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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 20-F

(Mark One)

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2021

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☐ **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission File Number 001-38974

BIOPHYTIS S.A.

(Exact name of Registrant as specified in its charter and translation of Registrant's name into English)

FRANCE
(Jurisdiction of incorporation or organization)

Biophytis S.A.
Sorbonne University—BC 9, Bâtiment A 4ème étage
4 pace Jussieu
75005 Paris, France
(Address of principal executive offices)

Stanislas Veillet
Chief Executive Officer
Biophytis S.A.
Tel: +33 1 44 27 23 00
(Name, Telephone, Email and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
American Depositary Shares, each representing 10 ordinary shares, €0.20 nominal value per share	BPTS	The Nasdaq Capital Market
Ordinary shares, €0.20 nominal value per share*	*	The Nasdaq Capital Market*

**Not for trading, but only in connection with the registration of the American Depositary Shares.*

Securities registered or to be registered pursuant to Section 12(g) of the Act. None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act. None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report. **Ordinary shares: 135,953,657 shares outstanding as of December 31, 2021**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☐ Yes ☒ No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. ☐ Yes ☒ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definition of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒ Emerging growth company ☒

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards† provided pursuant to Section 13(a) of the Exchange Act. ☐

† The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☐ International Financial Reporting Standards as issued by the International Accounting Standards Board ☒ Other ☐

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. ☐ Item 17 ☐ Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). ☐ Yes ☒ No

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INTRODUCTION

Unless otherwise indicated, "BIOPHYTIS," "the Company," "our company," "we," "us" and "our" refer to BIOPHYTIS S.A. and its consolidated subsidiaries.

This annual report may contain references to our trademarks and to trademarks belonging to other entities. Solely for convenience, trademarks and trade names referred to in this annual report, including logos, artwork and other visual displays, may appear without the ® or ™ symbols, but such references are not intended to indicate, in any way, that we will not assert, to the fullest extent under applicable law, our rights or the rights of the applicable licensor to these trademarks and trade names. We do not intend our use or display of other companies' trade names or trademarks to imply a relationship with, or endorsement or sponsorship of us by, any other company.

Our audited consolidated financial statements have been prepared in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Board, or IASB. Our financial statements included in this annual report are presented in euros and, unless otherwise specified, all monetary amounts are in euros. All references in this annual report to "$," "US$," "U.S.$," "U.S. dollars," "dollars" and "USD" mean U.S. dollars and all references to "€" and "euros," mean euros, unless otherwise noted. Throughout this report, references to ADSs mean American Depositary Shares, or ADSs, or ordinary shares represented by such ADSs, as the case may be.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 20-F, or annual report, contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act, that are based on our management's beliefs and assumptions and on information currently available to our management. All statements other than present and historical facts and conditions contained in this annual report, including statements regarding our future results of operations and financial positions, business strategy, plans and our objectives for future operations, are forward-looking statements. When used in this annual report, the words "anticipate," "believe," "can," "could," "estimate," "expect," "intend," "is designed to," "may," "might," "plan," "potential," "predict," "objective," "should," or the negative of these and similar expressions identify forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- the timing, progress and results of clinical trials for our drug candidates, including statements regarding the timing of initiation and completion of clinical trials, dosing of subjects and the period during which the results of the clinical trials will become available;
- the potential impact of COVID-19 on our clinical trials and our operations generally;
- the timing, scope or likelihood of regulatory filings and approvals for our drug candidates;
- our ability to successfully commercialize our drug candidates;
- potential benefits of the clinical development and commercial experience of our management team;
- our ability to effectively market any drug candidates that receive regulatory approval, emergency use authorization, or conditional marketing authorization on our own or through third parties;
- our commercialization, marketing and manufacturing capabilities and strategy;
- our expectation regarding the safety and efficacy of our drug candidates;
- the potential clinical utility and benefits of our drug candidates;
- our ability to advance our drug candidates through various stages of development, especially through pivotal safety and efficacy trials;
- the likelihood of success and difficulty in ensuring success of clinical investigations;
- our estimates regarding the potential market opportunity for our drug candidates;
- developments and projections relating to our competitors or our industry;
- our ability to become profitable;
- our estimates regarding expenses, future revenue, capital requirements and needs for additional financing;
- our ability to secure additional financing when needed on acceptable terms;
- the impact of government laws and regulations in the United States, France and foreign countries;
- the implementation of our business model, strategic plans for our business, drug candidates and technology;
- our intellectual property position;
- our ability to rely on orphan drug designation for market exclusivity;

- our ability to attract or retain key employees, advisors or consultants;
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act; and
- whether we are classified as a passive foreign investment company (a "PFIC") for current and future periods.

You should refer to the section of this annual report titled "Item 3.D—Risk Factors" for a discussion of important factors that may cause our actual results to differ materially from those expressed or implied by our forward-looking statements. As a result of these factors, we cannot assure you that the forward-looking statements in this annual report will prove to be accurate. Furthermore, if our forward-looking statements prove to be inaccurate, the inaccuracy may be material. In light of the significant uncertainties in these forward-looking statements, you should not regard these statements as a representation or warranty by us or any other person that we will achieve our objectives and plans in any specified time frame or at all. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

You should read this annual report and the documents that we reference in this annual report and have filed as exhibits to this annual report completely and with the understanding that our actual future results may be materially different from what we expect. We qualify all of our forward-looking statements by these cautionary statements.

This annual report contains market data and industry forecasts that were obtained from industry publications. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such estimates. We have not independently verified any third-party information. While we believe the market position, market opportunity and market size information included in this annual report is generally reliable, such information is inherently imprecise.

PART I

Item 1. Identity of Director, Senior Management and Advisers.

Not applicable.

Item 2. Offer Statistics and Expected Timetable.

Not applicable.

Item 3. Key Information.

A. Selected Financial Data

Not applicable.

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

Our business is subject to a number of risks and uncertainties that may adversely affect our business, financial condition, results of operations, cash flows, and prospects. These risks are discussed more fully below and include, but are not limited to:

- Risks Related to Our Limited Operating History, Financial Condition, and Capital Requirements
    - We have been and may continue to be affected by health pandemics or epidemics, including the current outbreak of COVID-19, or emergence of other infectious diseases.
    - We are a clinical-stage biotechnology company with no products approved or authorized for sale and history of losses and we will need substantial additional financing to achieve our goals.
    - We are dependent on reimbursable financial advances and non-reimbursable subsidies from French government.
    - We have limited resources and may face challenges related to prioritizing drug candidate development.
    - Our indebtedness could restrict our operations and make us more vulnerable to adverse economic conditions.
- Risks Related to Our Business
    - Clinical development is lengthy and expensive and we may not be able to obtain regulatory approval or emergency use authorization for our drug candidates.
    - We may have difficulty enrolling patients or finding and retaining investigators that are needed to conduct the clinical studies.
    - Our drug candidates could cause undesirable side effects.
    - Our drug candidates may fail to achieve physician acceptance and patient adoption.

- We rely on third parties for raw materials and to conduct our preclinical studies and clinical trials.
- We face significant competition.
- We will face government restrictions on pricing and reimbursement.
- We will need to establish or secure sales capabilities.
- We may face challenges attracting and retaining senior management and key scientific personnel.
- We may face product liability lawsuits.
- We may not be successful in our existing and future collaborations.
- We may experience significant disruptions to our information technology systems or breaches of data security and/or misconduct by our employees or independence contractors.
- Our employees and independent contracts may engage in misconduct or improper activities.
- Ability to comply with environmental laws and regulations.

- Risks Related to Intellectual Property
  - We must protect our intellectual property and proprietary rights.
  - Our ability to resolve disputes concerning the infringement or misappropriation of our proprietary rights or the proprietary rights of others.
- Risks Related to Government Regulation
  - Even if we obtain regulatory approval or authorization for our products, we will remain subject to ongoing regulatory scrutiny.
  - Changes in COVID-19 infectiousness or lethality rates, or eradication or substantial eradication of the disease could reduce or eliminate the demand for the investigational new drugs we are studying through our COVA program.
  - Regulatory agencies may change the policies and requirements regarding approvals and emergency use authorizations, or revoke emergency use authorizations that the agencies have already issued.
  - We may be unable to obtain orphan drug designation, if we pursue it.
  - Our business will be impacted by healthcare legislation and our relationships with investigators, healthcare professionals, consultants, third-party payors, patient organizations and customers.
  - We will be impacted by U.S. and foreign anti-corruption and anti-money laundering laws on our business.
  - We may be unable to maintain certain tax benefits applicable to French technology companies.
  - We will be impacted by U.S. tax laws and regulations on our business.
- Risks Related to the Ownership of the ADSs and Ordinary Shares and Our Status as a Non-U.S. Company with Foreign Private Issuer Status
  - The requirements of being a U.S. public company may strain our resources.

- An active trading market for our ADSs may not develop and the market price of our equity securities may be volatile.
- We may be exposed to foreign exchange risk.
- Investors may be diluted as a result of a significant number of outstanding warrants and convertible debt instruments and future sales of a substantial number of our securities could adversely affect the price of our securities.
- U.S. investors may have difficulty enforcing civil liabilities against our company and directors and senior management and the experts named in this annual report and may not be entitled to a jury trial with respect to claims arising under the deposit agreement.
- Our governing documents and French corporate law may delay or discourage a takeover attempt.
- The ability of ADS holders to exercise voting rights, participate in any future preferential subscription rights, receive dividends, or transfer their ADSs.
- Our status as a foreign private issuer and an "emerging growth company".
- Risks associated with being characterized a passive foreign investment company.
- Our ability to establish and maintain effective internal control over financial reporting.

Risks Related to Our Limited Operating History, Financial Condition, and Capital Requirements

Our business has been and could in the future be materially adversely affected by the effects of health pandemics or epidemics, including COVID -19 and its related variants, or emergence of other infectious diseases, and in particular in regions where we or third parties on which we rely have significant manufacturing facilties, concentrations of clinical trial sites or other business operations.

Our business has been and could in the future be materially adversely affected by the effects of health pandemics or epidemics, including COVID -19 and its related variants, or emergence of other infectious diseases. COVID-19 has prompted severe lifestyle and commercial restrictions aimed at reducing the spread of the disease. Governments have imposed quarantines and other restrictions in response to the pandemic. We have also implemented social distancing and sanitary measures as well as a work-from-home policy for most of our employees. Some of our clinical study sites had to be temporarily closed during the pandemic, and we were forced to revise the protocols and obtain IRB review and approval to continue our SARA INT clinical trial, which has since been completed. Although the COVID-19 pandemic appears to be gradually subsiding as a result of widespread access to vaccines and other preventative measures, additional variants that are more infectious or deadly may emerge in the future, and any future restrictions implemented in response to COVID-19 or another health pandemic or epidemic, or emergence of other infectious diseases could negatively impact our productivity, disrupt our business and delay our clinical programs and timelines, the magnitude of which will depend, in part, on the length and severity of the restrictions, among other factors. Although we do not currently anticipate any further impacts to our clinical programs from COVID-19 or another pandemic or endemic, or emergence of other infectious diseases, these and similar, and perhaps more severe, disruptions in our operations could negatively impact our business operating results and financial condition in the future.

Quarantines, shutdowns and shelter-in-place and similar government orders related to COVID -19 or other infectious diseases, or the perception that such events, orders or other restrictions on the conduct of business operations could occur, could impact personnel at third-party supplier, manufacturing or packaging facilities in the United States and other countries, or the availability or costs of materials, which could disrupt our supply chain. Although we do not currently anticipate any clinical supply issues or concerns for our planned clinical trials, any future restrictions resulting from the COVID -19 pandemic or other health pandemics or epidemics or emergence of other infectious diseases may disrupt our supply chain in the future and delay or limit our ability to obtain sufficient materials for our drug candidates.

In addition, our current clinical trial and planned clinical trials could be affected by a resurgence of COVID -19 (or emergence of new vaccine resistant strains) or emergence of new pandemics, epidemics or other infectious diseases. For example, site initiation and patient enrollment could be impacted by a resurgence of COVID-19 (or emergence of new vaccine resistant strains), and

sites conducting potential patient enrollment may not be able or willing to comply with clinical trial protocols whether due to quarantines impeding patient movement or interrupting healthcare services, or due to potential patient concerns regarding interactions with medical facilities or staff. Similarly, our ability to recruit and retain principal investigators and site staff who, as healthcare providers, may have heightened exposure to COVID -19 or another virus, may be delayed or disrupted, which could adversely impact our clinical trial operations. Furthermore, when the primary endpoint of one of our studies is a site-based assessment, there is a risk that participants will not be able to or want to undergo this required in person assessment for safety reasons, resulting in a delay to our studies and potentially compromising the timing and results of our study. A resurgence of COVID -19 (or emergence of new vaccine resistant strains) or emergence of new pandemic, epidemic or other infectious diseases could also lead to increased costs, due to a prolonged study timeframe, resulting in the need to add study staff and the need to utilize additional technological tools, such as remote monitoring, remote source-data verification and remote audits.

Regulatory authorities may also experience a significantly increased workload, with requirements and demands for short review timelines for COVID -19 studies on the one hand and the need to amend study protocols to address COVID -19-related limitations in study conduct on the other hand. This can prolong review timelines and reduce the availability to run expedited programs, which put a high demand on regulatory staff. There is also a risk that the changes to protocols of ongoing clinical trials (other than for COVID -19 indications) that were made to address restrictions imposed in the context of the coronavirus pandemic will negatively impact the review conducted by the relevant regulatory agencies. In which case, such agencies may consider the data to be insufficient to support acceptance of the data and the statistical plan. For example, changing in-office and in-person checks and visits to phone contacts may not be sufficient for regulatory review. We will not know until we complete our ongoing studies, complete analysis, and submit such data to the regulatory authorities, what, if any, limitations and effects could result.

In addition, the global COVID-19 pandemic has adversely affected, and any future significant outbreak of contagious diseases could similarly adversely affect, the economics and financial markets of many countries, including the United States, resulting in an economic downturn that could reduce our ability to access capital, which could negatively affect our liquidity and ability to process our clinical trials and business operations and suppress demand for our future products. Any of these events could have a material adverse effect on our business, financial condition, results of operations or cash flow. In addition, a recession, down-turn or market correction resulting from the COVID-19 pandemic, other pandemic or epidemic, or emergence of other infectious diseases could materially adversely affect the value of our ADSs and ordinary shares.

We are a clinical-stage biotechnology company with no products approved or authorized for commercial sale. We have incurred significant losses since our inception and anticipate that we will continue to incur losses for the foreseeable future.

Biotechnology product development is a highly speculative undertaking because it entails substantial upfront capital expenditures and significant risk that any potential drug candidate will not demonstrate adequate effectiveness in the targeted indication or an acceptable safety profile, gain regulatory approval or become commercially viable. We have incurred significant losses since our inception in 2006, and we anticipate that we will continue to incur losses for the foreseeable future, which, together with our limited operating history, may make it difficult to assess our future viability.

We incurred losses of €18.9 million, €25.5 million and €31.2 million ($35.4 million) (translated solely for convenience into dollars at an exchange rate of €1.00=$1.1318, the noon buying rate of the Federal Reserve Bank of New York on December 31, 2021) for the years ended December 31, 2019, 2020 and 2021, respectively. Substantially all of our losses have resulted from expenses incurred in connection with our preclinical and clinical programs and other research and development activities and from general and administrative costs associated with our operations. We expect to continue to incur losses for the foreseeable future, and we anticipate these losses will increase as we continue to develop our drug candidates, conduct clinical trials and pursue research and development activities. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our shareholders' equity and working capital.

We will require substantial additional financing to achieve our goals, and a failure to obtain this capital when needed on acceptable terms, or at all, could force us to delay, limit, reduce or terminate our product development or other operations.

Since our inception, we have invested a significant portion of our efforts and financial resources on our preclinical studies and clinical trials and other research and development activities. We believe that we will continue to expend substantial resources for the foreseeable future in connection with the preclinical and clinical development of our current drug candidates and the discovery and development of any other drug candidates we may choose to pursue. These expenditures will include costs associated with conducting preclinical studies and clinical trials and obtaining regulatory approvals, emergency use authorizations, or conditional marketing

authorization and any expenses associated with commercializing, marketing and selling products approved or authorized for sale that we elect to commercialize ourselves. In addition, other unanticipated costs may arise. Because the outcome of any preclinical study or clinical trial is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development of our current drug candidates or any future drug candidates we may choose to pursue.

As of December 31, 2021, we had capital resources consisting of cash and cash equivalents of €23.9 million ($27.1 million) (translated solely for convenience into dollars at an exchange rate of €1.00=$1.1318, the noon buying rate of the Federal Reserve Bank of New York on December 31, 2021). Since December 31, 2021, we drew down €4 million from our 2021 credit facility with ATLAS Special Opportunities LLC ("ATLAS").

We expect our existing capital resources, including our ability to draw down on our credit facility with ATLAS (as described in further detail in "Item 5, Operating and Financial Review and Prospects" of this annual report), will be enough to fund our planned operating expenses for the next 12 months. However, our current operating plans may change as a result of many factors currently unknown to us, and we may need to seek additional funds even sooner than planned, through public or private equity or debt financings or other sources, such as strategic collaborations. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

Our future capital requirements depend on many factors, including:

- the scope, progress, data and costs of researching and developing our current drug candidates and any other drug candidates we may choose to pursue in the future, and conducting preclinical studies and clinical trials;
- the timing of, and the costs involved in, obtaining regulatory approvals or authorizations for our current drug candidates or any future drug candidates we may choose to pursue;
- the number and characteristics of any additional drug candidates we develop or acquire;
- any costs associated with manufacturing our current drug candidates and any future drug candidates;
- the cost of sourcing purified extracts and a supply chain in sufficient quantity and quality to meet our needs;
- the cost of commercialization activities associated with any of our current drug candidates or any future drug candidates that are approved or authorized for sale and that we choose to commercialize ourselves, including marketing, sales and distribution costs;
- our ability to maintain existing, and establish new, strategic collaborations, licensing or other arrangements and the financial terms of any such agreements, including the timing and amount of any future milestone, royalty or other payments due under any such agreement;
- any product liability or other lawsuits related to any current or future drug candidates that are approved or authorized for sale;
- the expenses needed to attract, hire and retain skilled personnel;
- the costs associated with being a public company;
- the costs that become required as a result of modified or revised clinical protocols for our clinical trials;
- the costs that become required due to necessity of having to perform additional clinical trials;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing our intellectual property portfolio; and
- the timing, receipt and amount of sales of any future approved or authorized products, if any.

Additional funds may not be available when we need them, on terms that are acceptable to us, or at all. If adequate funds are not available to us on a timely basis on terms acceptable to us, we may be required to:

- delay, limit, reduce or terminate preclinical studies, clinical trials or other development activities for our current drug candidates or any future drug candidate;
- seek corporate partners for our drug candidates when we would otherwise develop our drug candidates on our own, or at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available;
- delay, limit, reduce or terminate our research and development activities; or
- delay, limit, reduce or terminate any efforts to establish manufacturing and sales and marketing capabilities or other activities that may be necessary to commercialize our current drug candidates or any future drug candidates.

We do not expect to realize revenue from sales of products or royalties from licensed products in the foreseeable future, if at all, unless and until our drug candidates are clinically tested, approved or authorized for commercialization, and successfully marketed. To date, we have primarily financed our operations through the sale of debt and equity securities (including our U.S. initial public offering in February 2021), as well as public aid for innovation and reimbursement of the French research tax credit, described elsewhere in this annual report. We will need to seek additional funding in the future and currently intend to do so through collaborations, public or private equity offerings or debt financings, credit or loan facilities, public funding, or a combination of one or more of these funding sources. Our ability to raise additional funds will depend on financial, economic and other factors, many of which are beyond our control. Additional funds may not be available to us on acceptable terms or at all. If we enter into arrangements with collaborators or others, we may be required to relinquish rights to some of our drug candidates that we would otherwise pursue on our own. If we raise additional funds by issuing equity securities, our shareholders will suffer dilution and the terms of any financing may adversely affect the rights of our shareholders. In addition, as a condition to providing additional funds to us, future investors may demand, and may be granted, rights superior to those of existing shareholders. Debt financing, if available, is likely to involve restrictive covenants limiting our flexibility in conducting future business activities, and, in the event of insolvency, debt holders would be repaid before holders of our equity securities received any distribution of our corporate assets.

We have benefited from certain reimbursable financial advances and non-reimbursable subsidies from the French government that if terminated or reduced may restrict our ability to successfully develop, manufacture and commercialize our drug candidates.

We have benefited from certain reimbursable advances and non-reimbursable subsidies from the French government and intend to continue to seek advances and/or subsidies from these agencies in the future in order to accelerate the development of our drug candidates. There is no assurance that these benefits will continue to be available to us in the future. If such benefits and programs were to be terminated or reduced, it could have an adverse effect on our business, operating results and financial condition and could deprive us of financial resources necessary for research and development of our drug candidates. Furthermore, the advances and subsidies are generally subject to contractual conditions, including our compliance with agreed upon preliminary budgets and scientific programs, informing the lender of any deviations from such agreed upon budgets and programs, and our compliance with certain financial ratios to ensure our solvency. In the event that we do not comply with the contractual conditions of the subsidies, we may be required to reimburse the French government for any outstanding payments (€1.0 million as of December 31, 2021) ($1.1 million) (translated solely for convenience into dollars at an exchange rate of €1.00=$1.1318, the noon buying rate of the Federal Reserve Bank of New York on December 31, 2021) on an accelerated basis and could be liable for any damages incurred by such agencies resulting from the breach of contract.

Due to the significant resources required for the development of our drug candidates, we must prioritize development of certain drug candidates and/or certain disease indications. We may expend our limited resources on candidates or indications that do not yield a successful product and fail to capitalize on drug candidates or indications that may be more profitable or for which there is a greater likelihood of success.

We plan to develop a pipeline of drug candidates to treat age-related diseases and diseases whose progression and symptoms are similar to those associated with aging. Due to the significant resources required for the development of drug candidates, we must focus our attention and resources on specific diseases and disease pathways and decide which drug candidates to pursue and the amount of resources to allocate to each.

Our decisions concerning the allocation of research, development, collaboration, management and financial resources toward particular drug candidates or therapeutic areas may not lead to the development of any viable commercial product and may divert resources away from better opportunities. Similarly, any decision to delay, terminate or collaborate with third parties in respect of certain programs may subsequently prove to be suboptimal and could cause us to miss valuable opportunities. If we make incorrect determinations regarding the viability or market potential of any of our programs, drug candidates, or misread trends in the aging or age-related disease space, or in the biotechnology industry, our business, financial condition and results of operations could be materially adversely affected. As a result, we may fail to capitalize on viable commercial products or profitable market opportunities, be required to forego or delay pursuit of opportunities with other drug candidates or other diseases and disease pathways that may later prove to have greater commercial potential than those we choose to pursue, or relinquish valuable rights to such drug candidates through collaboration, licensing or other royalty arrangements in cases in which it would have been advantageous for us to invest additional resources to retain development and commercialization rights.

Our operating results may fluctuate significantly, which may make our future operating results difficult to predict.

Our operating results may fluctuate significantly, which may make it difficult for us to predict our future operating results. These fluctuations may occur due to a variety of factors, many of which are outside of our control and may be difficult to predict, including:

- the timing and cost of, and level of investment in, research, development and, if approved or authorized, any commercialization activities relating to our drug candidates, which may change from time to time;
- the timing and status of enrollment for our clinical trials, and availability of medical staff to conduct the clinical trials;
- the effect of pandemics or endemics (including COVID-19), or emergence of other infectious diseases, on our clinical trials, including government-mandated or -recommended shutdowns, or other restrictions or limitations that are caused by the spread of viruses;
- the further development and widespread adoption of COVID-19 vaccines and treatment options that could significantly reduce or eliminate the demand for our products;
- the regulatory agencies' revocation of emergency use authorizations, or conclusion of the public health emergency declaration;
- the cost of manufacturing our drug candidates, as well as building out our supply chain, which may vary depending on the quantity of production and the terms of our agreements with manufacturers;
- expenditures that we may incur to acquire, develop or commercialize additional drug candidates;
- the timing and amount of any future milestone, royalty or other payments due under any collaboration or license agreement;
- future accounting pronouncements or changes in our accounting policies;
- the timing and success or failure of preclinical studies and clinical trials for our drug candidates and/or redesign, delays and/or change of scope of our preclinical or clinical trials;
- the timing of receipt of approvals, emergency use authorizations, or conditional marketing authorizations for our drug candidates from regulatory authorities in the United States and internationally;
- the timing and success of competing drug candidates, or any other change in the competitive landscape of our industry, including consolidation among our competitors or partners;
- coverage and reimbursement policies with respect to our drug candidates, if approved or authorized for emergency use; and
- the level of demand for our products, if approved or authorized for emergency use, which may vary significantly over time.

The cumulative effects of these factors could result in large fluctuations and unpredictability in our annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance.

This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any forecasts we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our ordinary shares and ADSs could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated revenue or earnings guidance we may provide.

Our indebtedness could restrict our operations and make us more vulnerable to adverse economic conditions.

On September 10, 2018, we entered into a Venture Loan Agreement and Bonds Issue Agreement with Kreos Capital V (UK) Ltd., which provides for up to €10 million in financing to us. Pursuant to the terms of the agreements, Kreos agreed to subscribe for up to €10 million in non-convertible bonds, to be issued by us in up to four tranches of €2.5 million each. The first two tranches were issued in September 2018, a third tranche was issued in December 2018, and the final tranche was issued on March 1, 2019. Each tranche bears a 10% annual interest rate and must be repaid in 36 monthly installments, with monthly payments of €320,004 commencing in April 2019. In connection with the first tranche, we issued a warrant to Kreos giving them the right to purchase 442,477 new ordinary shares at an exercise price of €2.67 per share over a 7-year period from the issue date. Kreos waived its right to exercise the warrant when subscribing to the new financing structure described below.

In April 2020, we signed a convertible bond financing of €24 million with ATLAS to continue the development of Sarconeos (BIO101). Pursuant to the terms of the agreement (as amended), ATLAS agreed to subscribe for up to €24 million in convertible bonds, to be issued by us in up to eight tranches of €3 million each. We issued the eighth tranche in December 2021. On June 14, 2021, we signed a new convertible bond financing of €32 million with ATLAS. Pursuant to the terms of the agreement, ATLAS agreed to subscribe for up to €32 million in convertible bonds, to be issued by us in up to eight tranches of €4 million each. The first tranche has not been issued yet.

On November 19, 2021, we entered into a Subscription Agreement, a Straight Bonds Issue Agreement and a Convertible Bonds Issue Agreement with Kreos Capital VI (UK) Ltd. and Kreos Capital VI (Expert Fund) L.P., which provides for up to €10 million in financing to us. Pursuant to the terms of the agreements, Kreos agreed to subscribe for up to €7.75 million in convertible bonds and for up to €2.25 million in non-convertible bonds, to be issued by us in up to four tranches. The first two tranches were issued on November 22, 2021. Each tranche of non-convertible bonds bears a 10% annual interest rate and must be repaid in 36 monthly installments, with monthly payments commencing in April 2022. Each tranche of convertible bonds bears a 9.5% annual interest rate and must be repaid or converted into shares by 31 March 2025. In connection with the Kreos financing, we issued 2,218,293 warrants giving them the right to purchase 2,218,293 new ordinary shares at an exercise price of €0.56 per share over a seven year period from the issue date. By subscribing to the warrants, Kreos waived its right to exercise the warrants issued to Kreos within the framework of the 2018 loan structure described above.

Pursuant to the terms of the agreements with Kreos, we have the right, at any time but with no less than 30 days prior notice to Kreos, to prepay or purchase the bonds, exclusively in full. The prepayment will be equal to (i) the principal amount outstanding, plus (ii) the sum of all interest repayments which would have been paid throughout the remainder of the term of the relevant tranche discounted by 10% per annum.

If we are unable to make the required payments, we may need to refinance all or a portion of our indebtedness, sell assets, delay capital expenditures or seek additional equity. The terms of our existing or future debt agreements may also restrict us from affecting any of these alternatives. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. Further, changes in the credit and capital markets, including market disruptions and interest rate fluctuations, may increase the cost of financing, make it more difficult to obtain favorable terms, or restrict our access to these sources of future liquidity. In addition, any failure to make scheduled payments of interest and principal on our outstanding indebtedness would likely result in a reduction of our credit rating, which could harm our ability to incur additional indebtedness on commercially reasonable terms or at all. Our inability to generate sufficient cash flow to satisfy our debt service obligations, or to refinance or restructure our obligations on commercially reasonable terms or at all, could have a material adverse effect on our business, financial condition and results of operations, as well as on our ability to satisfy our obligations in respect of our indebtedness.

Our debt agreements contain restrictions that limit our flexibility in operating our business.

Our Venture Loan Agreement and Bonds Issue Agreement with Kreos and our convertible notes agreement with ATLAS impose certain operating and financial restrictions. These covenants may limit our ability and the ability of our subsidiaries, under certain circumstances, to, among other things:

- incur additional indebtedness;
- create or incur liens;
- sell or transfer assets; and
- pay dividends and distributions.

These agreements also contain certain customary affirmative covenants and events of default, including a change of control.

As a result of the covenants and restrictions contained in our existing debt agreements, we are limited in how we conduct our business, and we may be unable to raise additional debt to compete effectively or to take advantage of new business opportunities. The terms of any future indebtedness we may incur could include more restrictive covenants. We cannot guarantee that we will be able to maintain compliance with these covenants in the future and, if we fail to do so, that we will be able to obtain waivers from Kreos and ATLAS, and/or amend the covenants.

Our failure to comply with the restrictive covenants described above as well as others contained in our future debt instruments from time to time could result in an event of default, which, if not cured or waived, could result in our being required to repay these borrowings before their maturity dates. In addition, any event of default or declaration of acceleration under one debt instrument could also result in an event of default under one or more of our other debt instruments. If we are unable to repay, refinance or restructure our indebtedness under our secured debt, the holders of such debt could proceed against the collateral securing that indebtedness. If we are forced to refinance these borrowings on less favorable terms or if we are unable to repay, refinance or restructure such indebtedness, our financial condition and results of operations could be adversely affected.

Risks Related to Our Business

Our business is dependent on the successful development, regulatory approval, emergency use authorization or conditional marketing authorization, manufacture and commercialization of our drug candidates.

We have no products approved or authorized for sale. Our lead drug candidate, Sarconeos (BIO101), is in clinical development and our second drug candidate, Macuneos (BIO201) is still in the preclinical development phase. Our life-cycle extension drug candidates, BIO103 and BIO203, are still in the preclinical development phase.

To secure marketing approval for our lead drug candidates, we will need to meet endpoints satisfactory to the U.S. Food and Drug Administration ("FDA"), and European Medicines Agency ("EMA"), in larger confirmatory clinical trials. The success of our business, including our ability to finance our company and generate any revenue in the future, will primarily depend on the successful development, regulatory approval, emergency use authorization or conditional marketing authorization, and commercialization of drug candidates. It may be many years, if we succeed at all, before we have demonstrated the safety and efficacy of a drug candidate sufficient to warrant approval, emergency use authorization or conditional marketing authorization for commercialization.

In the future, we may also become dependent on other drug candidates that we may develop or acquire. The clinical and commercial success of our current drug candidates and any future drug candidates will depend on a number of factors, including the following:

- our ability to raise any additional required capital on acceptable terms, or at all;
- our ability to complete Investigational New Drug ("IND")-enabling studies and successfully submit IND or comparable applications;

- timely completion of our preclinical studies and clinical trials, which may be significantly slower or cost more than we currently anticipate and will depend substantially upon the performance of third-party contractors;
- whether we are required by the FDA, EMA or similar regulatory authorities to conduct additional clinical trials or other studies beyond those planned to support the approval, authorization, and commercialization of our drug candidates or any future drug candidates;
- acceptance of our proposed indications and primary endpoint assessments relating to the proposed indications of our drug candidates by the FDA, the EMA and similar regulatory authorities;
- our ability to demonstrate to the satisfaction of the FDA, EMA and similar regulatory authorities the safety, efficacy and acceptable risk to benefit profile of our drug candidates or any future drug candidates;
- the prevalence, duration and severity of potential side effects or other safety issues experienced with our drug candidates or future approved products, if any;
- the timely receipt of necessary marketing approvals or authorizations from the FDA, EMA and similar regulatory authorities;
- achieving and maintaining, and, where applicable, ensuring that our third-party contractors achieve and maintain compliance with our contractual obligations and with all regulatory requirements applicable to our drug candidates or any future drug candidates or approved products, if any;
- the ability of any third parties with whom we contract to manufacture adequate clinical trial and commercial supplies, if approved or authorized, of our current drug candidates or any future drug candidates, remain in good standing with regulatory agencies and develop, validate and maintain commercially viable manufacturing processes that are compliant with applicable requirements including current good manufacturing practices, ("cGMP");
- with respect to any approved or authorized drug candidates that we elect to commercialize ourselves, our ability to successfully develop a commercial strategy and thereafter commercialize such drug candidates, whether alone or in collaboration with others;
- the convenience of our treatment or dosing regimen;
- our sourcing of purified extracts and a supply chain in sufficient quantity and quality to meet product needs for clinical development and commercialization;
- acceptance by physicians, payors and patients of the benefits, safety and efficacy of our drug candidates or any future drug candidates, if approved or authorized, including relative to alternative and competing treatments;
- patient demand for our drug candidates, if approved or authorized;
- our ability to maintain adequate drug diversion controls for Sarconeos (BIO101), which has a potential for misuse/abuse among body builders and other sportsmen as a result of its intended anabolic effect;
- lifestyle and commercial restrictions as a result of a resurgence or continuation of the COVID -19 pandemic or other pandemics or epidemics, or emergence of other infectious diseases;
- the potential impact of changing government orders in response to upticks in COVID -19 cases or as a result of new pandemics, epidemics, or other infectious diseases, and other limitations on our ability to conduct our business in the ordinary course;
- prioritization of hospital resources toward the COVID -19 pandemic, other pandemics or epidemics, or emergence of other infectious diseases, which would otherwise be used for clinical studies;

- the ability of our participants to safely follow clinical trial protocols because of quarantines impeding patient movement or interrupting healthcare services, or due to potential patient concerns regarding interactions with medical facilities or staff as a result of the COVID -19 pandemic, other pandemics or epidemics, or emergence of other infectious diseases;

- our ability to recruit and retain principal investigators and site staff who, as healthcare providers, may have heightened exposure to COVID -19, other pandemics or epidemics, or emergence of other infectious diseases may be delayed or disrupted, which may be adversely impact our clinical trial operations;

- delays due to the COVID -19 pandemic, other pandemics or epidemics, or emergence of other infectious diseases including due to reduced workforce productivity, illness among personnel, or due to delays at our third-party contract research organizations throughout the world for similar reasons or due to restrictions imposed or recommended by applicable governmental authorities;

- the impact, if any, on the data from ongoing studies that have been impacted by the initial and subsequent waves of the COVID-19 pandemic effect, and whether changes that were made to accommodate the pandemic will allow regulatory acceptance of the resulting data or whether the data will be sufficient for regulatory review—the effect of such changes will not be known until we complete ongoing studies, data analysis, and submit the data for regulatory review;

- our ability to establish and enforce intellectual property rights in and to our current drug candidates and any future drug candidates we may develop;

- our ability to avoid third-party patent interference, intellectual property challenges or intellectual property infringement claims; and

- risks related to COVID -19, the status of the ongoing pandemic, the availability and effectiveness of vaccines, and the pattern of spread (which may depend, in part, on persistence, or lack thereof, of antibodies which, as of the date of this annual report, is suspected to be no longer than six to 12 months).

These factors, many of which are beyond our control, could cause us to experience significant delays or an inability to obtain regulatory approvals or authorizations, or commercialize or license our drug candidates. Even if regulatory approvals or authorizations are obtained, we may never be able to successfully commercialize or license any of our drug candidates. Accordingly, we cannot provide assurances that we will be able to generate sufficient revenue through the sale of our drug candidates or any future drug candidates we may develop to continue our business or achieve profitability.

We may not be able to obtain regulatory approval or emergency use authorization for our drug candidates under applicable regulatory requirements. The denial, delay or imposed limitations of or on any such approval or authorization would preclude, delay or limit the commercialization of our drug candidates and adversely impact our potential to generate revenue and/or raise financing, our business and our results of operations.

To gain approval or authorization to market our drug candidates, we must provide the FDA, EMA and other foreign regulatory authorities with clinical data that adequately demonstrate the safety and efficacy of the drug candidate for the intended indication applied for in the applicable regulatory filing. Product development is a long, expensive and uncertain process, and delay or failure can occur at any stage of any of our clinical development programs. A number of companies in the biotechnology and pharmaceutical industries have suffered significant setbacks in clinical trials, even after promising data in preclinical studies or earlier phase clinical trials. These setbacks have been caused by, among other things, new preclinical findings made while clinical trials were underway and safety or efficacy observations made in clinical trials, including previously unreported adverse events. Success in preclinical testing and early phase clinical trials does not ensure that later phase clinical trials will be successful, and the results of clinical trials conducted by other parties may not be indicative of the results in trials we may conduct. Further, it is not currently known what effect, if any, modification of ongoing non-COVID-19 related studies resulting from the COVID-19 pandemic will have on the acceptability of data from such revised studies, mostly regarding conditions for our targeted patients to participate in our current or future trials.

The research, testing, manufacturing, packaging, labeling, approval, authorization, sale, marketing and distribution of drug and biologic products are subject to extensive regulation by the FDA, EMA and other foreign regulatory authorities, and such regulations differ from country to country. We are not permitted to market our investigational drug candidates in the EU, the United

States or any other country until they receive the requisite approval or authorization from the applicable regulatory authorities of such jurisdictions.

Separately, in response to the global COVID-19 pandemic, on March 10, 2020, the FDA announced its intention to postpone most foreign inspections of manufacturing facilities and products through April 2020. The FDA reported in July 2021 that the agency had largely returned to standard operations for domestic inspections; however, the agency's foreign inspectional activities, including inspections for drug establishments, were still hampered by the pandemic. The FDA's delayed inspections caused drug application delays, which meant that the applicants' schedule for commercializing the drugs were affected negatively. In January 2022, the FDA again put certain inspectional activities on hold because of the spread of the Omicron variant of COVID-19. In February 2022, FDA announced that it will again resume its domestic inspectional activities, considering the decline in COVID-19 cases in the United States. FDA will continue with mission-critical foreign inspections, as well as any previously planned foreign surveillance inspctions with country clearance, and which are within the Center for Disease Control and Prevention's Level 1 or Level 2 COVID-19 travel recommendation. Otherwise, FDA expects that it will resume additional foreign inspectional activities in April. It is possible that new variants will continue to emerge in the future, further interrupting and affecting the agency's ability to carry out inspections in a timely manner. If global health concerns related to the emergence of new variants or new viruses prevent the FDA, EMA and other foreign regulatory authorities from conducting their regular inspections, reviews, or other regulatory activities, it could significantly impact the ability of the FDA, EMA or other foreign regulatory authorities to timely review and process regulatory submissions, which could have a material adverse effect on our business.

The FDA, EMA or any foreign regulatory authorities can delay, limit or deny approval or authorization of our drug candidates for many reasons, including:

- our inability to demonstrate to the satisfaction of the agency that a drug candidate is safe and effective for the requested indication;
- the agency's disagreement with, or questions on, our trial protocol or the interpretation of data from preclinical studies or clinical trials, including studies impacted by the coronavirus pandemic;
- the agency's refusal to accept the data that is produced from modified protocols (*e.g.,* data collected from phone contacts instead of in-office and in-person checks and visits may not be sufficient for regulatory approval or authorization);
- our inability to demonstrate that the clinical and other benefits of a drug candidate outweigh any safety or other perceived risks;
- the agency's requirement for additional preclinical studies or clinical trials;
- the agency's non-approval of the formulation, labeling or specifications of a drug candidate;
- the agency's failure to approve the manufacturing processes or facilities of third-party manufacturers upon which we rely;
- our inability to demonstrate to the satisfaction of the agency the sourcing of purified extracts and that our supply chain is in sufficient quantity and quality to meet product specifications; or
- the potential for regulations and policies of the FDA, EMA or the applicable foreign regulatory agencies relating to drug approval or emergency use authorization to significantly change in a manner rendering our clinical data insufficient for approval or authorization.

In addition, the legal and regulatory basis for expedited and emergency programs related to COVID-19 may be revoked and withdrawn if the public health assessment warrants the removal of the pandemic and emergency status.

Of the large number of biotechnology and pharmaceutical products in development, only a small percentage successfully complete the applicable regulatory approval or authorization processes and are commercialized.

Even if we eventually complete clinical testing and receive approval or authorization from the FDA, EMA or applicable foreign authorities for any of our drug candidates, the applicable agency may grant approval or authorization contingent on the

performance of costly additional clinical trials, which may be required after approval or authorization. The FDA, EMA or the applicable foreign regulatory agency also may approve or authorize our drug candidates for a more limited indication or a narrower patient population than we originally requested, and the applicable agency, may not approve or authorize our drug candidates with the labeling that we believe is necessary or desirable for the successful commercialization of such drug candidates.

Any delay in obtaining, or inability to obtain, applicable regulatory approval or authorization would delay or prevent commercialization of our drug candidates and would materially adversely impact our business and prospects.

Clinical development is a lengthy and expensive process with an uncertain outcome, and results of earlier studies and trials may not be predictive of future trial results.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure or delay can occur at any time during the different phases, or stages, of the clinical trial process. Success in preclinical studies and early clinical trials does not ensure that later clinical trials will be successful. A number of companies in the biotechnology, biopharmaceutical and pharmaceutical industries have suffered significant setbacks in clinical trials, even after positive results in earlier preclinical studies or earlier phase clinical trials. These setbacks have been caused by, among other things, new preclinical findings made while clinical trials were underway and safety or efficacy observations made in clinical trials, including previously unreported adverse events. The results of our preclinical studies or *in vivo* and *in vitro* studies provide very limited data in diseases whose physiopathology is not well understood and may not be predictive of the results of study outcomes in human clinical trials. Drug candidates in later stages of clinical trials may fail to show the desired pharmacological properties or safety and efficacy traits despite having progressed through preclinical studies and early phase clinical trials. Notwithstanding any promising results in earlier studies, we cannot be certain that we will not face setbacks and receive less promising results in later studies. Even if we are able to initiate and complete clinical trials, including studies underway during the initial coronavirus pandemic, the safety and efficacy data may not be sufficient to obtain regulatory approval or authorization for our drug candidates.

We may experience delays in obtaining the necessary regulatory authorization for our various clinical programs, and initiating other planned studies and trials. Additionally, we cannot be certain that studies or trials for our drug candidates will begin on time, not require redesign, enroll an adequate number of subjects on time or be completed on schedule, if at all. Clinical trials can be delayed or terminated for a variety of reasons, including delays or failures related to:

- the FDA, EMA or comparable foreign regulatory authorities disagreeing as to the design or implementation of our clinical trials;
- delays in obtaining regulatory approval to commence a trial;
- reaching agreement on acceptable terms with prospective contract research organizations (“CROs”), and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly from one country to another, notably among different CROs and trial sites;
- institutional review boards, ethics committee or IRB approval at each trial site;
- recruiting an adequate number of suitable patients to participate in a trial;
- having subjects complete a trial or return for post-treatment follow-up;
- clinical sites deviating from trial protocol or dropping out of a trial;
- inability to access sites for initiation and patient monitoring and enrollment due to travel or quarantine restrictions imposed by national, federal, state or local governance;
- addressing subject safety concerns that arise during the course of a trial;
- adding a sufficient number of clinical trial sites;
- sourcing of purified extracts and a supply chain in sufficient quantity and quality to meet product needs;

- safety issues that are discovered in preclinical studies that will be conducted concurrently with our COVA study that is ending, and our planned future clinical trials;

- supply chain and sourcing may be slow or significantly delayed as the result of COVID-19 or other pandemic or epidemic restrictions on movement suspensions of service, and temporary global border closings; or

- obtaining sufficient product supply of drug candidate for use in preclinical studies, clinical trials, or during industrial scale up from third-party suppliers.

We may experience numerous adverse or unforeseen events during, or as a result of, preclinical studies and clinical trials that could delay or prevent our ability to receive marketing approval or authorization, or commercialize our drug candidates, including:

- we may receive feedback from regulatory authorities that requires us to modify the design of our clinical trials;

- clinical trials of our drug candidates may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical trials or abandon drug development programs;

- patient screening, new patient enrollment, monitoring and data collection may be affected or delayed as a result of restrictions imposed by national, federal, state or local governments due to COVID -19, other pandemics or epidemics, or emergence of other infectious diseases;

- the number of patients required for clinical trials of our drug candidates may be larger than we anticipate, enrollment in these clinical trials may be slower than we anticipate or participants may drop out of these clinical trials at a higher rate than we anticipate;

- our third-party contractors may fail to comply with regulatory requirements, fail to maintain adequate quality controls, or be unable to source or provide us with sufficient purified extracts for product supply to conduct and complete preclinical studies or clinical trials of our drug candidates in a timely manner, or at all;

- we or our investigators might have to suspend or terminate clinical trials of our drug candidates for various reasons, including non-compliance with regulatory requirements, inability to comply with applicable study protocol as a result of COVID -19 or other pandemic, epidemics, or other infectious diseases, a finding that our drug candidates have undesirable side effects or other unexpected characteristics, or a finding that the participants are being exposed to unacceptable health risks;

- limitations occurring as a result of public health emergencies, such as COVID-19;

- the impact, if any on the data from ongoing studies that have been impacted by the initial and subsequent waves of the coronavirus pandemic effect and whether changes to accommodate the pandemic will impact regulatory acceptance of the data or whether it will be sufficient for regulatory review, the effect of which will not be known until we complete ongoing studies, data analysis and submit the data for regulatory review;

- the cost of clinical trials of our drug candidates may be greater than we anticipate;

- the quality of our drug candidates or other materials necessary to conduct preclinical studies or clinical trials of our drug candidates may be insufficient or inadequate;

- regulators may revise the requirements for approving or authorizing our drug candidates, or such requirements may not be as we anticipate; and

- future collaborators may conduct clinical trials in ways they view as advantageous to them but that are suboptimal for us.

If we are required to conduct additional clinical trials or other testing of our drug candidates beyond those that we currently contemplate, if we are unable to successfully complete clinical trials of our drug candidates or other testing, if the results of these trials or tests are not positive or are only moderately positive or if there are safety concerns, we may:

- incur unplanned costs;
- be delayed in obtaining marketing approval or authorization for our drug candidates or, in due course, not obtain marketing approval at all;
- obtain marketing approval in some countries and not in others;
- obtain marketing approval or authorization for indications or patient populations that are not as broad as intended or desired;
- obtain marketing approval or authorization with labeling that includes significant use or distribution restrictions or safety warnings, including boxed warnings;
- be subject to additional post-marketing testing requirements; or
- have the treatment removed from the market after obtaining marketing approval or authorization.

We could also encounter delays if a clinical trial is suspended or terminated by us, by the IRBs of the institutions in which such trials are being conducted, by the Data Safety Monitoring Board ("DSMB") for such trial or by the FDA, EMA or other regulatory authorities. Such authorities may suspend or terminate a clinical trial due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA, EMA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial.

Further, conducting clinical trials in foreign countries presents additional risks that may delay completion of our clinical trials. These risks include the failure of enrolled patients in foreign countries to adhere to clinical protocol as a result of differences in healthcare services or cultural customs, managing additional administrative burdens associated with foreign regulatory schemes, as well as political and economic risks relevant to such foreign countries, including foreign countries' enforcement of COVID-19 restrictions on movement and lifestyle.

Principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and may receive cash or equity compensation in connection with such services. If these relationships and any related compensation result in perceived or actual conflicts of interest, or a regulatory authority concludes that the financial relationship may have affected the interpretation of the trial, the integrity of the data generated at the applicable clinical trial site may be questioned and the utility of the clinical trial itself may be jeopardized, which could result in the delay or rejection of the marketing application we submit. Any such delay or rejection could prevent or delay us from commercializing our current or future drug candidates.

If we experience delays in the completion, or termination, of any preclinical study or clinical trial of our drug candidates, the commercial prospects of our drug candidates may be harmed, and our ability to generate revenues from any of these drug candidates will be delayed or not realized at all. In addition, any delays in completing our clinical trials may increase our costs, slow down our drug candidate development and approval process and jeopardize our ability to commercialize our products and generate revenues. Any of these occurrences may significantly harm our business, financial condition and prospects. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval or authorization of our drug candidates. If one or more of our drug candidates prove to be ineffective, unsafe or commercially unviable, our entire platform and pipeline would have little, if any, value, which would have a material and adverse effect on our business, financial condition, results of operations and prospects.

If we encounter difficulties enrolling patients in our clinical trials, our clinical development activities could be delayed or otherwise adversely affected.

The timely completion of clinical trials in accordance with their protocols depends on, among other things, our ability to enroll a sufficient number of patients who remain in the study until its conclusion. We may experience difficulties in patient enrollment in our clinical trials for a variety of reasons. The enrollment of patients depends on many factors, including:

- the patient eligibility criteria defined in the protocol;
- the size of the patient population required for analysis of the trial's primary endpoints;
- the number of COVID-19 patients in the area where clinical investigation sites are located;
- the proximity of patients to trial sites;
- the ability of patients to be assessed in study sites, given potential lock-downs due to the COVID -19 pandemic, other pandemics or epidemics, or emergence of other infectious diseases;
- the design of the trial;
- patient enrollment may be delayed due to quarantines impeding patient movement or patient concerns regarding interaction and monitoring with medical facilities and staff;
- our ability to recruit clinical trial investigators with the appropriate competencies and experience;
- clinicians' and patients' perceptions as to the potential advantages of the drug candidate being studied in relation to other available therapies, including any new drugs that may be approved or authorized for the indications we are investigating; and
- our ability to obtain and maintain patient consents.

In addition, our clinical trials may compete with other clinical trials for drug candidates that are in the same therapeutic areas as our drug candidates, and this competition will reduce the number and types of patients available to us, because some patients who might have opted to enroll in our trials may instead opt to enroll in a trial being conducted by one of our competitors. Since the number of qualified clinical investigators is limited, we may conduct some of our clinical trials at the same clinical trial sites that some of our competitors use, which will reduce the number of patients who are available for our clinical trials in such clinical trial site.

Delays in patient enrollment may result in increased costs or may affect the timing or outcome of the planned clinical trials, which could prevent completion of these trials and adversely affect our ability to advance the development of our drug candidates. The combined effects of high vaccination rates with reduction in patient numbers and mutations in the COVID-19 virus that may decrease its virulence and cause less severe disease, may decrease our ability to complete the study and file for approval.

A resurgence of COVID-19 (or emergence of new vaccine resistant strains), pandemic, endemic, or emergence of other infectious disease, may limit our ability or the investigators' ability to find and retain medical staffs that are needed to conduct the clinical studies.

The COVID-19 pandemic has caused a shortage of labor force, including nurses, clinicians, and other medical staff. This shortage is causing medical institutions and other establishments to change their operations to accommodate the shortage, and in many cases, it results in increased personnel costs in finding and retaining the staffs that are necessary to conduct the institutions and establishments' operations. While COVID-19 cases have been decreasing, due in part to more people being vaccinated, a resurgence of COVID-19 (or emergence of new vaccine resistant strains), or emergence of other pandemic, epidemic, or other infectious diseases, could cause or exacerbate a staffing shortage, our ability to conduct clinical trials may be negatively affected, and we may need to modify, suspend, or stop our clinical trials, or expend greater resource in identifying and retaining the appropriate personnel necessary for the clinical investigations.

Our participation in an expanded access program in Brazil could subject us to adverse event reporting requirements in the United States, potentially leading to modification, suspension, or stoppage of the ongoing investigations

We are planning to organize, subject to regulatory approval by ANVISA, an expanded access program (EAP) in Brazil for hospitalized patients with severe COVID-19 symptoms who are mechanically ventilated in intensive care units. Under FDA regulations we are required to review and submit IND safety reports for suspected adverse reactions whether such safety information is collected from foreign or domestic sources. If adverse reactions occur during the expanded access program in Brazil, we will need to review and submit the safety reports to FDA, even if the COVA clinical investigation has stopped recruiting new patients due to the lack of enrollment, and will be subsequently concluded. FDA may review the safety information for other uses of Sarconeos (BIO101) such as the expanded access program if it meets the applicable threshold, or other clinical investigations that study Sarconeos (BIO101).

Our drug candidates may cause undesirable side effects or have other properties that could delay or prevent their regulatory approval or authorization, limit the commercial profile of an approved or authorized label, or result in significant negative consequences following marketing approval or authorization, if any.

Undesirable side effects caused by our drug candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval or authorization by the FDA, EMA or comparable foreign regulatory authorities. For example, one of our drug products, Sarconeos (BIO101), has been identified as having potential for misuse/abuse of the intended anabolic effect by body builders and sportsmen. Participants in clinical studies with Sarconeos (BIO101) are advised not to allow anyone access to the trial medication and the investigators specifically instruct subjects not to share their medicine. This risk is likely to become more significant after marketing authorization is granted, and the label for the drug, if it becomes approved or authorized, may have warnings and restrictions on the use and distribution of the product.

If unacceptable side effects arise in the development of our drug candidates, we, the FDA, EMA, the IRBs at the institutions in which our studies are conducted, or the DSMB could suspend or terminate our clinical trials or the FDA, EMA or comparable foreign regulatory authorities could order us to cease clinical trials or deny approval or authorization of our drug candidates for any or all targeted indications. Treatment-related side effects could also affect patient recruitment or the ability of enrolled patients to complete any of our clinical trials or result in potential product liability claims. In addition, these side effects may not be appropriately recognized or managed by the treating medical staff. Failure to recognize or manage the potential side effects of our drug candidates could result in patient injury. Any of these occurrences may harm our business, financial condition and prospects significantly.

If our drug candidates are used in combination with other drugs or treatments, they may interact negatively with those other drugs or treatments. We plan to conduct studies in order to assess the risks of interactions of our drug candidates with other drugs and treatments taken together. However, there can be no guarantee that our drug candidates will not interact negatively with other drugs or treatments not covered by our studies or that such interactions will not be revealed until after the products have been commercialized. These interactions could have adverse, unacceptable or undetected side effects, or could reduce or destroy the effectiveness of our drug candidates, which could diminish the commercial potential of our drug candidates, slow their development and consequently, have a material adverse effect on our business, financial condition and prospects.

Even if we successfully advance any of our drug candidates into and through clinical trials, such trials will likely only include a limited number of subjects and limited duration of exposure to our drug candidates. As a result, we cannot be assured that adverse effects of our drug candidates will not be uncovered when a significantly larger number of patients are exposed to the drug candidate. Further, any clinical trials may not be sufficient to determine the effect and safety consequences of taking our drug candidates over a multi-year period. Certain clinical trial protocols that are revised because of the continuing COVID-19 pandemic may also make it more difficult to identify potential safety concerns early on.

If any of our drug candidates receives marketing approval or authorization, and we or others later identify undesirable side effects caused by such products, a number of potentially significant negative consequences could result, including:

- regulatory authorities may withdraw their approval or authorization of the product;
- we may be required to recall a product or change the way such product is administered to patients;
- additional restrictions may be imposed on the marketing of the particular product or the manufacturing processes for the product or any component thereof;

- regulatory authorities may require the addition of labeling statements, such as a "black box" warning or other warnings, including a potential for abuse warning;
- we may be required to implement a Risk Evaluation and Mitigation Strategy ("REMS"), or create a Medication Guide outlining the risks of such side effects for distribution to patients;
- we could be sued and held liable for harm caused to patients;
- the sales of our product may decrease significantly and the product may become less competitive; and
- our reputation may suffer.

Any of the foregoing events could prevent us from achieving or maintaining market acceptance of the particular drug candidate, if approved or authorized, and result in the loss of significant revenues to us, which would materially and adversely affect our results of operations and business. In addition, if one or more of our drug candidates prove to be unsafe, our entire platform and pipeline could be affected, which would have a material and adverse effect on our business, financial condition, results of operations and prospects.

Even if our current drug candidates or any future drug candidates obtain regulatory approval or authorization, they may fail to achieve the broad degree of physician and patient adoption and use necessary for commercial success.

Even if one or more of our drug candidates receives the necessary regulatory approvals or authorizations, the commercial success of any of our current or future drug candidates will depend significantly on the broad adoption and use of the resulting product by physicians and patients for approved or authorized indications. Our drug candidates may not be commercially successful. For a variety of reasons, including among other things, competitive factors, pricing or physician preference, reimbursement by insurers, the degree and rate of physician and patient adoption of our current or future drug candidates, if approved or authorized, will depend on a number of factors, including:

- the clinical indications for which the product is approved or authorized and patient demand for approved or authorized products that treat those indications;
- the safety and efficacy of our product as compared to other available therapies;
- the feasibility of adhering to heightened drug diversion protocols for drug product Sarconeos (BIO101), which has the potential for misuse/abuse by body builders and other sportsmen;
- the availability of coverage and adequate reimbursement from managed care plans, insurers and other healthcare payors for any of our drug candidates that may be approved or authorized;
- acceptance by physicians, operators of clinics and patients of the product as a safe and effective treatment;
- overcoming any biases physicians or patients may have toward particular therapies for the treatment of approved or authorized indications;
- public misperception regarding the use of our therapies, or public bias against "anti-aging" companies;
- patient satisfaction with the administration and effectiveness of our drug candidates and overall treatment experience, including, for example, the convenience of any dosing regimen and storage method;
- the cost of treatment with our drug candidates in relation to alternative treatments and reimbursement levels, if any, and willingness to pay for the product, if approved or authorized, on the part of insurance companies and other third-party payers, physicians and patients;
- the timing of market introduction of the drug candidate as well as competitive products;

- the revenue and profitability that our products may offer a physician as compared to alternative therapies;
- the prevalence and severity of side effects;
- limitations or warnings contained in the approved or authorized labeling for our products;
- any regulatory agency's requirement to undertake a REMS;
- the effectiveness of our sales, marketing and distribution efforts;
- COVID-19 may be substantially eradicated prior to our development of a successful therapy in the COVA clinical program by one or more of the vaccines that have been or may in the future be authorized for use, or the therapy produced by the COVA clinical program may not be effective against other or future coronavirus variants, reducing or eliminating the need for this therapy to treat the disease;
- the SARS-CoV-2 virus could develop resistance to our treatment developed in the COVA clinical program (which is concluding early due to the lack of enrollment), which could affect any long-term demand or sales potential for our potential therapies;
- adverse publicity about our products, status of ongoing trials, or favorable publicity about competitive products; and
- potential product liability claims.

We cannot assure you that our current or future drug candidates, if approved or authorized, will achieve broad market acceptance among physicians and patients. Any failure by our drug candidates that obtain regulatory approval or authorization to achieve market acceptance or commercial success would adversely affect our results of operations.

We rely on third parties to provide the raw materials necessary for our drug candidates and to manufacture preclinical and clinical supplies of our drug candidates and we intend to rely on third parties to produce commercial supplies of any approved or authorized drug candidate. The loss of these suppliers or manufacturers, or their failure to comply with applicable regulatory requirements or to provide us with sufficient quantities at acceptable quality levels or prices, or at all, would materially and adversely affect our business.

We do not have nor do we plan to build or acquire the infrastructure or capability internally to source the raw materials necessary to produce our drug candidates and/or to manufacture our drug candidates on a preclinical, clinical or commercial scale.

Sarconeos (BIO101) is a pharmaceutical-grade purification of 20-hydroxyecdysone, which is derived from the *Cyamnotis* sp or *Stemmacantha* sp, a plant cultivated in China and used for medicinal purposes in traditional Chinese medicine. There are a limited number of growers of this plant and suppliers of the plant material and we must account for the lead time required to grow sufficient quantities of the plant to meet our needs. At this time we rely on one supplier for the plant quantities we require for our clinical trials. We have not entered into a long-term supply agreement with this supplier. We have already obtained good manufacturing practices ("GMP") batches/GMP-compliant batches/batches produced in compliance with GMP of Sarconeos (BIO101) for our clinical trials and we believe we can secure sufficient quantities for our future clinical programs through our current supply chain up to regulatory approval and/or marketing authorization. If our current supplier is unable to provide sufficient quantities of the plant to produce Sarconeos (BIO101) for future clinical trials, our ability to obtain regulatory approval or authorization for Sarconeos (BIO101) would be affected. If we receive regulatory approval or authorization, we will likely need substantial quantities of plants to produce Sarconeos (BIO101) for commercial development. If our current supplier is unable to provide sufficient quantities of the plant to produce Sarconeos (BIO101) and if we are unable to find an alternative source, our ability to commercialize Sarconeos (BIO101) would be impaired. In order to address this issue, we are evaluating alternative methods for producing 20 -hydroxyecdysone in order to optimize the supply chain to support our projected commercial needs.

Macuneos (BIO201) is a pharmaceutical-grade purification of norbixin, which is derived from seeds of *Bixa orellana L.*, a plant traditionally used for medicinal purposes in the Amazon and currently used for producing a food color in many countries. Although this plant is more widely available, there are a limited number of suppliers of the plant material that could meet our requirement for quality. At this time we rely on one supplier for the plant quantities we will require for our MACA clinical program. We have not entered into a long-term supply agreement with this supplier. If our current supplier is unable to provide sufficient supply

to produce Macuneos (BIO201) for future clinical trials, our ability to obtain regulatory approval or authorization for Macuneos (BIO201) would be affected. If we receive regulatory approval or authorization, we will likely need substantial quantities of plants to produce Macuneos (BIO201) for commercial development. If our current supplier is unable to provide sufficient quantities of the plant to produce Macuneos (BIO201) and if we are unable to find an alternative source, our ability to commercialize Macuneos (BIO201) would be impaired. In order to address this issue, we are evaluating alternative methods for producing norbixin in order to optimize the supply chain to support our projected commercial needs.

Our contract manufacturing partner for both Sarconeos (BIO101) and Macuneos (BIO201) is Patheon, a part of Thermo Fisher Scientific, located in Germany. We have not entered into a long-term manufacturing agreement with Patheon or any other contract manufacturer.

The facilities used by our contract manufacturer to manufacture our drug candidates are subject to various regulatory requirements and may be subject to the inspection of the FDA, EMA or other regulatory authorities. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partner for compliance with the regulatory requirements, known as cGMPs. If our contract manufacturer cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA, EMA or comparable regulatory authorities in foreign jurisdictions, we may not be able to rely on their manufacturing facilities for the manufacture of our drug candidates. In addition, we have limited control over the ability of our contract manufacturer to maintain adequate quality control, quality assurance and qualified personnel. If the FDA, EMA or a comparable foreign regulatory authority finds these facilities inadequate for the manufacture of our drug candidates or if such facilities are subject to enforcement action in the future or are otherwise inadequate, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval or authorization for or market our drug candidates. Any significant delay in, or quality control problems with respect to, the supply of a drug candidate, or the raw material components thereof, for an ongoing study or trial could considerably delay completion of our preclinical studies or future clinical trials, product testing and potential regulatory approval or authorization of our drug candidates. Moreover, quarantines, shutdowns, shelter-in-place and other restrictions related to COVID-19 or other infectious diseases, or the perception that such events, orders or other restrictions on the conduct of business operations could occur, could impact personnel at manufacturing facilities which could disrupt our supply chain.

If any of our drug candidates is approved or authorized by the FDA, EMA and/or comparable foreign regulatory authorities and we choose to independently commercialize such drug candidate, we will need to engage manufacturers for the commercial supply of such drug candidates. However, we may be unable to enter into any such agreement or do so on commercially reasonable terms, which could have a material adverse impact upon our business. Moreover, if there is a disruption to one or more of our third-party manufacturers' or suppliers' relevant operations, or if we are unable to enter into arrangements for the commercial supply of our drug candidates, we will have no other means of producing our drug candidates until they restore the affected facilities or we or they procure alternative manufacturing facilities or sources of supply. Our ability to progress our preclinical and clinical programs could be materially and adversely impacted if any of the third party suppliers upon which we rely were to experience a significant business challenge, disruption or failure due to issues such as financial difficulties or bankruptcy, issues relating to other customers such as regulatory or quality compliance issues, or other financial, legal, regulatory or reputational issues. Additionally, any damage to or destruction of our third-party manufacturers' or suppliers' facilities or equipment may significantly impair our ability to manufacture our drug candidates on a timely basis.

In addition, to manufacture our drug candidates in the quantities that we believe would be required to meet anticipated market demand, our third-party manufacturers would likely need to increase manufacturing capacity and, in some cases, we could be required to secure alternative sources of commercial supply, which could involve significant challenges and could require additional regulatory approvals. If new restrictions are imposed as a result of a COVID-19 resurgence, any new pandemic or epidemic, or emergence of other infectious diseases, we may not be able to develop or scale up manufacturing capacity on a timely basis or have access to logistics or supply channels. In addition, the development of commercial-scale manufacturing capabilities could require us and our third-party manufacturers to invest substantial additional funds and hire and retain the technical personnel who have the necessary manufacturing experience. Neither we nor our third-party manufacturers may successfully complete any required increase to existing manufacturing capacity in a timely manner, or at all. If our manufacturers or we are unable to purchase the raw materials necessary for the manufacture of our drug candidates on acceptable terms, at sufficient quality levels, or in adequate quantities, if at all, the commercial launch of our drug candidates or any future drug candidates would be delayed or there would be a shortage in supply, which would impair our ability to generate revenues from the sale of such drug candidates, if approved.

We rely on third parties in the conduct of all of our preclinical studies and clinical trials and intend to rely on third parties in the conduct of all of our future clinical trials. If these third parties do not successfully carry out their contractual duties, fail to comply with applicable regulatory requirements or meet expected deadlines, we may be unable to obtain regulatory approval for our drug candidates.

We currently do not have the ability to independently conduct preclinical studies that comply with the regulatory requirements known as good laboratory practice ("GLP") requirements. We also do not currently have the ability to independently conduct any clinical trials. The FDA, EMA and regulatory authorities in other jurisdictions require us to comply with regulations and standards, commonly referred to as good clinical practice ("GCP") requirements for conducting, monitoring, recording and reporting the results of clinical trials, in order to ensure that the data and results are scientifically credible and accurate and that the trial subjects are adequately informed of the potential risks of participating in clinical trials. We rely on medical institutions, clinical investigators, contract laboratories and other third parties, such as CROs to conduct GLP-compliant preclinical studies and GCP-compliant clinical trials on our drug candidates properly and on time. While we have agreements governing their activities, we control only certain aspects of their activities and have limited influence over their actual performance. The third parties with whom we contract for execution of our GLP-compliant preclinical studies and our GCP-compliant clinical studies play a significant role in the conduct of these studies and trials and the subsequent collection and analysis of data. These third parties are not our employees and, except for restrictions imposed by our contracts with such third parties, we have limited ability to control the amount or timing of resources that they devote to our programs. In addition, third parties may have or adopt their own policies in response to continuing COVID-19 or other pandemics, epidemics, or other infectious diseases that may create delays or service disruptions, including work-from-home policies that lead to reduced workforce productivity. Although we rely on these third parties to conduct our GLP-compliant preclinical studies and GCP-compliant clinical trials, we remain responsible for ensuring that each of our GLP preclinical studies and clinical trials is conducted in accordance with its investigational plan and protocol and applicable laws and regulations, and our reliance on the CROs does not relieve us of our regulatory responsibilities.

Many of the third parties with whom we contract may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other drug development activities that could harm our competitive position. If the third parties conducting our preclinical studies or our clinical trials do not adequately perform their contractual duties or obligations, experience significant business challenges, disruptions or failures, do not meet expected deadlines, terminate their agreements with us or need to be replaced, or if the quality or accuracy of the data they obtain is compromised due to their failure to adhere to our protocols or to GCPs, or for any other reason, we may need to enter into new arrangements with alternative third parties. This could be difficult, costly or impossible, and our preclinical studies or clinical trials may need to be extended, delayed, terminated or repeated. As a result we may not be able to obtain regulatory approval or authorization in a timely fashion, or at all, for the applicable drug candidate, our financial results and the commercial prospects for our drug candidates would be harmed, our costs could increase, and our ability to generate revenues could be delayed.

We face significant competition in an environment of rapid technological and scientific change, and our drug candidates, if approved or authorized, will face significant competition and our failure to effectively compete may prevent us from achieving significant market penetration. A number of our competitors have significantly greater resources than we do and we may not be able to successfully compete.

The biotechnology and pharmaceutical industries in particular are characterized by rapidly advancing technologies, intense competition and a strong emphasis on developing proprietary therapeutics. Numerous companies are engaged in the development, patenting, manufacturing and marketing of healthcare products competitive with those that we are developing. We face competition from a number of sources, such as pharmaceutical companies, generic drug companies, biotechnology companies and academic and research institutions, many of which have greater financial resources, marketing capabilities, sales forces, manufacturing capabilities, research and development capabilities, clinical trial expertise, intellectual property portfolios, experience in obtaining patents and regulatory approvals or authorizations for drug candidates and other resources than we do. Some of the companies that offer competing products also have a broad range of other product offerings, large direct sales forces and long-term customer relationships with our target physicians, which could inhibit our market penetration efforts. Mergers and acquisitions in the biotechnology and pharmaceutical industry may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. In addition, certain of our drug candidates, if approved, may compete with other products that treat age-related diseases, including over-the-counter ("OTC") treatments, for a share of some patients' discretionary budgets and for physicians' attention within their clinical practices.

We are aware of other companies seeking to develop treatments to prevent or treat aging-related diseases through various biological pathways. Indeed, the main challenge is to be able to identify the optimal target population given the dynamics in diagnostic criteria. The recent failures, combined with these dynamics, can deter major pharmaceutical companies from re-entering this space. While there are numerous clinical studies with new drug candidates to treat COVID-19, we believe Sarconeos (BIO101) is the most advanced drug candidate for the treatment of respiratory failure associated with COVID-19, specifically targeting the RAS imbalanced by SARS-CoV-2.

For DMD, our current focus on non-ambulatory patients with evidence of respiratory deterioration, puts us in a position to become one of the more advanced companies that develop medications for this population. Santhera Therapeutics, which was developing idebenone for this indication, has recently stopped their Phase 2/3 study and are no longer investing in this area. For dry AMD, we believe that we will compete with a number of companies that are developing drugs to treat this disease using different technologies (*e.g.*, cellular and gene therapy, integrin regulation, and others), for example, Allegro Ophthalmics, Apellis Pharmaceuticals, Kodiak Sciences, Astellas, Hemera Biosciences, Ionis Pharmaceuticals, Ophthotech Corporation and Roche and Stealth Biotherapeutics.

Certain alternative treatments offered by competitors may be available at lower prices and may offer greater efficacy or better safety profiles. Furthermore, currently approved products could be discovered to have application for treatment of age-related diseases generally, which could give such products significant regulatory and market timing advantages over any of our drug candidates. Our competitors also may obtain FDA, EMA or other regulatory approval for their products more rapidly than we may obtain approval for ours and may obtain orphan product exclusivity from the FDA or EMA for indications our drug candidates are targeting, which could result in our competitors establishing a strong market position before we are able to enter the market. Newly developed systemic or non-systemic treatments that replace existing therapies that are currently only utilized in patients suffering from severe disease may also have lessened side effects or reduced prices compared to current therapies, which make them more attractive for patients suffering from mild to moderate disease. Even if a generic product or an OTC product is less effective than our drug candidates, a less effective generic or OTC product may be more quickly adopted by physicians and patients than our competing drug candidates based upon cost or convenience. For additional information regarding our competition, see the section of this annual report titled “Business—Competition.”

In addition, another party may be successful in producing a more efficacious therapy for COVID-19 or a therapy with a more convenient or preferred route of administration or in producing a therapy in a more timely manner, which may lead to the diversion of funding away from us and toward other companies or lead to decreased demand for our potential therapies. Further, other therapies that are more affordable than our potential therapies may be used to treat COVID-19, including existing generic drugs, which could also hurt the funding of and demand for our potential therapies.

Several public and private entities have been working to develop a therapy for COVID-19, and some of these therapies have already received approval or authorization for emergency usage. These entities may be more successful at developing, manufacturing or commercializing therapies for COVID-19, especially given that several of these other organizations are much larger than we are and have access to larger pools of capital, including U.S. government funding, and broader manufacturing infrastructure. The success or failure of other entities, or perceived success or failure, may adversely impact our ability to obtain any future funding for our development and manufacturing efforts or to ultimately commercialize a therapy for COVID-19, if approved or authorized.

Furthermore, there are a number of preventative vaccines in development and others that have already been authorized and widely distributed. If the COVID-19 pandemic subsides as a result of these vaccines, it may reduce demand for our product.

Government restrictions on pricing and reimbursement, as well as other healthcare payor cost-containment initiatives, may negatively impact our ability to generate revenues and become profitable even if we obtain regulatory approval or authorization to market a product.

Our ability to commercialize any products successfully also will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers and other organizations. Government authorities and other third-party payors, such as private health insurers and health maintenance organizations, determine which medications they will cover and establish reimbursement levels. Assuming we obtain coverage for a given product by a third-party payor, the resulting reimbursement payment rates may not be adequate or may require co-payments that patients find unacceptably high. Patients who are prescribed medications for the treatment of their conditions, and their prescribing physicians, generally rely on third-party payors to reimburse all or part of the costs associated with their prescription drugs. Patients are unlikely to use our products unless coverage is provided and reimbursement is adequate to cover all or a significant

portion of the cost of our products. Therefore, coverage and adequate reimbursement is critical to new product acceptance. Coverage decisions may depend upon clinical and economic standards that disfavor new drug products when more established or lower cost therapeutic alternatives are already available or subsequently become available.

Government authorities and other third-party payors are developing increasingly sophisticated methods of controlling healthcare costs, such as by limiting coverage and the amount of reimbursement for particular medications. Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices as a condition of coverage, are using restrictive formularies and preferred drug lists to leverage greater discounts in competitive classes, and are challenging the prices charged for medical products.

In the United States, federal programs impose penalties on drug manufacturers in the form of mandatory additional rebates and/or discounts if commercial prices increase at a rate greater than the Consumer Price Index-Urban, and these rebates and/or discounts, which can be substantial, may impact our ability to raise commercial prices. Further, no uniform policy requirement for coverage and reimbursement for drug products exists among third-party payors in the United States. Therefore, coverage and reimbursement for drug products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance.

In the European Union ("EU") coverage and reimbursement possibilities for drug products differ from one Member State to another. Each Member State has the ability to set the prices and restrict the range of medicinal products for which their national health insurance systems provide reimbursement. Factors contributing to price changes between Member States depend on different regulatory approaches and instruments used by each Member State to govern the supply and demand of medicinal products. For example, in France, a pharmaceutical company may freely set a price of a drug after obtaining a marketing authorization. However, in order for the product to be reimbursed under the French Social Security scheme, the pharmaceutical company must follow a specific process and submit an application to the French High Authority for Health, or HAS. The opinion issued by the HAS and its subcommittees (Transparency Commission or CT, and the Commission for Economic and Public Health Evaluation or CEESP, if applicable) is then transmitted to the French Economic Committee for Health Products, or CEPS—with which the pharmaceutical company has to negotiate the price of the product and the French National Union of Health Insurance Funds, or UNCAM which fixes the reimbursement rate of medicines covered by statutory health insurance. The final decision on price and reimbursement is issued by the French Minister of Health and can be revised afterwards, for example, depending on the cost/benefit balance of the medicinal product over time. Other EU countries may adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market as well as other price control mechanisms. In view of these differences from one Member State to another, there is still a risk that some EU countries do not allow favorable reimbursements and pricing arrangements.

The continuing efforts of governments, insurance companies, managed care organizations and other payors of healthcare costs to contain or reduce costs of healthcare may negatively affect our commercialization prospects, including:

- our ability to set a price we believe is fair for our products, if approved or authorized;
- our ability to obtain and maintain market acceptance by the medical community and patients;
- our ability to generate revenues and achieve profitability; and
- the availability of capital.

We cannot be sure that coverage and reimbursement will be available for any potential drug candidate that we may commercialize and, if reimbursement is available, what the level of reimbursement will be. Coverage and reimbursement may impact the demand for, or the price of, any drug candidate for which we obtain marketing approval or authorization. If coverage and reimbursement are not available or reimbursement is available only to limited levels, we may not successfully commercialize any drug candidate for which we obtain marketing approval or authorization.

We expect that additional U.S. state and federal healthcare reform measures, as well as similar measures by non-U.S. governments, will be adopted in the future, any of which could limit the amounts that governments will pay for healthcare products and services, which could result in additional pricing pressure or reduced demand for any drug candidate we develop.

In the event we elect to commercialize any of our drug candidates that receive regulatory approval or authorization, we will need to establish sales capabilities on our own or through third parties. If we are unsuccessful in our efforts, we may not be able to market and sell our drug candidates effectively in the United States, EU and/or other foreign jurisdictions, if approved or authorized, or generate product revenue.

We currently do not have a marketing or sales organization. In order to commercialize our drug candidates in the United States and foreign jurisdictions, we would need to establish marketing, sales, distribution, managerial and other non-technical capabilities or make arrangements with third parties to perform these services, and we may not be successful in doing so. If any of our drug candidates receive regulatory approval or authorization and we elect to independently commercialize such drug candidates, we would expect to establish a sales organization with technical expertise and supporting distribution capabilities to commercialize each such drug candidate, which would be expensive and time consuming. We have no prior experience in the marketing, sale and distribution of pharmaceutical products and there are significant risks involved in building and managing a sales organization, including our ability to hire, retain, and incentivize qualified individuals, generate sufficient sales leads, provide adequate training to sales and marketing personnel, and effectively manage a geographically dispersed sales and marketing team. Any failure or delay in the development of our internal sales, marketing and distribution capabilities would adversely impact the commercialization of these products. Alternatively, we may choose to collaborate with third parties that have direct sales forces and established distribution systems, either to augment our own sales force and distribution systems or in lieu of our own sales force and distribution systems. If we are unable to enter into such arrangements on acceptable terms or at all, we may not be able to successfully commercialize our drug candidates. If we are not successful in commercializing our drug candidates or any future drug candidates, either on our own or through arrangements with one or more third parties, and are not otherwise able to license these products to third parties, we may not be able to generate any future product revenue and we would incur significant additional losses.

We will need to increase the size of our organization, and we may experience difficulties in managing growth.

As of the date of this annual report, we have 25 full-time employees, 20 of whom are engaged in research and development activities and five of whom are engaged in general and administrative activities. We will need to continue to expand our managerial, operational, finance and other resources in order to manage our operations and clinical trials, continue our development activities and commercialize our drug candidates or any future drug candidates. Our management and personnel, systems and facilities currently in place may not be adequate to support this future growth. Our need to effectively execute our growth strategy requires that we:

- manage our clinical trials effectively;
- identify, recruit, retain, incentivize and integrate additional employees;
- manage our internal development and operational efforts effectively while carrying out our contractual obligations to and/or relations with third parties including regulatory agencies and market authorities;
- continue to improve our operational, financial and management controls, reports systems and procedures; and
- manage our information technology systems and data security.

If we fail to attract and retain senior management and key scientific personnel, we may be unable to successfully develop our drug candidates or any future drug candidates, conduct our clinical trials and commercialize our current or any future drug candidates.

We are dependent upon the services of our senior management and the loss of any of these individuals could harm our business. The loss of services of any of our key executive officers or other members of our senior management team, may be disruptive to, or cause uncertainty in, our business and could have a negative impact on our ability to manage and grow our business effectively. Such disruption could have a material adverse impact on our financial performance, financial condition, and the market price of our ordinary shares.

Our success also depends on our ability to continue to attract, retain and motivate highly qualified clinical and scientific personnel. Competition for qualified personnel in the biotechnology and pharmaceuticals field is intense due to the limited number of individuals who possess the skills and experience required by our industry. We will need to hire additional personnel as we expand our clinical development and if we initiate commercial activities. We may not be able to attract and retain quality personnel on acceptable terms, or at all. In addition, to the extent we hire personnel from competitors, we may be subject to allegations that they have been

improperly solicited or that they have divulged proprietary or other confidential information, or that their former employers own their research output.

If product liability lawsuits are brought against us, we may incur substantial liabilities and may be required to limit commercialization of our current or future drug candidates.

We face an inherent risk of product liability as a result of the clinical testing of our drug candidates and will face an even greater risk if we commercialize any products. For example, we may be sued if any product we develop allegedly causes injury or is found to be otherwise unsuitable during product testing, manufacturing, marketing or sale. Any such product liability claims may include allegations of defects in manufacturing, defects in design, a failure to warn of dangers inherent in the product, negligence, strict liability, and a breach of warranty. Claims could also be asserted under state consumer protection acts. If we cannot successfully defend ourselves against product liability claims, we may incur substantial liabilities or be required to limit commercialization of our drug candidates. Even a successful defense would require significant financial and management resources. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for our current or future drug candidates;
- injury to our reputation;
- withdrawal of clinical trial participants;
- costs to defend the related litigation;
- a diversion of management's time and our resources;
- substantial monetary awards to trial participants or patients;
- regulatory investigations, product recalls, withdrawals or labeling, marketing or promotional restrictions;
- loss of revenue; and
- the inability to commercialize our current or any future drug candidates.

Our inability to obtain and maintain sufficient product liability insurance at an acceptable cost and scope of coverage to protect against potential product liability claims could prevent or inhibit the commercialization of our current or any future drug candidates we develop. We currently carry product liability insurance covering our clinical trials. Although we maintain such insurance, any claim that may be brought against us could result in a court judgment or settlement in an amount that is not covered, in whole or in part, by our insurance or that is in excess of the limits of our insurance coverage. Our insurance policies also have various exclusions and deductibles, and we may be subject to a product liability claim for which we have no coverage. We will have to pay any amounts awarded by a court or negotiated in a settlement that exceed our coverage limitations or that are not covered by our insurance, and we may not have, or be able to obtain, sufficient funds to pay such amounts. Moreover, in the future, we may not be able to maintain insurance coverage at a reasonable cost or in sufficient amounts to protect us against losses. If and when we obtain approval or authorization for marketing any of our drug candidates, we intend to expand our insurance coverage to include the sale of such drug candidate; however, we may be unable to obtain this liability insurance on commercially reasonable terms or at all.

Our existing collaborations as well as additional collaboration arrangements that we may enter into in the future may not be successful, which could adversely affect our ability to develop and commercialize our drug candidates.

We utilize external collaborations and currently maintain several active early-stage research and discovery focused collaborations. We may seek to partner with pharmaceutical laboratories to conduct clinical trials of our drug candidates. We may also seek additional collaboration arrangements for the commercialization, or potentially for the development, of certain of our drug candidates depending on the merits of retaining commercialization rights for ourselves as compared to entering into collaboration arrangements. To the extent that we decide to enter into additional collaboration agreements in the future, we may face significant competition in seeking appropriate collaborators. Moreover, collaboration arrangements are complex and time-consuming to negotiate, document, implement and maintain and challenging to manage. We may not be successful in our efforts to prudently

manage our existing collaborations or to enter new ones should we choose to do so. The terms of new collaborations or other arrangements that we may establish may not be favorable to us.

The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators. Collaborations are subject to numerous risks, which may include risks that:

- collaborators have significant discretion in determining the efforts and resources that they will apply to collaborations;
- collaborators may not perform their obligations as expected;
- collaborators may not pursue development and commercialization of our drug candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in their strategic focus due to their acquisition of competitive products or their internal development of competitive products, availability of funding or other external factors, such as a business combination that diverts resources or creates competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial, abandon a drug candidate, repeat or conduct new clinical trials or require a new formulation of a drug candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or drug candidates;
- a collaborator with marketing, manufacturing and distribution rights to one or more products may not commit sufficient resources to or otherwise not perform satisfactorily in carrying out these activities;
- we could grant exclusive rights to our collaborators that would prevent us from collaborating with others;
- collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a collaborator that cause the delay or termination of the research, development or commercialization of our current or future drug candidates or that result in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated, and, if terminated, this may result in a need for additional capital to pursue further development or commercialization of the applicable current or future drug candidates;
- collaborators may own or co-own intellectual property covering products that results from our collaborating with them, and in such cases, we would not have the exclusive right to develop or commercialize such intellectual property;
- disputes may arise with respect to the ownership of any intellectual property developed pursuant to our collaborations; and
- a collaborator's sales and marketing activities or other operations may not be in compliance with applicable laws resulting in civil or criminal proceedings.

Significant disruptions of information technology systems or breaches of data security could materially adversely affect our business, results of operations and financial condition.

We collect and maintain information in digital form that is necessary to conduct our business, and we are increasingly dependent on information technology systems and infrastructure to operate our business. In the ordinary course of our business, we collect, store and transmit large amounts of confidential information, including intellectual property, proprietary business information and personal information. It is critical that we do so in a secure manner to maintain the confidentiality and integrity of such confidential information. We have established physical, electronic and organizational measures to safeguard and secure our systems to prevent a data compromise, and rely on commercially available systems, software, tools, and monitoring to provide security for our information technology systems and the processing, transmission and storage of digital information. We have also outsourced

elements of our information technology infrastructure, and as a result a number of third-party vendors may or could have access to our confidential information. Our internal information technology systems and infrastructure, and those of our current and any future collaborators, contractors and consultants and other third parties on which we rely, are vulnerable to damage from computer viruses, malware, natural disasters, terrorism, war, telecommunication and electrical failures, cyber-attacks or cyber-intrusions over the Internet, attachments to emails, persons inside our organization, or persons with access to systems inside our organization.

The risk of a security breach or disruption, particularly through cyber-attacks or cyber-intrusion, including by computer hackers, foreign governments and cyber-terrorists, has generally increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. In addition, the prevalent use of mobile devices that access confidential information increases the risk of data security breaches, which could lead to the loss of confidential information or other intellectual property. The costs to us to mitigate network security problems, bugs, viruses, worms, malicious software programs and security vulnerabilities could be significant, and while we have implemented security measures to protect our data security and information technology systems, our efforts to address these problems may not be successful, and these problems could result in unexpected interruptions, delays, cessation of service and other harm to our business and our competitive position. If such an event were to occur and cause interruptions in our operations, it could result in a material disruption of our product development programs. For example, the loss of clinical trial data from completed or ongoing or planned clinical trials could result in delays in our regulatory approval or authorization efforts and significantly increase our costs to recover or reproduce the data. Moreover, if a computer security breach affects our systems or results in the unauthorized release of personally identifiable information, our reputation could be materially damaged.

In addition, such a breach may require notification to governmental agencies, the media or individuals pursuant to various federal and state privacy and security laws, if applicable, including the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Clinical Health Act of 2009, and its implementing rules and regulations, as well as regulations promulgated by the Federal Trade Commission and state breach notification laws.

Under the data protection laws in the EU, and notably the General Data Protection Regulation ("GDPR") No. 2016/679, which entered into force on May 25, 2018 and is applicable personal data that we process in relation to our presence in the EU, the offering of products or services to individuals in the EU or the monitoring of the behavior of individuals in the EU, we have also a legal responsibility to report personal data breaches to the competent supervisory authority. The GDPR includes a broad definition and a short deadline for the notification of personal data breaches, which may be difficult to implement in practice and requires that we implement robust internal processes. Under the GDPR, we have to report personal data breaches to the competent supervisory authority within 72 hours of the time we become aware of a breach "unless the personal data breach is unlikely to result in a risk to the right and freedoms of natural persons" (Article 33 of the GDPR). In addition, the GDPR requires that we communicate the breach to the data subject if the breach is "likely to result in a high risk to the rights and freedoms of natural persons" (Article 34 of the GDPR). In order to fulfil these requirements, we have to implement specific internal processes to be followed in case of a personal data breach, which will allow us to (a) contain and recover the breach, (b) assess the risk to the data subjects, (c) notify, and possibly communicate the breach to the data subjects, (d) investigate and respond to the breach. The performance of these processes involve substantial costs in resources and time.

Finally, as a consequence of the decision by the European Court of Justice issued on July 16, 2020 (known as the "Schrems II decision"), which invalidated the privacy shield for data transfers between the EU and the United States, a reassessment of both data transfers to and storage of EU data by our U.S. entities or other U.S. companies will be required. To the extent that the U.S. legal system is not considered as providing an adequate level of protection by the European authorities, and that the other safeguards provided by applicable regulation (*e.g.*, Standard Contractual Clause ("SCCs") in their form before June 2021) are not deemed to fully address such inadequacies, additional protective measures will have to be assessed on a case-by-case basis, and implemented in order to ensure the compliance of such transfers, based on the new SCCs, prior to adoption.

Moreover, as we may rely on third parties that will also process as processor the data for which we are a data controller—for example, in the context of the manufacturing of our drug candidates or for the conduct of clinical trials, we must contractually ensure that strict security measures, as well as appropriate obligations including an obligation to report in due delay any security incident are implemented, in order to allow us fulfilling our own regulatory requirements.

We would also be exposed to a risk of loss or litigation and potential liability for any security breach on personal data for which we are data controller. The costs of above-mentioned processes together with legal penalties, possible compensation for damages and any resulting lawsuits arising from a breach may be extensive and may have a negative impact on reputation and materially adversely affect our business, results of operations and financial condition.

Our employees and independent contractors, including principal investigators, consultants, commercial collaborators, service providers and other vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements, which could have an adverse effect on our results of operations.

We are exposed to the risk that our employees and independent contractors, including principal investigators, consultants, any future commercial collaborators, service providers and other vendors may engage in misconduct or other illegal activity. Misconduct by these parties could include intentional, reckless and/or negligent conduct or other unauthorized activities that violate the laws and regulations of the FDA, EMA and other similar regulatory authorities, including those laws that require the reporting of true, complete and accurate information to such regulatory authorities; manufacturing standards; healthcare fraud and abuse, data privacy laws and other similar laws; or laws that require the true, complete and accurate reporting of financial information or data. Activities subject to these laws also involve the improper use or misrepresentation of information obtained in the course of clinical trials, the creation of fraudulent data in our preclinical studies or clinical trials, or illegal misappropriation of product, which could result in regulatory sanctions and cause serious harm to our reputation. It is not always possible to identify and deter misconduct by employees and other third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws or regulations. In addition, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and financial results, including, without limitation, the imposition of significant civil, criminal and administrative penalties, damages, monetary fines, disgorgements, possible exclusion from participation in governmental healthcare programs, individual imprisonment, other sanctions, contractual damages, reputational harm, diminished profits and future earnings and curtailment of our operations, any of which could adversely affect our ability to operate our business and our results of operations.

Our business involves the use of hazardous materials and we and our third-party manufacturers and suppliers must comply with environmental laws and regulations, which can be expensive and restrict how we do business.

Our research and development activities and our third-party manufacturers' and suppliers' activities involve the controlled storage, use and disposal of hazardous materials owned by us, including the components of our product and drug candidates and other hazardous compounds. We and any third-party manufacturers and suppliers we engage are subject to numerous federal, state and local environmental, health and safety laws, regulations and permitting requirements, including those governing laboratory procedures; the generation, handling, use, storage, treatment, and disposal of hazardous and regulated materials and wastes; the emission and discharge of hazardous materials into the ground, air and water; and employee health and safety. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also produce hazardous waste. In some cases, these hazardous materials and various wastes resulting from their use are stored at our and our manufacturers' facilities pending their use and disposal. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination, which could cause an interruption of our commercialization efforts, research and development efforts and business operations, environmental damage resulting in costly clean-up and liabilities under applicable laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products.

Although we believe that the safety procedures utilized by our third-party manufacturers for handling and disposing of these materials generally comply with the standards prescribed by these laws and regulations, we cannot guarantee that this is the case or eliminate the risk of accidental contamination or injury from these materials. Under certain environmental laws, we could be held responsible for costs relating to any contamination at our current or past facilities and at third-party facilities. In such an event, we may be held liable for any resulting damages and such liability could exceed our resources and state or federal or other applicable authorities may curtail our use of certain materials and/or interrupt our business operations. Furthermore, environmental laws and regulations are complex, change frequently and have tended to become more stringent. We cannot predict the impact of such changes and cannot be certain of our future compliance.

Compliance with applicable environmental laws and regulations may be expensive, and current or future environmental laws and regulations may impair our research, product development and manufacturing efforts. In addition, we cannot entirely eliminate the risk of accidental injury or contamination from these materials or wastes. Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not carry specific biological or hazardous waste insurance coverage, and our property, casualty, and general liability insurance policies specifically exclude coverage for damages and fines arising from biological or hazardous waste exposure or contamination. Accordingly, in the event of contamination or injury, we could be held liable for damages or be penalized with fines in an amount exceeding our resources, and our clinical trials or regulatory

approvals or authorization could be suspended, which could have a material adverse effect on our business, results of operations and financial condition.

Risks Related to Intellectual Property

Our ability to compete may decline if we do not adequately protect our proprietary rights.

Our success depends on obtaining and maintaining proprietary rights to our drug candidates for the treatment of age-related diseases, as well as successfully defending these rights against third-party challenges. We will only be able to protect our drug candidates, and their uses from unauthorized use by third parties to the extent that valid and enforceable patents, or effectively protected trade secrets, cover them. Our ability to obtain patent protection for our drug candidates is uncertain due to a number of factors, including:

- we may not have been the first to make the inventions covered by pending patent applications or issued patents;
- we may not have been the first to file patent applications for our drug candidates or the compositions we developed or for their uses;
- others may independently develop identical, similar or alternative products or compositions and uses thereof;
- our disclosures in patent applications may not be sufficient to meet the statutory requirements for patentability;
- any or all of our pending patent applications may not result in issued patents;
- we may not seek or obtain patent protection in countries that may eventually provide us a significant business opportunity;
- any patents issued to us may not provide a basis for commercially viable products, may not provide any competitive advantages, or may be successfully challenged by third parties;
- our compositions and methods may not be patentable;
- others may design around our patent claims to produce competitive products which fall outside of the scope of our patents; or
- others may identify prior art or other bases which could invalidate our patents.

Even if we have or obtain patents covering our drug candidates or compositions, we may still be barred from making, using and selling our drug candidates or technologies because of the patent rights of others. Others may have filed, and in the future may file, patent applications covering compositions or products that are similar or identical to ours. There are many issued U.S. and foreign patents relating to chemical compounds and therapeutic products, and some of these relate to compounds we intend to commercialize. Numerous U.S. and foreign issued patents and pending patent applications owned by others exist in the allergy treatment field in which we are developing products. These could materially affect our ability to develop our drug candidates or sell our products if approved or authorized. Because patent applications can take many years to issue, there may be currently pending applications unknown to us that may later result in issued patents that our drug candidates or compositions may infringe. These patent applications may have priority over patent applications filed by us.

Obtaining and maintaining a patent portfolio entails significant expense and resources. Part of the expense includes periodic maintenance fees, renewal fees, annuity fees, various other governmental fees on patents and/or applications due in several stages over the lifetime of patents and/or applications, as well as the cost associated with complying with numerous procedural provisions during the patent application process. We may or may not choose to pursue or maintain protection for particular inventions. In addition, there are situations in which failure to make certain payments or noncompliance with certain requirements in the patent process can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. If we choose to forgo patent protection or allow a patent application or patent to lapse purposefully or inadvertently, our competitive position could suffer.

In addition, it is unclear at this time what Brexit's impact will have on our intellectual property rights and the process for obtaining and defending such rights. It is possible that certain intellectual property rights, such as trademarks, granted by the EU will cease being enforceable in the UK absent special arrangements to the contrary. With regard to existing patent rights, the effect of Brexit should be minimal considering enforceable patent rights are specific to the UK, whether arising out of the European Patent Office or directly through the UK patent office.

Legal actions to enforce our proprietary rights (including patents and trademarks) can be expensive and may involve the diversion of significant management time. In addition, these legal actions could be unsuccessful and could also result in the invalidation of our patents or trademarks or a finding that they are unenforceable. We may or may not choose to pursue litigation or other actions against those that have infringed on our patents or trademarks, or used them without authorization, due to the associated expense and time commitment of monitoring these activities. If we fail to protect or to enforce our intellectual property rights successfully, our competitive position could suffer, which could harm our results of operations.

Biotechnology patents and patent applications involve highly complex legal and factual questions, which, if determined adversely to us, could negatively impact our patent position.

The patent positions of biotechnology companies can be highly uncertain and involve complex legal and factual questions. The interpretation and breadth of claims allowed in some patents covering biotechnology compositions may be uncertain and difficult to determine, and are often affected materially by the facts and circumstances that pertain to the patented compositions and the related patent claims. The standards of the United States Patent and Trademark Office ("USPTO") are sometimes uncertain and could change in the future. Consequently, the issuance and scope of patents cannot be predicted with certainty. Patents, if issued, may be challenged, invalidated or circumvented. U.S. patents and patent applications may also be subject to interference proceedings, and U.S. patents may be subject to reexamination proceedings, post-grant review and/or inter partes review in the USPTO. Foreign patents may be subject also to opposition or comparable proceedings in the corresponding foreign patent office, which could result in either loss of the patent or denial of the patent application or loss or reduction in the scope of one or more of the claims of the patent or patent application. For example, Patent No. EP2790706 (protecting Patent family S3 in various European countries) is currently subject to an opposition procedure before the European Patent Office. A final decision is expected by the end of 2022. It has been alleged that the Chinese patent protecting the same invention (Patent family S3) was invalidated by the Court of Revision of the Chinese Patent Office, further to a motion for invalidation brought by a third party based on similar arguments (including the insufficient description of the animal model used in the patent, the novelty of the patent, the extension beyond the application as filed and the inventive step). In addition, such interference, reexamination, post-grant review, inter partes review and opposition proceedings may be costly. Accordingly, rights under any issued patents may not provide us with sufficient protection against competitive products or processes.

In addition, changes in or different interpretations of patent laws in the United States and foreign countries may permit others to use our discoveries or to develop and commercialize our technology and products without providing any compensation to us, or may limit the number of patents or claims we can obtain. The laws of some countries do not protect intellectual property rights to the same extent as U.S. laws and those countries may lack adequate rules and procedures for defending our intellectual property rights. This may also result in having the same invention covering differing claims in different countries and provide a different scope of protection in foreign countries.

If we fail to obtain and maintain patent protection and trade secret protection of our drug candidates, we could lose our competitive advantage and competition we face would increase, reducing any potential revenues and adversely affecting our ability to attain or maintain profitability.

Developments in patent law could have a negative impact on our business.

From time to time, the United States Supreme Court, or the Supreme Court, other federal courts, the United States Congress, the USPTO or similar foreign authorities may change the standards of patentability and any such changes could have a negative impact on our business.

In addition, the Leahy-Smith America Invents Act, or the America Invents Act, which was signed into law in 2011, includes a number of significant changes to U.S. patent law. These changes include a transition from a "first-to-invent" system to a "first-to-file" system, changes to the way issued patents are challenged, and changes to the way patent applications are disputed during the examination process. These changes may favor larger and more established companies that have greater resources to devote to patent application filing and prosecution. The USPTO has developed new and untested regulations and procedures to govern the full implementation of the America Invents Act, and many of the substantive changes to patent law associated with the America Invents

Act, and, in particular, the first-to-file provisions, became effective on March 16, 2013. Substantive changes to patent law associated with the America Invents Act may affect our ability to obtain patents, and if obtained, to enforce or defend them. Accordingly, it is not clear what, if any, impact the America Invents Act will have on the cost of prosecuting our patent applications, our ability to obtain patents based on our discoveries and our ability to enforce or defend any patents that may issue from our patent applications, all of which could have a material adverse effect on our business.

If we are unable to protect the confidentiality of our trade secrets, our business and competitive position would be harmed.

In addition to patent protection, because we operate in the highly technical field of development of therapies, we rely in part on trade secret protection in order to protect our proprietary technology and processes. However, trade secrets are difficult to protect. We expect to enter into confidentiality and intellectual property assignment agreements with our employees, consultants, outside scientific collaborators, sponsored researchers, and other advisors. These agreements generally require that the other party keep confidential and not disclose to third parties all confidential information developed by the party or made known to the party by us during the course of the party's relationship with us. These agreements also generally provide that inventions conceived by the party in the course of rendering services to us will be our exclusive property. However, these agreements may not be honored and may not effectively assign intellectual property rights to us.

In addition to contractual measures, we try to protect the confidential nature of our proprietary information using physical and technological security measures. Such measures may not, for example, in the case of misappropriation of a trade secret by an employee or third party with authorized access, provide adequate protection for our proprietary information. Our security measures may not prevent an employee or consultant from misappropriating our trade secrets and providing them to a competitor, and recourse we take against such misconduct may not provide an adequate remedy to protect our interests fully. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive, and time-consuming, and the outcome is unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets. Trade secrets may be independently developed by others in a manner that could prevent legal recourse by us. If any of our confidential or proprietary information, such as our trade secrets, were to be disclosed or misappropriated, or if any such information was independently developed by a competitor, our competitive position could be harmed.

We will not seek to protect our intellectual property rights in all jurisdictions throughout the world and we may not be able to adequately enforce our intellectual property rights even in the jurisdictions where we seek protection.

Filing, prosecuting and defending patents on our drug candidates and our trademarks in all countries and jurisdictions throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States could be less extensive than those in the United States, assuming that rights are obtained in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we may not be able to prevent third parties from practicing our inventions or using our trademarks in all countries outside the United States, or from selling or importing products made using our inventions or commercialized under identical or similar trademarks in and into the United States or other jurisdictions. The statutory deadlines for pursuing patent and trademark protection in individual foreign jurisdictions are based on the priority dates of each of our patent and trademark applications.

Competitors may use our technologies or trademarks in jurisdictions where we do not pursue and obtain patent or trademark protection to develop their own products and further, may export otherwise infringing products to territories where we have patent or trademark protection, but enforcement is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing. Even if we pursue and obtain issued patents and trademarks in particular jurisdictions, our patent claims or other intellectual property rights may not be effective or sufficient to prevent third parties from so competing.

The laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. The legal systems of some countries, particularly developing countries, do not favor the enforcement of patents and other intellectual property protection, especially those relating to biopharmaceuticals or biotechnologies. This could make it difficult for us to stop the infringement of our patents, if obtained, or the misappropriation of our other intellectual property rights. For example, many foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties, provided that (as a general rule and subject to local laws) the interests of public health so require (*e.g.*, if the treatment is made available to the public in insufficient quantity or quality or at abnormally high prices) and the patent owner is compensated. If the test of the safety and efficacy of Sarconeos (BIO101) in patients with SARS-CoV-2 pneumonia is successful, we could be required to

grant compulsory licenses for any patent or patent application protecting such treatment. In addition, many countries limit the enforceability of patents against third parties, including government authorities or government contractors. In these countries, patents may provide limited or no benefit. Patent protection must ultimately be sought on a country-by-country basis, which is an expensive and time-consuming process with uncertain outcomes. Accordingly, we may choose not to seek patent protection in certain countries, and we will not have the benefit of patent protection in such countries.

Proceedings to enforce our patent or other intellectual property rights in foreign jurisdictions could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents or other intellectual property at risk of being invalidated or interpreted narrowly, could put our patent or trademark applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. In addition, changes in the law and legal decisions by courts in the United States and foreign countries may affect our ability to obtain adequate protection for our technology and the enforcement of intellectual property. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Third parties may assert ownership or commercial rights to inventions we develop.

Third parties may in the future make claims challenging the inventorship or ownership of our intellectual property. We have written agreements with collaborators that provide for the ownership of intellectual property arising from our collaborations. These agreements provide that we must negotiate certain commercial rights with collaborators with respect to joint inventions or inventions made by our collaborators that arise from the results of the collaboration. In some instances, there may not be adequate written provisions to address clearly the resolution of intellectual property rights that may arise from a collaboration. If we cannot successfully negotiate sufficient ownership and commercial rights to the inventions that result from our use of a third-party collaborator's materials where required, or if disputes otherwise arise with respect to the intellectual property developed with the use of a collaborator's samples, we may be limited in our ability to capitalize on the market potential of these inventions. In addition, we may face claims by third parties that our agreements with employees, contractors, or consultants obligating them to assign intellectual property to us are ineffective, or in conflict with prior or competing contractual obligations of assignment, which could result in ownership disputes regarding intellectual property we have developed or will develop and interfere with our ability to capture the commercial value of such inventions. Litigation may be necessary to resolve an ownership dispute, and if we are not successful, we may be precluded from using certain intellectual property, or may lose our exclusive rights in that intellectual property. Either outcome could have an adverse impact on our business.

Our Chief Executive Officer, who is a corporate officer (*mandataire social*) but not an employee of the Company under French law, is involved in our research and development activities. He has contributed to research results for which we have submitted patent applications in which he is listed as a co-inventor and other inventions that we expect may give rise to patent applications in the future for which we expect he will be included as a co-inventor. Under French intellectual property law, inventors who are employees of a company have legal rights that are typically circumscribed in France by a combination of French labor law and contractual arrangements. Because Mr. Veillet is our CEO, and not an employee, we have entered into an assignment agreement with him, pursuant to which he is entitled to certain payments as consideration for his prior and future contributions to our research projects and inventions. See "Intellectual Property Agreement with Stanislas Veillet" in the "Business" section of this annual report for additional information.

Third parties may assert that our employees or consultants have wrongfully used or disclosed confidential information or misappropriated trade secrets.

We employ individuals who were previously employed at universities or other biotechnology companies, including our competitors or potential competitors. Although we try to ensure that our employees and consultants do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of a former employer or other third parties. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

A dispute concerning the infringement or misappropriation of our proprietary rights or the proprietary rights of others could be time-consuming and costly, and an unfavorable outcome could harm our business.

There is significant litigation in the biotechnology industry regarding patent and other intellectual property rights. While we are not currently subject to any pending intellectual property litigation, and are not aware of any such threatened litigation, we may be exposed to future litigation by third parties based on claims that our drug candidates, technologies or activities infringe the intellectual property rights of others. If our development activities are found to infringe any such patents, we may have to pay significant damages or seek licenses to such patents. A patentee could prevent us from using the patented drugs or compositions. We may need to resort to litigation to enforce a patent issued to us, to protect our trade secrets, or to determine the scope and validity of third-party proprietary rights. From time to time, we may hire scientific personnel or consultants formerly employed by other companies involved in one or more areas similar to the activities conducted by us. Either we or these individuals may be subject to allegations of trade secret misappropriation or other similar claims as a result of prior affiliations. If we become involved in litigation, it could consume a substantial portion of our managerial and financial resources, regardless of whether we win or lose. We may not be able to afford the costs of litigation. Any adverse ruling or perception of an adverse ruling in defending ourselves against these claims could have a material adverse impact on our cash position and the price of the ADSs. Any legal action against us or our collaborators could lead to:

- payment of damages, potentially treble damages, if we are found to have willfully infringed a party's patent rights;
- injunctive or other equitable relief that may effectively block our ability to further develop, commercialize, and sell products; or
- us or our collaborators having to enter into license arrangements that may not be available on commercially acceptable terms, if at all, all of which could have a material adverse impact on our cash position and business and financial condition. As a result, we could be prevented from commercializing current or future drug candidates.

We may infringe the intellectual property rights of others, which may prevent or delay our product development efforts and stop us from commercializing or increase the costs of commercializing our drug candidates, if approved or authorized.

Our success will depend in part on our ability to operate without infringing the intellectual property and proprietary rights of third parties. We cannot assure you that our business, products and methods do not or will not infringe the patents or other intellectual property rights of third parties.

The biotechnology industry is characterized by extensive litigation regarding patents and other intellectual property rights. Other parties may allege that our drug candidates or the use of our technologies infringes patent claims or other intellectual property rights held by them or that we are employing their proprietary technology without authorization. Patent and other types of intellectual property litigation can involve complex factual and legal questions, and their outcome is uncertain. Any claim relating to intellectual property infringement that is successfully asserted against us may require us to pay substantial damages, including treble damages and attorney's fees if we are found to be willfully infringing another party's patents, for past use of the asserted intellectual property and royalties and other consideration going forward if we are forced to take a license. In addition, if any such claim were successfully asserted against us and we could not obtain such a license, we may be forced to stop or delay developing, manufacturing, selling or otherwise commercializing products.

Even if we are successful in these proceedings, we may incur substantial costs and divert management time and attention in pursuing these proceedings, which could have a material adverse effect on us. If we are unable to avoid infringing the patent rights of others, we may be required to seek a license, defend an infringement action or challenge the validity of the patents in court, or redesign our products. Patent litigation is costly and time consuming. We may not have sufficient resources to bring these actions to a successful conclusion. In addition, intellectual property litigation or claims could force us to do one or more of the following:

- cease developing, selling or otherwise commercializing our drug candidates;
- pay substantial damages for past use of the asserted intellectual property;
- obtain a license from the holder of the asserted intellectual property, which license may not be available on reasonable terms, if at all;
- harm our reputation and cause potential partners or academic entities to avoid working with us; and

- in the case of trademark claims, redesign or rename trademarks we own to avoid infringing the intellectual property rights of third parties, which may not be possible and, even if possible, could be costly and time-consuming.

Any of these risks coming to fruition could have a material adverse effect on our business, results of operations, financial condition and prospects.

Issued patents covering our drug candidates could be found invalid or unenforceable if challenged in court.

If we or one of our licensing partners initiated legal proceedings against a third party to enforce a patent covering our drug candidate, the defendant could counterclaim that the patent covering our drug candidate is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge include alleged failures to meet any of several statutory requirements, including lack of novelty, obviousness or non-enablement. Grounds for unenforceability assertions include allegations that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post grant review and equivalent proceedings in foreign jurisdictions, e.g., opposition proceedings. Such proceedings could result in revocation or amendment of our patents in such a way that they no longer cover our drug candidates or competitive products. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to validity, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our drug candidates. Such a loss of patent protection would have a material adverse impact on our business.

Risks Related to Government Regulation

Even if we obtain regulatory approval or authorization for a drug candidate, our products will remain subject to regulatory scrutiny.

If our drug candidates are approved or authorization, they may be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies, and submission of safety, efficacy, and other post-market information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities.

Manufacturers and manufacturers' facilities are required to comply with extensive FDA, EMA and comparable foreign regulatory authority requirements, including ensuring that quality control and manufacturing procedures conform to cGMP regulations. As such, we and our contract manufacturers will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any approved marketing application or authorization. Inspections by regulatory authorities and the potential need for subsequent corrective actions may require additional investment or changes to our manufacturing or suppliers' manufacturing facilities, and may cause delays, interruptions, or complete stoppage of the manufacturing process. If certain drugs have a potential for misuse/abuse, manufacturers and manufacturers' facilities must also comply with certain drug diversion regulatory and compliance programs. Accordingly, we and others with whom we work must continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production, and quality control.

Given that we expect to have a global supply chain, our supply chain may also be affected by the FDA's enforcement activity at the U.S. border, such as import detentions, import holds, import refusals, or drug diversion oversight or refusals. Despite our investment in regulatory compliance, the FDA may raise issues with our regulatory compliance, and suppliers outside of our direct control may also fail to adhere to the FDA's regulatory requirements, in which case our supply chain and business plans may be interrupted. Further import detentions, holds, or refusals may also occur while the FDA attempts to verify the imported products' compliance with the law. Such detentions, holds, or refusals may affect our supply chain and business plans.

Authorities and policy makers are tightening controls on compliance by suppliers on environmental and social standards. We may be required to further tighten the audit of our suppliers, and to change suppliers in case of non-compliance. Independently, enforcement measures by government authorities such as import bans from suppliers suspected of such non-compliance may impact our supply chain.

We will have to comply with requirements concerning advertising and promotion for our products. Promotional communications with respect to prescription drugs and biologics are subject to a variety of legal and regulatory restrictions in the United States and the EU (both at EU and national level, for instance, in France) and must be consistent with the information in the product's approved or authorized label. As such, we may not promote our products for indications or uses for which they do not have approval or authorization. The holder of an approved or authorized application must submit new or supplemental applications and obtain approval or authorization for certain changes to the approved or authorized product, product labeling, or manufacturing process. We could also be asked to conduct post-marketing clinical trials to verify the safety and efficacy of our products in general or in specific patient subsets. An unsuccessful post-marketing study or failure to complete such a study could result in the withdrawal of marketing approval or authorization. In addition, under European regulation, certain of our drug candidates could be added to the list of drugs subject to additional monitoring and studies. Such list concerns drugs for which there is no experience due to their recent marketing or a lack of data on their long-term use. This classification would lead to additional requirements regarding post-marketing surveillance measures of our products or safety studies, which may require more resources on our end.

If a regulatory authority discovers previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, or disagrees with the promotion, marketing or labeling of a product, such regulatory agency may impose restrictions on that product or us, including requiring withdrawal of the product from the market. If we fail to comply with applicable regulatory requirements, a regulatory agency or enforcement authority may, among other things:

- issue warning letters;
- carry out inspections;
- seek an injunction or impose administrative, civil or criminal penalties or sanctions;
- suspend or withdraw regulatory approval or authorization;
- suspend any of our clinical trials;
- refuse to approve or authorize pending applications or supplements to approved or authorized applications submitted by us;
- impose restrictions on our operations, including closing our contract manufacturers' facilities;
- seize or detain products, or require a product recall; or
- refuse product importation, subject the import shipments to scrutiny, or place us or our suppliers on the Import Alert program.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response, and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize and generate revenue from our products. If regulatory sanctions are applied or if regulatory approval or authorization is withdrawn, the value of our company and our operating results will be adversely affected.

Moreover, the policies of the FDA, EMA and of other regulatory authorities may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval or authorization of our drug candidates. We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative or executive action, in Europe, the United States or elsewhere. For example, Regulation (EU) No 536/2014 on clinical trials on medicinal products for human use was adopted in 2014 and became effective as of January 31, 2022 and could impact the administrative procedure that we will have to follow in order to obtain regulatory approval or authorization for our drug candidates. Depending on the date of our application for clinical trial authorization, we could be required to adapt quickly to the new requirements and procedures resulting from this new regulation, in particular regarding the new required deadlines that will require us to be reactive in the event of additional requests from the authorities. We are also anticipating further guidance and decisions from the European Commission, EMA and national regulators of Member States (such as ANSM for France) as those are involved in the process.

In addition, certain policies of the new Biden administration in the United States may impact our business and industry. Previously, the Trump administration enacted several executive actions, including the issuance of a number of Executive Orders that

restricted the FDA's ability to engage in routine oversight activities such as implementing rules through rulemaking. The Biden administration rescinded some of the Executive Orders, but it may also implement new policies and executive actions that could affect the FDA's ability to exercise its authority. If these executive actions impose restrictions on the FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted. In addition, if we are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we are not able to maintain regulatory compliance, we may lose any marketing approval or authorization that we may have obtained and we may not achieve or sustain profitability.

Changes in COVID-19 infectiousness or lethality rates, or eradication or substantial eradication of the disease could reduce or eliminate the demand for our product.

We are currently concluding the global, multicenter, double-blind, placebo-controlled, group-sequential, and adaptive two-part Phase 2-3 study (COVA) in patients with SARS-CoV-2 pneumonia. Widespread access to vaccines or other therapeutic options significantly reduced or eliminated our ability to enroll subjects in the COVA program. For example, On December 22, 2021, FDA issued an EUA for Paxlovid for the treatment of mild-to-moderate coronavirus disease 2019 (COVID-19) in adults and pediatric patients (12 years of age and older weighing at least 40 kg) with positive results of direct severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) viral testing, and who are at high risk for progression to severe COVID-19, including hospitalization or death. On December 8, 2021, the FDA also issued an EUA for Evusheld for the pre-exposure prophylaxis (prevention) of COVID-19 in certain adults and pediatric individuals (12 years of age and older weighing at least 40 kilograms. On October 29, 2021, the FDA has officially granted Emergency Use Authorization of the Pfizer-BioNTech COVID-19 vaccine for children ages 5-11. A substantial proportion of the population has now had COVID-19, which may have provided further immunity and/or lead to a mild clinical course that only very rarely results in hospitalization (as is now seen with the Omicron variant).

In addition, spread of new COVID-19 variants that do not cause severe respiratory illnesses are reducing the demand for our product and impacting our ability to enroll subjects for the COVA study. For example, information that is known about the newer variants suggest that there is some possibility that while they are more infectious, they do not cause severe respiratory illnesses as frequently as the prior variants did. If this is the case, the demand for our Sarconeos (BIO101) could be significantly reduced.

Regulatory agencies may change the policies and requirements regarding approvals and emergency use authorizations, or revoke emergency use authorizations that the agencies have already issued.

Under section 564 of the Federal Food, Drug and Cosmetic Act ("FD&C Act"), following a public health emergency declaration by the Secretary of Health and Human Services (HHS), the FDA Commissioner may allow unapproved medical products, or unapproved uses of approved medical products, to be used in an emergency to diagnose, treat, or prevent serious or life-threatening diseases or conditions caused by chemical, biological, radiological and nuclear (CBRN) threat agents when there are no adequate, approved, and available alternatives. The EUA allows temporary use of the medical product, based on efficacy data, which is usually not sufficient on its own for approval. Many drugs and medical devices have received emergency use authorizations under this framework, and we plan to seek emergency use authorization for at least one of our drug candidates. There is some risk, however, that the public health emergency declaration could be terminated before or soon after we complete the development of our drug, or even if we obtain an EUA, that the FDA will revoke the EUA. In fact, the FDA has already begun promulgating guidance documents that discuss disposition of products that are distributed pursuant to EUAs. If this occurs, we may no longer be able to distribute our product, or our distribution and marketing efforts may be severely restricted.

If any of our drug candidates obtain regulatory approval, additional competitors could enter the market with generic versions of such drugs, which may result in a material decline in sales of affected products.

Under the Drug Price Competition and Patent Term Restoration Act of 1984 (the "Hatch-Waxman Act"), a pharmaceutical manufacturer may file an abbreviated new drug application ("ANDA") seeking approval of a generic version of an approved, small molecule innovator product. Under the Hatch-Waxman Act, a manufacturer may also submit a new drug application ("NDA") under section 505(b)(2) of the Federal Food, Drug, and Cosmetic Act (the "FDCA") that references the FDA's prior approval of the innovator product. A 505(b)(2) NDA product may be for a new or improved version of the original innovator product. The Hatch-Waxman Act also provides for certain periods of regulatory exclusivity, which preclude FDA approval (or in some circumstances, FDA filing and review) of an ANDA or 505(b)(2) NDA. In addition to the benefits of regulatory exclusivity, an innovator NDA holder may have patents claiming the active ingredient, product formulation or an approved use of the drug, which would be listed with the product in the FDA publication, "Approved Drug Products with Therapeutic Equivalence Evaluations," known as the Orange Book. If there are patents listed in the Orange Book for a product, a generic or 505(b)(2) applicant that seeks to market its product

before expiration of the patents must include in their applications what is known as a "Paragraph IV" certification, challenging the validity or enforceability of, or claiming non-infringement of, the listed patent or patents. Notice of the certification must be given to the patent owner and NDA holder and if, within 45 days of receiving notice, either the patent owner or NDA holder sues for patent infringement, approval of the ANDA or 505(b)(2) NDA is stayed for up to 30 months.

Accordingly, if any of our drug candidates are approved, competitors could file ANDAs for generic versions of our drug candidates or 505(b)(2) NDAs that reference our small molecule drug products. If there are patents listed for our drug candidates in the Orange Book, those ANDAs and 505(b)(2) NDAs would be required to include a certification as to each listed patent indicating whether the ANDA applicant does or does not intend to challenge the patent. We cannot predict which, if any, patents in our current portfolio or patents we may obtain in the future will be eligible for listing in the Orange Book, how any generic competitor would address such patents, whether we would sue on any such patents, or the outcome of any such suit.

We may not be successful in securing or maintaining proprietary patent protection for products and technologies we develop or license. Moreover, if any of our owned or in-licensed patents that are listed in the Orange Book are successfully challenged by way of a Paragraph IV certification and subsequent litigation, the affected product could immediately face generic competition and its sales would likely decline rapidly and materially.

We have received and may seek additional orphan drug designations for certain future drug candidates, but we may be unable to obtain such designations or to maintain the benefits associated with orphan drug designation, including market exclusivity, which may cause our revenue, if any, to be reduced.

We obtained and may pursue orphan drug designation for certain of our future drug candidates. In the European Union, the EMA's Committee for Orphan Medicinal Products ("COMP") recommends orphan drug designation to promote the development of products that are intended for the diagnosis, prevention, or treatment of a life-threatening or chronically debilitating condition affecting not more than five in 10,000 persons in the European Union. Additionally, designation is granted for products intended for the diagnosis, prevention, or treatment of a life-threatening, seriously debilitating or serious and chronic condition when, without incentives, it is unlikely that sales of the drug in the European Union would be sufficient to justify the necessary investment in developing the drug or biological product or where there is no satisfactory method of diagnosis, prevention, or treatment, or, if such a method exists, the medicine must be of significant benefit to those affected by the condition. Under the Orphan Drug Act, the FDA may designate a drug or biologic product as an orphan drug if it is intended to treat a rare disease or condition, defined as a patient population of fewer than 200,000 in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States.

In the European Union, orphan drug designation may entitle a party to financial incentives such as reduction of regulatory fees or fee waivers and ten years of market exclusivity following drug or biological product approval unless a derogation applies. This period may be reduced to six years if the orphan drug designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and application fee waivers. In addition, if a product receives the first FDA approval for the indication for which it has orphan designation, the product is entitled to orphan drug exclusivity, which means the FDA may not approve any other application to market the same drug for the same indication for a period of seven years, except in limited circumstances, such as a showing of clinical superiority over the product with orphan exclusivity or where the manufacturer is unable to assure sufficient product quantity for the orphan patient population.

We may seek additional orphan drug designations in the future for some of our future drug candidates but FDA or EMA may decline our application. Even if we obtain orphan drug designation, we may not be the first to obtain marketing approval for any particular orphan indication due to the uncertainties associated with developing pharmaceutical products. Further, even if we obtain orphan drug exclusivity for a drug candidate, that exclusivity may not effectively protect the product from competition because different drugs with different active moieties can be approved for the same condition. Orphan drug designations are not in any way indicative of a drug's likelihood of receiving the final marketing authorization from FDA. The FDA does not evaluate a drug candidate's safety and effectiveness using the same standard as it would when reviewing a drug candidate's safety and effectiveness prior to granting final marketing approvals. The FDA may grant orphan drug designations to multiple drugs intended for the same indication. Even after an orphan drug is approved, the EMA or FDA can subsequently approve the same drug with the same active moiety for the same condition if the EMA or FDA concludes that the later drug is clinically superior in that it is safer, more effective, or makes a major contribution to patient care. Orphan drug designation neither shortens the development time or regulatory review time of a drug or biologic nor gives the drug or biologic any advantage in the regulatory review or approval process.

Enacted and future healthcare legislation may increase the difficulty and cost for us to obtain marketing approval or authorization of and commercialize our drug candidates and may affect the prices we may set.

In the United States, the EU and other jurisdictions, there have been, and we expect there will continue to be, a number of legislative and regulatory changes and proposed changes to the healthcare system that could affect our future results of operations. In particular, there have been and continue to be a number of initiatives at the U.S. federal and state levels that seek to reduce healthcare costs and improve the quality of healthcare. For example, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act (collectively, the "Affordable Care Act") was enacted, which substantially changed the way healthcare is financed by both governmental and private insurers. Among the provisions of the Affordable Care Act, those of greatest importance to the pharmaceutical and biotechnology industries include the following:

- an annual, non-deductible fee payable by any entity that manufactures or imports certain branded prescription drugs and biologic agents (other than those designated as orphan drugs), which is apportioned among these entities according to their market share in certain government healthcare programs;
- a Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D;
- requirements to report certain financial arrangements with physicians, teaching hospitals, and other healthcare providers, including reporting "transfers of value" made or distributed to such healthcare providers and reporting ownership or investment interests held by physicians and their immediate family members;
- an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program to 23.1% and 13.0% of the average manufacturer price for branded and generic drugs, respectively;
- a methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected;
- extension of a manufacturer's Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;
- expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to certain individuals with income at or below 133% of the federal poverty level, thereby potentially increasing a manufacturer's Medicaid rebate liability;
- a Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research; and
- establishment of a Center for Medicare Innovation at the Centers for Medicare & Medicaid Services, or CMS, to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the Affordable Care Act, and we expect there will be additional challenges and amendments to the Affordable Care Act in the future.

In addition, other legislative changes have been proposed and adopted in the United States since the Affordable Care Act was enacted. In August 2011, the Budget Control Act of 2011, among other things, led to aggregate reductions of Medicare payments to providers of 2% per fiscal year. These reductions went into effect in April 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2025 unless additional action is taken by Congress. In January 2013, the American Taxpayer Relief Act of 2012 was signed into law, which, among other things, further reduced Medicare payments to several types of providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

Individual states in the United States have also become increasingly aggressive in passing legislation and implementing regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints,

discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing. Legally-mandated price controls on payment amounts by third-party payors or other restrictions could harm our business, results of operations, financial condition and prospects. In addition, regional healthcare authorities and individual hospitals are increasingly using bidding procedures to determine what pharmaceutical products and which suppliers will be included in their prescription drug and other healthcare programs. This could reduce the ultimate demand for our drug candidates or put pressure on our product pricing. Moreover, payment methodologies may be subject to changes in healthcare legislation and regulatory initiatives. For example, CMS may develop new payment and delivery models, such as bundled payment models. In addition, recently there has been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products.

In the EU, similar political, economic and regulatory developments may affect our ability to profitably commercialize our drug candidates, if approved. In addition to continuing pressure on prices and cost containment measures, legislative developments at the EU or at the Member State level may result in significant additional requirements or obstacles that may increase our operating costs. The delivery of healthcare in the EU, including the establishment and operation of health services and the pricing and reimbursement of medicines, is almost exclusively a matter for national, rather than EU, law and policy. National governments and health service providers have different priorities and approaches to the delivery of health care and the pricing and reimbursement of products in that context. In general, however, the healthcare budgetary constraints in most EU member states have resulted in restrictions on the pricing and reimbursement of medicines by relevant health service providers and payors. Generally, pricing negotiations with governmental authorities can take many months after the receipt of regulatory approval and product launch. In some EU Member States, such as in France, we may be required to conduct a clinical trial that compares the cost-effectiveness of our products candidates with available therapies in order to obtain favorable reimbursement for the indications sought or pricing approval. Should reimbursement for our drug candidates be unavailable in any country in which we seek reimbursement, or be limited or subject to additional clinical trials, or should pricing be set at unsatisfactory levels, then this might have an impact on our operating results. Coupled with ever-increasing EU and national regulatory burdens on those wishing to develop and market products, this could prevent or delay marketing approval of our drug candidates, restrict or regulate post-approval activities and affect our ability to commercialize our drug candidates, if approved. In markets outside of the United States and EU, reimbursement and healthcare payment systems vary significantly by country, and many countries have instituted price ceilings on specific products and therapies.

We cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action in the United States, the EU or any other jurisdiction. If we or any third parties we may engage are slow or unable to adapt to changes in existing requirements or the adoption of new requirements or policies, or if we or such third parties are not able to maintain regulatory compliance, our drug candidates may lose any regulatory approval that may have been obtained and we may not achieve or sustain profitability.

Our business operations and current and future relationships with investigators, healthcare professionals, consultants, third-party payors, patient organizations and customers will be subject to applicable healthcare regulatory laws, which could expose us to penalties.

Our business operations and current and future arrangements with investigators, healthcare professionals, consultants, third-party payors, patient organizations and customers, may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations. These laws may constrain the business or financial arrangements and relationships through which we conduct our operations, including how we research, market, sell and distribute our drug candidates, if approved or authorized. Such laws include:

- the U.S. federal Anti-Kickback Statute, which prohibits, among other things, persons or entities from knowingly and willfully soliciting, offering, receiving or providing any remuneration (including any kickback, bribe, or certain rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce or reward, or in return for, either the referral of an individual for, or the purchase, lease, order or recommendation of, any good, facility, item or service, for which payment may be made, in whole or in part, under U.S. federal and state healthcare programs such as Medicare and Medicaid. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- the U.S. federal false claims and civil monetary penalties laws, including the civil False Claims Act, which, among other things, impose criminal and civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities for knowingly presenting, or causing to be presented, to the U.S. federal government, claims for payment or approval that are false or fraudulent, knowingly making, using or causing to be made or used, a false record or statement material to a false or fraudulent claim, or from knowingly making a false statement to avoid, decrease or conceal an obligation to pay money to the U.S. federal government. In addition, the government may assert that a claim including items and services

resulting from a violation of the U.S. federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act;

- the U.S. federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), which imposes criminal and civil liability for, among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program, or knowingly and willfully falsifying, concealing or covering up a material fact or making any materially false statement, in connection with the delivery of, or payment for, healthcare benefits, items or services; similar to the U.S. federal Anti-Kickback Statute, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009 and its implementing regulations, which also imposes certain obligations, including mandatory contractual terms, with respect to safeguarding the privacy, security and transmission of individually identifiable health information without appropriate authorization by covered entities subject to the rule, such as health plans, healthcare clearinghouses and healthcare providers as well as their business associates that perform certain services involving the use or disclosure of individually identifiable health information;

- the FDCA, which prohibits, among other things, the adulteration or misbranding of drugs, biologics and medical devices and the introduction of such products into interstate commerce;

- the U.S. Public Health Service Act, which prohibits, among other things, the introduction into interstate commerce of a biological product unless a biologics license is in effect for that product;

- the U.S. Physician Payments Sunshine Act and its implementing regulations, which require certain manufacturers of drugs, devices, biologics and medical supplies that are reimbursable under Medicare, Medicaid, or the Children's Health Insurance Program to report annually to the government information related to certain payments and other transfers of value to physicians, teaching hospitals, and other healthcare providers, as well as ownership and investment interests held by the physicians described above and their immediate family members;

- analogous U.S. state laws and regulations, including: state anti-kickback and false claims laws, which may apply to our business practices, including but not limited to, research, distribution, sales and marketing arrangements and claims involving healthcare items or services reimbursed by any third-party payor, including private insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the U.S. federal government, or otherwise restrict payments that may be made to healthcare providers and other potential referral sources; state laws and regulations that require drug manufacturers to file reports relating to pricing and marketing information, which requires tracking gifts and other remuneration and items of value provided to healthcare professionals and entities; and state laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and often are not preempted by HIPAA, thus complicating compliance efforts; and

- similar healthcare laws and regulations in the EU and other jurisdictions, including reporting requirements detailing interactions with and payments to healthcare providers. For example, under French law, the regulation requires strict transparency of the links between the health care industry and other actors such as, but not limited to, health care practioners, and impose reporting on a public record all benefits granted to the various actors involved, in particular health professionals, as well as the existence of agreements concluded with these actors as well as remunerations paid. In addition to financial penalties, any violation of those requirements, such as misleading information or non-publication, could result in additional sanctions that may have harmful effect on the conduct of our business. More generally, as our business activity is heavily regulated and involves a significant interaction with government officials, our dealings with prescriber and authorities are subject to national anti-corruption laws of EU Member States. These laws notably prohibit us and our employees from improperly influencing government officials or commercial parties to obtain or retain business, direct business to any person or gain any advantage and also prohibit our third-party business partner's representatives and agents from engaging in corruption and bribery. Under these applicable anti-corruption laws, we may be held liable for the acts or the corrupt activities of our third-party business partners, intermediaries, representatives, contractors, channel partners and agents, even if we don't explicitly authorize or have knowledge of such activities. While we have a formal procedure that defines the process to be used to select our third-party partners, collaborate with them and monitor them in accordance with applicable anti-corruption laws, there is a risk that our third-party partners may act in violation of applicable laws, for which we may be

ultimately held responsible. Any violation of applicable anti-corruption laws could result in whistleblower complaints, adverse media coverage, investigations, imposition of significant legal fees, severe criminal, civil and administrative sanctions, suspension or debarment from government contracts, all of which may have an adverse effect on our reputation, business, results of operations and financial condition. In addition, it is possible that as our business grows and evolves, we will become subject to additional compliance requirements, resulting for example from the French Sapin II Act, which requires companies concerned by this regulation to implement a general anti-corruption compliance project under the control of the competent supervisory authority such as staff training, compliance documentation, audits and regular monitoring of commercial relationships. As the EU Commission has stated in one of its reports that the health sector is particularly vulnerable, our business may be subject to increased anti-corruption compliance monitoring.

Ensuring that our internal operations and future business arrangements with third parties comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations, agency guidance or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of the laws described above or any other governmental laws and regulations that may apply to us, we may be subject to significant penalties, including civil, criminal and administrative penalties, damages, fines, exclusion from government-funded healthcare programs, such as Medicare and Medicaid or similar programs in other countries or jurisdictions, disgorgement, individual imprisonment, contractual damages, reputational harm, diminished profits and the curtailment or restructuring of our operations. Further, defending against any such actions can be costly, time-consuming and may require significant personnel resources. Therefore, even if we are successful in defending against any such actions that may be brought against us, our business may be impaired.

In addition, considering that our activity involves the processing of personal data, in particular sensitive data such as health data, our business activities are also subject to GDPR and other national data protection laws and guidelines with respect to such data, which implies that we must implement significant and continuous efforts to comply with these data protection regulations, as well as any applicable additional national health care regulations. The GDPR has allowed EU Member States to introduce additional requirements for the processing of health data. This means we must comply with both EU as well as national laws in order to conduct our activities as regards patient data. In particular, our GDPR compliance involves the precise identification of our data processing operations and the risks incurred, the implementation of an organization of our internal processes and the establishment of documentation relating to our compliance. Our GDPR compliance also means being very aware of the fulfilment of our third-party contractors' obligations and their (own) GPDR compliance, which requires us to impose strict contractual provisions on our third-party contractors as processors or to ensure that they will not use the personal data for other purposes than agreed on. Moreover, the transfer of data from the EU to our U.S. entities or others U.S. companies must (i) have a legal basis in GDPR or other national data protection laws, and (ii) be subject to a valid legal mechanism for the lawful transfer of data, which may have to require some of our third-party contractors who process personal data to take additional privacy and security measures. Non-compliance could lead to severe impact for individuals and cause us to incur potential disruption and expense related to our business processes. Any violations of these laws and regulations could also result in substantial penalties and could materially damage our reputation.

Furthermore, following the European Court of Justice's decision to invalidate the EU—U.S. Privacy Shield as part of the Schrems II decision, any transfer or storage of data from the EU by our U.S. entities, other U.S. companies or contractual counterparties will require the implementation of additional safeguards, which given the current status of regulations, will most certainly require further protection measures in order to ensure an adequate level of protection as defined by the EU and national authorities. In case such additional safeguards do not lead to sufficient protection of personal data, transfers must be suspended or not carried out at all.

We are subject to U.S. and foreign anti-corruption and anti-money laundering laws with respect to our operations and non-compliance with such laws can subject us to criminal and/or civil liability and harm our business.

We are subject to the U.S. Foreign Corrupt Practices Act of 1977, as amended (the "FCPA"), the U.S. domestic bribery statute contained in 18 U.S.C. § 201, the U.S. Travel Act, the USA PATRIOT Act, and possibly other state and national anti-bribery and anti-money laundering laws in countries in which we conduct activities. Anti-corruption laws are interpreted broadly and prohibit companies and their employees, agents, third-party intermediaries, joint venture partners and collaborators from authorizing, promising, offering, or providing, directly or indirectly, improper payments or benefits to recipients in the public or private sector. We engage third-party investigators, CROs, and other consultants to design and perform preclinical studies of our drug candidates, and will do the same for any clinical trials. Also, once a drug candidate has been approved, authorized, and commercialized, we may engage third-party intermediaries to promote and sell our products abroad and/or to obtain necessary permits, licenses, and other regulatory approvals or authorizations. We or our third-party intermediaries may have direct or indirect interactions with officials and

employees of government agencies or state-owned or affiliated entities. We can be held liable for the corrupt or other illegal activities of these third-party intermediaries, our employees, representatives, contractors, collaborators, partners, and agents, even if we do not explicitly authorize or have actual knowledge of such activities.

Noncompliance with anti-corruption and anti-money laundering laws could subject us to whistleblower complaints, investigations, sanctions, settlements, prosecution, other enforcement actions, disgorgement of profits, significant fines, damages, other civil and criminal penalties or injunctions, suspension and/or debarment from contracting with certain persons, the loss of export privileges, reputational harm, adverse media coverage, and other collateral consequences. If any subpoenas, investigations, or other enforcement actions are launched, or governmental or other sanctions are imposed, or if we do not prevail in any possible civil or criminal litigation, our business, results of operations and financial condition could be materially harmed. In addition, responding to any action will likely result in a materially significant diversion of management's attention and resources and significant defense and compliance costs and other professional fees. In certain cases, enforcement authorities may even cause us to appoint an independent compliance monitor which can result in added costs and administrative burdens.

Our failure to maintain certain tax benefits applicable to French technology companies may adversely affect our results of operations.

As a French biotechnology company, we have benefited from certain tax advantages, including, for example, the research tax credit (*Crédit d'Impôt Recherche*), or CIR. The CIR is a French tax credit aimed at stimulating research and development. The CIR can be offset against French corporate income tax due and the portion in excess (if any) may be refunded at the end of a three fiscal-year period (or, sooner, for smaller companies such as ours). The CIR is calculated based on our claimed amount of eligible research and development expenditures in France and represented €2.8 million, €3.3 million and €4.1 as of December 31, 2019, 2020 and 2021, respectively. The French tax authority with the assistance of the Research and Technology Ministry may audit each research and development program in respect of which a CIR benefit has been claimed and assess whether such program qualifies in its view for the CIR benefit. The French tax authorities may challenge our eligibility to, or our calculation of certain tax reductions and/or deductions in respect of our research and development activities and, should the French tax authorities be successful, we may be liable for additional corporate income tax, and penalties and interest related thereto, or we may not obtain the refunds for which we have applied, which could have a significant impact on our results of operations and future cash flows. Furthermore, if the French Parliament decides to eliminate, or reduce the scope or the rate of, the CIR benefit, either of which it could decide to do at any time, our results of operations could be adversely affected.

Future changes to applicable U.S. tax laws and regulations may have an adverse effect on our business, financial condition and results of operations.

In general, changes in laws and policy relating to taxes may have an adverse effect on our business, financial condition and results of operations. For example, at the end of 2017, the U.S. government enacted significant tax reform, with additional guidance from the U.S. Treasury and Internal Revenue Service (the "IRS") still pending. Changes include, but are not limited to, a federal corporate tax rate decrease to 21% for tax years beginning after December 31, 2017, a reduction to the maximum deduction allowed for net operating losses generated in tax years after December 31, 2017, eliminating carrybacks of net operating losses, and providing for indefinite carryforwards for losses generated in tax years after December 31, 2017. The 2017 legislation remains unclear in many respects and could be subject to potential amendments and technical corrections or even outright changes. Additionally, current tax laws may continue to be subject to interpretations and implementing regulations by the U.S. Treasury and IRS, any of which could mitigate or increase certain adverse effects of prior legislation. In addition, it is unclear how future U.S. federal income tax changes will affect state and local taxation.

Risks Related to the Ownership of the ADSs and Ordinary Shares and Our Status as a Non-U.S. Company with Foreign Private Issuer Status

The requirements of being a U.S. public company may strain our resources, divert management's attention and affect our ability to attract and retain executive management and qualified board members.

As a U.S. public company, we have and will continue to incur legal, accounting, and other expenses that we did not previously incur. Following our initial public offering of ADSs in the United States, we are now subject to the Exchange Act, including the reporting requirements thereunder, the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), the Dodd-Frank Wall Street Reform and Consumer Protection Act, the Nasdaq listing requirements and other applicable securities rules and regulations. Compliance with these rules and regulations has and will continue to increase our legal and financial compliance costs, make some

activities more difficult, time-consuming or costly and increase demand on our systems and resources, particularly after we are no longer an "emerging growth company" and/or a foreign private issuer. For example, for so long as we remain a foreign private issuer, we will not be required to file with the SEC quarterly reports with respect to our business and results of operations, which are required to be made by domestic issuers pursuant to the Exchange Act.

Pursuant to Section 404 of the Sarbanes-Oxley Act, we will in the future be required to furnish an attestation report on internal control over financial reporting issued by our independent registered public accounting firm. However, while we remain an emerging growth company, we will not be required to include this attestation report on internal control over financial reporting issued by our independent registered public accounting firm. When our independent registered public accounting firm is required to undertake an assessment of our internal control over financial reporting, the cost of complying with Section 404 will significantly increase and management's attention may be diverted from other business concerns, which could adversely affect our business and results of operations. We may need to hire more employees in the future or engage outside consultants to comply with these requirements, which will further increase our cost and expense. If we fail to implement the requirements of Section 404 in the required timeframe, we may be subject to sanctions or investigations by regulatory authorities, including the SEC and the Nasdaq. Furthermore, if we are unable to conclude that our internal control over financial reporting is effective, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of the ADSs and our ordinary shares could decline, and we could be subject to sanctions or investigations by regulatory authorities. Failure to implement or maintain effective internal control systems required of public companies could also restrict our future access to the capital markets.

In addition, enhanced legal and regulatory regimes and heightened standards relating to corporate governance and disclosure for public companies result in increased legal and financial compliance costs and make some activities more time consuming. Further, being a U.S. public company and a French public company has and will continue to have an impact on our disclosure of information and requires compliance with two sets of applicable rules. This could result in uncertainty regarding compliance matters and higher costs necessitated by legal analysis of dual legal regimes, ongoing revisions to disclosure and adherence to heightened governance practices.

There was no public market for the ADSs prior to our U.S. initial public offering, and an active market may not develop in which investors can resell their ADSs.

Prior to our U.S. initial public offering, there was no public market for the ADSs. We cannot predict the extent to which an active trading market for the ADSs will develop or be sustained after the offering, or how the development of such a market might affect the market price for the ADSs. The initial public offering price of the ADSs in the offering was agreed upon between us and the underwriter based on a number of factors, including the trading price of our ordinary shares on the Euronext Growth Paris market, as well as certain market conditions in effect at the time of the offering, which may not be indicative of the price at which the ADSs will trade in the future. Investors may not be able to sell their ADSs at or above the price they paid. In addition, investors may not be able to successfully withdraw the underlying ordinary shares of the ADSs for the reasons discussed under the risk factor titled "*You may not be able to exercise your right to vote the underlying ordinary shares of the ADSs*" described below. In connection with any withdrawal of any of our ordinary shares represented by ADSs, the ADSs will be surrendered to the depositary. Unless additional ADSs are issued, the effect of such transactions will be to reduce the number of outstanding ADSs and, if a significant number of transactions are effected, to reduce the liquidity of the ADSs.

The market price of our equity securities may be volatile, and purchasers of our securities could incur substantial losses.

The market price for our securities may be volatile. The stock market in general and the market for biotechnology companies in particular have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their securities at or above the price paid for the security. The market price for our securities may be influenced by many factors, including:

- actual or anticipated fluctuations in our financial condition and operating results;
- actual or anticipated changes in our growth rate relative to our competitors;
- competition from existing products or new products that may emerge;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures, collaborations, or capital commitments;

- failure to meet or exceed financial estimates and projections of the investment community or that we provide to the public;
- issuance of new or updated research or reports by securities analysts;
- fluctuations in the valuation of companies perceived by investors to be comparable to us;
- price and volume fluctuations attributable to inconsistent trading volume levels of our securities
- additions or departures of key management or scientific personnel;
- lawsuits threatened or filed against us, disputes or other developments related to proprietary rights, including patents, litigation matters, and our ability to obtain patent protection for our technologies;
- changes to coverage policies or reimbursement levels by commercial third-party payors and government payors and any announcements relating to coverage policies or reimbursement levels;
- announcement or expectation of additional debt or equity financing efforts;
- sales of ADSs or ordinary shares by us, our insiders or our other holders; and
- general economic and market conditions.

These and other market and industry factors may cause the market price and demand for our securities to fluctuate substantially, regardless of our actual operating performance, which may limit or prevent investors from readily selling their securities and may otherwise negatively affect the liquidity of the trading market for our securities.

We may be exposed to significant foreign exchange risk. Exchange rate fluctuations may adversely affect the foreign currency value of the ADSs.

We incur portions of our expenses and may in the future derive revenues in currencies other than the euro, in particular, the U.S. dollar. As a result, we are exposed to foreign currency exchange risk as our results of operations and cash flows are subject to fluctuations in foreign currency exchange rates. We currently do not engage in hedging transactions to protect against uncertainty in future exchange rates between particular foreign currencies and the euro. Therefore, for example, an increase in the value of the euro against the U.S. dollar could be expected to have a negative impact on our revenue and earnings growth as U.S. dollar revenue and earnings, if any, would be translated into euros at a reduced value. We cannot predict the impact of foreign currency fluctuations, and foreign currency fluctuations in the future may adversely affect our financial condition, results of operations and cash flows. The ADSs are quoted in U.S. dollars on the Nasdaq Capital Market and our ordinary shares trade in euros on the Euronext Growth Paris. Our financial statements are prepared in euros. Fluctuations in the exchange rate between euros and the U.S. dollar will affect, among other matters, the U.S. dollar value of the ADSs.

If we do not achieve our projected development and commercialization goals in the timeframes we announce and expect, our business will be harmed and the price of our securities could decline as a result.

We sometimes estimate for planning purposes the timing of the accomplishment of various scientific, clinical, regulatory and other product development objectives. These milestones may include our expectations regarding the commencement or completion of scientific studies, clinical trials, the submission of regulatory filings, or commercialization objectives. From time to time, we may publicly announce the expected timing of some of these milestones, such as the completion of an ongoing clinical trial, the initiation of other clinical programs, receipt of marketing approval, authorization, or a commercial launch of a product. The achievement of many of these milestones may be outside of our control. All of these milestones are based on a variety of assumptions which may cause the timing of achievement of the milestones to vary considerably from our estimates, including:

- our available capital resources or capital constraints we experience;

- the rate of progress, costs and results of our clinical trials and research and development activities, including the extent of scheduling conflicts with participating clinicians and collaborators, and our ability to identify and enroll patients who meet clinical trial eligibility criteria;
- our receipt of approvals or authorizations by the EMA, FDA and other regulatory authorities and the timing thereof;
- other actions, decisions or rules issued by regulatory authorities
- our ability to access sufficient, reliable and affordable supplies of compounds and raw materials used in the manufacture of our drug candidates;
- our ability to license and/or generate revenues other than through independent commercialization of our products;
- the efforts of our collaborators and/or other partners, including licensees, with respect to the commercialization of, in due course, our products; and
- the securing of, costs related to, and timing issues associated with, product manufacturing as well as sales and marketing activities.

If we fail to achieve announced milestones in the timeframes we expect, the commercialization of our drug candidates may be delayed, our business and results of operations may be harmed, and the trading price of our securities may decline as a result.

If securities or industry analysts do not publish research or publish inaccurate or unfavorable research about our business, the price of the ADSs and their trading volume could decline.

The trading market for the ADSs depends in part on the research and reports that securities or industry analysts publish about us or our business. If no or few securities or industry analysts cover our company, the trading price for the ADSs would be negatively impacted. If one or more of the analysts who covers us downgrades our equity securities or publishes incorrect or unfavorable research about our business, the price of our securities would likely decline. If one or more of these analysts ceases coverage of our company or fails to publish reports on us regularly, or downgrades our securities, demand for our securities could decrease, which could cause the price of the ADSs or their trading volume to decline.

We do not currently intend to pay dividends on our ordinary shares and, consequently, your ability to achieve a return on your investment will depend on appreciation in the price of our securities. In addition, French law may limit the amount of dividends we are able to distribute.

We have never declared or paid any cash dividends on our ordinary shares and do not currently intend to do so for the foreseeable future. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, you are not likely to receive any dividends on our securities for the foreseeable future and the success of an investment in these securities will depend upon any future appreciation in their value. Consequently, investors may need to sell all or part of their holdings after price appreciation, which may never occur, as the only way to realize any future gains on their investment. There is no guarantee that our securities will appreciate in value or even maintain the price at which investors have purchased them. Investors seeking cash dividends should not purchase our securities.

Further, under French law, the determination of whether we have been sufficiently profitable to pay dividends is made on the basis of our statutory financial statements prepared and presented in accordance with accounting standards applicable in France. Article 34 of our By-laws imposes additional limitations on our ability to declare and pay dividends and there may be taxes imposed on you if we elect to pay a dividend. Therefore, we may be more restricted in our ability to declare dividends than companies not based in France.

In addition, exchange rate fluctuations may affect the amount of euros that we are able to distribute, and the amount in U.S. dollars that our shareholders receive upon the payment of cash dividends or other distributions we declare and pay in euros, if any. These factors could harm the value of the ADSs, and, in turn, the U.S. dollar proceeds that holders receive from the sale of the ADSs.

We have a significant number of outstanding warrants and convertible debt instruments, which may cause significant dilution to our shareholders, have a material adverse impact on the market price of our ordinary shares and make it more difficult for us to raise funds through future equity offerings.

As of February 28, 2022, we had 140,084,309 ordinary shares issued and outstanding. In addition, as of that date we had outstanding warrants to acquire up to 11,970,284 ordinary shares, 2,500,911 free ordinary shares that were granted to our two founders on December 22, 2020 and will be delivered to them on December 22, 2022 after a two-year vesting period, and 6,631,068 free ordinary shares that were granted to our two founders on September 15, 2021 and will be delivered to them on September 15, 2022 after a one-year vesting period. The issuance of ordinary shares upon the exercise of warrants and convertible debt instruments would dilute the percentage ownership interest of all shareholders, might dilute the book value per share of our ordinary shares and would increase the number of our publicly traded shares, which could depress the market price of our ordinary shares.

In addition to the dilutive effects described above, the perceived risk of dilution as a result of the significant number of outstanding warrants and convertible debt may cause our shareholders to be more inclined to sell their shares, which would contribute to a downward movement in the price of our ordinary shares. Moreover, the perceived risk of dilution and the resulting downward pressure on our share price could encourage investors to engage in short sales of our ordinary shares, which could further contribute to price declines in our ordinary shares. The fact that our shareholders, warrant holders and convertible debt holders can sell substantial amounts of our ordinary shares in the public market, whether or not sales have occurred or are occurring could make it more difficult for us to raise additional funds through the sale of equity or equity-related securities in the future at a time and price that we deem reasonable or appropriate, or at all.

Future sales, or the possibility of future sales, of a substantial number of the ADSs or our ordinary shares could adversely affect the price of the ADSs.

Future sales of a substantial number of the ADSs or ordinary shares, or the perception that such sales will occur, could cause a decline in the market price of the ADSs. ADSs sold in our U.S. initial public offering may be resold in the public market without restriction, unless purchased by our affiliates. If ADS holders sell substantial amounts of ADSs in the public market, or the market perceives that such sales may occur, the market price of the ADSs and our ability to raise capital through an issuance of equity securities in the future could be adversely affected.

The rights of shareholders in companies subject to French corporate law differ in material respects from the rights of shareholders of corporations incorporated in the United States.

We are a French company with limited liability. Our corporate affairs are governed by our bylaws and by the laws governing companies incorporated in France. The rights of shareholders and the responsibilities of members of our board of directors are in many ways different from the rights and obligations of shareholders in companies governed by the laws of U.S. jurisdictions. For example, in the performance of its duties, our board of directors is required by French law to consider the interests of our company, rather than solely our shareholders and/or creditors. It is possible that some of these parties will have interests that are different from, or in addition to, yours.

U.S. investors may have difficulty enforcing civil liabilities against our company and directors and senior management and the experts named in this annual report.

All of the members of our board of directors and senior management and certain experts named in this annual report are non-residents of the United States, and all or a substantial portion of our assets and the assets of such persons are located outside the United States. As a result, it may not be possible to serve process on such persons or us in the United States or to enforce judgments obtained in U.S. courts against them or us based on civil liability provisions of the securities laws of the United States. Additionally, it may be difficult to assert U.S. securities law claims in actions originally instituted outside of the United States. Foreign courts may refuse to hear a U.S. securities law claim because foreign courts may not be the most appropriate forums in which to bring such a claim. Even if a foreign court agrees to hear a claim, it may determine that the law of the jurisdiction in which the foreign court resides, and not U.S. law, is applicable to the claim. Further, if U.S. law is found to be applicable, the content of applicable U.S. law must be proved as a fact, which can be a time-consuming and costly process, and certain matters of procedure would still be governed by the law of the jurisdiction in which the foreign court resides. In particular, there is some doubt as to whether French courts would recognize and enforce certain civil liabilities under U.S. securities laws in original actions or judgments of U.S. courts based upon these civil liability provisions. In addition, awards of punitive damages in actions brought in the United States or elsewhere may be unenforceable in France. An award for monetary damages under the U.S. securities laws would be considered punitive if it does not

seek to compensate the claimant for loss or damage suffered but is intended to punish the defendant. French law provides that a shareholder, or a group of shareholders, may initiate a legal action to seek indemnification from the directors of a corporation in the corporation's interest if it fails to bring such legal action itself. If so, any damages awarded by the court are paid to the corporation and any legal fees relating to such action may be borne by the relevant shareholder or the group of shareholders.

The enforceability of any judgment in France will depend on the particular facts of the case as well as the laws and treaties in effect at the time. The United States and France do not currently have a treaty providing for recognition and enforcement of judgments (other than arbitration awards) in civil and commercial matters.

ADSs holders may not be entitled to a jury trial with respect to claims arising under the deposit agreement, which could result in less favorable outcomes to the plaintiff(s) in any such action.

The deposit agreement governing the ADSs representing our ordinary shares provides that, to the fullest extent permitted by law, ADS holders waive the right to a jury trial of any claim they may have against us or the depositary arising out of or relating to our shares, the ADSs or the deposit agreement, including any claim under the U.S. federal securities laws.

If we or the depositary opposed a jury trial demand based on the waiver, the court would determine whether the waiver was enforceable based on the facts and circumstances of that case in accordance with the applicable state and federal law. To our knowledge, the enforceability of a contractual pre-dispute jury trial waiver in connection with claims arising under the federal securities laws has not been finally adjudicated by the United States Supreme Court. However, we believe that a contractual pre-dispute jury trial waiver provision is generally enforceable, including under the laws of the State of New York, which govern the deposit agreement, by a federal or state court in the City of New York, which has non-exclusive jurisdiction over matters arising under the deposit agreement. In determining whether to enforce a contractual pre-dispute jury trial waiver provision, courts will generally consider whether a party knowingly, intelligently and voluntarily waived the right to a jury trial. We believe that this is the case with respect to the deposit agreement and the ADSs. In addition, New York courts will not enforce a jury trial waiver provision in order to bar a viable setoff or counterclaim sounding in fraud or one which is based upon a creditor's negligence in failing to liquidate collateral upon a guarantor's demand, or in the case of an intentional tort claim (as opposed to a contract dispute), none of which we believe are applicable in the case of the deposit agreement or the ADSs. It is advisable that you consult legal counsel regarding the jury waiver provision before entering into the deposit agreement.

If you or any other owner or holder of ADSs bring a claim against us or the depositary in connection with matters arising under the deposit agreement or the ADSs, including claims under federal securities laws, you or such other owner or holder may not be entitled to a jury trial with respect to such claims, which may have the effect of limiting and discouraging lawsuits against us and/or the depositary. If a lawsuit is brought against us and/or the depositary under the deposit agreement, it may be heard only by a judge or justice of the applicable trial court, which would be conducted according to different civil procedures and may result in different outcomes than a trial by jury would have had, including results that could be less favorable to the plaintiff(s) in any such action.

Nevertheless, if this jury trial waiver provision is not permitted by applicable law, an action could proceed under the terms of the deposit agreement with a jury trial. No condition, stipulation or provision of the deposit agreement or ADSs serves as a waiver by any owner or holder of ADSs or by us or the depositary of compliance with any substantive provision of the U.S. federal securities laws and the rules and regulations promulgated thereunder. By agreeing to the jury trial waiver provision in the deposit agreement, investors will not be deemed to have waived our compliance with or the depositary's compliance with the federal securities laws and the rules and regulations promulgated thereunder.

Our Articles of Association and By-laws and French corporate law contain provisions that may delay or discourage a takeover attempt.

Provisions contained in our Articles of Association and/or French corporate law could make it more difficult for a third party to acquire us, even if doing so might be beneficial to our shareholders. In addition, provisions of our bylaws impose various procedural and other requirements, which could make it more difficult for shareholders to effect certain corporate actions. These provisions include the following:

- under French law, the owner of 90% of voting rights of a public company listed on a regulated market in a Member State of the EU or in a state party to the European Economic Area ("EEA") Agreement, including France, has the right to force out minority shareholders following a tender offer made to all shareholders;

- under French law, a non-resident of France as well as any French entity controlled by non-French residents may have to file an administrative notice with French authorities in connection with a direct or indirect investment in us, as defined by administrative rulings; see the section of this annual report titled "Limitations Affecting Shareholders of a French Company";

- a merger (i.e., in a French law context, a stock for stock exchange following which our company would be dissolved into the acquiring entity and our shareholders would become shareholders of the acquiring entity) of our company into a company incorporated in the EU would require the approval of our board of directors as well as a two-thirds majority of the votes held by the shareholders present, represented by proxy or voting by mail at the relevant meeting;

- under French law, a cash merger is treated as a share purchase and would require the consent of each participating shareholder;

- our shareholders have granted and may grant in the future our board of directors broad authorizations to increase our share capital or to issue additional ordinary shares or other securities, such as warrants, to our shareholders, the public or qualified investors, including as a possible defense following the launching of a tender offer for our shares;

- our shareholders have preferential subscription rights on a pro rata basis on the issuance by us of any additional securities for cash or a set-off of cash debts, which rights may only be waived by the extraordinary general meeting (by a two-thirds majority vote) of our shareholders or on an individual basis by each shareholder;

- our board of directors has the right to appoint directors to fill a vacancy created by the resignation or death of a director, for the remaining duration of such director's term of office, provided that prior to such decision of the board of directors, the number of directors remaining in office exceeds the minimum required by law and our bylaws, and subject to the approval by the shareholders of such appointment at the next shareholders' meeting, which prevents shareholders from having the sole right to fill vacancies on our board of directors;

- our board of directors can be convened by our chairman (directly or upon request of our managing director), or, when no board meeting has been held for more than three consecutive months, by directors representing at least one third of the total number of directors;

- our board of directors meetings can only be regularly held if at least half of the directors attend either physically or by way of videoconference or teleconference enabling the directors' identification and ensuring their effective participation in the board's decisions;

- our shares are nominative or bearer, if the legislation so permits, according to the shareholder's choice;

- under French law, certain investments in any entity governed by French law relating to certain strategic industries (such as research and development in biotechnologies and activities relating to public health) and activities by individuals or entities not French, not resident in France or controlled by entities not French or not resident in France are subject to prior authorization of the Ministry of Economy; see "Limitations Affecting Shareholders of a French Company";

- approval of at least a majority of the votes held by shareholders present, represented by a proxy, or voting by mail at the relevant ordinary shareholders' general meeting is required to remove directors with or without cause;

- advance notice is required for nominations to the board of directors or for proposing matters to be acted upon at a shareholders' meeting, except that a vote to remove and replace a director can be proposed at any shareholders' meeting without notice;

- our bylaws can be changed in accordance with applicable laws;

- the crossing of certain thresholds has to be disclosed and can impose certain obligations;

- transfers of shares shall comply with applicable insider trading rules and regulations and, in particular, with the Market Abuse Directive and Regulation dated April 16, 2014; and

- pursuant to French law, our bylaws, including the sections relating to the number of directors and election and removal of a director from office, may only be modified by a resolution adopted by two-thirds of the votes of our shareholders present, represented by a proxy or voting by mail at the meeting.

You may not be able to exercise your right to vote the ordinary shares underlying your ADSs.

Holders of ADSs may exercise voting rights with respect to the ordinary shares represented by the ADSs only in accordance with the provisions of the deposit agreement. The deposit agreement provides that, upon receipt of notice of any meeting of holders of our ordinary shares, the depositary will fix a record date for the determination of ADS holders who will be entitled to give instructions for the exercise of voting rights. Upon timely receipt of notice from us, if we so request, the depositary will distribute to the holders as of the record date (1) the notice of the meeting or solicitation of consent or proxy sent by us and (2) a statement as to the manner in which instructions may be given by the holders.

Purchasers of ADSs may instruct the depositary of the ADSs to vote the ordinary shares underlying their ADSs. Otherwise, purchasers of ADSs will not be able to exercise voting rights unless they withdraw the ordinary shares underlying the ADSs they hold. However, a holder of ADSs may not know about the meeting far enough in advance to withdraw those ordinary shares. If we ask for a holder of ADSs' instructions, the depositary, upon timely notice from us, will distribute notice of the upcoming vote and arrange to deliver our voting materials to him or her. We cannot guarantee to any holder of ADSs that he or she will receive the voting materials in time to ensure that he or she can instruct the depositary to vote his or her ordinary shares or to withdraw his or her ordinary shares so that he or she can vote them. If the depositary does not receive timely voting instructions from a holder of ADSs, it may give a proxy to a person designated by us to vote the ordinary shares underlying his or her ADSs. In addition, the depositary and its agents are not responsible for failing to carry out voting instructions or for the manner of carrying out voting instructions. This means that a holder of ADSs may not be able to exercise his or her right to vote, and there may be nothing he or she can do if the ordinary shares underlying the ADSs are not voted as he or she requested.

Purchasers of ADSs may not be directly holding our ordinary shares.

A holder of ADSs will not be treated as one of our shareholders and will not have direct shareholder rights. French law governs our shareholder rights. The depositary will be the holder of the ordinary shares underlying ADSs held by ADS holders. The deposit agreement among us, the depositary and the owners and holders of ADSs, sets out ADS holder rights, as well as the rights and obligations of the depositary.

The right as a holder of ADSs to participate in any future preferential subscription rights or to elect to receive dividends in shares may be limited, which may cause dilution to ADS holders.

According to French law, if we issue additional securities for cash, current shareholders will have preferential subscription rights for these securities on a pro rata basis unless they waive those rights at an extraordinary meeting of our shareholders (by a two-thirds majority vote) or individually by each shareholder. However, ADS holders in the United States will not be entitled to exercise or sell such rights unless we register the rights and the securities to which the rights relate under the Securities Act of 1933, as amended, or the Securities Act, or an exemption from the registration requirements is available. In addition, the deposit agreement provides that the depositary will not make rights available to ADS holders unless the distribution to ADS holders of both the rights and any related securities are either registered under the Securities Act or exempted from registration under the Securities Act. Further, if we offer holders of our ordinary shares the option to receive dividends in either cash or shares, under the deposit agreement the depositary may require satisfactory assurances from us that extending the offer to holders of ADSs does not require registration of any securities under the Securities Act before making the option available to holders of ADSs. We are under no obligation to file a registration statement with respect to any such rights or securities or to endeavor to cause such a registration statement to be declared effective. Moreover, we may not be able to establish an exemption from registration under the Securities Act. Accordingly, ADS holders may be unable to participate in our rights offerings or to elect to receive dividends in shares and may experience dilution in their holdings. In addition, if the depositary is unable to sell rights that are not exercised or not distributed or if the sale is not lawful or reasonably practicable, it will allow the rights to lapse, in which case you will receive no value for these rights.

ADS holders may be subject to limitations on the transfer of their ADSs and the withdrawal of the underlying ordinary shares.

ADSs, which may be evidenced by ADRs, are transferable on the books of the depositary. However, the depositary may close its books at any time or from time to time when it deems expedient in connection with the performance of its duties. The depositary may refuse to deliver, transfer or register transfers of ADSs generally when our books or the books of the depositary are

closed, or at any time if we or the depositary think it is advisable to do so because of any requirement of law, government or governmental body, or under any provision of the deposit agreement, or for any other reason subject to a holder of ADSs' right to cancel his or her ADSs and withdraw the underlying ordinary shares. Temporary delays in the cancellation of ADSs and withdrawal of the underlying ordinary shares may arise because the depositary has closed its transfer books or we have closed our transfer books, the transfer of ordinary shares is blocked to permit voting at a shareholders' meeting or we are paying a dividend on our ordinary shares. In addition, a holder of ADSs may not be able to cancel his or her ADSs and withdraw the underlying ordinary shares when he or she owes money for fees, taxes and similar charges and when it is necessary to prohibit withdrawals in order to comply with any laws or governmental regulations that apply to ADSs or to the withdrawal of ordinary shares or other deposited securities.

As a foreign private issuer, we are exempt from a number of rules under the U.S. securities laws and are permitted to file less information with the SEC than a U.S. company. This may limit the information available to holders of ADSs.

We are a foreign private issuer, as defined in the SEC's rules and regulations and, consequently, we are not subject to all of the disclosure requirements applicable to public companies organized within the United States. For example, we are exempt from certain rules under the Exchange Act that regulate disclosure obligations and procedural requirements related to the solicitation of proxies, consents or authorizations applicable to a security registered under the Exchange Act, including the U.S. proxy rules under Section 14 of the Exchange Act. In addition, our officers and directors are exempt from the reporting and "short-swing" profit recovery provisions of Section 16 of the Exchange Act and related rules with respect to their purchases and sales of our securities. Moreover, while we currently make annual and semi-annual filings with respect to our listing on Euronext Growth Paris and expect to file financial reports on an annual and semi-annual basis, we will not be required to file periodic reports and financial statements with the SEC as frequently or as promptly as U.S. public companies and will not be required to file quarterly reports on Form 10-Q or current reports on Form 8-K under the Exchange Act. Accordingly, there will be less publicly available information concerning our company than there would be if we were not a foreign private issuer.

As a foreign private issuer, we are permitted and to and do follow certain home country practices in relation to corporate governance matters that differ significantly from Nasdaq's corporate governance standards. These practices may afford less protection to shareholders than they would enjoy if we complied fully with the corporate governance standards of Nasdaq.

As a foreign private issuer listed on the Nasdaq Capital Market, we will be subject to Nasdaq's corporate governance standards. However, Nasdaq rules provide that foreign private issuers are permitted to follow home country corporate governance practices in lieu of Nasdaq's corporate governance standards as long as notification is provided to Nasdaq of the intention to take advantage of such exemptions. We intend to rely on exemptions for foreign private issuers and follow French corporate governance practices in lieu of Nasdaq's corporate governance standards, to the extent possible. Certain corporate governance practices in France, which is our home country, may differ significantly from Nasdaq corporate governance standards. For example, as a French company, neither the corporate laws of France nor our bylaws require a majority of our directors to be independent and we can include non-independent directors as members of our remuneration committee, and our independent directors are not required to hold regularly scheduled meetings at which only independent directors are present.

We are also exempt from provisions set forth in Nasdaq rules which require an issuer to provide in its bylaws for a generally applicable quorum, and that such quorum may not be less than one-third of the outstanding voting stock. Consistent with French law, our bylaws provide that a quorum requires the presence of shareholders having at least (1) 20% of the shares entitled to vote in the case of an ordinary shareholders' general meeting or at an extraordinary shareholders' general meeting where shareholders are voting on a capital increase by capitalization of reserves, profits or share premium, or (2) 25% of the shares entitled to vote in the case of any other extraordinary shareholders' general meeting.

As a foreign private issuer, we are required to comply with certain Nasdaq rules and Rule 10A-3 of the Exchange Act, relating to audit committee composition and responsibilities. However, under French law, the audit committee may only have an advisory role and appointment of our statutory auditors, in particular, must be decided by the shareholders at our annual meeting.

Therefore, our shareholders may be afforded less protection than they otherwise would have under Nasdaq's corporate governance standards applicable to U.S. domestic issuers.

We may lose our foreign private issuer status in the future, which could result in significant additional cost and expense.

While we currently qualify as a foreign private issuer, the determination of foreign private issuer status is made annually on the last business day of an issuer's most recently completed second fiscal quarter and, accordingly, the next determination will be

made with respect to us on June 30, 2022. In the future, we would lose our foreign private issuer status if we fail to meet the requirements necessary to maintain our foreign private issuer status as of the relevant determination date. We will remain a foreign private issuer until such time that more than 50% of our outstanding voting securities are held by U.S. residents and any of the following three circumstances applies: (i) the majority of our executive officers or directors are U.S. citizens or residents; (ii) more than 50% of our assets are located in the United States; or (iii) our business is administered principally in the United States.

The regulatory and compliance costs to us under U.S. securities laws as a U.S. domestic issuer may be significantly more than costs we incur as a foreign private issuer. If we are not a foreign private issuer, we will be required to file periodic reports and registration statements on U.S. domestic issuer forms with the SEC, which are more detailed and extensive in certain respects than the forms available to a foreign private issuer. We would be required under current SEC rules to prepare our financial statements in accordance with U.S. GAAP, rather than IFRS, and modify certain of our policies to comply with corporate governance practices associated with U.S. domestic issuers. Such conversion of our financial statements to U.S. GAAP would involve significant time and cost. In addition, we may lose our ability to rely upon exemptions from certain corporate governance requirements on U.S. stock exchanges that are available to foreign private issuers such as the ones described herein and exemptions from procedural requirements related to the solicitation of proxies.

We are an "emerging growth company" under the JOBS Act and will be able to avail ourselves of reduced disclosure requirements applicable to emerging growth companies, which could make the ADSs less attractive to investors.

We are an "emerging growth company," as defined in the U.S. Jumpstart Our Business Startups Act of 2012, or the JOBS Act, and we intend to take advantage of certain exemptions from various reporting requirements that are applicable to other public companies that are not "emerging growth companies," including not being required to comply with the auditor attestation requirements of Section 404(b) of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved.

We cannot predict if investors will find the ADSs less attractive because we may rely on these exemptions. If some investors find the ADSs less attractive as a result, there may be a less active trading market for the ADSs and the price of the ADSs may be more volatile. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earliest of (i) the last day of the fiscal year in which we have total annual gross revenue of $1.07 billion or more; (ii) the last day of our fiscal year following the fifth anniversary of the closing date of our U.S. initial public offering; (iii) the date on which we have issued more than $1.0 billion in nonconvertible debt during the previous three years; and (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

U.S. holders of ADSs may suffer adverse tax consequences if we are characterized as a passive foreign investment company.

Generally, if, for any taxable year, at least 75% of our gross income is passive income, or at least 50% of the value of our assets is attributable to assets that produce passive income or are held for the production of passive income, including cash, we would be characterized as a passive foreign investment company, or PFIC, for U.S. federal income tax purposes. For purposes of these tests, passive income includes dividends, interest, and gains from the sale or exchange of investment property and rents and royalties other than rents and royalties which are received from unrelated parties in connection with the active conduct of a trade or business. If we are characterized as a PFIC, U.S. holders of the ADSs may suffer adverse tax consequences, including having gains realized on the sale of the ADSs treated as ordinary income, rather than capital gain, the loss of the preferential rate applicable to dividends received on the ADSs by individuals who are U.S. holders, and having interest charges apply to certain distributions by us and the proceeds of sales of the ADSs. See Item 10.E "Taxation" of this annual report for additional details.

Our status as a PFIC will depend on the composition of our income (including whether we receive certain non-refundable grants or subsidies and whether such amounts and reimbursements of certain refundable research tax credits will constitute gross income for purposes of the PFIC income test) and the composition and value of our assets, which may be determined in large part by reference to the market value of the ADSs, which may be volatile, from time to time. Based on the composition of our gross income, assets, activities, and market capitalization in 2021, and on reasonable assumptions, we believe that it is more likely than not that we were not a PFIC for our taxable year ending December 31, 2021. However, there can be no assurance that we will not be a PFIC for our current taxable year ending December 31, 2022 or for any prior or future taxable year. Our U.S. counsel expresses no opinion regarding our conclusions regarding our PFIC status.

Investments in our securities may be subject to prior governmental authorization under the French foreign investment control regime.

Pursuant to the provisions of the French Monetary and Financial Code (code monétaire et financier), any investment by any non-French citizen, any French citizen not residing in France, any non-French entity or any French entity controlled by one of the aforementioned persons or entities that will result in the relevant investor (a) acquiring control of an entity registered in France, (b) acquiring all or part of a business line of an entity registered in France, or (c) for non-EU or non-EEA investors crossing, directly or indirectly, alone or in concert, a 25% threshold of voting rights in an entity registered in France, in each case, conducting activities in certain strategic industries, such as the industry in which we operate, is subject to the prior authorization of the French Ministry of Economy, which authorization may be conditioned on certain undertakings.

In the context of the ongoing COVID-19 pandemic, the Decree (décret) n°2020-892 dated July 22, 2020 as modified by the Decree (décret) n°2020-1729 dated December 28, 2020 and the Decree (décret) n°2021 1758 dated December 22, 2021, has created, until December 31, 2022, a new 10% threshold of the voting rights for the non-European investments in listed companies, in addition to the 25% abovementioned threshold.

The foreign investment control regime described above applies to companies engaged in activities essential to protecting public health as well as biotechnology-related research and development activities.

Therefore, any investor meeting the above criteria willing to acquire all or part of our business with the effect of crossing the applicable share capital thresholds set forth by the French Monetary and Financial Code will have to request this prior governmental authorization before acquiring our ordinary shares or ADSs. We cannot guarantee that such investor will obtain the necessary authorization in due time. The authorization may also be granted subject to conditions that deter a potential purchaser. The existence of such conditions to an investment in our securities could have a negative impact on our ability to raise the funds necessary to our development. In addition, failure to comply with such measures could result in significant consequences for the investor (including the investment to be deemed null and void). Such measures could also delay or discourage a takeover attempt, and we cannot predict whether these measures will result in a lower or more volatile market price of our ADSs or ordinary shares.

We identified a material weakness in our internal control over financial reporting as of December 31, 2021 related to our failure to correctly apply IFRS 9 "Financial Instruments" to the fair value assessment of our convertible notes, and its related interpretations and rules with respect to their accounting treatment. We have implemented control procedures to mitigate this risk, but if we are still unable to establish and maintain an effective system of internal control over financial reporting in this matter, we may not be able to accurately report our financial results in a timely manner, which may adversely affect investor confidence in us and materially and adversely affect our business and operating results.

In connection with our fiscal 2021 audit, we identified a material weakness in our internal controls over financial reporting related to our failure to correctly apply IFRS 9 "Financial Instruments" to the fair value assessment of our convertible notes, and its related interpretations and rules with respect to their accounting treatment. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected and corrected on a timely basis.

In response to the control deficiencies described above, our management is implementing a remediation plan, which it believes will remediate the material weakness that has been identified. We cannot assure that the measures we have taken to date and may take in the future, will be sufficient to remediate the control deficiencies that led to our material weakness in internal control over financial reporting or that we will prevent or avoid potential future material weaknesses. Effective internal controls are necessary for us to provide reliable financial reports. These remediation measures may be time consuming and costly and there is no assurance that these initiatives will ultimately have the intended effects.

If we identify any new material weaknesses in the future, any such newly identified material weakness could limit our ability to prevent or detect a misstatement of our accounts or disclosures that could result in a material misstatement of our annual or interim financial statements. In such case, we may be unable to maintain compliance with securities law requirements regarding timely filing of periodic reports in addition to applicable stock exchange listing requirements, investors may lose confidence in our financial reporting and our stock price may decline as a result. We cannot assure you that the measures we have taken to date, or any measures we may take in the future, will be sufficient to avoid potential future material weaknesses.

We must establish and maintain effective internal control over financial reporting, and if we are unable to do so, the accuracy and timeliness of our financial reporting may be adversely affected, which could hurt our business, lessen investor confidence and depress the market price of our securities.

We must establish and maintain effective internal control over financial reporting in order to accurately and timely report our results of operations and financial condition. In addition, as a public company listed in the United States, the Sarbanes-Oxley Act requires, among other things, that we assess the effectiveness of our internal control over financial reporting at the end of each fiscal year.

The rules governing the standards that must be met for our management to assess our internal control over financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act are complex and require significant documentation, testing and possible remediation. These stringent standards require that our audit committee be advised and regularly updated on management's review of internal control over financial reporting. This process is time-consuming, costly, and complicated.

Our current controls and any new controls that we develop may become inadequate because of changes in conditions in our business. Further, additional weaknesses in our disclosure controls and internal control over financial reporting may be discovered in the future. Any failure to develop or maintain effective controls or any difficulties encountered in their implementation or improvement could harm our results of operations or cause us to fail to meet our reporting obligations and may result in a restatement of our financial statements for prior periods. Any failure to implement and maintain effective internal control over financial reporting also could adversely affect the results of periodic management evaluations and annual independent registered public accounting firm attestation reports regarding the effectiveness of our internal control over financial reporting that we will eventually be required to include in our periodic reports that will be filed with the SEC. Ineffective disclosure controls and procedures and internal control over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the trading price of our shares. In addition, if we are unable to continue to meet these requirements, we may not be able to remain listed on the Nasdaq Capital Market.

Our independent registered public accounting firm is not required to formally attest to the effectiveness of our internal control over financial reporting until after we are no longer an emerging growth company as defined in the JOBS Act. At such time, our independent registered public accounting firm may issue a report that is adverse in the event it is not satisfied with the level at which our internal control over financial reporting is documented, designed, or operating. Any failure to maintain effective disclosure controls and internal control over financial reporting could have an adverse effect on our business and results of operations and could cause a decline in the price of our shares.

Item 4. Information on the Company.

A. History and Development of the Company

We were incorporated as a *société anonyme*, or SA, on September 27, 2006. We are registered at the Paris *Registre du Commerce et des Sociétés* under the number 492 002 225. Our principal executive offices are located at Sorbonne University—BC 9, Bâtiment A 4ème étage, 4 place Jussieu 75005 Paris, France and our telephone number is +33 1 44 27 23 00. Our website address is *www.biophytis.com*. Our agent for service of process in the United States is Puglisi & Associates, 850 Library Avenue, Suite 204, Newark, Delaware 19711. The reference to our website is an inactive textual reference only and the information contained in, or that can be accessed through, our website is not a part of this annual report.

Our actual capital expenditures for the years ended December 31, 2019, 2020 and 2021 amounted to €642 thousand, €484 thousand and €844, respectively. These capital expenditures primarily consisted of patents rights acquired from our CEO (€630 thousand in 2019, €450 thousand in 2020, €270 thousand in 2021) and rights of use for the headquarters of the Company in France (€500 thousand in 2021) recorded in accordance with IFRS 16 *Lease*. To date, we have expensed all research and development costs as incurred, as we do not currently meet the conditions to capitalize expenditures on drug development activities, as provided in IAS 38 *Intangible Assets*. Our research and development costs for the years ended December 31, 2019, 2020 and 2021 amounted to €9,089 thousand, €9,921 thousand and €19,213 thousand, respectively. These research and development costs primarily consisted of expenses incurred in connection with the development of our drug candidates such as personnel-related costs, expenses incurred under our agreements with CROs, clinical sites, contract laboratories and costs of acquiring preclinical study and clinical trial materials. We expect our capital expenditures and research and development costs to remain significant as we continue our research and development efforts and advance the clinical development of Sarconeos (BIO101) and Macuneos (BIO201), in the United States, Europe and elsewhere. We anticipate our capital expenditures and research and development costs in 2022 to be financed from our

existing cash and cash equivalents, from the funding line of convertible notes set up with ATLAS. For the near future, our investments will mainly remain in France where our research and development facilities are currently located.

The SEC maintains an Internet site that contains reports, proxy information statements and other information regarding issuers that file electronically with the SEC. The address of that site is http://www.sec.gov. Our website address is *www.biophytis.com*. The reference to our website is an inactive textual reference only and information contained in, or that can be accessed through, our website or any other website cited in this annual report is not part of this annual report.

B. Business Overview

Overview

We are a clinical-stage biotechnology company focused on the development of therapeutics that are aimed at slowing the degenerative processes associated with aging and improving functional outcomes for patients suffering from age-related diseases, including severe respiratory failure in patients suffering from COVID-19. Our goal is to become a leader in the emerging field of aging science by delivering life-changing therapies to the growing number of patients in need. To accomplish this goal, we have assembled an experienced and skilled group of industry professionals, scientists, clinicians and key opinion leaders from leading industry and academic institutions from around the world.

A number of degenerative diseases associated with aging have been characterized in the last century, including sarcopenia and AMD. The pathophysiology of these and many other age-related diseases is not yet well understood, and effective treatment options are lacking. The global population of people over the age of 60 is expected to double from approximately 962 million in 2017 to 2.1 billion by 2050, according to estimates from the United Nations' World Population Prospects: the 2017 Revision. We believe that the need for effective therapeutics for age-related diseases will continue to grow throughout the 21st century. In addition, healthcare costs, including costs associated with treatments and long-term care for age-related diseases associated with this demographic shift, are expected to rise proportionally, as effective treatment options are currently lacking. We believe that developing treatments to slow disease progression and reduce the risk of severe disability associated with age-related diseases is of the utmost importance.

As we age, our physical, respiratory, visual and cognitive performances gradually decline due, in part, to the cumulative deleterious effect of multiple biological and environmental stresses, including current and emerging viral infections, to which we are exposed during our lifetime. The functional decline can be much faster in some individuals as a consequence of, among other things, the degenerative processes affecting specific cells, tissues and organs. Through evolution, cells, tissues and organisms have developed natural means or pathways to counteract and balance the effects of the many stresses they face. This natural ability to compensate for stress and remain functional, called biological resilience, degrades over time. The decline in biological resilience contributes to the acceleration of these degenerative processes and the impairment of functional performances, which, in turn, can lead to severe disability, reduced health-span and ultimately death. This occurs as we age, but can occur at a younger age, when genetic mutations exist, or in the case of infection and inflammation.

COVID-19 was recognized as a worldwide pandemic by WHO in March 2020. There are many ongoing clinical studies to develop medical responses to COVID-19. A few anti-viral agents (including bamlanivimab and etesevimab (administered together), Paxlovid (nirmatrelvir and ritonavir), and molnupiravir) as well as monoclonal antibodies (sotrovimab and Evusheld (tixagevimab co-packaged with cilgavimab and administered together)) have already received authorizations in the United States for specific indications and patient groups, with Veklury (remdesivir) having been approved in the U.S. by the FDA for use in adults and pediatric patients (12 years of age and older and weighing at least 40 kg) for the treatment of COVID-19 requiring hospitalization. Moreover, a number of vaccines have now been authorized around the globe; while many more remain in development, including vaccines that are developed by Sanofi and GlaxoSmithKline. In the EU, Veklury (remdesivir) is conditionally approved while other drugs such as RoActemra and Kineret (anakinra) have received marketing authorizations or are currently being reviewed, including Paxlovid (PF-07321332 and ritonavir) and Lagevrio (molnupiravir). Furthermore, EMA's Committee for Medicinal Products for Human Use (CHMP) issued so-called favorable Article 5(3) Opinions under Regulation (EC) No 726/2004 for the use of different treatment options (including Lagevrio, Bamlanivimab/etesevimab, Casirivimab/imdevimab, Dexamethasone, Paxlovid, Regdanvimab and Sotrovimab) and has started evaluating Evusheld (tixagevimab and cilgavimab). Age, co-morbidities, heavy smoking, male gender and several ethnic backgrounds are associated with worse outcomes. Our therapeutic approach is aimed at targeting and activating key biological resilience pathways that can protect against and counteract the effects of the multiple biological and environmental stresses, including inflammatory, oxidative, metabolic and viral stresses that lead to age-related diseases.

Our lead drug candidate, Sarconeos (BIO101), is an orally administered small molecule in development for the treatment of neuromuscular diseases. Sarconeos (BIO101) is a plant-derived pharmaceutical-grade purified 20-hydroxyecdysone.

The initial indication we are seeking approval for is sarcopenia, an age-related degeneration of skeletal muscle, which is characterized by a loss of muscle mass, strength and function in elderly people (adults 65 years of age and older) leading to reduced mobility, or mobility disability, and increased risk of adverse health events and hospitalization, and potential death resulting from falls, fractures, and physical disability. There is currently no approved medication for sarcopenia, which is present in the elderly (greater than 65 years old) with an estimated prevalence range between six to 22% worldwide.

Sarconeos (BIO101) is also in development to treat patients with severe respiratory manifestations of COVID-19. We are currently concluding the COVA study, a global, multicenter, double-blind, placebo-controlled, group-sequential, and adaptive two-part Phase 2-3 study, in patients with SARS-CoV-2 pneumonia. We are planning to organize, subject to regulatory approval by ANVISA, in an expanded access program in Brazil for hospitalized patients with severe COVID-19 symptoms who are mechanically ventilated in intensive care units. Most people infected with the COVID-19 virus and its variants will experience mild to moderate respiratory illness and recover without requiring special treatment. Older people, and those with underlying medical problems like cardiovascular disease, diabetes, chronic respiratory disease and cancer are more likely to develop serious illness. In January 2022, we received approval from the ANVISA (Brazilian health authority) for an expanded access program to treat hospitalized patients with severe COVID-19 symptoms that are mechanically ventilated with Sarconeos (BIO101) and not eligible for the COVA study.

We are also developing Sarconeos (BIO101) for DMD, a rare genetic neuromuscular disease in male children and young adults, which is characterized by an accelerated degeneration of muscle and is responsible for a loss of mobility, respiratory failure and cardiomyopathy, leading to premature death. There is currently no cure and limited treatment options for DMD, which affects approximately 2.8 out of 100,000 people worldwide (approximately 20,000 new cases annually worldwide), based on our estimates from publicly available information.

Our second drug candidate, Macuneos (BIO201), is an orally administered small molecule in development for the treatment of retinopathies. It is a plant-derived pharmaceutical-grade purified norbixin. We have completed preclinical cellular and animal studies of Macuneos (BIO201) for the treatment of retinopathies. While we are still in the early stages of development, we believe that the results from our preclinical studies support continued investigation into whether Macuneos (BIO201) may stimulate biological resilience and protect the retina against phototoxic damage that leads to vision loss. The initial indication we plan to seek approval for is dry AMD, a common eye disorder among people over the age of 50 that affects central vision, impairing functions such as reading, driving, and facial recognition, and has a major impact on quality of life and the ability to live independently. There are currently no approved treatments for dry AMD. Based on our estimates from publicly available information, AMD affects approximately 8.5% of the global population (ages 45 to 85) and is expected to increase over time as the population ages.

We are also exploring Macuneos (BIO201) as a potential treatment for Stargardt disease, which shares many of the characteristics of dry AMD. Stargardt disease is the most common form of inherited macular degeneration that typically develops in childhood and leads to vision loss and, in some cases, blindness.

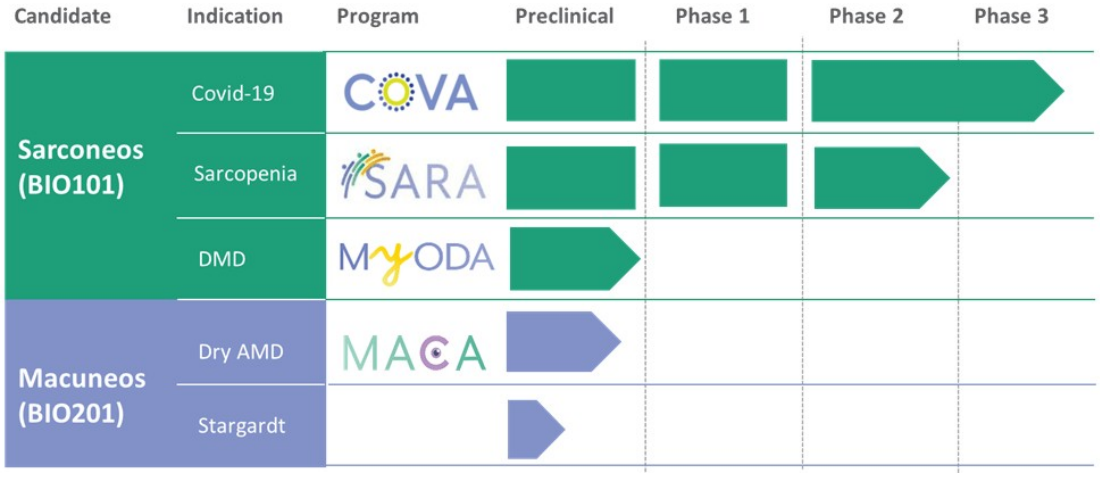
Subject to our entering into commercialization agreements in relation to two patent applications we recently filed, which are further described below as patent families S8 and S9, we hold exclusive commercialization rights through licenses for each of our drug candidates. We currently plan to develop our drug candidates through clinical PoC (typically Phase 2), and then seek licensing and/or partnership opportunities for further clinical development through regulatory approval and commercialization.

We have developed our lead clinical drug candidate Sarconeos (BIO101), preclinical drug candidate Macuneos (BIO201), and a preclinical pipeline of life-cycle extension products, consisting of BIO103 and BIO203, through a drug discovery platform in collaboration with Sorbonne University in Paris, France based on work with medicinal plants. Plants are major sources of small molecules, called secondary metabolites, which they produce as a defense mechanism to various environmental stresses, including attack from predatory and pathogenic species (*e.g.*, insects, bacteria and fungi). Our drug discovery platform is based on a reverse pharmacology approach that tests a collection of bioactive secondary metabolites along with chemical analogs that we have synthesized in phenotypic screens of various age-related diseases. Our long-term goal is to advance the field of aging science with the continued discovery and development of new drug candidates that treat age-related diseases by stimulating biological resilience pathways that are involved in the aging process and/or age-related diseases.

We have assembled an executive team of scientific, clinical, and business leaders with broad expertise in biotechnology and clinical drug development (see Item 6.A for more information on our directors and senior management).

Our Clinical Pipeline

We are developing a portfolio of programs targeting biological resilience pathways that slow the degenerative processes associated with aging and improve functional outcomes for patients suffering from age-related diseases. Our current pipeline of drug candidates is illustrated below.



Our Strategy

We are focused on the development of therapeutics that improve functional outcomes for patients suffering from age-related diseases. Our goal is to build Biophytis into a leading biotechnology company focused on targeting biological resilience pathways that slow the degenerative processes associated with age-related disease progression in order to improve the lives of millions of patients that have limited or no treatment options. We currently plan to develop our drug candidates and then seek licensing and/or partnership opportunities for further clinical development through regulatory approval and commercialization. To achieve our goal, we are pursuing the following strategies:

- ***Demonstrate efficacy of Sarconeos (BIO101) in sarcopenia.*** Our resources and business efforts are significantly focused on advancing the clinical development of Sarconeos (BIO101) for the treatment of neuromuscular disorders, with an initial focus on sarcopenia. The topline data for our SARA-INT Phase 2b clinical trial was published in October 2021. Due to the effect of the pandemic on patient population, only 45 percent of the study subjects were able to complete the study with end-of-treatment efficacy assessments and the study was underpowered to observe the hypothesized effect size, and the primary and secondary endpoints were not met. Additional Phase 2 dose-finding studies are planned to identify an optimal dose or dosing regimens, and further inform the safety profile for higher dosing regimens and related safety information as well as pharmacokinetics data are planned.

- ***Demonstrate the therapeutic benefit and obtain an EUA (US, Brazil) and conditional approval (EU) of Sarconeos (BIO101) for COVID-19 patients.*** We are concluding the enrollment part of the two-part Phase 2/3 COVA study in hospitalized COVID-19 patients with severe respiratory manifestations earlier than planned due to the progression of the pandemic and the difficulty we experienced in enrollment. Since April 2020, 237 patients have been enrolled in France, the United States, Belgium, and Brazil, in approximately 35 clinical centers. The initial target for enrollment was 310 pateints. We plan to conclude our data analysis by the end of the third quarter of 2022. Based on these results, we will further determine development and regulatory strategies.

- ***Initiate clinical development of Sarconeos (BIO101) in DMD.*** Our efforts are also focused on leveraging our knowledge and the development of Sarconeos (BIO101) in sarcopenia to commence and advance the clinical development of Sarconeos (BIO101) for the treatment of non-ambulatory DMD patients with signs of respiratory deterioration, independent of genetic mutation and across the disease spectrum. We have already received an IND “may proceed” letter from the FDA in the United States and a CTA approval from FAMHP in Belgium. In the “may proceed” letter from the FDA, the FDA noted that

it had significant concerns with the design of the study, and that the results of the study, as originally designed to enroll ambulatory and non-ambulatory patients and measure muscle function deterioration through a composite score, would not be capable of providing interpretable data sufficient to support a marketing application. In its letter, the FDA recommended that we revise the study population and primary endpoint. We have incorporated the FDA's recommendations and revised the protocol to focus on non-ambulatory patients with signs of respiratory deterioration and changed the primary endpoint to respiratory function. The revised protocol will be submitted as an amendment to the FDA and other regulatory authorities for review. We have delayed this study in order to focus on completing the COVA study and until such time as we have a clearer understanding of the course of the pandemic. We hope to initiate this study in the second half of 2022 or first half of 2023, subject to any COVID-19 -related delays and delays caused by its variants and the impact of the pandemic on our operational capabilities. The pandemic may also pose limitations on starting a study in this very vulnerable population.

- ***Advance the development of our second drug candidate, Macuneos (BIO201).*** We are also working on continuing the preclinical development of our second drug candidate, Macuneos (BIO201), for the treatment of retinopathies, with an initial focus on dry AMD. We plan to start a Phase 1 clinical trial (MACA-PK) in healthy volunteers, in the second half of 2023, subject to regulatory review and approval and the ongoing impact of the current pandemic on our operation capabilities.

- ***Expand our presence in the United States to support co-development in Europe and the United States.*** We plan to continue the expansion of our company in the United States and Europe. In 2018, we opened offices in Cambridge, Massachusetts to support our growing clinical, regulatory, and operational efforts. Our goal is to continue to build our clinical and regulatory operations in this country to support further clinical trials and, if successful, apply for regulatory approval in both the United States and Europe. We plan to work with patient associations, key experts, regulatory agencies, government and third-party payors and other key constituencies in both regions.

- ***Expand our pipeline and explore potential strategic partnerships and alliances to maximize the value of our development programs.*** We plan to continue to leverage our collaborations with leading scientific and academic institutions in order to pursue new INDs for our existing drug candidates, including Sarconeos (BIO101), BIO103, and Macuneos (BIO201), as well as Macuneos (BIO203). We believe that our drug candidates may be applicable for additional age-related disease research and potential application. We plan to explore the commercial potential of our drug candidates after establishing clinical PoC through Phase 2/3.

Our Drug Candidates

Sarconeos (BIO101)

Our lead drug candidate, Sarconeos (BIO101), is an orally administered small molecule in development for the treatment of neuromuscular diseases. We have completed preclinical studies and are in various stages of further clinical development for the treatment of neuromuscular diseases. While preclinical studies provide limited data, based on results from our cellular and animal studies, we believe Sarconeos (BIO101) stimulates biological resilience through activation of the MAS Receptor, which may preserve muscle strength, mobility and respiratory function in various age-related conditions.

In addition, MAS activation could potentially counter the deleterious effects of the SARS-CoV -2 infection. Data from models of ALI suggest a further protective role of Sarconeos (BIO101) on the pulmonary tissue. In light of this, we began investigating Sarconeos (BIO101) in the COVA study in patients with severe respiratory manifestations of COVID-19 as an initial potential indication for Sarconeos (BIO101). The enrollment for this study ended April 7, 2022, earlier than planned, due to our inability to recruit sufficient patients in a suitable timeframe as a result of the developing pandemic. It is now rare for patients with Covid-19 disease to be admitted to hospitals for respiratory failure, due to the combined effect of high vaccination rates, high numbers of patients becoming immune through prior infection and the mild disease from the predominant Omicron variant.

Another indication we are developing is sarcopenia, an age-related degeneration of skeletal muscle, which is characterized by a loss of muscle mass, strength, function and mobility disability, and increased risk of adverse health events and potential death resulting from falls, fractures, and physical disability. There is currently no approved prescription for sarcopenia, which is highly prevalent in the elderly (adults 65 years of age and older) with an estimated prevalence between six to 22% worldwide.

We are also developing Sarconeos (BIO101) for DMD, the most common form of muscular dystrophy in children leading to early mortality. We are focusing on non-ambulatory patients with signs of respiratory deterioration.

History and Development of Sarconeos (BIO101)

In collaboration with Sorbonne University in Paris, France, we began our drug discovery efforts with a class of plant secondary metabolites called phytoecdysteroids, which are produced by plants to protect against insect attack. Phytoecdysteroids are analogs of the insect molting hormones ecdysone, which protects the plants by acting as endocrine disrupters and/or feeding deterrent. Phytoecdysteroids are found in various medicinal plants throughout the world and are used in traditional medicines as tonics or anti-diabetics.

We utilized a reverse pharmacology approach starting with phenotypic screens of a collection of phytoecdysteroids that had been gathered for over 30 years by scientists from Sorbonne University, along with chemical analogs that we have synthesized for their ability to stimulate protein synthesis in muscle cells. We selected 20-hydroxyecdysone for clinical development based on its safety profile, pharmacological activity and potential in maintaining key muscle functions, including mobility and strength. This compound was tested in animal models submitted to different stresses, including metabolic stress (high fat dieting or diabetic models), age-related stress (sarcopenia and disuse models), and genetic-related stress (DMD and Spinal Muscular Atrophy models). We are also testing the compound for infectious-related disease stress (COVID-19). Once pharmacological effects were detected, we identified the molecular target(s) and potential mechanism-of-action.

Potential Mechanism-of-Action

The MAS Receptor, the protective arm of the Renin-Angiotensin System (RAS)

Our preclinical studies demonstrate that Sarconeos (BIO101) activates the MAS Receptor in muscle cells, a key component of the RAS. The RAS is a fundamental endocrine system that is known to control fluid balance and blood pressure, playing a key role in cardio-vascular function. It is also involved in the regulation of smooth, cardiac and skeletal muscle metabolism, and plays a key role in muscle function and mobility in disease states. It is made up of two different arms that counter-regulate each other: (i) the “classical” arm (or ACE / angiotensin-II (Ang-II) / Ang-II receptor type 1 (AT1R) axis), and (ii) the “protective” arm (or ACE2 / angiotensin 1-7 (Ang-1-7) / MAS Receptor axis). Ang-II blood concentration has been shown to be increased with aging and in various neuromuscular diseases, such as sarcopenia and respiratory diseases that are caused by viruses such as SARS-CoV-2. Ang 1-7, the endogenous ligand of the MAS Receptor, opposes the numerous actions of Ang-II on muscle and cardio respiratory functions.

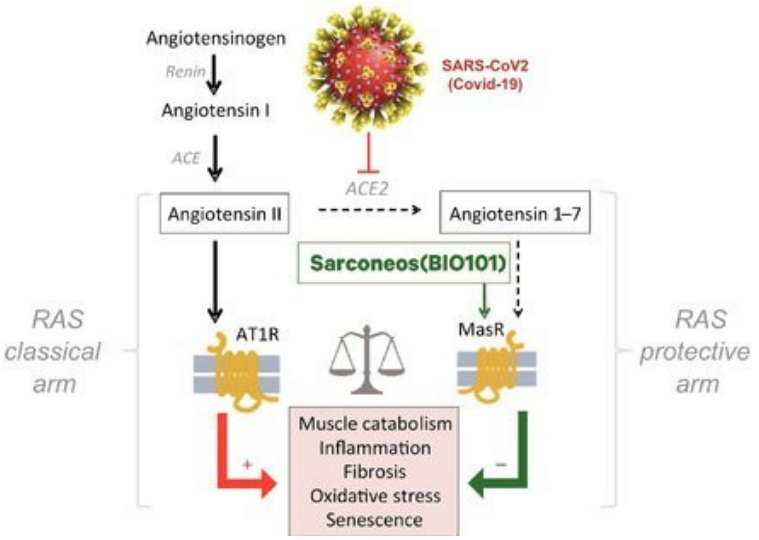
We believe Sarconeos (BIO101), through the activation of the MAS Receptor, triggers two key downstream signaling-pathways: (i) the P13K/AKT/mTOR pathway, or the AKT pathway, which is known to be responsible for increasing protein synthesis, (ii) the AMPK/ACC pathway, or the AMPK pathway, which is known to be involved in stimulating energy production. We have demonstrated that Sarconeos (BIO101) activates major signaling pathways such as the AKT pathway and potentially the AMPK pathway in C2C12 myotubes and human muscle cells through western blot analysis. The AKT pathway and AMPK pathway have all been shown to be impaired in muscle wasting conditions.

The potential mechanism-of-action through activation of the MAS Receptor is illustrated in the diagram below:

We believe that the AKT and AMPK pathway are potentially the key factors for (i) preserving muscle mass and increasing muscle strength under muscle wasting conditions and (ii) increasing muscle strength and improved endurance, respectively. We have also observed in preclinical studies that activation of the MAS Receptor by Sarconeos (BIO101) shares many common properties with Ang-1-7 at the cellular level. However, Sarconeos (BIO101) did not show an effect on blood pressure or heart rate when compared to enalapril, an angiotensin-converting enzyme, or ACE, inhibitor.

The activation of MAS Receptor is thought to be a key component of the cardio-respiratory function. When it comes to COVID-19, SARS-CoV-2 infection, by down-regulation of ACE2 expression and activity, reduces the conversion of Ang-II to Ang-1-7 resulting in excessive levels of Ang-II. This imbalance between the “classical” and “protective” arms of the RAS due to excessive activation of AT1R and limited activation of MAS Receptor which explain some of the observations in clinical practice reported in COVID-19 patients. Therefore, we believe that restoration of the balance of the RAS, by directly activating MAS Receptor downstream of ACE2, would be a particularly relevant avenue to treat patients infected with SARS-CoV-2.

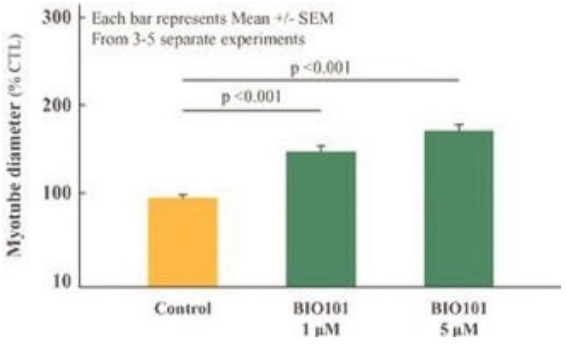
The potential mechanism-of-action through activation of MAS Receptor downstream of ACE2 which rebalances RAS in SARS-Cov2 infected subjects is as follows:



Preclinical proofs of concept

Effect on myocyte differentiation into myotubes (in vitro)

Our preclinical data in C2C12 cell lines and human cell models suggest that Sarconeos (BIO101) enlarges myotubes, the main structural units of muscle, warranting continued research. We believe that this is important for limiting muscle mass loss and increasing muscle strength under muscle wasting conditions. As depicted below, results from an *in vitro* study demonstrate that human myotubes are larger in muscle cells treated with Sarconeos (BIO101) as compared to untreated control cells.



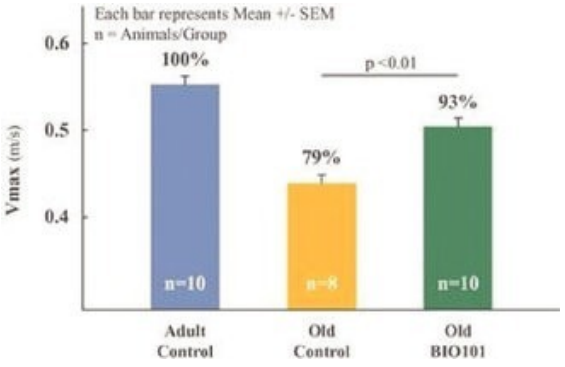
Effect of Sarconeos (BIO101) on mean myotube diameter

We believe Sarconeos (BIO101) directly targets muscle tissue and cells, and improves several key muscle cell functions, including protein synthesis, regeneration and energy production through key signaling pathways that are impaired in muscle wasting conditions, regardless of the disease stage, state of disease progression or severity, and may have the potential to improve muscle function and preserve strength, mobility and respiratory capacity in various neuromuscular diseases, independent of cause (*i.e.*, age-related or genetic) and pathophysiology.

Preclinical Development of Sarconeos (BIO101) in Sarcopenia.

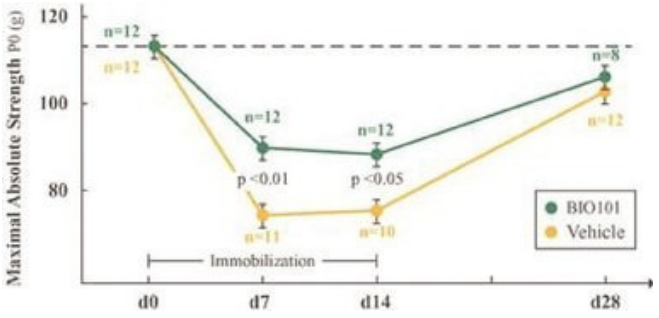
We conducted numerous *in vivo* experiments in C57Bl/6J mouse models to assess the activity of Sarconeos (BIO101) within the context of aging, specifically studying a high fat diet and immobilization. Key *in vivo* results are summarized below.

Beneficial effect on mobility in mice. We administered Sarconeos (BIO101) at 50 mg/kg/day or a placebo to "old" mice (22 months old at the beginning of the study) that were fed a high-fat diet over 14 weeks. The mice were exercised on a treadmill and maximum running velocity (Vmax) was recorded after 14 weeks of treatment. Untreated "adult" mice (12 months old at the beginning of the study) were also fed a high-fat diet and exercised similarly to determine a positive control velocity. As shown in the graph below, "old" control mice had a Vmax that was approximately 21% less than "adult" control mice ($p<0.001$) demonstrating the effects of aging. Further, results showed that "old" mice treated with Sarconeos (BIO101) demonstrated a significant improvement in Vmax as compared to "old" control mice ($p<0.01$), compensating almost completely for the loss of mobility due to aging. These results were presented in December 2016 at the Society on sarcopenia, Cachexia and Wasting Disorders, or SCWD, conference in Berlin, Germany.



Effect of chronic Sarconeos (BIO101) treatment over 14 weeks on maximum running velocity in old mice

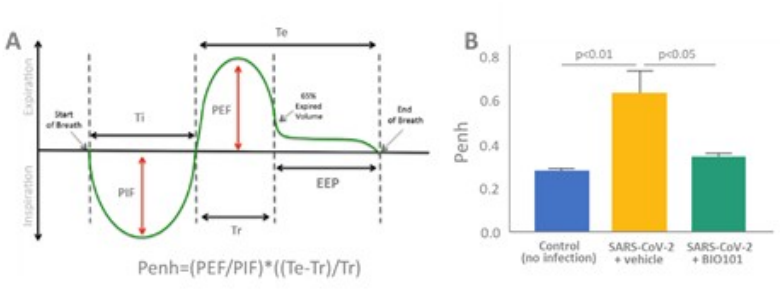
Preservation of muscle strength after immobilization in mice. To model muscle wasting associated with impaired mobility, we immobilized young mice (13 weeks old) and began administering either Sarconeos (BIO101) at 50 mg/kg/day or a placebo control (vehicle). After 14 days, we removed the immobilization and continued administration of Sarconeos (BIO101) for an additional 14 days. The absolute strength of hind limb muscle was recorded at various times over the 28-day period. As shown in the graph below, mice treated with Sarconeos (BIO101) demonstrated a preservation of muscle strength while immobilized compared to vehicle control. We believe these results support continued research to investigate whether Sarconeos (BIO101) could be an effective treatment to preserve muscle function under conditions of disuse or immobility.



Effect of chronic Sarconeos (BIO101) treatment over 28 days on maximal absolute strength in hind limb-immobilized mice

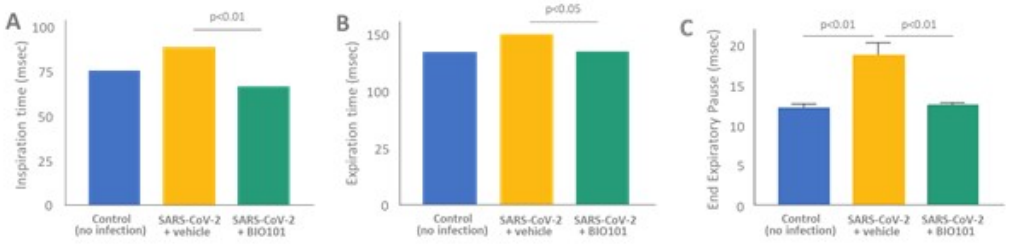
Preclinical Development of Sarconeos (BIO101) in COVID-19

ALI is acute lung injury caused by non-cardiogenic pathogenic factors and may develop to acute respiratory distress syndrome ("ARDS") in severe cases. One of the important causes of ALI is virus infection that in some cases (including SARS-CoV-2) can deregulate the expression of RAS components by accelerating the imbalance of RAS and the occurrence and development of ALI/ARDS. Of particular interest, Sarconeos (BIO101)'s active principle ingredient ("API") has shown lung anti-inflammatory and lung protective effects in various *in vivo* models of ALI known for being associated with severe RAS imbalance. A 2021 preclinical study revealed that Sarconeos (BIO101) daily treatment prevents respiratory function deterioration in SARS-CoV-2-infected mammals and provided a preclinical proof of concept for the concluding phase 2/3 COVA clinical study.



Effect of Sarconeos (BIO101) on SARS-CoV-2 infected hamsters

Enhanced pause (Penh) evaluation after BIO101 IP treatment of Sars-CoV-2-infected hamsters. As demonstrated in (A) above, Penh is a classically used and derived measure of respiratory distress. Penh is derived by assessing several measures of the respiratory response curve (peak expiratory flow of breath (PEF), peak inspiratory flow of breath (PIF), time of expiratory portion of breath (Te) and time required to exhale 65% of breath volume (Tr). EEP: End expiratory Pause. As noted in (B) above, this histogram shows Penh values of control group (not infected with SARS-CoV-2), infected with SARS-CoV-2 and treated with the vehicle (SARS-CoV-2 + vehicle) or infected with the SARS-CoV-2 and treated with BIO101 IP (SARS-CoV-2 + BIO101) with * p <0.05, and ** p <0.01. This data was referenced at at the European Congress of Clinical Microbiology and Infectious Diseases ("ECCMID") in July 2021.

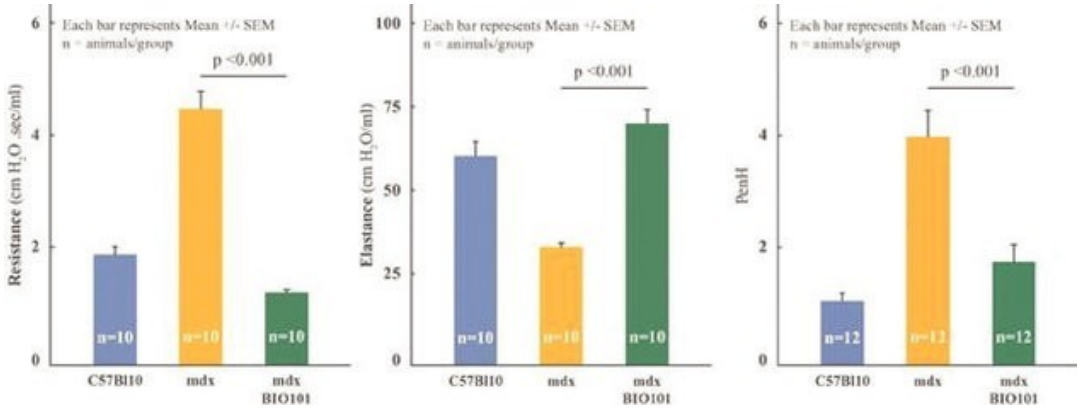


In the graphs above: (A) Inspiration time, (B) expiration time and (C) End Expiratory Pause (EEP) time evaluation after BIO101 IP treatment of SARS-CoV-2 infected hamsters. Histograms show values of control group (not infected with SARS-CoV-2), infected with SARS-CoV-2 and treated with the vehicle (SARS-CoV-2 + vehicle) or infected with the SARS-CoV-2 and treated with BIO101 IP (SARS-CoV-2 + BIO101) with * p <0.05, and ** p <0.01. This data was also referenced at at the ECCMID in July 2021.

Preclinical Development of Sarconeos (BIO101) in DMD

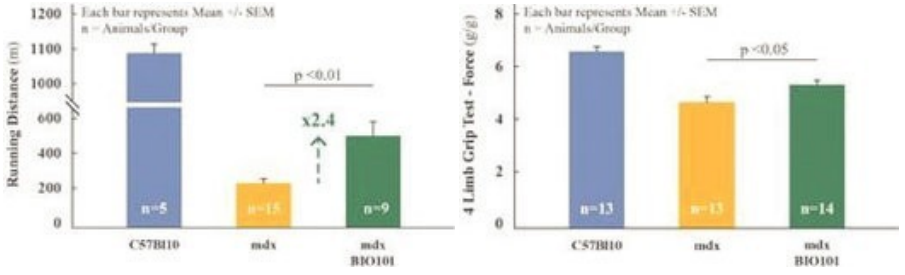
We conducted various *in vivo* experiments in *mdx* mice, a commonly used model of DMD. The results from these *mdx* mice studies were consistent with the results on cellular activity and functional outcomes from both *in vitro* and *in vivo* studies of Sarconeos (BIO101) in sarcopenia. We believe these results provide additional support for our belief that Sarconeos (BIO101) has the potential for improving mobility and muscle strength. In addition, we believe these results suggest that Sarconeos (BIO101) may increase respiratory function and decrease fibrosis. Key *in vivo* results in DMD are summarized below.

Improved respiratory function in mice. The loss of respiratory function is a major health issue for later-stage, non-ambulatory patients with DMD. Results have shown that chronic (eight weeks) daily administration of 50/mg/kg of Sarconeos (BIO101) ameliorates the time-dependent degradation of respiratory function observed in C57BL10-*mdx* mice as compared to C57BL10 control mice. This protective effect on respiratory function is not only associated with breathing parameters as suggested by enhanced pause, or PenH, measurements, but also by an improvement of deep airway structure of the respiratory system shown by FlexiVent experiments, which are a common measurement for *in vivo* lung function. PenH is calculated as follows: (PIP/PEP) x Pause, where PIP is the maximum change in chamber pressure during inspiration, PEP is the maximum change in chamber pressure during expiration, and Pause equals (TE-TR)/TE, where TE is expiratory time and TR is relaxation time. As shown in the three graphs below, C57BL10-*mdx* mice treated with Sarconeos (BIO101) exhibited improved respiratory function as measured by resistance, elastance and PenH of the lung. These results were presented in March 2019 at the annual international congress of Myology in Bordeaux, France.



Effect of chronic Sarconeos (BIO101) treatment on resistance, elastance and airway reactivity (PenH).

Improved mobility and muscle strength in mice. We studied the effect of chronic oral administration of 50 mg/kg/day of Sarconeos (BIO101) on mobility and strength over eight weeks in C57BL10-*mdx* mice. Mobility was measured by running distance and strength was measured by maximum absolute strength (force) in the four-limb grip-test test. Results show that Sarconeos (BIO101) treatment improved mobility in certain animal models, as C57BL10-*mdx* mice treated with Sarconeos (BIO101) ran 2.4x farther than untreated control C57BL10-*mdx* mice. Results show that Sarconeos (BIO101) treatment improved muscle strength in animal models, as C57BL10-*mdx* mice treated with Sarconeos (BIO101) showed an approximate 14% improvement in strength as compared to untreated control C57BL10-*mdx* mice.



Effect of Sarconeos (BIO101) on mobility (running distance) and muscle strength (four-limb grip-test force).

These *in vivo* results on muscle functionality (mobility and strength) in mice are consistent with cellular and molecular changes observed in our previous preclinical studies, including (i) improved energy metabolism (mitochondrial respiration and spare respiratory capacity), (ii) improved myoblast differentiation, and (iii) confirmed activation of the AKT Pathway involved in anabolism known for being impaired in DMD muscle. These results were presented in October 2018 at the World Muscle Society, or WMS, conference in Mendoza, Argentina (Dilda et al., 2018).

Improved lesion profile in mice. We have observed that Sarconeos (BIO101) treatment may improve the histological (muscular lesion) profile of muscle in mice, consistent with the improvements in physical performance and muscle function (mobility and strength), as mentioned above. We performed histopathological analysis of muscle from C57BL10-control mice, C57BL10-*mdx* mice and C57BL10-*mdx* mice treated with Sarconeos (BIO101). Muscles from C57BL10-*mdx* mice exhibited anisocytosis (atrophy of muscle fibers), as well as chronic inflammation associated with fibrosis as compared to healthy muscles from control mice. Observations of muscle from C57BL10-*mdx* treated mice showed that chronic administration of Sarconeos (BIO101) decreased anisocytosis and inflammation as compared to muscles from C57BL10-*mdx* mice. These results were presented in October 2017 at the WMS conference held in Saint Malo, France.

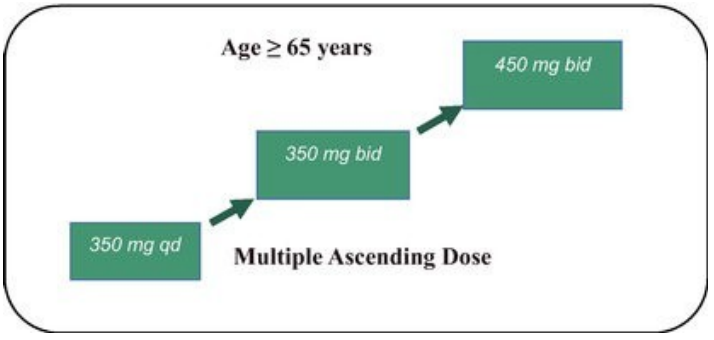
Sarconeos (BIO101) clinical development

Phase 1 Clinical Trial (SARA-PK)

We conducted a dose-escalating Phase 1 clinical trial (SARA-PK) to evaluate the safety, PK and PD effects of Sarconeos (BIO101) in 54 healthy adult and elderly subjects. Based on the results of the SARA-PK Phase 1 clinical trial, we chose 175 and 350 mg b.i.d. (twice daily) as the safe, active dosing levels for the SARA-INT Phase 2b clinical trial.

Single Ascending Dose. In the single ascending dose("SAD") phase, subjects were dosed once with Sarconeos (BIO101) at a range between 100 to 1,400 mg or placebo. No abnormal clinical vital signs and/or serious adverse events were reported as treatment emergent adverse events, or TEAE. All TEAEs were mild in severity and were resolved by the end of the study. No serious adverse events, or SAEs, were reported in the SAD phase.

Multiple Ascending Dose. The multiple ascending dose("MAD") phase was conducted with three selected doses of Sarconeos (BIO101) that were orally administered to 30 patients in total broken into three groups of older adults between 65 and 85 years over 14 days. Each group consisted of eight active and two placebo per dose.



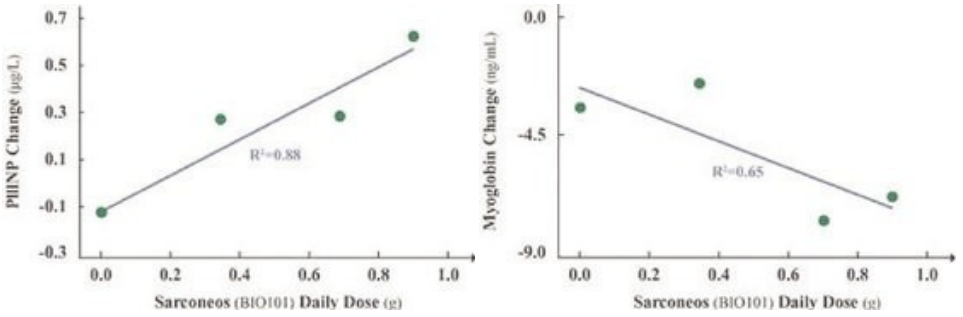
No abnormal clinical vital signs and/or adverse events were reported. Study results indicated that several patients experienced TEAEs, the most common were headache and nausea, with one participant reporting an event of food poisoning at the follow-up visit and dizziness postural (vertigo) and are described in the table below. All TEAEs were indicated as mild or moderate and were resolved by the end of the study. No SAEs associated with Sarconeos (BIO101) were reported in the MAD phase.

Dose	No. of treated subjects with TEAE (Type of TEAE)	No. of placebo subjects with TEAE
350 mg q.d. (once daily)	2 subjects (mainly wound and pain in extremity).	3 subjects (mainly musculoskeletal and connective tissues (back pain, spasms and stiffness) and nervous system (dizziness and headache)).
350 mg b.i.d. (twice daily)	7 subjects (mainly gastrointestinal (constipation, diarrhea and bloating), and musculoskeletal and connective tissue (back pain, spasms and stiffness)).	
450 mg b.i.d. (twice daily)	8 subjects (mainly gastrointestinal (constipation, diarrhea and bloating), musculoskeletal and connective tissue disorders (back pain, spasms and stiffness) and nervous system (dizziness and headache)).	

The pharmacokinetic analysis showed a short half-life between 3 to 4 hours and that the steady state was reached from the second day of administration in the MAD phase. No accumulation of Sarconeos (BIO101) was observed at 350 mg q.d. in the MAD phase (accumulation ratio of 1.14); however, a small accumulation was observed at 350 and 450 mg b.i.d. in the MAD phase (accumulation ratio of 1.31). We determined the optimal dosing of 175 and 350 mg b.i.d. from a PK modeling study.

We also evaluated the effects of Sarconeos (BIO101) on PD markers. Results showed a tendency towards a decreased plasma level in muscle catabolism markers (myoglobin, creatine kinase) and in markers of the RAS (aldosterone and renin). This is consistent with the proposed mechanism-of-action of Sarconeos (BIO101) and is coherent with the activity of Sarconeos (BIO101) on the RAS.

As shown in the graphs below, Sarconeos (BIO101) treatment over 14 days showed (i) a dose-dependent effect on muscle growth and repair, as measured by plasma Procollagen type III N-terminal peptide (PIIINP), a common marker of muscle growth, repair and fibrosis, and (ii) a dose-dependent negative correlation of muscle wasting, as measured by plasma myoglobin, a common marker of muscle catabolism.



Effect of Sarconeos (BIO101) treatment for 14 days on the evolution of PD markers related to muscle anabolism (PIIINP) and to muscle catabolism (myoglobin)

Results from the SARA-PK Phase 1 clinical trial were released in April 2017 in an oral presentation at the International Conference on Frailty & Sarcopenia Research, in Barcelona, Spain. The results were used to establish the dosing levels for the recently completed SARA-INT Phase 2b clinical trial. Additional dosing studies are recommended by FDA to proceed.

Sarconeos (BIO101) for the treatment of age-related Sarcopenia

Biophytis is developing BIO101 to treat age-related degeneration of skeletal muscle. It is a major cause of mobility disability in the elderly, characterized by a loss of muscle mass, strength, balance and the ability to stand and/or walk, resulting in a loss of independence, increased risk of adverse health events and hospitalization, and potential death resulting from falls, fractures, and physical disability.

Sarcopenia was first defined in 1989 and officially classified as a disease in 2016 based on the establishment of a code from the WHO's International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM), used by physicians, researchers and health systems. There is currently no widely accepted standard of care for sarcopenia, however, to our knowledge, current non-medicinal treatment recommendations primarily focus on moderate physical activity, such as 30 minutes of walking per day or resistance-based (strength) training, as they exert effects on both the nervous and muscular systems that are critical to positive physiological and functional adaptations in older adults, and nutritional intervention. According to the International Clinical Practice Guidelines for Sarcopenia (ICFSR): Screening, Diagnosis and Management (Dent et al., *J Nutr Health Aging. 2018;22(10):1148-1161*) there is moderate certainty of evidence for the beneficial effects of physical therapy in treating patients with sarcopenia as most of the evidence for physical activity comes from studies of non-sarcopenic older adults or those with mild-moderate sarcopenia. The efficacy of more structured physical activity programs along with certain supplementation (*i.e.* dietary protein intake and/ or nutrients) for the treatment of sarcopenia is being assessed in various studies, including the SPRINTT trial. However, no consensus on nutritional intervention currently exists.

The SARA Program - Phase 2 Clinical Trial (SARA-OBS and SARA-INT)

The SARA clinical program contains two studies:

- SARA-OBS was an observational study that recruited 218 participants, of whom 185 completed a 6-months follow-up, between April 2017 and April 2019. This study was designed to characterize the target population of elderly patients (65 years old and above), who are at risk for mobility disability. This study was executed in 11 sites in the United States, France, Italy and Belgium. The study was finalized and a preliminary analysis of the SARA-OBS study was presented at the 12th Annual Congress of SCWD in Berlin, Germany in December 2019. The first presentation of the final results was given at the virtual 13th annual congress of SCWD on December 12, 2020.

- SARA-INT was a global, double-blind, placebo-controlled study, with 233 participants, who received Sarconeos (BIO101) at doses of 175 or 350 mg b.i.d. or placebo for 6 to 9 months. The study was executed in 22 centers in the United States and Belgium. Recruitment was completed in March 2020 with the last patient completing his final on-treatment visit in December 2020. Because of impediments posed by the COVID -19 pandemic, such as the interruption of in-office study visits and other disruptions, only 45 percent of the study subjects were able to complete the study with end-of-treatment efficacy assessments and the study was underpowered to observe the hypothesized effect size, and the primary and secondary endpoints were not met.

SARA-OBS Study

Objectives and Study Design. The SARA-OBS study aimed to characterize sarcopenia in patients over the age of 65 at risk of mobility disability. The mobility and physical performance of these participants, including body composition was evaluated over a six-month period. This observational phase included two visits, one at the baseline and one at the end of the study, supplemented by a telephone interview at three months to determine whether participants were complaining of a poor physical condition. The SARA-OBS study was designed and structured as a pre-selection for the SARA-INT Phase 2b clinical trial.

Results. Baseline characteristics of the 218 participants were presented in December 2018 at the Society on sarcopenia, Cachexia and Wasting Disorders conference in Maastricht, Netherlands and the virtual 13th annual congress of SCWD on December 12, 2020 and are summarized in the table below. We believe these characteristics are consistent with other clinical trials of sarcopenia patients, including the SPRINTT and LIFE trials.

Age:	79.29
BMI:	29.3
SPPB:	6.12
Gait speed:	<0.8 m/s
6-minute walk test:	295.14 meters

The final results, on the main endpoints, for the 185 completers are:

	Baseline	M6	Change	P-value
400MWT	0.866	0.835	-0.027	0.064
SPPB score	6.562	7.078	0.439	0.439
6MWT	297.561	284.841	-16.655	0.006
Chair-stand	1.732	1.774	0.007	0.929
Handgrip	23.739	24.464	0.957	0.077

400MWT = 400-meters walk-test; SPPB score = Short-Performance Physical Battery; 6MWT = 6-minute walk-test; Chair-stand = the chair-stand component of the SPPB

SARA-INT Phase 2b Study

Objectives and Endpoints. The objectives and endpoints of the study are summarized below:

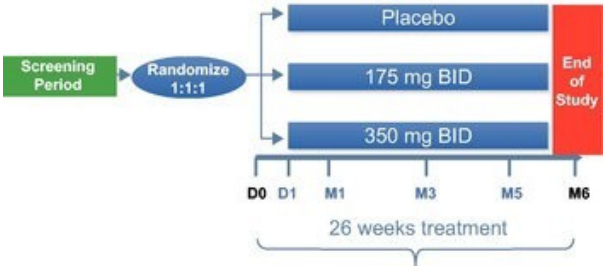
Objectives:	• Evaluate the safety and effectiveness of two doses, 175 and 350 mg b.i.d. (twice daily) of Sarconeos (BIO101) administered orally with a meal for 26 weeks against a placebo in participants over 65 at risk of impaired mobility; and • Measure treatment effect on improvement of physical function and on decrease of risk of mobility disability after six-month treatment.
Primary Endpoint:	• The change from baseline in gait speed as measured in the 400MWT. A minimum clinically significant benefit is set at 0.10 meter per second in the mean difference between groups.
Key Secondary Endpoints:	• Change from baseline in the hand grip strength. • Change from baseline and responder analysis on Physical Function domain (PF-10) of the SF-36 questionnaire. • Responder analysis from the 400MWT test with a responder definition of "study participant with an improvement of gait speed at 400MW test greater or equal to 0.1 m/s versus baseline", at an individual level.
Other Secondary, Tertiary and Exploratory Endpoints:	• Change from baseline of ALM and other parameters of body composition by DEXA; the rate of success to complete 400MW test after a 6-month treatment versus placebo; change from baseline of muscle strength as measured by knee extension and SCPT; change from baseline of the total SPPB score and of the sub-score of the repeated chair stands test; change from baseline using the SarQol, PAT-D, TSD-OC, SF-36 autoself-evaluation questionnaires. • exploratory endpoints: Plasma parameters including safety markers, biomarkers of the RAS (renin, aldosterone), inflammation (IL -6, CRP and hsCRP), and muscle metabolism (PIIINP, myoglobin, creatine kinase MM and creatine kinase MB) and actimetry

In addition, four pre-defined subgroup analyses were performed:

- a "very low walking speed subpopulation," defined as having a gait speed< 0.8 m/s in the 4-meter walk test, a component of the SPPB;
- Subpopulation of participants with a chair stand sub-score of ≤2 of the SPPB;
- "Subpopulation with sarcopenic obesity" defined by a body fat percentage of > 25% for men and > 35% for women; and
- Subpopulation of participants who experience a deterioration in their ALM/BMI as measured by the DEXA scan at the end-of-treatment visit compared to the baseline measurement.

These subpopulations represented sarcopenia patients that were at a significantly high risk for deterioration and adverse outcomes.

Trial Design: The trial design is summarized below:



Prospective participants were screened for a period of up to eight weeks prior to inclusion in the trial. The interventional phase was comprised of an inclusion visit (D0) where baseline measurements were taken on the first day and dosing started the following day (D1), a one-month safety visit (M1), a three-month follow-up visit (M3) with safety and reduced measurements in connection with the primary endpoint, a five-month telephone interview (M5), and a final six-month visit (M6) with safety and full measurements. For 50 patients who could not come to the scheduled end of treatment visit at month 6, treatment could be extended to at most 9 months, anticipating that thereafter Covid-19 restrictions would make it possible again for them to come to the site.

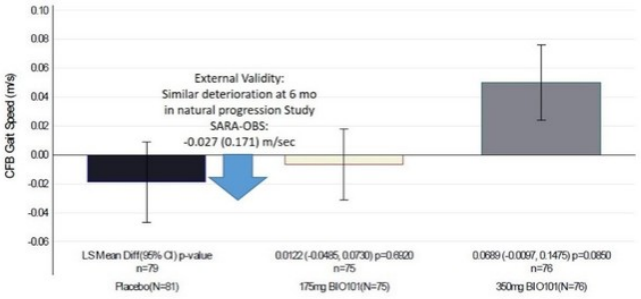
A total of 233 elderly patients with sarcopenia at risk of mobility disability were recruited in 22 clinical investigation centers in the United States and Belgium. Recruitment was completed in March 2020. During the first wave of the pandemic, clinical study sites were closed and we revised the protocols to continue our clinical trials. We informed the IRBs that oversee the clinical trials and received approvals for modifications resulting from COVID -19. Despite these and other impediments, we were able to retain most of the participants. A total of 196 participants completed the SARA-INT study, with or without an extension of up to 9 months of treatment. Of those, and due to COVID-19 restrictions, only 106 patients could perform the 400m walk test at the End-of-Study visit (M6/M9), which was the primary endpoint of our study (55% loss of efficacy data). This resulted in the study being underpowered. The last patient completed his final on-treatment visit in December 2020. Top-line results from this study were announced in August 2021, with Clinical Study Report (CSR) finalized in February 2022.

The effect of two doses of Sarconeos (BIO101), 175 mg bid and 350 mg bid, were compared to placebo in the Full Analysis Dataset (FAS) and in the Per-Protocol population (PP, subset of participants that complied to the clinical protocol), as well as in sub-populations of patients.

Results. Sarconeos (BIO101) at the highest dose of 350 mg bid showed an increase of 0.09 m/s in the FAS population and of 0.10 meters per second (m/s) in the PP population compared to placebo in observed data, for the 400-meter walking test (400MWT) in gait speed after 6 months of treatment in observed data. Statistical analyses based on Multiple and Bayesian imputation showed a LS Mean difference at Month 6 of 0.07 m/s in the FAS population (p=0.085) versus Placebo. Minimal Clinically Important Difference (MCID) for the 400MWT in sarcopenia is 0.1 m/s per the study protocol.

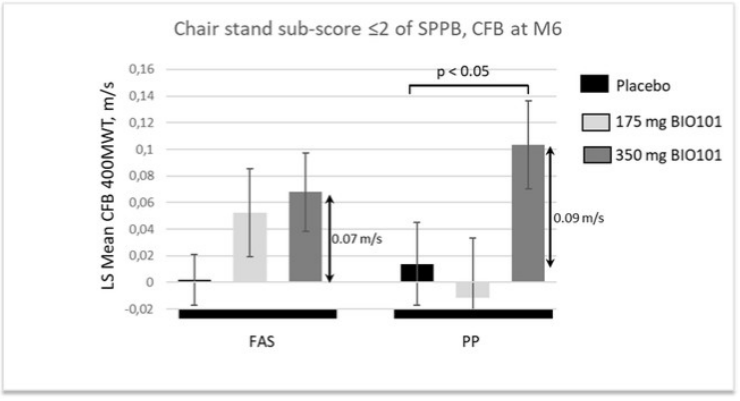
However, the increase was not statistically significant, and none of the primary or secondary efficacy endpoints reached statistical significance.

Several results from the SARA-INT Phase 2b trial of Sarconeos (BIO101) in sarcopenia were presented at the ICFSR on September 30, 2021. ICFSR is the key international scientific event on frailty and sarcopenia, and is attended by leading researchers, physicians, and personnel from the biotechnology and pharmaceutical companies. The results are provided in graphs.



Effect of Sarconeos (BIO101) on the 400 MWT gait speed in the FAS population at Month 6 based on multiple imputation for subjects without data on On-Site Visit

Sarconeos (BIO101) at 350mg bid showed an increase on the 400MWT gait speed in sub-population at higher risk of mobility disability such as slow walkers (LS mean difference of 0.07 m/s versus placebo), obese subgroup (LS mean difference of 0.09 m/s versus Placebo), chair stand sub-score ≤2 of the SPPB (LS mean difference of 0.09 m/s versus placebo, p= 0.004) in the PP population at Month 6.



Effect of Sarconeos (BIO101) on the 400MWT gait speed in sub-population with higher risk of mobility disability (chair stand subscore ≤2) at Month 6

The COVID-19 pandemic and its related restrictions had a significant impact on the conduct of the study, with 55% of total participants not allowed to perform their on-site End of Study visit, despite the extension of their treatment period. Only 45 percent of the study subjects were able to complete the end of study assessments at the clinic and thus the study was underpowered to observe the hypothesized effect size, and the primary and secondary endpoints were not met.

Safety analysis. The proportion of subjects with Treatment-Emergent Adverse Events (TEAEs) was 52 (64.2%), 51 (68.0%), and 44 (59.5%) in the placebo, 175 mg and 350 mg BIO101 groups. The proportion of subjects with serious TEAEs was 9 (11.1%), 10 (13.3%), and 2 (2.7%) in the placebo, 175 mg and 350 mg BIO101 groups. There was no noticeable difference in TEAS, related TEAEs or Serious Adverse Events (SAEs) between treatment groups.

A tabulated summary of safety data is presented below:

Events	Placebo	175 mg BIO101	350 mg BIO101
# participants	81	75	74
Adverse Events (% of total events)	119 (36%)	123 (37%)	89 (27%)
Number of subjects with any AE	52	51	44
Serious Adverse Events (% of total events)	15 (45%)	14 (42%)	4 (12%)
Number of subjects with any SAE	10	10	4
Treatment Emergent Adverse Events (% of total events)	107 (38%)	101 (36%)	70 (25%)
Number of participants with any TEAEs	48	45	38
Treatment related TEAEs (% of total events)	24 (44%)	15 (27%)	16 (29%)
Number of participants with any treatment related TEAEs	13	10	10
Treatment related Serious TEAEs	2 (100%)	0	0

Adverse Events, Serious Adverse Events and Treatment Emergent Adverse Events in the Placebo, 175 mg bid and 350 mg bid groups in the SARA-INT study

Regulatory consultation with FDA

Upon review of the results, FDA reclassified the scheduled end-of-phase Type B meeting was reclassified to a Type C meeting. During the meeting, which was held on January 24, 2022, FDA discussed concerns that entering into Phase 3 would be premature, and recommended that we perform an additional Phase 2 dose-finding study to identify an optimal dose or dosing regimen, and further inform the safety profile for higher doses along with alternative dosing regimens, related safety information, and pharmacokinetics. We also discussed strategies to further define the proposed population and to refine the proposed indication, and development of other information and data that will assist us in preparing the chemistry, manufacturing, and control information to be submitted to FDA, as well as the regulatory non-clinical plan. We plan to assess, evaluate, and address FDA's comments and recommendations in development of our continued Phase 2 part of a seamless Phase 2/3 program. We plan to have a Type C meeting with FDA in Q3 to discuss the clinical protocol design and the Clinical Outcome Asessments to be used in our next studies. Based on the comments from FDA, we plan to submit the protocols for our next studies in Q4 2022. We also anticipate discussions with the EMA in the first half of 2022, to get scientific advice including on the results of the Phase 2b study and potential progression into Phase 2/3.

Market Opportunity

Sarcopenia is a major cause of mobility disability in the elderly, resulting in a loss of independence, increased risk of adverse health events and hospitalization, and ultimately death. Sarcopenia is highly prevalent in adults greater than 65 years of age with an estimated prevalence between six to 22% worldwide. It poses a major public health issue and is steadily increasing as the global population ages. If approved by regulatory authorities for commercial use, we believe there is a market potential for Sarconeos (BIO101) in sarcopenia, as there is currently no approved medication for sarcopenia and an unmet medical need for therapeutic treatments.

Over the past two decades, other companies have launched multiple clinical development programs to treat sarcopenia, primarily with drug candidates falling in one of two classes: (i) myostatin inhibitors and (ii) selective androgen receptor modulators, or SARMs. Myostatin inhibitors, which primarily aim to increase muscle mass by blocking myostatin (myostatin acts as an essential negative regulator of muscle bulk), have been found to increase muscle mass in early clinical trials. However, they have yet to demonstrate effectiveness on clinically meaningful mobility outcomes (strength and mobility) or safety in larger clinical trials and/or have not progressed through the clinic. Both steroidal and non-steroidal SARMs have been tested as therapeutic agents for several medical conditions, including muscle-wasting diseases, but none have progressed through clinical development mainly due to safety concerns.

Based on our review of publicly available information, currently, neither myostatin inhibitors nor SARMs are being tested in late-stage clinical trials for sarcopenia. Based on our review of research in this area, we believe Sarconeos (BIO101) is currently the most advanced drug candidate being tested in a clinical program for the treatment of sarcopenia and has the potential to improve the vital functional outcomes of mobility disability necessary for regulatory approval. To our knowledge, there is currently no widely

accepted standard of care for sarcopenia. Current non-medicinal treatment recommendations primarily focus on moderate physical activity, such as 30 minutes of walking per day or resistance-based (strength) training, as they exert effects on both the nervous and muscular systems that are critical to positive physiological and functional adaptations in older adults, and nutritional intervention. Other potential drug modalities that have been tested in the clinic for sarcopenia have yet to demonstrate effectiveness on clinically meaningful outcomes (strength and mobility) and/or safety in larger clinical trials and/or have not progressed through the clinic. Based on our understanding and discussions with regulatory agencies, including the FDA and EMA, functional mobility endpoints must be achieved in order to obtain marketing approval for sarcopenia.

Sarconeos (BIO101) for treatment of severe respiratory manifestation of COVID-19

COVID-19 was recognized as a worldwide pandemic by the WHO in March 2020. As of March 1, 2022, approximately 435 million people have been identified as having been infected with the SARS-CoV-2 virus, and more than 5.9 million have died because of COVID-19. COVID-19 is caused by the SARS-CoV-2 virus. In its severe form, COVID-19 is associated with a plethora of complications, including:

- Acute pneumonia and ARDS;
- Cardiac injury, including myocarditis and pericarditis;
- Renal failure;
- Hepatitis;
- Vasculitis and thromboembolic events, leading to cardiac and cerebral strokes and pulmonary thromboembolism;
- Coagulopathy;
- Muscle injury; and
- Long-term symptoms such as fatigue, depressive symptoms and respiratory difficulties.

There are many ongoing clinical studies to develop medical responses to COVID -19. A few anti-viral agents (including bamlanivimab and etesevimab (administered together), Paxlovid (nirmatrelvir and ritonavir), and molnupiravir) as well as monoclonal antibodies (sotrovimab and Evusheld (tixagevimab co-packaged with cilgavimab and administered together)) have already received authorizations in the United States for specific indications and patient groups, with Veklury (remdesivir) having been approved in the U.S. by the FDA for use in adults and pediatric patients (12 years of age and older and weighing at least 40 kg) for the treatment of COVID-19 requiring hospitalization. Moreover, a number of vaccines have now been authorized around the globe; while many more remain in development. In the EU, Veklury (remdesivir) is conditionally approved whilst other drugs such as RoActemra and Kineret (anakinra) have received marketing authorizations or are currently being reviewed, including Paxlovid (PF-07321332 and ritonavir) and Lagevrio (molnupiravir). Furthermore, EMA's Committee for Medicinal Products for Human Use (CHMP) issued so-called favorable Article 5(3) Opinions under Regulation (EC) No 726/2004 for the use of different treatment options (including Lagevrio, bamlanivimab/etesevimab, casirivimab/imdevimab, dexamethasone, Paxlovid, regdanvimab and sotrovimab) and has started evaluating Evusheld (tixagevimab and cilgavimab), Lagevrio (molnupiravir) and Olumiant (baricitinib).

Ample evidence points towards the membrane-bound ACE2 as the entryway of SARS-CoV -2 into the cells (in a manner similar to the previously described coronavirus-associated severe acute respiratory syndrome (SARS)). Data is emerging that in COVID -19 increased levels of Ang-II are observed and are linked to the severity of the clinical syndrome. Despite the difficulty in measuring Ang -1 -7, some evidence has emerged that the levels of these peptides are indeed decreased in COVID -19 as well.

While we do not yet have evidence of the benefit of Sarconeos (BIO101) in animal models of COVID -19, it is very plausible to hypothesize that by activation of the MAS-receptor, Sarconeos (BIO101) could mitigate some of the downstream effects of the interaction between SARS-CoV-2 and ACE2. Indeed, studies that were conducted in a model of ALI have shown that 20-hydroxyecdysone can mitigate inflammation and reduce the levels of inflammatory markers. We have performed additional studies in animal models of COVID-19, in parallel with the COVA clinical program with the University of Liège in Belgium and other research institutions.

SARS-CoV-2 infection, by down-regulation of ACE2 expression and activity, reduces the conversion of Ang-II to Ang-1-7 resulting in excessive levels of Ang-II. Ang-II levels in COVID-19 patients are significantly higher than in non-infected individuals and, more importantly, are linearly associated with viral load and lung injury. Moreover, the plasma levels of Ang-1-7 are significantly lower in COVID-19 patients versus healthy controls and particularly between COVID-19 patients admitted to ICUs compared to those who are not. Because most of SARS-CoV-2 deleterious effects including inflammation, fibrosis, thrombosis, pulmonary damage, point towards an imbalance of the RAS, we strongly believe that acting on the protective arm of RAS via its MAS Receptor downstream of ACE2 could have a beneficial effect in COVID-19-infected patients and, therefore, improve ARDS outcome.

The COVA Study

The COVA study is a global, multicenter, double-blind, placebo-controlled, group-sequential, and adaptive two-part Phase 2-3 study, with a total of 310-465 hospitalized patients in both parts. The final number of patients was recommended by the DMC based on the blinded second interim analyses and to protect the scientific integrity of the study. Since April 2020, however, only 237 patients meeting the study criteria have been enrolled in the trial in France, the United States, Belgium and Brazil, in approximately 35 clinical centers. Progression of the pandemic impacted our ability to enroll for the study.

The study focused on testing the benefit of Sarconeos (BIO101) in hospitalized patients 45 years old and older with severe respiratory manifestations of COVID-19. This study is intended to study Sarconeos (BIO101)'s effectiveness in hospitalized patients with severe respiratory manifestation.

Part	Goal	Number of participants
1	Allow recruitment into Part 2, based on safety data. Obtain indication of activity of BIO101, about the effect of BIO101 in preventing further respiratory deterioration.	50 1:1 randomization
2	Re-assessment of the sample size for Part 2.	155 (an addition of 105 participants) 1:1 randomization
	Confirmation of the effect of BIO101 in preventing further respiratory deterioration and obtaining a conditional marketing authorization.	310, potentially increased by 50% (up to 465, based on interim analysis 2) 1:1 randomization

During the study parts, two IAs were conducted by an independent DMC:

- IA1, on the data from the intervention period (28 days or until reaching the study endpoint, whatever comes first), of the 50 participants of Part 1:
    - To analyze the safety and tolerability of Sarconeos (BIO1010) in the target population and begin recruitment into Part 2; and
    - To obtain early evidence of activity of Sarconeos (BIO101)—the outcome of this will be disclosed only if there is a need to do so, in the interest of public health and based on consultation with the regulatory authorities.
- IA2, on the data from the intervention period, in half of the original sample size (i.e. the 50 participants of Part 1 and an addition or 105 participants from Part 2), to re-assess the final sample size of the study, based on the efficacy data. The sample size can be increased according to this analysis by up to 50%, to 465 participants in both parts.

The primary endpoint of the COVA study is the proportion of participants with "negative" events (*i.e.* all-cause mortality and respiratory failure). The key secondary endpoint is: the proportion of participants with a "positive" event, i.e. discharge home due to improvement. Additional endpoints include: all-cause mortality, time to events, function scales and biomarkers.

We received an IND "may proceed" letter from the FDA (in the United States) and a CTA approval from ANVISA (Brazil), ANSM (France), MHRA (UK) and FAMHP (Belgium). Approximately 35 centers were planned for recruitment in Belgium, Brazil, France and the United States with a target of around 15 to 20 centers for the second part of the study. Recruitment for the Part 1 of the study began in July 2020. On January 8, 2021, the independent DMC of COVA reviewed the safety data analysis from the first 50 patients who were enrolled in the study, and recommended beginning recruitment for Part 2 of COVA. Following the DMC's recommendation to begin the recruitment for Part 2 of COVA, authorization was obtained from the applicable regulatory authorities (national regulatory agencies and/or central IRB and/or local Ethics Committees) in Brazil and the United States for most clinical

centers in the two countries for the start of Part 2 of the study. Similar authorizations to begin Part 2 of COVA were subsequently obtained from the applicable regulatory authorities in France and in Belgium. Enrollment for Part 1 was completed on January 21, 2021.

In September 2021, we received confirmation from the Data Monitoring Committee (DMC) to continue the Phase 2-3 COVA study without any modification of the protocol based on on the interim efficacy data that were reviewed by the DMC.

As of the date of this Annual Report, the COVA study has enrolled 237 patients hospitalized with severe pneumonia from COVID-19 infection in approximately 35 centers in the United States, Brazil, France and Belgium. Due to a variety of circumstances in the countries participating in this study (e.g., high vaccination rates and high rates of past infections providing (partial) immunity as well as the predominance of the Omicron variant that very rarely leads to hospitalization), recruitment has progressively slowed in the first months of 2022, with only 1 randomization in March. For these reasons, we have decided to stop enrollment in the study with immediate effect and we plan to obtain topline results after the end of the 28-day treatment period during the second quarter of 2022 and complete results in the third quarter of 2022.

Market opportunity

We believe there is a market opportunity for Sarconeos (BIO101) for the treatment of respiratory failure in COVID-19, subject to successful clinical trials and the FDA's approval or authorization of Sarconeos (BIO101) for such indication. The COVID-19 pandemic continues to be a major public health issue, with a major impact on the economy of hundreds of countries. As of March 1, 2022, approximately 435 million people have been identified as having been infected with the SARS-CoV-2 virus, and more than 5.9 million have died because of COVID-19.

To our knowledge, although there are multiple initiatives to develop treatments, in the United States, Veklury (remdesivir) is the only product that has been approved for the treatment of COVID-19 requiring hospitalization, for adults and pediatric patients 12 years or older. Therapeutic products authorized by FDA under an EUA are the following: Olumiant (baracitinib), REGEN-COV (casirivimab and imdevimab), bamlanivimab and etesevimab, sotrovimab, Actemra (tocilizumab), Evusheld (tixagevimab co-packaged with cilgavimab), Paxlovid (nirmatrelvir and ritonavir), molnupiravir, and bebtelovimab.

In the EU, EMA has granted a marketing approval to the following drugs for the treatment of COVID-19: Kineret (anakinra), Regkirona (regdanvimab), RoActemra (tocilizumab), Ronapreve (casirivimab / imdevimab), and Xevudy (sotrovimab). The following drugs have received a conditonal marketing approval: Paxlovid (PF-07321332 / ritonavir), and Veklury (remdesivir). Marketing authorisation applications have been submitted for Olumiant (baricitinib), Evusheld (tixagevimab / cilgavimab) and Lagevrio (molnupiravir).

Finally, no treatment specifically targeting the stimulation of respiratory function in hospitalized COVID-19 patients has been approved or recommended for use in USA or in Europe.

Sarconeos (BIO101) for Duchenne Muscular Dystrophy (DMD)

DMD is a rare, genetic neuromuscular disease in male children and young adults, which is characterized by an accelerated degeneration of muscles and is responsible for a loss of mobility, respiratory failure and cardiomyopathy, leading to premature death. DMD is caused by mutations in the dystrophin gene that result in the absence of very low levels of functional dystrophin, a cytoskeletal protein that protects muscle cells. It is the most common form of muscular dystrophy in children, affecting approximately 2.8 out of 100,000 people worldwide (approximately 20,000 new cases annually worldwide), based on our estimates from publicly available information. DMD is caused by mutations in the dystrophin gene that result in the absence or very low levels of functional dystrophin, a cytoskeletal protein that protects muscle cells.

The absence of dystrophin in muscle severely weakens the structural and membrane stability of the muscle fibers. During normal muscle contraction and stretching the muscle fibers become damaged and eventually undergo necrosis (*i.e.*, cell death). In order to compensate for the increased necrosis, muscle tissue regeneration is accelerated. This process soon becomes exhausted and muscle degeneration accelerates as muscle fibers are replaced by fat and connective tissue (fibrosis), resulting in the loss of muscle strength and mobility. DMD evolves according to a very well understood progression with symptoms that are similar to those associated with accelerated aging across all stages. DMD progression can be summarized as follows:

- muscle damage characterized by loss of myofibers, inflammation, and fibrosis beginning at an early age;

- lower extremity muscle weakness and progressive loss of muscle function beginning in the first few years of life;
- decline of ambulation and respiratory function after the age of seven;
- total loss of ambulation where the use of a wheelchair is essential in the pre-teenage or early teenage years;
- progressive loss of upper extremity function during mid to late-teens; and
- respiratory and/or cardiac failure, resulting in death around the age of 30.

Our Clinical Development Plans of Sarconeos (BIO101) in DMD (the MYODA program)

We have developed a formulation that is suitable to treat children, especially with swallowing difficulties. We have weight-adjusted the dose range of Sarconeos (BIO101) that we aim to test in the pediatric patient population based on modeling of data from animal studies and the SARA-PK Phase 1 trial in healthy adult and elderly participants. The low end of the dose range is driven by efficacy studies and the upper end of the dose range is driven by safety margins (toxicology and Phase 1). At the low end of the dose range, differences caused by the variance in animal models (*i.e.*, species, age and size) could affect efficacy between animals and humans (both adults and children). At the high end of the dose range, differences in body composition, absorption and metabolism between the age and patient segments could affect safety margins and tolerability. We do not have actual experimental safety PK, PD or efficacy data from clinical testing in a pediatric patient population comprised of developing children (2-12 years), adolescents (12-16 years) or young adults. However, the MYODA clinical study is designed to fill this gap, by testing a range of doses in a dose escalating manner to address these potential differences in safety and efficacy.

We have designed our MYODA clinical program to specifically address the following known challenges in DMD clinical development:

- *Currently, DMD programs are very lengthy* and may take up to 10 years to finalize. With such a high unmet-need and a situation where young children lose function and experience a much shorter life span, there is a need to utilize fast and robust designs and expedite the development process.
- *A very crowded space, with a lot of competing development programs, which are mostly focusing on ambulatory patients,* leading to difficulties in recruitment, while there is very little development that targets non-ambulatory patients—a disease state, where deterioration in respiratory function is becoming a leading cause for mortality.

In June 2018, we received orphan drug designation from the FDA and EMA for Sarconeos (BIO1010) in DMD. In December 2019, we received an IND "may proceed" letter from the FDA (USA) and we received a CTA approval from the FAMHP (Belgium) to start the MYODA study, and to investigate Sarconeos (BIO101) in non-ambulatory patients with signs of respiratory deterioration. In the "may proceed" letter from the FDA, the FDA noted that it had significant concerns with the design of the study, and that the results of the study, as originally designed to enroll ambulatory and non-ambulatory patients and measure muscle function deterioration through a composite score, would not be capable of providing interpretable data sufficient to support a marketing application. In its letter, the FDA recommended that we revise the study population and primary endpoint. We have incorporated the FDA's recommendations and revised the protocol to focus on non-ambulatory patients with signs of respiratory deterioration and changed the primary endpoint to respiratory function. The revised protocol will be submitted as an amendment to the FDA and other regulatory authorities for review. We hope to start this study, which will be a global, double-blind, placebo-controlled, group-sequential, Phase 1-3 seamless study, in the second half of 2022, subject to any COVID-19-related delays and the impact of the pandemic on our operational capabilities.

The MYODA study is expected to recruit up to 200 participants, as follows:

Part	Objective	Design	Doses of BIO101	Number of participants
1	To evaluate the safety, tolerability and PK profile of BIO101 and its main metabolites after a single dose (Day 1) and after multiple doses at Day 7, 14 and 56	Double-blind, placebo-controlled, ascending dose-cohorts	1.25, 2.5 and 5mg/kg, placebo	3 cohorts, 6 participants in each cohort
2	To evaluate the safety, tolerability, and efficacy on respiratory function, of BIO101 following 48 weeks double blind dosing, in a small population	Double-blind, placebo-controlled, parallel groups	TBD, placebo	An addition of 30 participants
3	To evaluate the safety, tolerability, and efficacy on respiratory function of BIO101 following 48 weeks double blind dosing, in a large population	Double-blind, placebo-controlled, parallel groups	TBD, placebo	An addition of participants, up to 200 in total

All the study participants will be treated for 48 weeks, followed by an open-label extension. Participants who are recruited during Part 1, to the lower dose cohorts, will be moved to a higher dose, once it is cleared to be used. An independent committee will oversee the study, will review the safety data and allow moving from one dose cohort to the next and will conduct IAs to allow progression from one part of the study to the next.

Because of the high unmet need, we have decided to focus, at this stage, on DMD patients who are non-ambulatory and with evidence of respiratory deterioration. The primary endpoint will be Change from Baseline in Percent Predicted Peak Expiratory Flow (PEF % predictive) at Week 48 (assessed by hospital-based spirometry measurements) and the key secondary endpoint is Change from Baseline in Forced Vital Capacity (FVC % predictive) at Week 48 (assessed by hospital-based spirometry measurements). Additional endpoints include other measures of respiratory function, functional scales, muscle strength and goal-attainment.

Our study design and clinical trial protocols are subject to regulatory approval and will be submitted to regulatory agencies for review. We plan to work with the agencies to finalize the protocols. Additional challenges and risks remain with our innovative clinical trial program, including:

- *Challenges in achieving regulatory approval in each country for the MYODA clinical trial.* We received feedback from the CHMP in December 2018 on our trial design concepts and will continue to work in concert with the relevant regulatory agencies. However, the trial protocol and applications are not yet finalized and may be subject to further regulatory review, comments and changes prior to approval, if at all, at this stage, we have received approval to proceed from 2 countries: United States and Belgium. We will be seeking additional approval from other agencies.

- *Challenges in pediatric dosing of Sarconeos (BIO101).* We have modeled a weight-adjusted dosing regimen to treat children and young adults with Sarconeos (BIO101) based on data from animal studies and safety and PK observations from the SARA-PK Phase 1 trial in healthy adult and elderly volunteers.

Market Opportunity

We believe that there is market potential for Sarconeos (BIO101) in DMD, if approved by regulatory authorities for commercial use. DMD is the most common form of genetic muscular dystrophy in children, affecting approximately 2.8 out of 100,000 people worldwide (approximately 20,000 new cases annually worldwide), based on our estimates from publicly available information, resulting in premature death. There is currently no cure for DMD and there are only limited treatment options that aim to control the symptoms and slow the disease progression. In many countries, corticosteroids are the standard drug therapy. However, corticosteroids typically only slow the progression of muscle weakness and delay the loss of ambulation by up to two years, and their benefit for non-ambulatory boys with signs of respiratory deterioration, is not clear. They have also been associated with adverse side effects and are generally not suitable for long-term administration.

There are three targeted therapies (*i.e.,* therapies targeting a specific dystrophin mutation by exon skipping or with stop codons) available on the market (two in the United States and one in Europe). As these therapies each target a specific gene mutation, they can only address the approximately 20% of the overall DMD patient population with those genetic mutations. In addition, there are only a few treatments that are in clinical development that target treatment of ambulatory children. There are very few early stage programs that target treatment of non-ambulatory patients with signs of respiratory deterioration.

In addition to these targeted therapies, gene therapies that are under development aim to introduce a gene coding for a truncated dystrophin protein that could limit immune reactions. These therapies typically suffer from low transfection rates resulting in low levels of dystrophin expression and potential severe immune reactions. This leaves room for combinations of genetic treatments with other disease modifying agents, regardless of the mutation. Additional approaches in development include: immune modulators, anti-fibrotic agents and agents that enhance muscle mass and function.

We believe that Sarconeos (BIO101) directly targets muscle tissue and cells, may increase key muscle cell functions that are impaired independent of the genetic mutation that causes the disease, and has the potential to be used complementarily with corticosteroids, current targeted therapies and other gene therapies under development. We also believe that because Sarconeos (BIO101) targets various impaired muscle tissues and cells relevant to muscle strength, mobility and respiratory function, it may have the potential to be used in all stages of DMD progression, including both ambulatory and non-ambulatory patients. Due to the high unmet need, specifically in the population of non-ambulatory patients, with signs of respiratory deterioration, we decided to focus on this sub-population, at this stage.

Macuneos (BIO201)

Our second drug candidate, Macuneos (BIO201), is an orally administered small molecule in development for the treatment of retinopathies. The initial indication we plan to seek approval for is dry AMD, followed by Stargardt disease.

History and Development of Macuneos (BIO201)

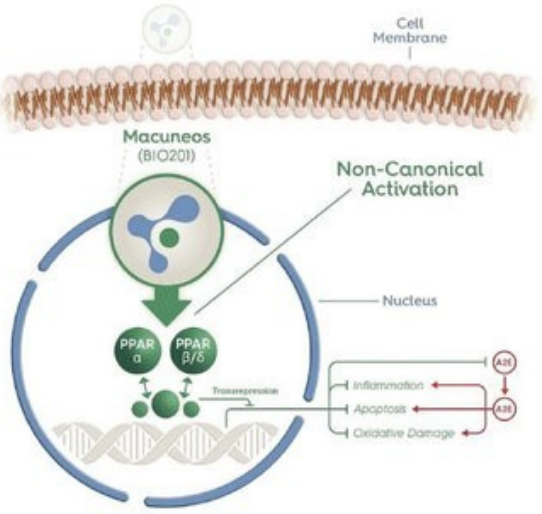
Utilizing our expertise in functional screens and assays, we expanded our drug discovery efforts to other age-related diseases, with a focus on retinopathies. Using cellular models developed with the Institute of Vision at Sorbonne University in Paris, we screened a variety of carotenoids and flavonoids for their ability to protect retinal pigment epithelium ("RPE") cells against the photo-oxidative stress induced by blue light in the presence of A2E, a phototoxic byproduct of the visual pigment cycle. We selected norbixin (an apo-carotenoid) for clinical development based on its pharmacological properties and safety profile in animal models of AMD and Stargardt disease. Next, we identified its molecular target(s) and identified a potential mechanism-of-action.

Potential mechanism-of-action

Inhibition of PPARs

Results from our preclinical studies support continued research to investigate whether Macuneos (BIO201) may protect RPE cells against the photo-oxidative stress induced by blue light in the presence of A2E through transrepression of peroxisome proliferator-activated receptors ("PPARs"). PPARs are nuclear receptors that primarily regulates carbohydrate and lipid metabolism in regenerative tissues only, and inflammatory processes in neuronal tissues, such as the brain or retina. Based on the result from our preclinical studies, we believe that Macuneos (BIO201) potentially counteracts the phototoxic effects of A2E by inhibition of PPARα and PPARγ responsible for the anti-oxidative, anti-inflammatory and anti-apoptotic activity observed in the retina. We believe that the mode of action ("MOA") of BIO201 differs from the MOA of most PPAR activators that are typically associated with known side effects.

The potential mechanism-of-action of BIO201 is illustrated in the diagram on the below:



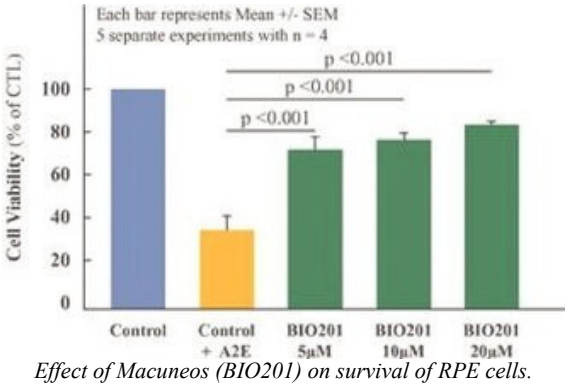
Macuneos (BIO201) is an antagonist of PPAR, involved in protecting retinal cells

Preclinical Development

Proof of concept in cellular models

In collaboration with the Institute of Vision, we used models of primary porcine RPE cell cultures to test the effect of Macuneos (BIO201). We believe this model best preserves functional defense mechanisms against photo-oxidative stress and better represents functioning human RPE cells as compared to existing stable cell lines. We exposed these RPE cells to blue light in the presence of A2E in order to explore the protective effect of Macuneos (BIO201) on RPE cell death.

Increased cell survival. Our preclinical data indicate that Macuneos (BIO201) may protect RPE cells from cell death, in a dose-dependent manner, against the photo-oxidative stress induced by blue light in the presence of A2E. These results were presented in 2016 at the annual meeting of the Association for Research in Vision and Ophthalmology, or ARVO, in Seattle, Washington, and published in *PLoSONE* (Fontaine et al; 2016).

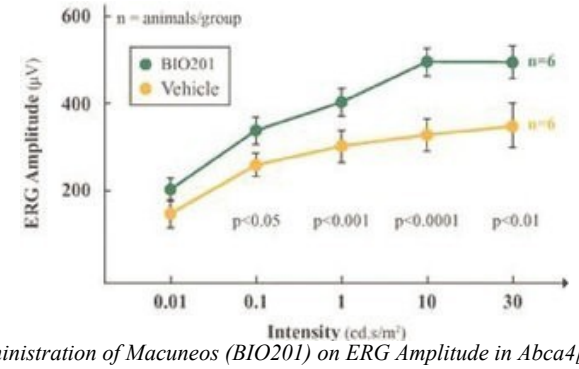


Effect of Macuneos (BIO201) on survival of RPE cells.

Proof of concept in animal models

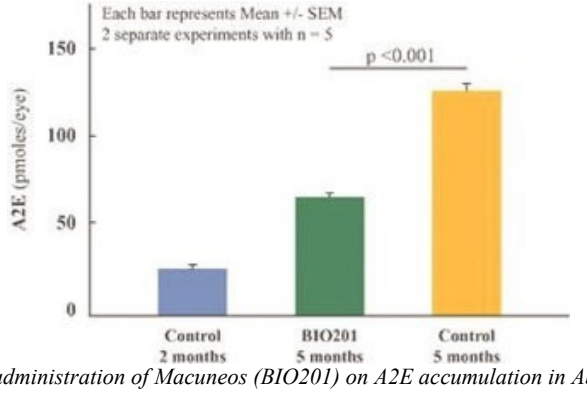
We have observed that Macuneos (BIO201) protects the retina after both oral and intra-vitreal administration in various animal models of AMD and Stargardt disease. The results from the studies, which are summarized below, were presented in 2016 at the annual meeting of the ARVO in Seattle, Washington.

Preservation of visual function in mice. We studied mice in which two genes encoding the proteins involved in the visual pigment cycle (the Abca4 transporter and the retinol dehydrogenase Rdh8) were absent. These animals, called Abca4-/- Rdh8-/-mice, accumulated A2E in their eyes and showed an early loss of electroretinogram amplitude. Our preclinical data suggest that chronic oral administration of Macuneos (BIO201) for three and six months may be effective in protecting the retina, as measured by electroretinography. This is a commonly used way to measure retinal function by looking at the electric signal transport from the retina to the brain. As shown in the figure below, Macuneos (BIO201) treated mice showed a less degraded electroretinogram as compared to the untreated control mice, meaning the treated mice have slower visual function loss. The six-month results were presented in 2018 at the annual meeting of the ARVO in Honolulu, Hawaii and recently published (Fontaine *et al*. *Aging*, 2020).



Effects of chronic oral administration of Macuneos (BIO201) on ERG Amplitude in Abca4[ib]-/[ib]- Rdh8[ib]-/[ib]-mice.

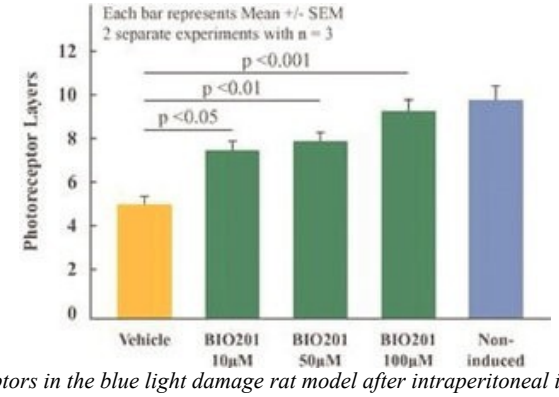
Reduced A2E Accumulation in mice. We studied the effect of Macuneos (BIO201) treatment on the accumulation of A2E in the retina of Abca4-/- Rdh8-/- mice. We began a three-month dosing regimen starting on mice that were 2 months of age. We observed that there was significant accumulation of A2E in vehicle Abca4-/- Rdh8-/-mice treated with placebo over three months as compared to control wild type mice at the beginning of the study, confirming a dysfunction of the visual cycle. Results demonstrated that chronic oral administration of Macuneos (BIO201) reduced A2E accumulation in the retina in treated Abca4-/- Rdh8-/-mice by approximately 45% as compared to vehicle control mice, which we believe is a key factor for maintaining visual function (Fontaine *et al*. *PloSOne* 2016).



Effects of chronic oral administration of Macuneos (BIO201) on A2E accumulation in Abca4-/—Rdh8-/—mice.

Dose-dependent protection of retina integrity in rats. In the classical blue light damage (BLD) rat model using normal albino rats, we observed that intra-peritoneal administration of Macuneos (BIO201) protected the retina in a dose-dependent manner, as measured by the number of remaining layers of photoreceptors. We demonstrated that there was an approximate 90% increase in the

number of photoreceptors layers following the maximum dose of 100 µM of Macuneos (BIO201) as compared to the vehicle control. The results were published in *PLoSONE* (Fontaine *et al*. 2016).



Number of layers of photoreceptors in the blue light damage rat model after intraperitoneal injection of Macuneos (BIO201).

Based on this body of work, we believe that Macuneos (BIO201) may have significant clinical potential for the treatment of retinopathies, including dry AMD and Stargardt disease, and warrants continued investigation.

Macuneos (BIO201) for AMD

AMD is an age-related degeneration of the macula, the central part of the retina. It is one of the leading causes of irreversible vision loss and blindness in the people over the age of 50 worldwide, according to the BrightFocus Foundation's Age-Related Macular Degeneration: Facts & Figures Fact Sheet. AMD affects the central part of the retina, known as the macula, which is responsible for central vision and its sharpness. There are two types of AMD:

- Dry AMD is a multistage process leading to the progressive loss of vision. Dry AMD affects central vision and impairs many functions affecting quality of life and independent living such as reading, driving, and facial recognition. Early-stage dry AMD is characterized by small drüsen accumulation, which may not cause changes in vision, but as drüsen grow in size and increase in number, they may lead to a dimming or distortion of vision that people find most noticeable when they read. Intermediate stage dry AMD is defined by more abundant and larger drüsen and the appearance of early atrophies. Patients at this stage are at high-risk of advancing into geographic atrophy ("GA"), a late stage form of AMD. Patients in the late stage of AMD may have blind spots in the center of their vision and may lose central vision. The prevalence of dry AMD increases significantly with advancing age.

- Wet AMD is a late stage form of AMD, which is characterized by abnormal growth of blood vessels from the choroid underneath the macula. This is called choroidal neovascularization. These blood vessels leak blood and fluid into the retina, causing distortion of vision that makes straight lines look wavy, as well as blind spots and loss of central vision. These abnormal blood vessels and their bleeding eventually form a scar, leading to permanent loss of central vision.

Approximately 85 to 90% of patients with AMD suffer from the dry (atrophic) form of AMD, called dry AMD, according to estimates provided by the American Macular Degeneration Foundation. We believe that photo-oxidative and inflammatory stresses induced by the accumulation of A2E in RPE cells are the main factors responsible for the degenerative process of the retina in diseases such as AMD. We believe the biggest opportunity in treating dry AMD is preventing advancement into the later stages, GA or wet AMD, where vision loss is severe and can lead to visual disability.

Clinical Development Plans

We are currently conducting chronic and acute rodent and non-rodent toxicology studies that we believe will be sufficient to support our IND and clinical trial applications for our MACA clinical development program. We plan to commence a Phase 1 clinical trial (MACA-PK) with BIO201 in single and multiple ascending doses in healthy volunteers to assess the safety, PK and PD, drug and food interaction of Macuneos (BIO201) in the second half of 2023, subject to regulatory review and approval, any COVID-19-related delays and the impact of the pandemic on our operational capabilities.

We also intend to investigate whether Macuneos (BIO201) may be an effective treatment for Stargardt disease, the most common form of inherited juvenile macular degeneration. The pathophysiology of Stargardt disease is linked to excessive oxidative stress and inflammation following the accumulation of lipofuscin in patients with deficiency of genes important for the visual process. A similar accumulation of Lipofuscin occurs with aging and is believed to be responsible for dry AMD. In both diseases it leads to an accelerated retinal degeneration resulting in loss of vision. Due to the similarity of the pathophysiological processes of Stargardt disease and AMD, and based on the mode of action of Macuneos, we plan to explore clinical development of Macuneos (BIO201) for Stargardt disease in 2023 following our MACA-PK Phase 1 clinical trial, subject to any COVID-19-related delays and the impact of the current pandemic on our operational capabilities.

Market Opportunity

We believe that there is market potential for Macuneos (BIO201) in dry AMD, if approved by regulatory authorities for commercial use. AMD is one of the leading causes of irreversible vision loss and blindness in people over the age of 50 worldwide, and its prevalence increases with advancing age. Based on our review of publicly available data and to our knowledge, there is currently no approved medication for dry AMD, which represents between 85 to 90% of all AMD cases according to the American Macular Degeneration Foundation, and, based on our estimates from publicly available information, affects approximately 170 million people worldwide, and is expected to increase over time as the population ages.

There are a number of companies currently developing treatments, including anti-complement or neuroprotective agents administered by intraocular injections that may treat or alter the progression of dry AMD. We believe the market for AMD will remain fragmented and will include stand-alone and combination treatments for all stages of the disease and that a large market exists for a drug that could be administered orally rather than by monthly intraocular injections. We will continue to study Macuneos (BIO201) to determine its clinical safety and effectiveness, and to explore the feasibility of oral administration, and to further explain its mode of action.

Preclinical and Discovery Pipeline

Our preclinical pipeline currently consists of Macuneos (BIO201), as well as BIO103 and BIO203, which are chemically synthesized life-cycle extension products for Sarconeos (BIO101) and Macuneos (BIO201), respectively, potentially with better pharmacological properties. We are testing these preclinical drug candidates in preclinical models for multiple age-related diseases. We plan to continue to identify new drug candidates through our drug discovery platform based on our functional assays and reverse pharmacology approach.

Competition

The biotechnology and pharmaceutical industry is characterized by rapidly advancing technologies, intense competition and a strong emphasis on proprietary products. While we believe that our expertise in age-related diseases, scientific knowledge and intellectual property portfolio provide us with competitive advantages, we face potential competition from many different sources, including major pharmaceutical, specialty pharmaceutical and biotechnology companies, academic institutions, governmental agencies and public and private research institutions. Not only must we compete with other companies that are focused on neuromuscular diseases and retinopathies, but any drug candidates that we successfully develop and commercialize will compete with existing therapies and new therapies that may become available in the future.

Many of our competitors may have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals and marketing approved products than we do. These competitors also compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Mergers and acquisitions in the pharmaceutical, biotechnology and diagnostic industries may result in even more

resources being concentrated among a smaller number of our competitors. Smaller or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies.

The key competitive factors affecting the success of all of our drug candidates, if approved, are likely to be their efficacy, safety, tolerability, convenience, price and the availability of reimbursement from government and other third-party payors. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than any products that we may develop. Our competitors also may obtain FDA, EMA or other national regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market.

The main competitors for each target indication of our drug candidates include:

- ***Sarcopenia:*** We are not currently aware of any approved medications for sarcopenia. Pharmaceutical development of myostatin inhibitors and SARM have been halted, due to lack of evidence of benefit in multiple Phase 2 studies. Therapy development focuses mostly on exercise (including devices that can improve physical function), food supplements and dietary measures. Early stage development of cell therapy and agents that aim to improve muscle function has also started.

- ***COVID-19:*** There are many ongoing clinical studies to develop medical responses to COVID-19. To date, Veklury (remdesivir) is the only product that has been approved by FDA for the treatment of COVID-19 requiring hospitalization, for adults and pediatric patients 12 years or older. Therapeutic products authorized by FDA under an EUA are the following: Olumiant (baracitinib), REGEN-COV (casirivimab and imdevimab), bamlanivimab and etesevimab, sotrovimab, Actemra (tocilizumab), Evusheld (tixagevimab co-packaged with cilgavimab), Paxlovid (nirmatrelvir and ritonavir), molnupiravir, and bebtelovimab. Because the anti-SARS-CoV-2 mAbs bamlanivimab-etesevimab and casirivimab-imdevimab combinations are predicted to have markedly reduced activities against Omicron variant, and because real-time testing to identify rare, non-Omicron variants is not routinely available, FDA revised the authorization for these anti-SARS-CoV-2 mAbs to limit their use to only when the patient is likely to have been infected with or exposed to a variant that is susceptible to these treatments. In the EU, EMA has granted a marketing approval to the following drugs for the treatment of COVID-19: Kineret (anakinra), Regkirona (regdanvimab), RoActemra (tocilizumab), Ronapreve (casirivimab / imdevimab), and Xevudy (sotrovimab). The following drugs have received a conditonal marketing approval: Paxlovid (PF-07321332 / ritonavir) andVeklury (remdesivir). Marketing Authorisation applications have been submitted for Olumiant (baricitinib), Evusheld (tixagevimab / cilgavimab) and Lagevrio (molnupiravir).

- ***Duchenne Muscular Dystrophy:*** Corticosteroids are the standard drug therapy for DMD patients in many countries throughout the world, this includes Emflaza (deflazacort, by PTC therapeutics), which was approved by the FDA in 2017, however their benefit for non-ambulatory patients with evidence of respiratory deterioration is limited. To our knowledge, three targeted therapies have been approved to date, which all are treatments that target the genetic mutation: Exondys51 (eteplirsen, by Sarepta), Vyondys53 (golodirsen, by Sarepta) and Amondys 45 (casimersen, by Sarepta) in the United States, and Translarna (ataluren, by PTC therapeutics) in Europe. While many new therapies are in development, most focus on ambulatory children. Only very few candidates, and in early stages, are being developed to treat patients who are non-ambulatory and with signs of respiratory deterioration.

- ***Dry Age-Related Macular Degeneration:*** Based on our review of research in this area, currently there are no approved therapeutic treatments for dry AMD. We believe that a number of other companies are developing drugs that may treat or alter the progression of the disease. Such competitors include, but are not limited to Allegro Ophthalmics, Apellis Pharmaceuticals, Astellas, Hemera Biosciences, Ionis Pharmaceuticals, Ophthotech Corporation, Roche and Stealth Biotherapeutics.

Manufacturing and Supply

We do not own or operate, and currently have no plans to establish any manufacturing facilities. We currently rely, and expect to continue to rely, on third parties for the manufacturing of our drug candidates for both preclinical studies and all phases of clinical trials, as well as for commercial production should any of our drug candidates receive marketing approval for commercialization. We obtain key raw materials for Sarconeos (BIO101) and Macuneos (BIO201) from third-party suppliers. We are developing at the pilot and industrial scales the manufacturing processes and transfer them through agreements to third party European and American Clinical Development Manufacturing Organizations (“CDMOs”). Non GMP and GMP batches are produced in compliance with regulations for preclinical and clinical studies, including in view of the relevant guidelines adopted by the EMA,

FDA, ANVISA and other regulatory authorities regarding the COVID-19 context. These batches allowed us to conduct all of our clinical programs. We plan to sign and signed agreements with the same and/or alternative manufacturers for industrial scale-up to submit the regulatory applications for approval and market access, subject to the global COVID-19 pandemic conditions and the impact of the current pandemic on operational capabilities. The manufacturing capacities allowed us to complete the SARA-INT clinical trial in sarcopenia and we currently have sufficient quantities to conclude COVA phase 2/3 clinical study with Sarconeos (BIO101) in COVID-19, as well as conduct the first two parts of the planned MYODA clinical trial in DMD.

Sarconeos (BIO101)

BIO101, the API of Sarconeos, is a pharmaceutical grade small molecule, 20-hydroxyecdysone (>97% purity of the active molecule). We have produced the API for preclinical and clinical development by purifying the active molecule from *Cyanotis* sp *or Stemmacantha* sp, plants cultivated in China and used for medicinal purposes in Traditional Chinese Medicine. We currently rely on one supplier for the quantities of starting material for all our studies. We have not entered into a long-term supply agreement with this supplier for commercial scale up. However, we currently have a supply agreement allowing enough quantities for our ongoing clinical programs, as well as for the manufacturing of validation and registration batches. BIO101 is purified for pharmaceutical use (>97% purity of the active molecule) using proprietary and patented processes, in compliance with GMP for pharmaceuticals, by Patheon/ThermoFisher Scientific our manufacturing partner located in Germany and Austria. We have not entered into a long-term supply agreement with Patheon/ThermoFisher. We have, by agreement, initiated the scaling-up of the manufacturing process for validation and registration batches. We believe that the supply chain we have developed over the last five years has been sufficiently scaled up, and we have already secured sufficient quantities to conduct the planned clinical trials.

We believe we can secure sufficient quantities for regulatory approval and marketing authorization for Sarconeos BIO101 in COVID-19, using our current supply chain, through scaling up production at the ThermoFisher's sites of Linz (Austria) and Bourgoin (France) to industrial level capacity and GMP standards, subject to the impact of the current pandemic on operational capabilities. Depending on positive results of the clinical program, we will have to address significant upscaling of sourcing and manufacturing to support any commercial launch.

We are also evaluating alternative methods for producing Sarconeos (BIO101), such as new chemical synthesis or fermentation, and potential alternative plant sources, in order to optimize the supply chain to support our projected commercial needs.

Macuneos (BIO201)

BIO201, the API of Macuneos, is a pharmaceutical grade small molecule norbixin (>97% purity of the active molecule). We have produced the API for preclinical development by chemical conversion into norbixin of the natural molecule bixin, which has been previously purified from seeds of *Bixa orellana L.*, a plant traditionally used for medicinal purposes in the Amazon. At this time, we rely on one supplier for the plant quantities we will require for our MACA clinical program. We have not entered into a long-term supply agreement with this supplier. The pharmaceutical development of Macuneos (BIO201) is performed by Patheon using proprietary processes. The development of the manufacturing process, the production of the technical batches, the validation of analytical methods, as well as the stability studies are currently being planned for 2021 to produce the clinical batches of Macuneos (BIO201) for the MACA-PK Phase 1 clinical trial. We are evaluating alternative methods for producing Macuneos (BIO201), such as bio fermentation, in order to optimize the supply chain to support our projected commercial needs.

Research and Collaboration Agreements with Sorbonne University and Other Academic Research Institutions

We have entered into several research and collaboration agreements with Sorbonne University and other academic research institutions (*i.e.*, the Centre National de la Recherche Scientifique (CNRS), the Institut National de la Recherche Agronomique, or INRA, Institut National de la Santé et de la Recherche Médicale, or INSERM, and Université Paris Descartes) in order to further strengthen our research and development strategies. The purpose of these agreements is to define the terms and conditions of our research (including its financing) and the results of such research. As of the date of this annual report, three research and collaboration agreements are still in force.

The research and collaboration agreements were entered into for an initial fixed term (six to 12 months), and have each been extended by amendments as long as research is ongoing. The agreements may be terminated by any party to the agreement in the event of a breach by another party that has not been remedied within one month of a notice of the breach.

Pursuant to the terms of the research and collaboration agreements, each of the parties to the agreements remains the owner of intellectual property it owned prior to the time of the agreement, and all parties will have equal ownership of any patents resulting from the research conducted pursuant to such agreements. The parties must jointly agree as to whether the results of research conducted pursuant to the agreement should give rise to the filing of a patent application. In the event that one party does not wish to file a patent application but another party does and agrees to bear alone the cost of such filing, it will have the right to do so and the party who declined to pursue registration of the patent will be required to assign its co-ownership interest of the patent and patent applications to the other party at no charge. For any patent application that is filed, we are responsible for managing the patent application and all intellectual property registrations in France or abroad. In the event that a party desires to assign its co-ownership interest in a patent (except in the event of an assignment between Sorbonne University and CNRS or to one of the inventors within the team dedicated to the research), the other parties to the agreement will have a preemptive right to acquire such party's co-ownership interest. We have an option to obtain exclusive commercial rights with respect to any products developed through the parties' research pursuant to the terms of the collaboration agreements (whether patentable or not), which the Company exercised regarding patent families S1 through S10 and patent families MI through MV and still is in a position to exercise regarding ongoing researches and other patent families. The parties may use the results of research conducted pursuant to the agreements for other research purposes, subject to informing the other parties to the agreement if such research is to be carried out in collaboration with third parties.

Pursuant to the terms of the research and collaboration agreements, once a patent is filed, the parties to such agreement enter into (i) a co-ownership agreement providing for the respective rights and obligations of the co-owners of the patents, and (ii) a commercialization/license agreement providing for our right to commercialize products based on the patents in consideration for the payment of royalties to Sorbonne University and/or the other French academic research institutions involved, as applicable, the terms of which will supersede the collaboration agreement. Until these agreements are entered into, the provisions of the collaboration agreements will continue to govern ownership of the results and the rights to commercialize any products developed through such collaborations.

As of the date of this annual report, we have a research and collaboration agreement with Sorbonne University, CNRS and INSERM "(supervisory entities of the Institut de la Vision)" dated March 2, 2020, relating to AMD for which research is currently ongoing. Our research and collaboration agreement with Sorbonne University and CNRS dated July 1, 2016, as amended on March 22, 2017, which previously governed co-ownership of patent family S6, expired when a co-ownership agreement relating to patent family S6 was entered into on October 9, 2019.

We have a research and collaboration agreement with Sorbonne University and CNRS dated February 1, 2019 (as amended) relating to heart failure associated with DMD.

We also have a research and collaboration agreement with Université Paris Descartes and SATT Ile de France Innov relating to spinal muscular atrophy for which research is currently ongoing.

Intellectual Property

We seek to protect and enhance proprietary technology, investments, and improvements that are commercially important to our business by seeking, maintaining and defending patent rights. We also seek to and will continue to rely on regulatory protection afforded through orphan drug designations, data exclusivity, market exclusivity and patent term extensions where available.

Our industrial property protection policy covers our two key fields of innovation: (i) Sarconeos (BIO101) and our life-cycle extension drug candidate, BIO103, for the treatment of neuromuscular disorders, including sarcopenia spinal muscular atrophy (SMA) and DMD, respiratory function impairment resulting from a viral infection and (ii) Macuneos (BIO201) and our life-cycle extension drug candidate, BIO203, for the treatment of retinopathies, including dry AMD.

Current Intellectual Property Portfolio

Our patent portfolio covers 15 patent families, which include a total of 48 co-owned issued patents and a total of 48 co-owned patent applications. We have recently filed other patent applications that are currently under examination.

The issued patents in our portfolio consist of nine European patents, five U.S. patents, and 20 patents in other jurisdictions, including Australia, Brazil, China, Japan and Russia.

The pending patent applications in our portfolio consist of four European patent applications, five U.S. patent applications, and 31 patent applications pending in other jurisdictions, including Australia, Brazil, Canada, China, India, Japan, Mexico, Russia and South Korea.

Our patents and patent applications are all jointly owned by us and Sorbonne, and in some cases together with other academic research institutions (*i.e.*, CNRS, INRA and INSERM). We hold exclusive commercial rights through licenses of each of our drug candidates.

Our drug candidates rely upon one or more patent rights protecting various technologies, including rights related to:

- the use of phytoecdysones in the preparation of a composition to act on metabolic syndrome (Patent family No. S1 "*metabolic syndrome*");
- the use of phytoecdysones in stabilizing weight in overweight or obese subjects after dieting (Patent family No. S2 "*weight stabilization*");
- the use of phytoecdysones to improve muscular quality in obese and/or sarcopenic mammals (Patent family No. S3 "*muscular quality*");
- a process whereby new chemical entities are used in the preparation of medicines (Patent family No. S4 "*phytoecdysone analogue*");
- a process for extracting purified 20-hydroxyecdysone and the therapeutic use of these extracts to improve muscle function or treat cardiovascular disease (Patent family No. S5 "*20-hydroxyecdysone; extracts*");
- the use of 20-hydroxyecdysone components and their derivatives to treat myopathies and other muscular dystrophies (Patent family No. S6 "*20-hydroxyecdysone*");
- the use of phytoecdysones to prevent loss of muscular strength after immobilization (Patent family No. S7 "*Loss of muscle strength*");
- the use of phytoecdysones in a treatment of neuromuscular disease (Patent family No. S8 "*Phytoecdysones in neuromuscular diseases*");
- the use of phytoecdysones in a treatment of impaired respiratory function (Patent family No. S9 "*Phytoecdysones in respiratory diseases*);
- the use of phytoecdysones and their derivatives for use in the treatment of impaired respiratory function during a viral infection (Patent family No.10 "Phytoecdysones in COVID-19 respiratory disease");
- the use of a composition of bixin and norbixin to protect the skin against sun damage (Patent family No. MI "*Photo-protection*");
- the use of bixin and norbixin compounds to protect the eye against AMD (Patent family No. MII "*AMD*");
- the use of a composition using norbixin in the treatment of AMD (Patent family No. MIII "*Composition for protecting retinal epithelial cells*");
- the use of compounds from the family of flavonoids and anthocyanidins for the treatment, prevention and/or stabilization of AMD and/or Stargardt's disease, pigmentary retinopathy and/or diabetic retinopathy (Patent family MIV "*Use of 3-deoxyanthocyanidins for the treatment of eye diseases*"); and
- The use of compounds targeting the eye and use thereof for treating ocular diseases (Patent family MV "*Use of compounds targeting the eye for the treatment of ocular diseases*").

Individual patent terms extend for varying periods of time, depending upon the date of filing of the patent application, the date of patent issuance, and the legal term of patents in the countries in which they are obtained. In most countries in which we file patent applications, including the United States, the patent term is 20 years from the date of filing of the first non-provisional application to which priority is claimed. In certain instances, a patent term can be extended under certain circumstances.

For example, in the United States, the term of a patent that covers an FDA-approved drug may be eligible for a patent term restoration of up to five years to effectively compensate for the patent term lost during the FDA regulatory review process, subject to several limitations discussed below under "Our Intellectual Property Strategy." Also, in the United States, a patent's term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the U.S. Patent and Trademark Office in granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier-filed patent. Similar term extension mechanism may apply for patents filed with the Office Européen des Brevets (European patent office).

Our issued patents and patent applications (if issued) will expire as follows (unless extended):

Patent family No. S1:

- Patent No. FR2924346 expires November 30, 2027.
- Patent Nos. AU2008332981, CN102231986, BRPI0820455-1, EP2217255, RU2010126625 and US8236359 expire November 19, 2028.

Patent family No. S2:

- Patent No. FR2982489 expires November 10, 2031.
- Patent Nos. CN103957727, EP2775859, JP6346094 and JP6462918 expire November 12, 2032.

Patent family No. S3:

- Patent No. FR2983733 expires December 13, 2031.
- Patent No. EP2790706 expires December 13, 2032.

Patent family No. S4:

- Patent No. FR3021318 expires May 20, 2034.
- Patent Nos. AU2015263121, CN106536539, EP3145942, JP6621217, RU2724329, US9938315 and US10316056 expire May 20, 2035.

Patent family No. S5:

- Patent No. FR3065644 expires April 28, 2037.

Patent family No. S6:

- Patent No. FR3065642 expires August 31, 2037.

Patent family No. S7:

- Patent No. FR3078252 expires February 28, 2038.

Patent family No. S8:

- Patent No. FR3093640 expires March 15, 2039.

Patent family No. S9:

- Patent No. FR3093641 expires March 15, 2039.

Patent family No. S10

- Patent No. FR3108504 expires March 30, 2040.

Patent family No. MI

- Patent Nos. FR2947173 and FR2955767 expire June 25, 2029
- Patent Nos. BR1010113-6, EP2445476 and US9173823 expire June 25, 2030

Patent family No. MII

- Patent Nos. FR2975008 and FR2996773 expire May 13, 2031.
- Patent Nos. EP2717891, JP6421306, and JP6432913 expire May 14, 2032.

Patent family No. MIII

- Patent No. FR3035589 expires April 30, 2035.
- Patent Nos. EP3288551, JP6660401, MX/a/2017/013918, RU2715889 and US10314804 expire April 28, 2036.

Patent family No. MIV

- Patent No. FR1554761 expires May 27, 2035.
- Patent Nos. EP33302463, JP6738412, RU2730854 and US10513503 expire May 27, 2036.

In China, Patent No. ZL201280066803.6 from Patent family S3 was subject to a motion for invalidation brought by a third party based on several arguments, including the insufficient description of the animal model used in the patent, the novelty of the patent, the extension beyond the application as filed and the inventive step. Under Chinese patent law, the invalidity of a patent may be sought by any person or entity after the grant of the patent. The patent was invalidated in China following oral proceedings before the Court of Revision of the Chinese Patent Office. The arguments in favor of the invalidation by the Court of Revision of the Chinese Patent Office were not considered as relevant objections in the context of the European examination procedure leading to the grant of a European patent on May 8, 2019 (Patent No EP2790706). However, an opposition procedure to the European patent has been started, supposedly by the same opponent as in China (the latter remaining anonymous), and is currently in progress. The corresponding oral proceedings before the European Opposition Division are expected to take place in 2021. We do not expect the potential cancellation of this patent to have any material impact on our development plans for our product candidates, our patent portfolio or our business.

If patents are issued on our pending patent applications, the resulting patents are projected to expire on dates ranging from 2027 to 2039. However, the actual protection afforded by a patent varies on a product-by-product basis, from country-to-country, and depends upon many factors, including the type of patent, the scope of its coverage, the availability of regulatory-related extensions, the availability of legal remedies in a particular country, and the validity and enforceability of the patent.

Commercialization/License Agreements

As contemplated by the various research and collaboration agreements, we have entered into two commercialization/license agreements with respect to our patents which are co-owned with Sorbonne University and/or academic research institutions : (i) a commercialization/license agreement, dated January 1, 2016 by and between us and SATT Lutech (acting as agent for CNRS, INRA and Sorbonne University) and CNRS, INRA and Sorbonne University, as amended on April 2, 2019, November 6, 2020 and

December 17, 2020, relating to patent families S1 through S9, or the S-Commercialization Agreement, and (ii) a commercialization/license agreement, dated January 1, 2016, by and between us and SATT Lutech (acting as agent for CNRS, INSERM and Sorbonne University) and CNRS, INSERM and Sorbonne University, as amended on December 17, 2020 relating to patent families MI through MIV, or the M-Commercialization Agreement.

Unless terminated sooner, these agreements will remain in effect until the expiration or invalidation of the last of the patents covered by such agreement. The terms of the agreements provide that they will automatically terminate upon our termination of activity, wind-up and/or liquidation, a breach of the agreement, or upon a force majeure event (as described in the agreement). In addition, we may terminate these agreements upon 30 days' notification to SATT Lutech and payment of a penalty equal to three times the annual guaranteed minimum amount, except where termination is justified by the denial of marketing authorizations.

We are required to make certain payments under the S-Commercialization Agreement and M-Commercialization Agreement as follows:

- under the S-Commercialization Agreement, (i) beginning in the year following the first marketing of a product and in any event no later than 2023, we will pay a guaranteed annual minimum amount of €40 thousand, which will be deducted from the amount of royalties due annually (as described below), (ii) for direct commercialization by the us, the agreement provides for annual single-digit royalties based on the net sales of products, distinguishing between sales of nutraceutical and medicinal products, and (iii) for indirect commercialization by a third party, the agreement provides for annual royalties (10-20%) based on income received from licensees, distinguishing (a) between the sales of nutraceutical products (10-20% royalties) and drug products (10-20% royalties or single-digit royalties) and (b) the product development phase (Phase 1, 2 or 3) at the time of the conclusion of the licensing agreement; and

- under the M-Commercialization Agreement, (i) since 2020, we are paying a guaranteed annual minimum amount of €15 thousand, which will be deducted from the amount of royalties due annually, when applicable (as described below), (ii) beginning in the year following the first marketing of a drug product and in any event no later than 2026, the Company will pay an annual guaranteed minimum amount of €50 thousand, which will be deducted from the amount of royalties due annually (as described below), (iii) for direct commercialization by the us, the agreement provides for annual single-digit royalties based on the net sales of products, distinguishing between sales of nutraceutical and medicinal products, and (iii) for indirect commercialization by a third party, the agreement provides for annual royalties (10-20%) based on income received from licensees, distinguishing (a) between the sales of nutraceutical products (10-20% royalties) and drug products (10-20% or single-digit royalties) and (b) the product development phase (Phase 1, 2 or 3) at the time of the conclusion of the licensing agreement. The payments made under the S-Commercialization Agreement and the M-Commercialization Agreement will end upon termination of these agreements.

Co-Ownership Agreements

As contemplated by the various research and collaboration agreements, we have entered into 10 co-ownership agreements with Sorbonne University and/or academic research institutions, covering all of our patent families except for (i) patent family S7, which is governed by legal provisions of the French intellectual property code, which applies by default, and (ii) patent families S8 and S9, which have only recently been filed and for which we expect to enter into similar co-ownership agreements in the near future. Until such time as agreements are signed in relation to patent families S8 and S9, co-ownership will be governed by legal provisions of the French intellectual property code, which apply by default.

Each of these co-ownership agreements is entered into for a term ending upon expiration or invalidation of the last of the patents covered by such agreement, or, in the case of the co-ownership agreements covering patent families MI, MIII and MIV, until expiration or invalidation of the last of the patents covered by the agreement or as long as the commercialization/license agreement remains in effect. These agreements may be terminated if one of the parties becomes the sole owner of the patents or in the event the parties no longer own the patents. In the event that assignment to a third party is contemplated, the other parties to the agreement will have a preemptive right to acquire such party's co-ownership share.

Intellectual Property Agreement with Stanislas Veillet

Our CEO, who is a corporate officer *(mandataire social)* but not an employee of the Company under French law, is involved in our research and development activities. He has developed inventions with us for which we have submitted patent applications in which he is listed as a co-inventor and other inventions that we expect may give rise to patent applications in the future for which we

expect he will be included as a co-inventor. As an inventor, our CEO has certain rights under French intellectual property law. These rights are distinct from the statutory rights that usually apply to employee inventors under French law. In order to define a framework within which any intellectual property resulting from our CEO's research and development activities is properly assigned to us, we have entered into an agreement with our CEO, which has been approved by our board of directors, pursuant to which he is entitled to the following payments for his contributions:

- a first lump sum cash payment of €90 thousand to be paid within 30 days of filing of a patent application based on the assigned rights;
- a second lump sum cash payment of €90 thousand to be paid within 30 days of publication of a patent application based on the assigned rights; and
- a 6.5% royalty payment with respect to any license income and/or any net sales by us of products manufactured with the patents filed on the basis of the assigned rights.

These three payments will be capped at €2.1 million on a platform per platform basis, a platform being defined in the agreement as the research and development works which cover the same family of chemical molecules targeting the same molecular receptor or biological pathway for a family of pathologies which are clinically connected.

In the event that a third-party pharmaceutical and/or biotech company acquires 100% of our capital and voting rights, payments will be accelerated, so that the cap (€2.1 million per platform), less any amount previously paid in respect of a platform, will become immediately payable.

The agreement shall remain in effect until no further payments are due. However, the provisions of this agreement will only apply to results generated during the period in which our CEO occupies the position of a corporate officer of the Company or any of its affiliates. Any party to the agreement may, upon material breach of the agreement by the other party, terminate the agreement.

Trademarks

In addition to patent protection, we have trademark protection in many countries for our name (Biophytis) and our drug candidates (in particular, "Macuneos" and "Sarconeos"). In total, we hold 42 trademarks or trademark applications. None of our trademarks are subject to a third-party license.

Our Intellectual Property Strategy

Our patent policy is to file the first priority application regionally in France, then extend that patent application for international coverage by filing a related international application through the Patent Cooperation Treaty, or PCT. The PCT international application has the potential to be pursued in 142 PCT-contracting countries.

We determine which countries to pursue patent coverage in based on our business strategy. Our business strategy focuses on two main zones in which to pursue patent coverage via the PCT: (1) Europe, and in particular, the major European countries, United States, and Japan because these countries are where most of the main major pharmaceutical companies are concentrated, and (2) the BRIC zone, which is Brazil, Russia, India, and China; and sometimes Canada, Australia and South Korea.

Our objective for this international intellectual property strategy is to secure the earliest patents in these target countries and obtain the broadest and most effective scope of intellectual property protection in these countries. In addition to protecting our innovations by patents, they often have supplemental regulatory data exclusivity in connection with the marketing authorization of our products.

Government Regulation

Government authorities in the United States (including federal, state and local authorities) and in other countries, extensively regulate, among other things, the manufacturing, research and clinical development, marketing, labeling and packaging, storage, distribution, post-approval monitoring and reporting, advertising and promotion, pricing, and export and import of pharmaceutical products and active pharmaceutical ingredients, such as those we are developing. The process of obtaining regulatory approvals,

authorizations, and the subsequent compliance with appropriate federal, state, local and foreign statutes and regulations require the expenditure of substantial time and financial resources.

U.S. Government Regulation

In the United States, the FDA regulates drugs under the FDCA and its implementing regulations. FDA approval is required before any new unapproved drug or dosage form, including a new use of a previously approved drug, can be marketed in the United States. Drugs are also subject to other federal, state and local statutes and regulations. If we fail to comply with applicable FDA or other requirements at any time during the drug development process, clinical testing, the approval process or after approval, we may become subject to administrative or judicial sanctions. These sanctions could include the FDA's refusal to approve pending applications, license suspension or revocation, withdrawal of an approval, warning letters, product recalls, product seizures, placement on Import Alerts, debarment of personnel, employees or officers, total or partial suspension of production or distribution, injunctions, fines, civil penalties or criminal prosecution.

The process required by the FDA before drug candidates may be marketed in the United States generally involves the following:

- completion of extensive preclinical laboratory tests, preclinical animal studies, and toxicity data, performed in accordance with the GLP regulations;
- submission to the FDA of an IND, which must become effective before human clinical studies may begin;
- approval by an independent IRB or ethics committee representing each clinical site before each clinical study may be initiated;
- performance of adequate and well-controlled human clinical studies to establish the safety and efficacy of the drug candidate for each proposed indication;
- preparation of and submission to the FDA of a NDA after completion of all pivotal clinical studies;
- review of the product application by an FDA advisory committee, where appropriate and if applicable;
- a determination by the FDA within 60 days of its receipt of an NDA to file the application for review;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facilities where the drug candidate is produced to assess compliance with cGMP; and
- FDA review and approval of an NDA or Biologic License Application, or BLA, prior to any commercial marketing or sale of the drug in the United States.

An IND is a request for authorization from the FDA to administer an investigational new drug product to humans. The central focus of an IND submission is on the general investigational plan and the protocol(s) for human studies. The IND also includes results of animal and *in vitro* studies assessing the toxicology, pharmacokinetics, pharmacology and pharmacodynamic characteristics of the product; chemistry, manufacturing and controls information; and any available human data or literature to support the use of the investigational new drug. An IND must become effective before human clinical studies may begin. An IND will automatically become effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to the proposed clinical studies. In such a case, the IND may be placed on clinical hold and the IND sponsor and the FDA must resolve any outstanding concerns or questions before clinical studies can begin. Accordingly, submission of an IND may or may not result in the FDA allowing clinical studies to commence.

Clinical Studies

Clinical studies involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators in accordance with GCPs, which include the requirement that all research subjects provide their informed consent for their participation in any clinical study. Clinical studies are conducted under protocols detailing, among other things, the

objectives of the study, and the parameters to be used in monitoring safety and the efficacy criteria to be evaluated. A protocol for each clinical study and any subsequent protocol amendments must be submitted to the FDA as part of the IND. Additionally, approval must also be obtained from each clinical study site's IRB before the studies may be initiated, and the IRB must monitor the study until completed. There are also requirements governing the reporting of ongoing clinical studies and clinical study results to public registries, such as ClinicalTrials.gov.

The clinical investigation of a drug is generally divided into three or four phases. Although the phases are usually conducted sequentially, they may overlap or be combined.

- Phase 1. The drug is initially introduced into healthy human subjects or patients with the target disease or condition. These studies are designed to evaluate the safety, dosage tolerance, metabolism and pharmacologic actions of the investigational new drug in humans, the side effects associated with increasing doses, and if possible, to gain early evidence on effectiveness.

- Phase 2. The drug is administered to a limited patient population to evaluate dosage tolerance and optimal dosage, identify possible adverse side effects and safety risks and preliminarily evaluate efficacy.

- Phase 3. The drug is administered to an expanded patient population, generally at geographically dispersed clinical study sites to generate enough data to statistically evaluate dosage, clinical effectiveness and safety, to establish the overall benefit-risk relationship of the investigational product and to provide an adequate basis for product approval.

- Phase 4. In some cases, the FDA may condition approval of an NDA for a drug candidate on the sponsor's agreement to conduct additional clinical studies after approval. In other cases, a sponsor may commit to conducting or voluntarily conduct additional clinical studies after approval to gain more information about the drug. Such post-approval studies are typically referred to as Phase 4 clinical studies.

A confirmatory or pivotal study is a clinical study that adequately meets regulatory agency requirements for the evaluation of a drug candidate's efficacy and safety such that it can be used to justify the approval of the product. Generally, pivotal studies are Phase 3 studies, but the FDA may accept results from Phase 2 studies if the study design provides a well-controlled and reliable assessment of clinical benefit, particularly in situations where there is an unmet medical need and the results are sufficiently robust. In such cases, the FDA may require post-market studies for safety and efficacy to be conducted for the drug candidate. The FDA may withdraw the approval if the results indicate that the approved drug is not safe or effective.

The FDA, the IRB or the clinical study sponsor may suspend or terminate a clinical study at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Additionally, some clinical studies are overseen by an independent group of qualified experts organized by the clinical study sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether or not a study may move forward at designated check points based on access to certain data from the study. We may also suspend or terminate a clinical study based on evolving business objectives and/or competitive climate.

Submission of an NDA to the FDA

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, detailed investigational new drug product information is submitted to the FDA in the form of an NDA requesting approval to market the product for one or more indications. Under federal law, the submission of most NDAs is subject to a substantial application user fee. Applications for orphan drug products are exempted from the NDA application user fees.

An NDA must include all relevant data available from pertinent preclinical and clinical studies, including negative or ambiguous results as well as positive findings, together with detailed information relating to the product's chemistry, manufacturing, controls and proposed labeling, among other things. Data can come from company-sponsored clinical studies intended to test the safety and effectiveness of a use of a product, or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and effectiveness of the investigational product to the satisfaction of the FDA.

Once an NDA has been submitted, the FDA's goal is to review the application within ten months after it accepts the application for filing, or, if the application relates to an unmet medical need in a serious or life-threatening indication, six months after

the FDA accepts the application for filing. The review process is often significantly extended by FDA requests for additional information or clarification.

Before approving an NDA, the FDA typically will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA will typically inspect one or more clinical sites to assure compliance with GCP.

The FDA is required to refer an application for an investigational drug to an advisory committee or explain why such referral was not made. An advisory committee is a panel of independent experts, including clinicians and other scientific experts, that reviews, evaluates and provides a recommendation as to whether the investigational product application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions and typically follows such recommendations.

The FDA's Decision on an NDA

After the FDA evaluates the NDA and conducts inspections of manufacturing facilities, it may issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application is not ready for approval. A Complete Response Letter may require additional clinical data and/or an additional pivotal Phase 3 clinical study(ies), and/or other significant, expensive and time-consuming requirements related to clinical studies, preclinical studies or manufacturing. Even if such additional information is submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. The FDA could also approve the NDA with a REMS to mitigate risks, which could include medication guides, physician communication plans or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. The FDA also may condition approval on, among other things, changes to proposed labeling, development of adequate controls and specifications or a commitment to conduct one or more post- market studies or clinical studies. Such post-market testing may include Phase 4 clinical studies and surveillance to further assess and monitor the product's safety and effectiveness after commercialization. The FDA may have the authority to withdraw its approval if post-market testing fails to verify the approved drug's clinical benefit, if the applicant does not perform the required testing with due diligence, or if the any other evidence demonstrates the approved drug is not safe or effective, among other reasons. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

Expedited Review, Accelerated-Approval and Emergency Use Authorization Programs

The FDA has various programs, including fast track, priority review, breakthrough therapy, accelerated approval, and regenerative medicine advanced therapy or RMAT designations that are intended to expedite the development and approval of new drugs that address unmet medical needs in the treatment of serious or life-threatening diseases and conditions. To be eligible for a fast track designation, the FDA must determine, based on the request of an applicant, that a product is intended to treat a serious or life-threatening disease or condition and demonstrates the potential to address an unmet medical need. The FDA may review sections of the NDA for a fast-track product on a rolling basis before the complete application is submitted. If the applicant provides a schedule for the submission of the sections of the NDA, the FDA agrees to accept sections of the NDA and determines that the schedule is acceptable. The applicant pays any required user fees upon submission of the first section of the NDA.

The FDA may give a priority review designation to drugs that offer major advances in treatment, or provide a treatment where no adequate therapy exists. A priority review designation means that the goal for the FDA to review an application is six months, rather than the standard review of ten months. These six and ten-month review periods are measured from the "filing" date rather than the receipt date for NDAs for new molecular entities, which typically adds approximately two months to the timeline for review and decision from the date of submission. Products that are eligible for fast-track designation are also likely to be considered appropriate to receive a priority review.

In addition, products studied for their safety and effectiveness in treating serious or life-threatening illnesses and that provide meaningful therapeutic benefit over existing treatments may be eligible for accelerated approval and may be approved on the basis of adequate and well-controlled clinical studies establishing that the product has an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, that is reasonably likely to predict an effect on irreversible morbidity or mortality or other clinical benefit. This evaluation takes into account

the severity, rarity or prevalence of the condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require a sponsor of a drug receiving accelerated approval to perform post-marketing studies to verify and describe the predicted effect on irreversible morbidity or mortality or other clinical endpoint, and the drug may be subject to accelerated withdrawal procedures.

Moreover, under the provisions of the Food and Drug Administration Safety and Innovation Act passed in July 2012, a sponsor can request designation of a drug candidate as a "breakthrough therapy." A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development.

Drugs designated as breakthrough therapies are also eligible for priority review and fast track designation. As part of this process, the FDA takes certain actions, such as holding timely meetings and providing advice, intended to expedite the development and review of an application for approval of a breakthrough therapy.

In addition, the 21st Century Cures Act in 2016 made the Regenerative Medicine Advanced Therapy, or RMAT, designation available for investigational drugs that are regenerative medicine therapies intended to treat, modify, reverse, or cure a serious condition, with preliminary clinical evidence indicating that the drug has the potential for addressing unmet medical needs for such condition. The RMAT designation is available for cell therapy, therapeutic tissue engineering products, human cell and tissue products, and combination products that use such therapies or products. The advantages of RMAT designation include those of breakthrough and fast track designations, such as early interactions with the FDA and rolling review of applications, and the drug candidate with the RMAT designation may be eligible for accelerated approval. Requests for RMAT designations should be made with the IND application (if preliminary clinical evidence is available), but no later than the end-of-Phase-2 meeting.

Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for the FDA review or approval will not be shortened or will be withdrawn.

With the declaration of COVID-19 as a worldwide pandemic and public health emergency, several programs have been utilized, to expedite review of medications. These include:

- EUA authority allows the FDA to help strengthen the nation's public health protections against chemical, biological, radiological and nuclear threats by facilitating the availability and use of medical countermeasures needed during public health emergencies. Under section 564 of the Federal Food, Drug and Cosmetic Act, or FD&C Act, the FDA Commissioner may allow unapproved medical products, or unapproved uses of approved medical products, to be used in an emergency to diagnose, treat, or prevent serious or life-threatening diseases or conditions caused by chemical, biological, radiological and nuclear (CBRN) threat agents when there are no adequate, approved, and available alternatives. The EUA allows temporary use of the medical product, based on efficacy data, which is usually not sufficient on its own for approval. For example, A few anti-viral agents (including Veklury (remdesivir) and Paxlovid (nirmatrelvir and ritonavir), and molnupiravir) as well as monoclonal antibodies (sotrovimab and Evusheld (tixagevimab co-packaged with cilgavimab and administered together)) have received emergency use authorizations for certain patient populations and indications. An EUA may be revoked at the conclusion of a public health emergency, and there may be certain limitations to its uses, such as label statements specifying that the product only has an EUA, and that it has not received the FDA's clearance or approval.

- In Europe, the EMA has put in place a COVID-19 task force, to provide rapid scientific advice and review interim data, on a rolling basis, as a part of a (conditional) marketing authorization or for an extension of indication in case of authorized medicines.

- In the United Kingdom, the MHRA has put in place a process for a temporary authorization for the supply of an unlicensed medicinal product for use in response to certain specific types of public health threat—under regulation 174.

Post-Approval Requirements

Drugs marketed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product sampling and distribution, advertising and promotion and reporting of adverse experiences with the product. After approval, most changes to the approved product, such as adding new

indications or other labeling claims are subject to prior FDA review and approval. There also are continuing, annual user fee requirements.

Manufacturers are subject to periodic unannounced inspections by FDA and state agencies for compliance with cGMP requirements. Changes to the manufacturing process are strictly regulated and, depending on the significance of the change, may require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP and impose reporting and documentation requirements upon us and any third- party manufacturers that we may decide to use. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain compliance with cGMP and other aspects of regulatory compliance.

Discovery of previously unknown problems with a product or the failure to comply with applicable requirements may result in restrictions on a product, manufacturer or holder of an approved NDA, including withdrawal or recall of the product from the market or other voluntary, FDA-initiated or judicial action that could delay or prohibit further marketing. Also, new government requirements, including those resulting from new legislation, may be established, or the FDA's policies may change, which could delay or prevent regulatory approval of our products under development.

The FDA may withdraw approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post- market studies or clinical studies to assess new safety risks; or imposition of distribution restrictions or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the product;
- complete withdrawal of the product from the market or product recalls;
- fines, Form 483 observations, warning letters or holds on post-approval clinical studies;
- refusal of the FDA to approve pending NDAs or supplements to approved NDAs or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products; or
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted only for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

It is expected that, with respect to COVID-19-related EUA programs, data collection post-approval will be required, either in the form of a clinical trial, or by other methods (*e.g.* real-world data). Several anti-viral agents, for example Paxlovid (nirmatrelvir and ritonavir), and molnupiravir) as well as monoclonal antibodies (sotrovimab and Evusheld (tixagevimab co-packaged with cilgavimab and administered together)) have already received emergency use authorizations in the United States for specific indications and patient groups,.

Orphan Designation and Exclusivity

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug intended to treat a rare disease or condition, defined as a disease or condition with a patient population of fewer than 200,000 individuals in the United States, or a patient population greater than 200,000 individuals in the United States and when there is no reasonable expectation that the cost of developing and making available the drug in the United States will be recovered from sales in the United States for that drug. Orphan drug designation must be requested before submitting a BLA. After the FDA grants orphan drug designation, the generic identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA.

If a product that has orphan drug designation subsequently receives the first FDA approval for a particular active ingredient for the disease for which it has such designation, the product is entitled to orphan product marketing exclusivity, which means that the FDA may not approve any other applications, except in limited circumstances, such as a showing of clinical superiority to the product with orphan drug exclusivity or if the FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug was designated. Orphan drug exclusivity does not prevent the FDA from approving a different drug for the same disease or condition, or the same drug for a different disease or condition.

Among the other benefits of orphan drug designation are tax credits for certain research and a waiver of the NDA application user fee.

A designated orphan drug many not receive orphan drug exclusivity if it is approved for a use that is broader than the indication for which it received orphan designation. In addition, orphan drug exclusive marketing rights in the United States may be lost if the FDA later determines that the request for designation was materially defective or, as noted above, if the second applicant demonstrates that its product is clinically superior to the approved product with orphan exclusivity or the manufacturer of the approved product is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition.

Hatch-Waxman Amendments and Exclusivity

Section 505 of the FDCA describes three types of marketing applications that may be submitted to the FDA to request marketing authorization for a new drug. A Section 505(b)(1) NDA is an application that contains full reports of investigations of safety and efficacy. A 505(b)(2) NDA is an application that contains full reports of investigations of safety and efficacy but where at least some of the information required for approval comes from investigations that were not conducted by or for the applicant and for which the applicant has not obtained a right of reference or use from the person by or for whom the investigations were conducted. This regulatory pathway enables the applicant to rely, in part, on the FDA's prior findings of safety and efficacy for an existing product, or published literature, in support of its application. Section 505(j) establishes an abbreviated approval process for a generic version of approved drug products through the submission of an ANDA. An ANDA provides for marketing of a generic drug product that has the same active ingredients, dosage form, strength, route of administration, labeling, performance characteristics and intended use, among other things, to a previously approved product. ANDAs are termed "abbreviated" because they are generally not required to include preclinical (animal) and clinical (human) data to establish safety and efficacy. Instead, generic applicants must scientifically demonstrate that their product is bioequivalent to, or performs in the same manner as, the innovator drug through in vitro, in vivo or other testing. The generic version must deliver the same amount of active ingredients into a subject's bloodstream in the same amount of time as the innovator drug and can often be substituted by pharmacists under prescriptions written for the reference listed drug. In seeking approval for a drug through an NDA, applicants are required to list with the FDA each patent with claims that cover the applicant's drug or a method of using the drug. Upon approval of a drug, each of the patents listed in the application for the drug is then published in the Orange Book. Drugs listed in the Orange Book can, in turn, be cited by potential competitors in support of approval of an ANDA or 505(b)(2) NDA.

Upon submission of an ANDA or a 505(b)(2) NDA, an applicant must certify to the FDA that (1) no patent information on the drug product that is the subject of the application has been submitted to the FDA; (2) such patent has expired; (3) the date on which such patent expires; or (4) such patent is invalid or will not be infringed upon by the manufacture, use or sale of the drug product for which the application is submitted. Generally, the ANDA or 505(b)(2) NDA cannot be approved until all listed patents have expired, except where the ANDA or 505(b)(2) NDA applicant challenges a listed patent through the last type of certification, also known as a paragraph IV certification. If the applicant does not challenge the listed patents, or indicates that it is not seeking approval of a patented method of use, the ANDA or 505(b)(2) NDA application will not be approved until all of the listed patents claiming the referenced product have expired.

If the ANDA or 505(b)(2) NDA applicant has provided a Paragraph IV certification to the FDA, the applicant must send notice of the Paragraph IV certification to the NDA and patent holders once the application has been accepted for filing by the FDA. The NDA and patent holders may then initiate a patent infringement lawsuit in response to the notice of the paragraph IV certification. If the paragraph IV certification is challenged by an NDA holder or the patent owner(s) asserts a patent challenge to the paragraph IV certification, the FDA may not approve that application until the earlier of 30 months from the receipt of the notice of the paragraph IV certification, the expiration of the patent, when the infringement case concerning each such patent was favorably decided in the applicant's favor or settled, or such shorter or longer period as may be ordered by a court. This prohibition is generally referred to as the 30-month stay. In instances where an ANDA or 505(b)(2) NDA applicant files a paragraph IV certification, the NDA holder

or patent owner(s) regularly take action to trigger the 30-month stay, recognizing that the related patent litigation may take many months or years to resolve.

The FDA also cannot approve an ANDA or 505(b)(2) application until all applicable non-patent exclusivities listed in the Orange Book for the branded reference drug have expired. For example, a pharmaceutical manufacturer may obtain five years of non-patent exclusivity upon NDA approval of a new chemical entity, or NCE, which is a drug containing an active moiety that has not been approved by the FDA in any other NDA. An "active moiety" is defined as the molecule responsible for the drug substance's physiological or pharmacologic action. During that five-year exclusivity period, the FDA cannot accept for filing (and therefore cannot approve) any ANDA seeking approval of a generic version of that drug or any 505(b)(2) NDA that relies on the FDA's approval of the drug, provided that that the FDA may accept an ANDA four years into the NCE exclusivity period if the ANDA applicant also files a Paragraph IV certification.

A drug, including one approved under Section 505(b)(2), may obtain a three-year period of exclusivity for a particular condition of approval, or change to a marketed product, such as a new formulation for a previously approved product, if one or more new clinical studies (other than bioavailability or bioequivalence studies) was essential to the approval of the application and was conducted/sponsored by the applicant. Should this occur, the FDA would be precluded from approving any ANDA or 505(b)(2) application for the protected modification until after that three-year exclusivity period has run. However, unlike NCE exclusivity, the FDA can accept an application and begin the review process during the exclusivity period.

Other Healthcare Laws and Compliance Requirements

U.S. pharmaceutical companies are subject to additional healthcare regulation and enforcement by the federal government and by authorities in the states and foreign jurisdictions in which they conduct their business. Such laws include, without limitation, state and federal anti-kickback, fraud and abuse, false claims, privacy and security and physician sunshine laws and regulations. If pharmaceutical company operations are found to be in violation of any of such laws or any other applicable governmental regulations, these companies may be subject to penalties, including, without limitation, civil and criminal penalties, damages, fines, the curtailment or restructuring of operations, exclusion from participation in federal and state healthcare programs and individual imprisonment.

Coverage and Reimbursement

Sales of any product depend, in part, on the extent to which such product will be covered by third-party payors, such as federal, state and foreign government healthcare programs, commercial insurance and managed healthcare organizations and the level of third-party reimbursement for such product. Third-party payor decisions regarding the extent of coverage and amount of reimbursement to be provided are made on a plan-by-plan basis. These third-party payors often reduce reimbursements for medical products, drugs and services. In addition, the U.S. government, state legislatures and foreign governments have continued implementing cost-containment programs, including price controls, restrictions on coverage and reimbursement and requirements for substitution of generic products. Adoption of price controls and cost-containment measures, and adoption of more restrictive policies in jurisdictions with existing controls and measures, could further limit sales of any product. Decreases in third-party reimbursement for any product or a decision by a third-party payor not to cover a product could reduce physician usage and patient demand for the product and also has a material adverse effect on sales. Even after the FDA approves a product, for example, the failure to obtain third-party payor coverage may impose a material adverse effect on sales. As federal and state governments continue to promulgate new policies and regulations, these policies and regulations may also impose a material adverse effect on sales. These laws and regulations may restrict, prohibit, or preventing us from implementing a wide range of pricing, discounting, marketing, promotion, sales commission, incentive programs, and other business activities. No uniform policy of coverage and reimbursement among third-party payors exists in the United States. Finally, although payors often rely upon Medicare coverage policy establishing their coverage and reimbursement policies. Instead, each payor makes independent and separate decisions regarding the extent of coverage and amount of reimbursement to be provided.

Healthcare Reform

In March 2010, former President Obama signed the Affordable Care Act, which substantially changed the way healthcare is financed by both governmental and private insurers in the United States, and significantly affected the pharmaceutical industry. The Affordable Care Act contains a number of provisions, including those governing enrollments in federal healthcare programs, reimbursement adjustments and fraud and abuse changes. Additionally, the Affordable Care Act increases the minimum level of Medicaid rebates payable by manufacturers of brand name drugs from 15.1% to 23.1%; requires collection of rebates for drugs paid by Medicaid managed care organizations; requires manufacturers to participate in a coverage gap discount program, under which they

must agree to offer 50% point-of- sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; and imposes a non-deductible annual fee on pharmaceutical manufacturers or importers who sell "branded prescription drugs" to specified federal government programs.

Since its enactment, there have been judicial and Congressional challenges to certain aspects of the Affordable Care Act, and we expect there will be additional challenges and amendments to the Affordable Care Act in the future. Other legislative changes have been proposed and adopted since the Affordable Care Act was enacted, including aggregate reductions of Medicare payments to providers of 2% per fiscal year for certain Medicare providers and suppliers, and further reduced payments to several types of Medicare providers.

Moreover, there has recently been heightened governmental scrutiny over the manner in which manufacturers set prices for their marketed products, which has resulted in several Congressional inquiries and proposed bills designed to, among other things, bring more transparency to product pricing, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drug products. Individual states in the United States have also become increasingly active in implementing regulations designed to control pharmaceutical product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, proposing to encourage importation from other countries and bulk purchasing.

CARES Act

In March 2020, the United States Congress passed the Coronavirus Aid, Relief, and Economic Security, or CARES, Act, a $2 trillion relief package created in response to the ongoing COVID-19 pandemic in the United States. Although Congress directed a significant portion of CARES Act aid to health care providers and institutions that serve on the "front line" of the COVID-19 crisis, Congress also allocated $940 million to the NIH, the U.S. government's primary agency responsible for biomedical research. Additionally, for companies that engage in research studies that involve routine costs payable by federal health care programs, such as Medicare and Medicaid, the CARES Act includes a number of measures designed to ease restrictions, enhance coverage, or even accelerate reimbursement for those routine costs in limited circumstances. Although CARES Act financial aid and easing of restrictions are specifically intended to address the COVID-19 emergency and are thus generally temporary, the sheer size and breadth of relief opportunities afforded under the law could positively impact life science and biotechnology companies' growth in the long term (*i.e.*, even beyond the pandemic), particularly for early stage companies engaged in COVID-19 related research.

Foreign Corrupt Practices Act

Our business activities may be subject to the FCPA and similar anti-bribery or anti-corruption laws, regulations or rules of other countries in which we operate. The FCPA generally prohibits offering, promising, giving, or authorizing others to give anything of value, either directly or indirectly, to a non-U.S. government official in order to influence official action, or otherwise obtain or retain business. The FCPA also requires public companies to make and keep books and records that accurately and fairly reflect the transactions of the corporation and to devise and maintain an adequate system of internal accounting controls. Our business is heavily regulated and therefore involves significant interaction with public officials, including officials of non-U.S. governments. Additionally, in many other countries, the health care providers who prescribe pharmaceuticals are employed by their government, and the purchasers of pharmaceuticals are government entities; therefore, our dealings with these prescribers and purchasers are subject to regulation under the FCPA. There is no certainty that all of our employees, agents, suppliers, manufacturers, contractors, or collaborators, or those of our affiliates, will comply with all applicable laws and regulations, particularly given the high level of complexity of these laws. Violations of these laws and regulations could result in fines, criminal sanctions against us, our officers, or our employees, the closing down of facilities, including those of our suppliers and manufacturers, requirements to obtain export licenses, cessation of business activities in sanctioned countries, implementation of compliance programs, and prohibitions on the conduct of our business. Any such violations could include prohibitions on our ability to offer our products in one or more countries as well as difficulties in manufacturing or continuing to develop our products, and could materially damage our reputation, our brand, our international expansion efforts, our ability to attract and retain employees, and our business, prospects, operating results, and financial condition.

European Union Drug Development

In the European Union, our drug candidates may also be subject to extensive regulatory requirements. As in the United States, medicinal products can only be marketed if a marketing authorization from the competent regulatory agencies has been obtained.

Similar to the United States, the various phases of preclinical and clinical research in the European Union are subject to significant regulatory controls. Clinical trials of medicinal products in the European Union must be conducted in accordance with European Union, national regulations and international standards for GCP, as well as in accordance with the new guidelines of the EMA and of the relevant national regulatory authorities regarding the COVID-19 context.

Clinical trials are currently governed by EU Clinical Trials Directive 2001/20/EC that set out common rules for the control and authorization of clinical trials in the European Union, as well as by the GCP Directive 2005/28/EC.

To improve the current system, Regulation (EU) No 536/2014 on clinical trials on medicinal products for human use ("Clinical Trials Regulation") was adopted in 2014 and will apply as from January 31, 2022. The Clinical Trials Regulation aims at harmonizing and streamlining the clinical trials authorization process, simplifying adverse event reporting procedures, improving the supervision of clinical trials, and increasing their transparency, notably via a clinical trial information system set up by the EMA. The Clinical Trials Regulation applies as from January 31, 2022. The Clinical Trials Regulation allows to still start and conduct a clinical trial in accordance with Clinical Trials Directive 2001/20/EC during a transitional period of one year after application date (so until January 31, 2023). Clinical trials authorized under the Clinical Trials Directive 2001/20/EC can continue to be conducted under the Clinical Trials Directive 2001/20/EC until January 31, 2025. An application to transition ongoing trials from the Clinical Trials Directive 2001/20/EC to the Clinical Trials Regulation will need to be submitted and authorized before the end of the transitional period on January 31, 2025.

Under the current regime, before a clinical trial can be initiated it must be approved in each of the EU Member States where the trial is to be conducted by two distinct bodies: the National Competent Authority, or NCA, and one or more Ethics Committees, or ECs. Under the current regime all suspected unexpected serious adverse reactions, or SUSARs, to the investigated drug that occur during the clinical trial have to be reported to the NCA and ECs of the Member State where they occurred. The Directive also imposes an obligation of periodic notification so as to inform the EC of the progress of the clinical trial.

European Union Drug Review and Approval

In the EEA (which is comprised of the 27 (after the Brexit) Member States of the European Union plus Norway, Iceland and Liechtenstein), medicinal products can only be commercialized after obtaining a Marketing Authorization, or MA. MAs may be granted either centrally (Community MA) or nationally (National MA).

The Community MA is issued centrally by the European Commission through the Centralized Procedure, based on the opinion of the CHMP of the EMA and is valid throughout the entire territory of the EU and will be recognized in the other EEA Member States Norway, Iceland and Liechtenstein. The Centralized Procedure is mandatory for certain types of products such as orphan medicinal products and medicinal products containing a new active substance indicated for the treatment of neurodegenerative disorders. The Centralized Procedure is optional for products containing a new active substance not yet authorized in the EEA, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the European Union.

The European Commission may also grant a "conditional marketing authorization" prior to obtaining the comprehensive clinical data required for an application for a full marketing authorization. Such conditional marketing authorizations may be granted for product candidates (including medicines designated as orphan medical products), if:

- the risk-benefit balance of the product candidate is positive;
- it is likely that the applicant will be in a position to provide the required comprehensive clinical trial data;
- the product fulfills an unmet medical need; and

- the benefit to public health of the immediate availability on the market of the medicinal product concerned outweighs the risk inherent in the fact that additional data are still required.

A conditional marketing authorization may contain specific obligations to be fulfilled by the marketing authorization holder including obligations with respect to the completion of ongoing or new studies, and with respect to the collection of pharmacoviligance data. Conditional marketing authorizations are valid for one year, and may be renewed annually, if the risk-benefit balance remains positive, and after an assessment of the need for additional or modified conditions and/or specific obligations.

National MAs are issued nationally by the competent authorities of the Member States of the EEA and only cover their respective territory. National MAs are available for products not falling within the mandatory scope of the Centralized Procedure. We do not foresee that any of our current drug candidates will be suitable for a National MA as they fall within the mandatory criteria for the Centralized Procedure. Therefore, our drug candidates will be approved through Community MAs.

Under the above-described procedures, before granting the MA, the EMA or the competent authorities of the Member States of the EEA make an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy.

Pursuant to Regulation (EC) No. 1901/2006, or the "Pediatric Regulation", all applications for marketing authorization for new medicines, as well as all applications for new indications of approved medicines, must include to be valid, in addition to the particulars and documents referred to in Directive 2001/83/EC, the results of all studies performed and details of all information collected in compliance with a pediatric investigation plan agreed between regulatory authorities and the applicant, unless the medicine is exempt because of a deferral or waiver of the EMA.

Before the EMA is able to begin its assessment of a Community MA application, it will validate that the applicant has complied with the agreed pediatric investigation plan. The applicant and the EMA may, where such a step is adequately justified, agree to modify a pediatric investigation plan to assist validation. Modifications are not always possible; may take longer to agree than the period of validation permits; and may still require the applicant to withdraw its marketing authorization application and to conduct additional non-clinical and clinical studies. Products that are granted a MA on the basis of the pediatric clinical trials conducted in accordance with the Pediatric Investigation Plan, or PIP, are eligible for a six-month extension of the protection under a supplementary protection certificate (if any is in effect at the time of approval) or, in the case of orphan medicinal products, a two-year extension of the orphan market exclusivity. This pediatric reward is subject to specific conditions and is not automatically available when data in compliance with the PIP are developed and submitted.

Orphan Drugs

In the European Union, Regulation (EC) No 141/2000 of the European Parliament and of the Council of December 16, 1999 on orphan medicinal products, as amended, states that a drug shall be designated as an orphan drug if its sponsor can establish that the three following cumulative conditions are met:

- the product is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition;

- the prevalence of the conditions is not more than five in ten thousand persons in the European Union when the application is made, or that it is intended for the diagnosis, prevention or treatment of a life-threatening, seriously debilitating or serious and chronic condition in the European Union and that without incentives it is unlikely that the marketing of the drug in the European Union would generate sufficient return to justify the necessary investment; and

- that there is no satisfactory method of diagnosis, prevention or treatment of the condition in question that has been authorized in the European Union or, if such method exists, that the drug will be of significant benefit to those affected by that condition.

Pursuant to Regulation (EC) No. 847/2000 of April 27, 2000 laying down the provisions for implementation of the criteria for designation of a medicinal product as an orphan medicinal product and definitions of the concepts "similar medicinal product" and "clinical superiority", an application for the designation of a drug as an orphan drug must be submitted at any stage of development of the drug before filing of a MA application.

The European Union offers incentives to encourage the development of designated orphan medicines (protocol assistance, fee reductions, etc.) and provides opportunities for market exclusivity. Pursuant to abovementioned Regulation (EC) No. 141/2000, products receiving orphan designation in the European Union can obtain market exclusivity for a certain number of years in the European Union following the marketing approval.

If a Community MA in respect of an orphan drug is granted, regulatory authorities will not, for a period of usually ten years, accept another application for a MA, or grant a MA or accept an application to extend an existing MA, for the same therapeutic indication, in respect of a similar drug. This period may however be reduced to six years if, at the end of the fifth year, it is established, in respect of the drug concerned, that the above-mentioned criteria for orphan drug designation are no longer met, in other words, when it is shown on the basis of available evidence that the product is sufficiently profitable not to justify maintenance of market exclusivity.

Pursuant to Regulation No. 1901/2006, for orphan medicinal products, instead of an extension of the supplementary protection certificate, the ten-year period of orphan market exclusivity should be extended to 12 years if the requirement for data on use in the pediatric population is fully met (i.e. when the request contains the results of all studies carried out under the approved PIP and when the declaration attesting the conformity of the request to this PIP is included in the MA).

Notwithstanding the foregoing, a MA may be granted, for the same therapeutic indication, to a similar drug if:

- the holder of the MA for the original orphan drug has given its consent to the second applicant;
- the holder of the MA for the original orphan drug is unable to supply sufficient quantities of the drug; or
- the second applicant can establish in the application that the second drug, although similar to the orphan drug already authorized, is safer, more effective or otherwise clinically superior.

The abovementioned Regulation (EC) No. 141/2000 provides for other incentives regarding orphan medicinal products.

Post-Approval Controls

The holder of a MA must comply with EU requirements applicable to manufacturing, marketing, promotion and sale of medicinal products. In particular, the holder of the MA must establish and maintain a pharmacovigilance system and appoint a Qualified Person Responsible for Pharmacovigilance, or QPPV, who is responsible for oversight of that system and who will reside and operate in the EU. Key obligations include safety expedited reporting of suspected serious adverse reactions and submission of periodic safety update reports, or PSURs.

All new MAs must include a risk management plan, or RMP, to submit to the EMA, describing the risk management system that the company will put in place and documenting measures to prevent or minimize the risks associated with the product. The regulatory authorities may also impose specific obligations as a condition of the MA. Such risk-minimization measures or post-authorization obligations may include additional safety monitoring, more frequent submission of PSURs, or the conduct of additional clinical trials or post-authorization safety studies. RMPs and PSURs are routinely available to third parties requesting access, subject to limited redactions. All advertising and promotional activities for the product must be consistent with the approved summary of product characteristics, and therefore all off-label promotion is prohibited. Direct-to-consumer advertising of prescription medicines is also prohibited in the European Union. Although general requirements for advertising and promotion of medicinal products are established under EU directives, the details are governed by regulations in each EU Member State and can differ from one country to another.

Reimbursement

The European Union provides options for its Member States to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A Member State may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. For example, in France, effective market access will be supported by agreements with hospitals and products may be reimbursed by the Social Security Fund. The price of medicines covered by national health insurance is negotiated with the French Economic Committee for Health Products, or CEPS. There can be no

assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any of our drug candidates.

Historically, products launched in the European Union do not follow price structures of the United States and generally prices tend to be significantly lower.

Other European Regulatory Matters

French Regulatory Framework for Clinical Development

In France, Directive No. 2001/20/EC has been implemented in French national law, establishing a system of prior authorization and requiring a prior favorable opinion from an ethics committee.

Parties to a CTA must use a CTA template ("unique agreement" or convention unique) to organize the conduct of interventional clinical trials with commercial purpose, as well as specific template exhibits to this agreement. The use of the unique agreement template is mandatory if the research takes place in a public health establishment, institution ("maison de sante"), or centre ("centre de sante") in France. Once concluded, the CTA is communicated for information by the sponsor to the French national board of physicians (Ordre national des médecins) without delay.

The processing of personal data, including health data, collected during clinical trials has to comply with the Regulation (EU) 2016/679 of the European Parliament and of the Council of April 27, 2016 and Law No 2018-493 of June 20, 2018 on the protection of personal data, implementing the Regulation (EU) 2016/679 requirements, as well as the guidelines of the French data protection authority, the *Commission Nationale de l'Informatique et des Libertés*, or CNIL. Regarding automatic processing operations for the purpose of research or clinical studies, formalities have to be completed before the CNIL, so as to obtain the authorization to process personal data. However, there are simplified standards.

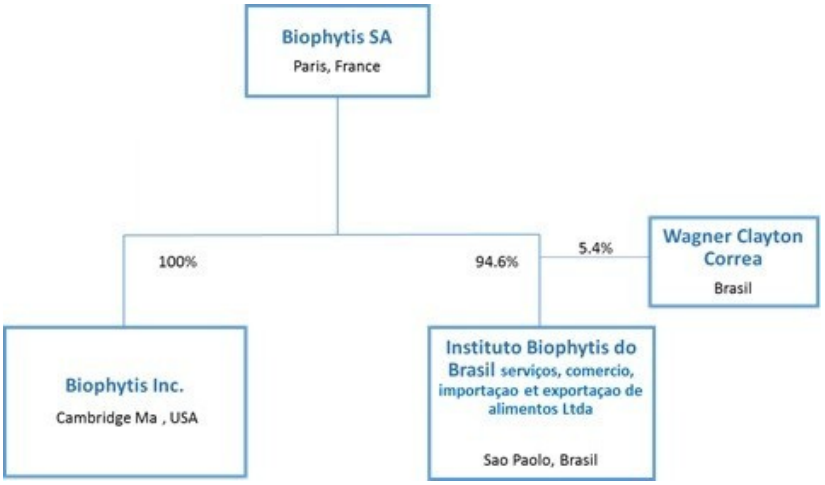
Law No. 2011-2012 of December 29, 2011, or Loi Bertrand, aimed at strengthening the health safety of medicinal and health products, as amended (and its implementing decrees), introduced into French law provisions regarding transparency of fees received by some healthcare professionals from health product industries, i.e. companies manufacturing or marketing health products (Article L.1453-1 of the French Public Health Code). The French Decree No. 2016-1939 of December 28, 2016 clarifies that companies manufacturing or marketing health care products (medicinal products, medical devices, etc.) in France shall publicly disclose (mainly on a specific public website available at: https://www.entreprises-transparence.sante.gouv.fr) the advantages and fees paid to healthcare professionals amounting to €10 or above, as well as the agreements concluded with the latter, along with detailed information about each agreement (the precise subject matter of the agreement, the date of signature of the agreement, its end date, the total amount paid to the healthcare professional, etc.). Another declaration must also be filed to the competent healthcare professional body. Several decrees have further extended the scope of these declarations. For instance, under Decree No. 2019-1530 of December 30, 2019, companies will also have to disclose agreements concluded with persons who present one or more health products in the media or social networks in such a way as to influence the public.

Law No. 2011-2012 also reinforced the French anti-gift rules. Further to subsequent modifications in 2017 and 2019, new Articles L. 1453-3 et seq. of the French Public Health Code amended the Anti-Gift regime and expanded the scope of the general prohibition of payments from pharmaceutical and device manufacturers to healthcare professionals to broadly cover any company manufacturing or marketing health products, regardless of whether or not payment for the products is reimbursed under the French social security system (new Articles L. 1453-3 et seq. of the French Public Health Code). Derogation must be submitted to the relevant healthcare professional body. Moreover, the penalties incurred for non-compliance with the requirements of the Anti-Gift regime by a healthcare company may lead to a fine of up to €750,000.

French Pharmaceutical Company Status

In France, there is a regulated status of pharmaceutical establishment and operating company, which allows us to manufacture and market drug candidates. Obtaining a pharmaceutical establishment license, either as a distributor or as a manufacturer requires the submission of an application file to the ANSM. The application package will vary depending on the type of application (distribution license or manufacturing license). The ANSM grants such license after verifying that the company has adequate premises, the necessary personnel and adequate procedures to carry out the proposed pharmaceutical activities.

C. Organizational Structure



D. Property, Plants and Equipment

We lease approximately 504 square meters of office space at Sorbonne University—BC 9, Bâtiment A 4ème étage, 4 place Jussieu, 75005 Paris, France for research and development and administrative activities. The lease agreement (convention d'occupation du domaine public) provides for a one-year renewable term. We incurred annual lease expense of €173 thousand for the year 2021. We believe that our existing facility is adequate to meet our current needs, and that suitable additional alternative spaces will be available in the future on commercially reasonable terms.

Item 4A. Unresolved Staff Comments.

Not applicable.

Item 5. Operating and Financial Review and Prospects.

Overview

We are a clinical-stage biotechnology company specialized in the development of therapeutics that are aimed at slowing the degenerative processes associated with aging and improving functional outcomes for patients suffering from age-related diseases, including severe respiratory failure in patients suffering from COVID-19. Sarconeos (BIO101), our leading drug candidate, is a small molecule, administered orally, being developed as a treatment for sarcopenia in Phase 2 clinical trials in the United States and Europe (SARA-INT). It was also studied in a clinical two-part Phase 2-3 study (COVA) for the treatment of severe respiratory manifestations of COVID-19 in Europe, Latin America, and the US. A pediatric formulation of Sarconeos (BIO101) is being developed for the treatment of Duchenne Muscular Dystrophy (DMD).

Financial Operations Overview

The following discussion sets forth certain components of our statements of operations as well as factors that impact those items.

Revenues

To date we have not generated any revenues from product sales, or otherwise, and we do not expect to recognize any revenue from the sale of products, even if we obtain regulatory approval for the products, in the near term. Our ability to generate revenue in the future will depend almost entirely on our ability to successfully develop, obtain regulatory approval for and then commercialize our drug candidates.

Research and Development Expenses

Our research and development expenses consist primarily of costs incurred in connection with the development of our drug candidates, including:

- personnel-related costs, such as salaries, bonuses, benefits, travel and other related expenses, including share-based compensation;
- expenses incurred under our agreements with CROs, clinical sites, contract laboratories, medical institutions and consultants that plan and conduct our preclinical studies and clinical trials;
- costs associated with regulatory filings;
- costs of acquiring preclinical study and clinical trial materials, and costs associated with preclinical development formulation and process development;
- depreciation, maintenance and other facility-related expenses; and
- as an offset of our research and development expenses, the CIR, which is a French tax credit dedicated to R&D.

To date, we have expensed all research and development costs as incurred, as we do not currently meet the conditions to capitalize expenditures on drug development activities, as provided in IAS 38 *Intangible Assets*.

Clinical development expenses for our drug candidates are a significant component of our current research and development expenses as we advance our drug candidates into and through clinical trials. Drug candidates in later stage clinical development generally have higher research and development costs than those in earlier stages of development, primarily due to increased size and duration of the clinical trials. We recognize costs for each grant project, preclinical study or clinical trial that we conduct based on our evaluation of the progress to completion, using information and data provided to us by our research and development vendors and clinical sites.

We expect our research and development expenses to increase for the foreseeable future as we progress our drug candidates into and through clinical trials. Furthermore, to the extent we undertake to commercialize any drug candidates approved or authorized for any indication for sale, our expenses will likely increase even more. The process of conducting the necessary clinical research to obtain regulatory approval or authorization of a drug candidate is costly and time consuming. We will require additional funding, beyond the proceeds raised in our U.S. initial public offering, to fund our continuing operations. The probability that any of our drug candidates receives regulatory approval or authorization and eventually is able to generate revenue depends on a variety of factors, including the quality of our drug candidates, early clinical data, investment in our clinical program and further clinical validation, competition, manufacturing capability and commercial viability. We may never succeed in obtaining regulatory approval or authorization for any of our drug candidates. As a result of these uncertainties, we are unable to determine the duration and completion costs of our research and development projects or if, when and to what extent we will generate revenue from the commercialization and sale of any of our drug candidates, if approved or authorized.

General and Administrative Expenses

General and administrative expenses include personnel costs, costs for outside professional services and other allocated expenses. Personnel costs consist of salaries, bonuses, benefits, travel and share-based compensation. Outside professional services consist of legal, accounting and audit services, commercial evaluation and strategy services, and other consulting services. We expect general and administrative expenses to increase in the near future with the expansion of our staff and management team to include new personnel responsible for finance, legal, information technology and later, sales and business development functions. We also expect to incur additional general and administrative costs as a result of operating as a U.S. public company, including expenses related to compliance with the rules and regulations of the SEC and those of any national securities exchange on which our securities are traded, additional insurance expense, investor relations activities and other administrative and professional services. We also expect to incur additional expenses related to in-licenses, acquisitions or similar transactions that we may pursue as part of our strategy, including legal, accounting and audit services and other consulting fees.

Net Financial Income (Expense)

Net financial income (expense) includes amortized cost of the reimbursable advances, amortized cost of non-convertible bonds and of the debt component of the convertible notes issued to Kreos Capital, change in fair value on derivative financial instruments related to the conversion option of the convertible notes issued to Kreos Capital and related to the warrants issued to Kreos Capital, fair value adjustments on convertible notes issued to NEGMA and ATLAS, the amortization of the day one losses related to the warrants attached to the convertible notes and to the debt component of the convertible notes issued to Kreos, other financial income and expense, the net financial income related to NEGMA returning to us cash settlement related to contractual terms in relation with the NEGMA litigation (as described in further detail in the paragraph "Results of Operations" below and in Note 12.2.1 to the audited consolidated financial statements), the financial indemnity paid to NEGMA in 2021 (as described in further detail in the paragraph "Results of Operations" below and in Note 13.2.1 to the audited consolidated financial statements) and foreign exchange gains and losses.

COVID-19 Impact

We have, like many other companies, experienced disruptions due to the COVID-19 pandemic. Although the COVID-19 pandemic appears to be gradually subsiding, given the rapid changes associated with COVID-19, we have and are continuing to take the necessary precautions to protect our employees, partners and operations. For example, we allow our employees to work from home on average two days a week and organize meetings and events in a virtual way whenever possible. We have also imposed restrictions on travel, which is now limited to professional imperatives only.

Our clinical studies have been impacted by COVID-19. Our SARA-INT trial in sarcopenia was impacted by the emergence of COVID-19 and lockdowns in Belgium and several American states (California and New York in particular). In light of the various measures adopted by governments and health authorities to restrict movement and protect the safety of patients, we had to adapt our SARA-INT protocol in order to ensure the continuity of the trial, in particular by closing all on-site activities, replacing them by phone calls, organizing Investigational Product delivery to patients' homes, and expanding the treatment from six to nine months for some patients. Despite these interruptions of in-office study visits and other disruptions, we were able to retain most of the study participants, and a total of 203 participants completed the SARA-INT study. The last patient completed his final on-treatment visit in December 2020. However only 106 patients could perform the 400m walk test, which was the primary endpoint of our study.

In addition, our MYODA program in DMD and MACA program for dry AMD planned for 2022 and 2023, respectively, could be delayed if new lockdowns or other restrictions are put in place as a result of a resurgence of COVID-19 or emergence of new vaccine resistant strains.

Patient recruitment for our COVA trial to treat COVID-19 patients has ended earlier than planned as a result of the evolution of the pandemic. Due to a lack of subjects meeting enrollment criteria, we have decided to stop enrollment in the COVA study with immediate effect and we plan to obtain topline results after the end of the 28-day treatment period during the second quarter of 2022 and complete results in the third quarter of 2022.

Critical Accounting Policies and Significant Judgments And Estimates

Our audited consolidated financial statements have been prepared in accordance with IFRS, as issued by the IASB. Some of the accounting methods and policies used in preparing our financial statements under IFRS are based on complex and subjective assessments by our management or on estimates based on past experience and assumptions deemed realistic and reasonable based on the circumstances. The actual value of our assets, liabilities and shareholders' equity and of our losses could differ from the value derived from these estimates if conditions change and these changes have an impact on the assumptions adopted. We believe that the most significant management judgments and assumptions in the preparation of our financial statements are described below. See Note 2.3 to our audited consolidated financial statements as of December 31, 2020 and 2021 and for each of the three years ended December 31, 2019, 2020 and 2021.

Founders' warrants and warrants granted to employees and executives

The fair value measurement of share-based payments is based on the Black-Scholes option valuation model, which makes assumptions about complex and subjective variables. These variables notably include the value of our shares, the expected volatility of the share price over the lifetime of the instrument, and the present and future behavior of holders of those instruments. There is a high

inherent risk of subjectivity when using an option valuation model to measure the fair value of share-based payments in accordance with IFRS 2 *Share-based Payment*.

Convertible Notes and Non-Convertible Bonds

During the year ended December 31, 2019, we issued non-convertible bonds to Kreos and notes convertible into ordinary shares and/or redeemable for cash with warrants attached to NEGMA.

During the year ended December 31, 2020, we issued notes convertible into ordinary shares and/or redeemable for cash to ATLAS.

During the year ended December 31, 2021, we issued notes convertible into ordinary shares and/or redeemable for cash to ATLAS and non-convertible bonds, convertible notes and warrants to Kreos Capital.

In accordance with IFRS 9 *Financial Instruments*, we measured the fair value of the convertible notes issued to NEGMA and ATLAS based on a binomial valuation model, which makes assumptions about complex and subjective variables. These variables notably include the value of our shares, the expected volatility of the share price over the lifetime of the instrument, and the assumed present and future behavior (including estimated timing of exercise, conversion and other decisions) of holders of those instruments. There is a high inherent risk of subjectivity when using an option valuation model to measure the fair value of financial instruments and equity instruments in accordance with IAS 32 *Financial Instruments: presentation*, and IFRS 9 *Financial Instruments*.

In accordance with IFRS 9 *Financial Instruments*, convertible notes issued to NEGMA and ATLAS were measured at fair value on the date of issuance (based on a binomial valuation model) with recognition of the changes in fair value in the consolidated statement of operations. At issuance date, a day one loss has been recognized in financial expense for the difference between the fair value of the convertible notes and the nominal value of the debt adjusted of the equity instruments related to the attached warrants (if any).

The warrants issued to NEGMA in 2019 and KREOS in 2018 are recognized at fair value at the issuance date through equity in accordance with IFRS 9 *Financial Instruments*.

In accordance with IFRS 9 *Financial Instruments*, the convertible notes issued to Kreos Capital with warrants were considered as an hybrid contract with a debt component and derivative instruments related to the conversion option and the warrants.

The convertible notes were initially recognized at fair value (based on the black&scholes valuation model) and subsequently bifurcated in a debt component recorded at amortized cost and a derivative instrument recorded at fair value through profit or loss. The Company determined that the fair value of the convertible notes and warrants on initial recognition differs from the transation price. A day one loss has been recognized at issuance date as a separate asset under other non-current financial asset line item and is amortized over the maturity of the instruments.

Due to contractual clauses, the Company determined that the warrants could not be settled in all circumstances by the exchange of a fixed amount of cash for a fixed number of the Company's own equity instrument. As a result, the warrants issued to KREOS in November 2021 at the same time as the loan arrangement with Kreos have been considered as derivative instruments recorded at fair value through profit or loss. Subsequent changes in fair value of the warrants are recognized in the statement of consolidated operations in accordance with IFRS 9 *Financial Instruments*.

The warrants issued to Kreos in 2018 were initially recognized as equity instruments. By subscribing to the 2021 warrants, Kreos Capital has expressly waived the right to exercise the 2018 warrants. As a result, the 2018 warrants were measured at fair value (based on the Black-Scholes valuation model) on November 19, 2021 and recognized as a reduction of equity.

Non-recognition of deferred tax assets net of deferred tax liabilities

The determination of the amount of deferred tax assets which can be recognized requires management to make estimates on both the period in which tax losses carried forward will be realizable, and the level of future taxable income.

As of December 31, 2019, 2020 and 2021, no deferred tax asset has been recognized in our financial statements except as a result of the expected taxable income to be derived from deferred tax liabilities.

We recognized in 2019:

- a deferred tax liability with respect to the equity component of the non-convertible bonds issued in 2019 for €80 thousand, as a decrease of equity on initial recognition under IAS 12 *Income Taxes*; and
- a deferred tax asset with respect to net operating losses (NOLs) carried forward as a result of the deferred tax liabilities generated, resulting in deferred tax income of €80 thousand in the statement of consolidated operations.

No deferred tax liability nor deferred tax assets were recognized in 2020 and in 2021.

The JOBS Act

As an "emerging growth company" under the JOBS Act, we can take advantage of an extended transition period for complying with new or revised accounting standards. This allows an "emerging growth company" to delay the adoption of certain accounting standards until those standards would otherwise apply to private companies. We will not take advantage of the extended transition period provided under Section 7(a)(2)(B) of the Securities Act for complying with new or revised accounting standards. Since IFRS makes no distinction between public and private companies for purposes of compliance with new or revised accounting standards, the requirements for our compliance as a private company and as a public company are the same.

We are in the process of evaluating the benefits of relying on other exemptions and reduced reporting requirements under the JOBS Act. Subject to certain conditions, as an "emerging growth company", we intend to rely on certain of these exemptions including, without limitation, the exemptions from providing an auditor's attestation report on our system of internal controls over financial reporting pursuant to Section 404(b) of the Sarbanes-Oxley Act. We will remain an "emerging growth company" until the earliest of: (1) the last day of the fiscal year in which we have total annual gross revenues of $1.07 billion or more; (2) the last day of the fiscal year following the fifth anniversary of the closing date of our U.S. initial public offering; (3) the date on which we have issued more than $1 billion in non-convertible debt during the previous three years; and (4) the date on which we are deemed to be a large accelerated filer under the rules of the SEC.

A. Operating Results

Comparison for the years ended December 31, 2020 and 2021

(Amounts in thousands of euros)	December 31, 2020	December 31, 2021
Revenue	—	—
Costs of sales	—	—
Gross margin	**—**	**—**
Research and development, net	(9,921)	(19,665)
General and administrative expenses	(4,021)	(7,150)
Operating loss	**(13,942)**	**(26,815)**
Financial expenses	(1,531)	(2,581)
Financial income	34	24
Change in fair value of convertible notes	(10,080)	(1,875)
Net financial expense	**(11,575)**	**(4,432)**
Loss before taxes	**(25,517)**	**(31,247)**
Income taxes benefit (expenses)	—	—
Net loss	**(25,517)**	**(31,247)**

Research and Development Expenses

Research and development expenses may be summarized as follows for the years ended December 31, 2020 and 2021.

(Amounts in thousands of euros)	December 31, 2020	December 31, 2021
Personnel expenses	(2,553)	(4,392)
Purchases and external expenses	(10,459)	(19,345)
Other	(251)	(264)
Research and development expenses	**(13,263)**	**(24,001)**
Research tax credit	3,328	4,080
Subsidies	14	256
Research tax credit and Subsidies	**3,342**	**4,336**
Research and development, net	**(9,921)**	**(19,665)**

Personnel costs, including stock-based payments for engineers and research personnel, were €2,553 thousand and €4,392 thousand for the years ended December 31, 2020 and 2021, respectively. The increase in personnel expenses in 2021 compared to 2020 was related to the staff reinforcement as part of the COVA clinical study and expenses relating to share-based payment for €2,125 thousand in 2021 compared to €367 thousand in 2020.

Purchases and external expenses related to our research activity were €10,459 thousand and €19,345 thousand for the years ended December 31, 2020 and 2021, respectively. The increase in purchases and external expenses related to our studies and research costs was primarily related to the progression of our COVA Phase 2-3 study as well as to the finalization for results publication of our SARA-INT phase 2 study. These expenses consisted primarily of the cost of CROs in conducting clinical trials and non-clinical studies, as well as the costs of CDMOs for the manufacturing scaling-up of Sarconeos (BIO101) in preparation of a potential filing with Regulatory Authorities upon positive results from COVA.

We have benefited from the Research Tax Credit (CIR) since our incorporation. The CIR amounted to €3,328 thousand and €4,080 thousand for the years ended December 31, 2020 and 2021, respectively. In December 2020, a portion of the CIR receivable for 2020 was prefinanced by the FONDS COMMUN DE TITRISATION PREDIREC INNOVATION 2020 with NEFTYS CONSEIL SARL as arranger, or NEFTYS. In December 2021, a portion of the CIR 2021 receivable (€3,450 thousand) was prefinanced by NEFTYS.

As part of the BPI France conditional advance for the “BIO 201” project, the Company was entitled to receive a grant of €380 thousand, of which €202 thousand was recognized as a subsidy in 2021 since 53% of the budget of research and development expenses were incurred at the closing date.

General and Administrative Expenses

General and Administrative expenses may be summarized as follows for the years ended December 31, 2020 and 2021.

(Amounts in thousands of euros)	December 31, 2020	December 31, 2021
Personnel costs	(1,796)	(3,107)
Purchases and external expenses	(2,188)	(3,991)
Other	(37)	(52)
General and administrative expenses	**(4,021)**	**(7,150)**

Personnel costs, including share-based payments, for general management and administrative staff were €1,796 thousand and €2,836 thousand for the years ended December 31, 2020 and 2021, respectively. This increase was mainly due to the reinforcement of the Company’s staff, mostly for Business Development and Sox Compliance, as well as to the impact of the stock based compensation expense related to Founders’ warrants and free shares granted in late 2020 and in 2021.

Purchases and external expenses were €2,188 thousand and €3,991 thousand for the years ended December 31, 2020 and 2021, respectively. These expenses consisted primarily of administrative expenses associated with being a public listed company in France and in the United States since February 2021, accounting and audit fees, insurance and legal fees.

Net Financial Expense

Net financial expense may be summarized as follows for the years ended December 31, 2020 and 2021.

(Amounts in thousands of euros)	December 31, 2020	December 31, 2021
Financial interest of the non-convertible bonds and convertible notes issued and amortized cost of the non-convertible to Kreos	(817)	(555)
Change in fair value of convertible notes issued to ATLAS and NEGMA and derivative instruments	(10,080)	(1,875)
NEGMA financial indemnity		(1,695)
Other financial expenses	(231)	(383)
Transaction costs related to the issuance of convertible notes	(453)	(166)
Net financial income related to NEGMA returning to Biophytis damages paid	34	20
Amortization of the day one losses		(54)
Other financial income	1	4
Foreign exchange gains (losses)	(29)	14
Net financial expense	**(11,575)**	**(4,432)**

Net financial expense was €(11,575) thousand and €(4,432) thousand for the years ended December 31, 2020 and 2021, respectively.

During the year ended December 31, 2021, the change in fair value of convertible notes and derivative instruments was related to (i) the change in fair value of the ORNANE issued to Negma for €1,307 thousand, (ii) the change in fair value of the ORNANE issued to Atlas for (€3,017) thousand and (iii) the change in fair value of the derivative instruments for (€174) thousand.

During the year ended December 31, 2020, the change in fair value of convertible notes and derivative instruments was related to (i) the change in fair value of the ORNANE issued to Negma for (€5,304) thousand, (ii) the change in fair value of the ORNANE issued to Atlas for (€4,776) thousand.

NEGMA agreement

On August 21, 2019, we signed an agreement with NEGMA providing for up to €24 million in financing to us through the issuance of multiple tranches of convertible notes with attached warrants (ORNANEBSA), at our sole discretion.

Pursuant to this agreement, the board of directors approved the issuance of the following convertible notes and warrants during the year ended December 31, 2019:

- A first tranche on August 21, 2019 of 300 ORNANE plus a commitment fee of 30 ORNANE, with attached warrants to purchase 585,936 shares (BSA_{T1}), resulting in gross proceeds to us of €3 million; and

- A second tranche on December 27, 2019 of 300 ORNANE, out of which 50% were paid by NEGMA as of December 31, 2019, resulting in gross proceeds to us of €1.5 million and with attached warrants to purchase 694,444 shares (BSA_{T2}).

On April 6, 2020, as part of the implementation of the ATLAS agreement described below, we terminated the contract with NEGMA.

Following this termination, NEGMA undertook legal action in order to claim damages of €910,900 from us as well as the delivery of 7,000,000 ordinary shares, that NEGMA considers it was entitled to pursuant to the only ORNANES still held by NEGMA, issued in consideration for a loan of €1,400,000 (140 bonds with par value of €10 thousand each).

The sum of €910,900 claimed by NEGMA corresponds to the contractual penalties alleged by NEGMA under the terms of our agreement with NEGMA, which provided for the payment of such penalties in the event of conversion of bonds into shares when the stock price is below the par value of the shares. We vigorously dispute this legal action and these requests for payment and delivery of shares.

Pursuant to a summary judgment dated May 7, 2020, NEGMA obtained a decision partially responding to its claims ordering us, under penalty (which amounted to €7 thousand), to pay €378 thousand as a settlement according to the contractual terms of the Negma agreement on ORNANE for which Negma had sent a conversion notice before April 6, 2020 and deliver 2,050,000 ordinary shares to NEGMA.

The Company and NEGMA appealed the decision of the Paris Commercial Court.

On November 18, 2020, the Paris Court of Appeal cancelled the May decision and ordered NEGMA to return to us the 2,050,000 shares previously delivered to NEGMA as well as the provision of €378 thousand. In addition, NEGMA is required to pay €41 thousand to us as additional compensation recorded under the financial result of the period.

As of December 31, 2020, the Company recognized the right to receive the 2,050,000 shares to be returned by Negma in equity for €1,210 thousand in counterparts of the recognition of a financial liability. As of December 31, 2020, the financial liability due to Negma amounted to €7,357 thousand which represent 7,000,000 shares at fair value (€6,447 thousand) and the contractual penalties alleged by NEGMA (€910 thousand). As of December 31, 2021, the Company has fulfilled all of its obligations under the judgment of the Paris-Commercial Court rendered on March 16, 2021 and under the judgement rendered on July 16, 2021 by the judge of the Paris Court of Justice in charge of overseeing the execution of judgments as detailed below. The financial liability due to Negma as of December 31, 2021 is nil.

During the year 2020, 68 bonds held by NEGMA were converted into new shares generating the issuance of 3,400,000 shares under the formula mentioned above for tranche 1 and tranche 2.

NEGMA also exercised all BSA_{T2} during the year ended December 31, 2020 generating the issuance of 694,444 shares. All BSA_{T1} were still outstanding as of December 31, 2020. During the year ended December 31, 2021, NEGMA exercised all BSA_{T1} generating the issuance of 585,936 shares at a share price of €0.64.

On March 16, 2021, the Paris Commercial Court rendered a judgement in NEGMA's favor and ordered Biophytis to pay NEGMA a sum of €910 thousand in contractual penalties with late payment interest calculated at the LIBOR rate + 10%, to deliver to NEGMA 7,000,000 shares, subject to a penalty of €50 thousand per day of delay as from the tenth day after the notification of the judgment and for a period of 30 days and to pay NEGMA €100 thousand under article 700 of the French Code of Civil Procedure as well as the expenses and legal costs.

Biophytis filed a petition with the Paris Commercial Court on the ground of failure of the Judgment to rule on certain claims made by the Company in the proceedings and appealed the Judgment to the Paris Court of Appeal.

In addition, as regards to the execution of this Judgement, Biophytis has served NEGMA with a petition filed with the Presiding Judge of the Paris Court of Appeal requesting that immediate enforcement of the Judgment be stayed or, alternatively, that it be modified. Oral argument on this matter occurred on September 6, 2021 and the court is still deliberating.

In the meantime, on June 24, 2021, NEGMA served Biophytis with a petition filed with the judge of the Paris Court of Justice charged with overseeing the execution of judgments requesting (i) the payment of the fine for non-performance imposed by the Judgment in connection with its order to Biophytis to deliver 7,000,000 shares and (ii) that a final fine for non-performance be set.

Pursuant to a judgment rendered on July 16, 2021, the judge of the Paris Court of Justice in charge of overseeing the execution of judgments partially granted NEGMA's claims (i) ordered Biophytis to pay the fine for non-performance imposed by the Judgment for €1,500 thousand, (ii) imposed a new provisional fine for non-performance of €50 thousand per day of delay in complying with the Judgment's order against Biophytis, as of the tenth day from service of this judgment, for a period of 30 days, (iii) ordered Biophytis to pay NEGMA €8 thousand pursuant to Article 700 of the Code of Civil Procedure and (iv) ordered Biophytis to pay the costs of the proceedings.

Biophytis has fulfilled all of its obligations under the above two judgments.

During the year ended December 31, 2021, the Company has paid (i) the contractual penalties (€910 thousand recorded in the financial liability due to NEGMA as of December 31, 2020), (ii) the fine for non-performance imposed by the Judgment €1,500 thousand, (iii) €108 thousand pursuant to Article 700 of the Code of Civil Procedure and (iv) late payment interest of €87 Thousand.

As a result, the Company recorded financial indemnities of €1,695 thousand in the statement of operations during the year ended December 31, 2021.

With regard in particular to the delivery of 7,000,000 shares to NEGMA, Biophytis has (i) delivered in August 2021 to NEGMA the 2,050,000 shares created and delivered to NEGMA in June 2020 and returned by NEGMA to Biophytis under the judgment of the Paris Court of Appeal dated November 18, 2020, which Biophytis had kept in self-holding for a total amount of €1,521 thousand and (ii) issued 4,950,000 new shares to NEGMA in August 2021 as part of a capital increase reserved for it on the basis of the 13th delegation of the general meeting of May 10, 2021 for a total amount of €3,619 thousand.

Biophytis has appealed against this judgment and, more generally, is taking all measures to safeguard its interests.

Following the delivery of the 2,050,000 shares and the issuance of the 4,950,000, the Company recorded in the statement of operations changes in fair value of the financial liability due to Negma of €1,307 thousand as of December 31, 2021.

Changes in fair value of the financial liability due to Negma amounted to (€5,304) thousand during the year ended December 31, 2020.

ATLAS contracts

In April 2020, we signed a new convertible bond financing of €24 million with ATLAS (the "2020 ATLAS Contract") to continue the development of Sarconeos (BIO101). We issued a first tranche of €3 million on April 29, 2020, a second tranche of €3 million on June 19, 2020, and a third tranche of €3 million on August 28, 2020.

In 2020, 330 convertible notes (nominal value of €25 thousand each) were converted and the remaining 30 notes were redeemed in cash. As of December 31, 2020, there were no outstanding convertible notes issued to ATLAS.

On May 27, 2021, we issued a fourth and fifth tranche of €3 million each. On September 20, 2021, we issued a sixth and seventh tranche of €3 million each. On December 20, 2021, we issued an eighth of €3 million.

As of December 31, 2021, 376 convertible notes had been converted and there are 224 convertible notes outstanding. Pursuant to the 2020 ATLAS Contract, all ORNANEs have been issued to ATLAS.

In June 2021, we signed a new convertible bond financing of up to €32 million (8 tranches with a nominal value of €4 million each) with ATLAS (the "2021 ATLAS Contract") to continue the development of Sarconeos (BIO 101) through the issuance of multiple convertible notes. As of December 31, 2021, no convertible notes have been issued as part of this contract. Since December 31, 2021, we drew down €4 million from our 2021 credit facility with ATLAS.

During the years ended December 31, 2021 and December 31, 2020, the Company recorded in the statement of operations changes in fair value of the convertible notes issued to Atlas for (€3,017) thousand and (€4,776) thousand, respectively.

Kreos agreements

In accordance with IFRS 9, the non-convertible debt component related to the 2018 Kreos venture loan agreement is measured according to the amortized cost method, which amounted to €0.9 million as of December 31, 2021 and to €4.4 million as of December 31, 2020.

On November 19, 2021, we signed a new venture loan agreement and bonds issue agreement which could provide for up to €10 million in financing to us through the issuance by us to Kreos of non-convertible bonds for €7.75 million (straight bonds) and convertible notes of €2.25 million, plus the issuance of attached warrants to the first tranche.

The loan agreement includes four tranches of respectively €2.5 million, €3.0 million, €2.5 million and €2.0 million. The two first tranches were drawn upon signing of the contract on November 19, 2021, the third tranche limited to €677 thousand was drawn on December 29, 2021.

In accordance with IFRS 9, the non-convertible bonds related to the 2021 Kreos venture loan agreement are initially recognized at fair value and subsequently measured at amortized cost, which amounted to €5.2 million as of December 31, 2021.

Due to contractual clauses, the Company determined that the conversion option could not be settled in all circumstances by the exchange of a fixed amount of cash for a fixed number of the Company's own equity instrument. As a result, in accordance with IFRS 9, the convertible notes were considered as an hybrid contract with a debt component and a derivative instrument related to the conversion option.

The conversion option was measured at fair value on the date of issuance (based on the Black-Scholes valuation model) with recognition of the changes in fair value in the statement of consolidated operations in accordance with IFRS 9. As of December 31, 2021, the derivative financial instruments related to the warrants amounted to €839 thousand.

The warrants have been considered as derivative instruments due to parity not fixed. A deferred day one loss has been recognized as a financial asset for the fair value of the warrants at issuance date and amortized over the maturity of the warrants (84 months). Subsequent changes in fair value of the warrants are recognized in the statement of consolidated operations in accordance with IFRS 9. As of December 31, 2021, the derivative financial instruments related to the warrants amounted to €639 thousand.

During the year ended December 31, 2021, the Company recognized €555 thousand (€817 thousand in 2020) of interest expense and amortized costs related to Kreos loan agreements.

During the year ended December 31, 2021, the change in fair value of the derivative instruments related to the conversion option and the warrants amounted to (€174) thousand.

Comparison for the years ended December 31, 2019 and 2020

(Amounts in thousands of euros)	December 31, 2019	December 31, 2020
Revenue	—	—
Costs of sales	—	—
Gross margin	**—**	**—**
Research and development, net	(9,089)	(9,921)
General and administrative expenses	(6,593)	(4,021)
Operating loss	**(15,682)**	**(13,942)**
Financial expenses	(1,496)	(1,531)
Financial income	18	34
Change in fair value of convertible notes	(1,867)	(10,080)
Net financial expense	**(3,344)**	**(11,575)**
Loss before taxes	**(19,026)**	**(25,517)**
Income taxes benefit	80	—
Net loss	**(18,946)**	**(25,517)**

Research and Development Expenses

Research and development expenses may be summarized as follows for the years ended December 31, 2019 and 2020.

(Amounts in thousands of euros)	December 31, 2019	December 31, 2020
Personnel expenses	(3,063)	(2,553)
Purchases and external expenses	(8,660)	(10,459)
Other	(214)	(251)
Research and development expenses	**(11,937)**	**(13,263)**
Research tax credit	2,807	3,328
Subsidies	41	14
Research tax credit and Subsidies	**2,848**	**3,342**
Research and development, net	**(9,089)**	**(9,921)**

Personnel costs, including stock-based payments for engineers and research personnel, were €3,063 thousand and €2,553 thousand for the years ended December 31, 2019 and 2020, respectively. The decrease in personnel expenses in 2020 compared to

2019 was related to the downsizing of our structure initiated during the second half of 2019 and also to a lower average salary for new employees in 2020.

Purchases and external expenses related to our research activity were €8,660 thousand and €10,456 thousand for the years ended December 31, 2019 and 2020, respectively. The increase in purchases and external expenses related to our studies and research costs was primarily related to the progression of our SARA-INT study and the launch of our COVA study. These expenses consisted primarily of the cost of CROs in conducting clinical trials and non-clinical regulatory studies.

Research and development expenses related to activities in connection with conducting clinical trials and non-clinical studies of our drug candidates for the treatment of age-related diseases and the treatment of severe respiratory failure in patients suffering from COVID-19.

We have benefited from the Research Tax Credit (CIR) since our incorporation. The CIR amounted to €2,807 thousand and €3,328 thousand for the years ended December 31, 2019 and 2020, respectively. In December 2019, a portion of the CIR receivables for 2018 and 2019 were prefinanced by FONDS COMMUN DE TITRISATION PREDIREC INNOVATION 2020 with NEFTYS CONSEIL SARL as arranger, or NEFTYS. CIR receivables for 2018 (€3,133 thousand) and 2019 (€3,243 thousand) were subsequently reimbursed by the French Tax Authorities in January 2020 and June 2020, respectively. The prefinanced receivables were then reimbursed directly to NEFTYS. In December 2020, a portion of the CIR 2020 receivables was prefinanced by NEFTYS. This operation followed the same rules described above.

General and Administrative Expenses

General and Administrative expenses may be summarized as follows for the years ended December 31, 2019 and 2020.

(Amounts in thousands of euros)	December 31, 2019	December 31, 2020
Personnel costs	(1,998)	(1,796)
Purchases and external expenses	(2,393)	(2,188)
Other	(2,203)	(37)
General and administrative expenses	**(6,593)**	**(4,021)**

Personnel costs, including share-based payments, for general management and administrative staff were €1,998 thousand and €1,796 thousand for the years ended December 31, 2019 and 2020, respectively. This decrease was due to the downsizing of our G&A functions.

Purchases and external expenses were €2,393 thousand and €2,188 thousand for the years ended December 31, 2019 and 2020, respectively. These expenses consisted primarily of administrative expenses associated with being a public listed company in France, accounting and audit fees, and legal fees.

In its decision dated October 1, 2019, the French Financial Market Authority, or the AMF, imposed a financial penalty of €100 thousand on us for failing to immediately communicate to the market the privileged information relating to the significant delay in the entry in phase 2 of clinical studies of two drug candidates. The Company settled this liability along with a late-filing penalty of €10 thousand. This amount is included in the general and administrative expenses for 2019.

The overall decrease in general and administrative expenses for the year ended December 31, 2020, was primarily due to the one-off fees related to our attempted 2019 Nasdaq listing application.

Net Financial Expense

Net financial expense may be summarized as follows for the years ended December 31, 2019 and 2020.

(Amounts in thousands of euros)	December 31, 2019	December 31, 2020
Financial interest and amortized cost of the non-convertible bonds	(1,125)	(817)
Change in fair value of convertible notes	(1,867)	(10,080)
Other financial expenses	(51)	(231)
Transaction costs related to the issuance of convertible notes	(320)	(453)
Net financial income related to NEGMA returning to Biophytis damages paid	—	34
Other financial income	4	1
Foreign exchange gains (losses)	14	(29)
Net financial expense	**(3,344)**	**(11,575)**

Net financial expense was €(3,344) thousand and €(11,575) thousand for the years ended December 31, 2019 and 2020, respectively.

During the year ended December 31, 2020, the change in fair value of convertible notes and derivative instruments was related to (i) the change in fair value of the ORNANE issued to Negma for (€5,304) thousand, (ii) the change in fair value of the ORNANE issued to Atlas for (€4,776) thousand.

During the year ended December 31, 2019, the change in fair value of convertible notes and derivative instruments was related to the change in fair value of the ORNANE issued to Negma for (€1,867) thousand.

On August 21, 2019, we signed an agreement with NEGMA providing for up to €24 million in financing to us through the issuance of multiple tranches of convertible notes with attached warrants (ORNANEBSA), at our sole discretion.

Pursuant to this agreement, the board of directors approved the issuance of the following convertible notes and warrants during the year ended December 31, 2019:

- A first tranche on August 21, 2019 of 300 ORNANE plus a commitment fee of 30 ORNANE, with attached warrants to purchase 585,936 shares (BSA_{T1}), resulting in gross proceeds to us of €3 million; and

- A second tranche on December 27, 2019 of 300 ORNANE, out of which 50% were paid by NEGMA as of December 31, 2019, resulting in gross proceeds to us of €1.5 million and with attached warrants to purchase 694,444 shares (BSA_{T2}).

In April 2020, we signed a new convertible bond financing of €24 million with ATLAS to continue the development of Sarconeos (BIO101). We issued a first tranche of €3 million on April 29, 2020, a second tranche of €3 million on June 19, 2020, and a third tranche of €3 million on August 28, 2020. In 2020, 330 convertible notes (nominal value of €25 thousand each) were converted and the remaining 30 notes were redeemed in cash. As of December 31, 2020, there were no outstanding convertible notes issued to ATLAS.

On April 6, 2020, as part of the implementation of the ATLAS agreement, we terminated the contract with NEGMA.

Following this termination, NEGMA undertook legal action in order to claim damages of €910,900 from us as well as the delivery of 7,000,000 ordinary shares, that NEGMA considers it was entitled to pursuant to the only ORNANES still held by NEGMA, issued in consideration for a loan of €1,400,000 (140 bonds with par value of €10 thousand each).

The sum of €910,900 claimed by NEGMA corresponds to the contractual penalties alleged by NEGMA under the terms of our agreement with NEGMA, which provided for the payment of such penalties in the event of conversion of bonds into shares when the stock price is below the par value of the shares. We vigorously dispute this legal action and these requests for payment and delivery of shares.

Pursuant to a summary judgment dated May 7, 2020, NEGMA obtained a decision partially responding to its claims ordering us, under penalty (which amounted to €7 thousand), to pay €378 thousand as a settlement according to the contractual terms of the Negma agreement on ORNANE for which Negma had sent a conversion notice before April 6, 2020 and deliver 2,050,000 ordinary shares to NEGMA.

The Company and NEGMA appealed the decision of the Paris Commercial Court (see Note 14).

On November 18, 2020, the Paris Court of Appeal cancelled the May decision and ordered NEGMA to return to us the 2,050,000 shares previously delivered to NEGMA as well as the provision of €378 thousand. In addition, NEGMA is required to pay €41 thousand to us as additional compensation recorded under the financial result of the period.

As of December 31, 2020, the Company recognized the right to receive the 2,050,000 shares to be returned by NEGMA in equity for €1,210 thousand in counterparts of the recognition of a financial liability. As of December 31, 2020, the financial liability due to NEGMA amounted to €7,357 thousand which represent 7,000,000 shares at fair value (€6,447 thousand) and the contractual penalties alleged by NEGMA (€910 thousand).

During the year 2020, 68 bonds held by NEGMA were converted into new shares generating the issuance of 3,400,000 shares under the formula mentioned above for tranche 1 and tranche 2.

NEGMA also exercised all BSA_{T2} during the year ended December 31, 2020 generating the issuance of 694,444 shares. All BSA_{T1} were still outstanding as of December 31, 2020.

Income taxes

In 2019, a deferred tax asset was recognized through the consolidated statement of operations to offset the deferred tax liability related to the equity component of the non-convertible bonds and the convertible notes recorded in equity.

B. Liquidity and Capital Resources

As of December 31, 2021, we had cash and cash equivalents of €23,926 thousand.

Cash in excess of immediate requirements is invested in accordance with our investment policy, primarily with a view to liquidity and capital preservation. Currently, our funds are held in bank accounts and fixed bank deposits primarily in France.

Our operations have been financed primarily by capital contributions from our founders, capital increases carried out between 2006 and 2021, convertible debt instruments with warrants, non-convertible bonds and net proceeds from the initial public offering of our ordinary shares on the Euronext Growth Market in France in 2015 and, into 2021, from the proceeds from our U.S initial public offering. Our primary uses of capital are, and we expect will continue to be, third-party expenses associated with the planning and conduct of preclinical studies and clinical trials, costs of process development services and manufacturing of our drug candidates, and compensation-related expenses.

We do not expect to generate significant revenue from product sales unless and until we out-license one or more drug candidates or we obtain regulatory approval or authorization for and commercialize our current or any future drug candidates, either directly or through others. We anticipate that we will continue to generate losses for the foreseeable future, and we expect our losses to increase as we continue the development of and seek regulatory approvals and authorizations for our drug candidates and begin to commercialize any approved or authorized products.

We are subject to numerous risks applicable to the development of new products, and we may encounter unforeseen expenses, difficulties, complications, delays and other unknown factors that may harm our business. We expect to incur additional costs associated with operating as a public company in the United States and we anticipate that we will need substantial additional funding in connection with our continuing operations.

Our future funding requirements will depend on many factors, including the following:

- the scope, rate of progress, results and cost of our preclinical studies and clinical trials and other related activities;

- the cost of formulation, development, manufacturing of clinical supplies and establishing commercial supplies of our drug candidates and any other drug candidates that we may develop, in-license or acquire;
- the cost, timing and outcomes of pursuing regulatory approvals and authorizations;
- the cost and timing of establishing administrative, sales, marketing and distribution capabilities, to the extent we undertake to commercialize our products directly;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish, including any required milestone and royalty payments thereunder; and
- the emergence of competing technologies and their achieving commercial success before we do or other adverse market developments.

Our ability to achieve and maintain profitability will depend upon the successful development, regulatory approval, authorization, and commercialization of our drug candidates and achieving a level of revenues adequate to support our cost structure. We may never achieve profitability, and unless and until we do, we will continue to need to raise additional capital. If we need to raise additional capital to fund our operations and complete our ongoing and planned clinical trials, funding may not be available to us on acceptable terms, or at all.

We plan to continue to fund our operations and capital funding needs through a combination of equity offerings, debt financings and collaborations. The sale of additional equity would result in additional dilution to our shareholders. The incurrence of debt financing would result in debt service obligations and the instruments governing such debt could provide for operating and financing covenants that would restrict our operations. If we are not able to secure adequate additional funding, we may be forced to make reductions in spending, extend payment terms with suppliers, sell assets where possible or suspend or curtail planned programs. In addition, lack of funding would limit any strategic initiatives to in-license or acquire additional drug candidates or programs.

As of December 31, 2021, we had capital resources consisting of cash, cash equivalents of €23.9 million ($27.1 million, translated solely for convenience into dollars at an exchange rate of €1.00 = $1.1318, the noon buying rate of the Federal Reserve Bank of New York on December 31, 2021).

In June 2021, we signed a new convertible bond financing of up to €32 million (8 tranches with a nominal value of €4 million each) with ATLAS (the "2021 ATLAS Contract") to continue the development of Sarconeos (BIO 101) through the issuance of multiple convertible notes.

We expect that our existing capital resources as adjusted by the effect of those events, and including our ability to draw down on our credit facility with ATLAS (up to €32 million) will be sufficient to fund our current operations at least for the next 12 months. However, this estimate is based on assumptions that may prove to be wrong, and we could use our capital resources sooner than we currently expect. In any event, we will need additional funding to pursue preclinical and clinical activities, obtain regulatory approval and authorization for, and commercialize our drug candidates.

Cash Flows

	Year Ended December 31,		
(Amounts in thousands of euros)	**2019**	**2020**	**2021**
Net cash (used in) provided by:			
Operating activities	(15,051)	(9,743)	(23,795)
Investing activities	(278)	(12,713)	12,160
Financing activities	7,278	21,953	29,715
Effect of exchange rate changes on cash and cash equivalents	(18)	13	(1)
Net increase (decrease) in cash and cash equivalents	(8,069)	(490)	18,079

Operating Activities

Net cash used in operating activities were €15,051 thousand, €9,743 thousand and €23,795 for the years ended December 31, 2019, 2020 and 2021, respectively. The decrease in net cash used from 2019 to 2020 is mainly related to the one-off fees related to the

postponed Nasdaq listing in July 2019 and the decrease in research tax credit receivables from 2019 to 2020. The increase in net cash used from 2020 to 2021 is mainly related to the research costs incurred as part of the COVA clinical study and SARA-INT.

Investing Activities

Net cash used in investing activities was €278 thousand and €12,713 thousand for the years ended December 31, 2019 and 2020, respectively. Net cash provided in investing activities was €12,160 thousand for the year ended December 31, 2021.

As part of the Intellectual Property Agreement signed with our CEO in 2019, we acquired from our CEO the rights to use patents for €1,350 thousand between 2019 and 2021, which are amortized over 19 years, €270 thousand of which was paid in 2019, €180 thousand in 2020 and €270 thousand of which was paid in 2021. The remaining amount was applied to the CEO's subscription and the exercise of Founders warrants in 2020.

In 2020, we purchased short-term deposits for €12,500 thousand, classified as other current financial assets in accordance with IAS 7.

In 2021, we sold short-term deposits for €12,500 thousand, classified as other current financial assets in accordance with IAS 7.

Financing Activities

Net cash provided by financing activities were €7,278 thousand, €21,953 thousand and €29,715 for the years ended December 31, 2019, 2020 and 2021, respectively.

On March 1, 2019, we issued one tranche of non-convertible bonds to Kreos for €2,500 thousand. A guarantee deposit of €80 thousand was withheld by Kreos from the proceeds received by us. The amount withheld will be deducted from the last installment to be repaid by us. In relation to these debt issuances, we incurred costs of €50 thousand. In 2019, we repaid €2,292 thousand.

On August 21, 2019, we issued one tranche of convertible notes with attached warrants to NEGMA for €3,000 thousand (300 convertible notes), plus a commitment fee of 30 convertible notes. On December 26, 2019, we issued a second tranche out of which 50% were paid by NEGMA, resulting in gross proceeds to us of €1.5 million (150 convertible notes). 242 convertible notes were converted in 2019 resulting in the issuance of 10,499,841 ordinary shares.

In December 2019, a portion of the research tax credit receivables for 2019 and 2018 was prefinanced by NEFTYS for net proceeds of €4,355 thousand after deducting issuance costs, amortized costs and guarantee deposit.

In 2020, we issued an aggregate of 49,295,005 ordinary shares in four capital increases that occurred in February, June, July and October for total gross proceeds to us of €23,486 thousand. In relation to these equity transactions, we incurred costs of €3,496 thousand.

Pursuant to a summary judgement dated May 7, 2020, we were required under penalty (which amounted to €7 thousand) to pay €378 thousand as a settlement according to contractual terms of the NEGMA agreement on ORNANE for which Negma had sent a conversion notice before April 6, 2020 and deliver 2,050,000 ordinary shares to NEGMA. Following the decision of the Paris Court of Appeal in November 2020, we received an indemnity from NEGMA of €419 thousand.

Proceeds from the subscription of warrants and the exercise of warrants amounted to €271 thousand and €862 thousand, respectively, for 2020. The subscription and the exercise of the investors' warrants by our CEO in April 2020 was settled against the €630 thousand due to our CEO following our acquisition of patents rights (€177 thousand for the subscription of warrants and €453 thousand for the exercise of warrants).

Proceeds from the subscription of warrants and founders' warrants amounted to €742 thousand in 2021.

In April, June and August 2020, we issued three tranches of convertible notes to ATLAS for €3,000 thousand each. 30 notes issued with the third tranche have been repaid in cash for a total amount of €863 thousand. In relation to these debt issuances, we incurred costs of €435 thousand.

On May 27, 2021, we issued a fourth and fifth tranche of €3 million each. On September 20, 2021, we issued a sixth and seventh tranche of €3 million each. On December 20, 2021, the Company issued an eighth of €3 million. In relation to these debt issuances, we incurred costs of €164 thousand.

We repaid €3,550 thousand of the Kreos non-convertible bonds in 2021 compared to €3,214 thousand in 2020 and €2,292 thousand in 2019.

We received proceeds from conditional advances of €400 thousand in 2021 compared to nil in 2020 and €73 thousand in 2019. We repaid €279 thousand in 2021 and €136 thousand in 2020.

We paid interest of €562 thousand, 628 thousand and €1,080 thousand for 2021, 2020 and 2019, respectively.

In December 2020, a portion of the research tax credit receivable for 2020 was prefinanced by NEFTYS for net proceeds of €1,964 thousand after deducting issuance costs, amortized costs and guarantee deposit. The prefinanced receivables for CIR 2018 and 2019 were reimbursed to NETFTYS for €4,589 thousand in 2020 after we received the CIR from the French Tax Authorities.

In December 2021, a portion of the research tax credit receivable for 2021 was prefinanced by NEFTYS for net proceeds of €3,011 thousand after deducting issuance costs, amortized costs and guarantee deposit. The prefinanced receivable for CIR 2020 was reimbursed to NETFTYS for €2,252 thousand in 2021 after we received the CIR from the French Tax Authorities.

On February 15, 2021, Biophytis closed its US IPO and Nasdaq listing. The total gross proceeds from the US IPO was €16,584 thousand. This transaction generated share capital increase of €2,400 thousand and an issue premium of €14,184 thousand. In relation to these equity transactions, we incurred costs of €2,099 thousand in 2021.

On November 19, 2021, the Company signed a new venture loan agreement and bonds issue agreement which could provide for up to €10 million in financing to the Company through the issuance by the Company to Kreos of non-convertible bonds for €7.75 million (straight bonds) and convertible notes of €2.25 million, plus the issuance of attached warrants to the first tranche. The loan agreement includes four tranches of respectively €2.5 million, €3.0 million, €2.5 million and €2.0 million. The two first tranches were drawn upon signing of the contract on November 19, 2021, the third tranche limited to €676 thousand was drawn up on December 29, 2021.

Pursuant to judgements rendered on March 16, 2021 and July 16, 2021, we were ordered to pay to NEGMA contractual penalties of €910 thousand with late payment interest, the fine for non-performance imposed by the Judgment for €1,500 thousand and €108 thousand under article 700 of the French Code of Civil Procedure. Total financial indemnity paid to Negma amounted to €2,585 thousand during the year ended December 31, 2021.

In 2021, the Company repaid the financial liabilities related to lease obligation for €54 thousand.

Cash and Funding Sources

Research Tax Credit

We have benefited from the CIR since our incorporation. The CIR is usually payable by the French government in the year following its recognition when there is no taxable net income to be offset if certain business size criteria are met.

In December 2019, a portion of the CIR receivables for 2018 and 2019 were prefinanced by NEFTYS. CIR receivables for 2018 (€3,133 thousand) and 2019 (€3,243 thousand) were reimbursed by the French Tax Authorities in January 2020 and June 2020, respectively. The prefinanced receivables were then reimbursed directly to NEFTYS.

In December 2020, a portion of the CIR receivables for 2020 (€1,964 thousand) was prefinanced with NEFTYS. The CIR for 2020 (€3,328 thousand) was reimbursed in December 2021.

In December 2021, a portion of the CIR receivables for 2021 (€3,011 thousand) was prefinanced with NEFTYS. The CIR for 2021 (€4,080 thousand) is expected to be reimbursed in 2022.

Reimbursable Advances

A reimbursable advance was granted to us by BPI France on February 4, 2015. This was a non-interest-bearing reimbursable advance of €260 thousand for the "in vitro, in vivo, and pharmacokinetic characterization of a candidate drug." Following the successful completion of the project and the extension of the repayment terms granted by BPI France, this advance is being repaid by means of quarterly payments made between June 30, 2017 and March 31, 2022. The payment schedule has been postponed by six months automatically by BPI France as part of the financial support measures for companies in the management of the COVID-19 crisis. As a result, the last payment will occur in September 30, 2022.

A reimbursable advance was granted to us by BPI France on November 28, 2016. This is a non-interest-bearing reimbursable advance of €1,100 thousand for the production of clinical batches, in the preclinical regulatory phase and clinical Phase 1 of Sarconeos (BIO101), for the treatment of sarcopenic obesity. The agreement with BPI France provides that the advance would be paid to us in two tranches, with the first of €600 thousand paid at the signing date of the agreement, and the second €500 thousand to be paid at the end of the program. We received €500 thousand during the year ended December 31, 2018 related to the second tranche. Following the successful completion of the project, this advance is being repaid by means of quarterly payments made between December 31, 2018 and September 30, 2023. The payment schedule has been postponed by six months automatically by BPI France as part of the financial support measures for companies in the management of the COVID-19 crisis. As a result, the last payment will occur in March 31, 2024.

On June 3, 2019, we entered into a collaboration agreement with the French Muscular Dystrophy Association (AFM-Telethon), pursuant to which AFM-Telethon has provided funding of €400,000 to us. This is a non-interest-bearing reimbursable advance of €400,000 for certain preclinical studies and preparations for our MYODA program. Under the terms of the agreement, subject to regulatory approval to conduct the MYODA clinical trial in Europe and conclusive results from the collaboration, we will submit to AFM-Telethon a new research project for further collaboration on the clinical development of Sarconeos (BIO101) in DMD. If funding for the new research project is approved by AFM-Telethon, we will negotiate in good faith the terms of a new collaboration agreement with AFM-Telethon. If entered into, the new collaboration agreement will grant certain rights to AFM-Telethon that may, in the event we later decide to abandon or not pursue the development of Sarconeos (BIO101), entitle AFM-Telethon to continue the development and/or commercialization of Sarconeos (BIO101) and/or any pharmaceutical product derived from Sarconeos (BIO101) for the purpose of guaranteeing the access of such products to DMD patients. The advance will be repaid upon our obtaining authorization to commence a Phase 3 clinical trial of Sarconeos (BIO101) for the treatment of DMD. In addition, we will be required to repay the advance if we are unable to come to an agreement with AFM-Telethon on further funding of our MYODA clinical program or we materially breach the agreement and AFM-Telethon requests reimbursement.

On August 23, 2019, we entered into an agreement with BPI France for an interest-free conditional advance of €600 thousand payable in milestone installments for its MACA program of Macuneos (BIO201) in dry Age-Related Macular Degeneration (AMD). The proceeds were subject to financial conditions that have been met in April 2021. The Company received €400 thousand in April 2021 in connection with this agreement. The balance of €200 thousand will be received once the Company finalizes the program. The repayment of this conditional advance is subject to the successful completion of the project: in case of technical and economic failure, a minimum repayment of €240 thousand is due at the end of the project timeline (36 months after first conditional advance received) and in case of successful completion, repayment over a 5-year period will commence in September 2022. As part of this agreement, the Company was entitled to receive a grant of €380 thousand, of which €260 thousand was received in April 2021. As of December 31, 2021, we recognized €202 thousand as subsidies since 53% of the budget of research and development expenses was incurred on that project at the closing date.

Non-convertible bonds issued to Kreos (2018 Kreos contract)

In September 2018, we entered into a venture loan agreement and bonds issue agreement with Kreos providing for up to €10 million in financing to us. Pursuant to the terms of the agreements, Kreos agreed to subscribe for up to €10 million in non-convertible bonds, to be issued by us in up to four tranches of €2.5 million each, with a warrant to purchase 442,477 ordinary shares attached to the first tranche. As required under the terms of the agreements, we pledged a security interest in our assets for the benefit of Kreos. We also granted a security over the business as a going concern (*nantissement de fonds de commerce*), including a portion of our patents, to Kreos.

Each tranche of non-convertible bonds bears a 10% annual interest rate and must be repaid in 36 monthly installments of €320,004 per month commencing in April 2019. The first and second tranches were issued to Kreos on September 10, 2018. The third tranche was issued to Kreos on December 17, 2018. The final tranche was issued on March 1, 2019.

In connection with the first tranche, we issued 442,477 warrants to Kreos giving them the right to purchase 442,477 new ordinary shares at an exercise price of €2.67 per share over a 7-year period from the issue date.

Pursuant to the terms of the agreements, we have the right, at any time but with no less than 30 days prior notice to Kreos, to prepay or purchase the bonds, exclusively in full. The prepayment will be equal to (i) the principal amount outstanding, plus (ii) the sum of all interest repayments which would have been paid throughout the remainder of the term of the relevant tranche discounted by 10% per annum.

Non-convertible bonds and convertible notes issued to Kreos (2021 Kreos contract)

On November 19, 2021, we signed a new venture loan agreement and bonds issue agreement that could provide for up to €10 million in financing to us through the issuance by us to Kreos of non-convertible bonds for €7.75 million (straight bonds) and convertible notes of €2.25 million, plus the issuance of attached warrants to the first tranche. The loan agreement includes four tranches of respectively €2.5 million, €3.0 million, €2.5 million and €2.0 million. The two first tranches were drawn upon signing of the contract on November 19, 2021, the third tranche limited to €676 thousand was drawn up before December 31, 2021, and the last tranche can be drawn up to March 31, 2022 if we comply with level of debt ratio.

Non-convertible bonds bears a 10% annual interest rate and must be repaid in cash in 36 monthly installments commencing on April 1, 2022. Convertible notes bears a 9.5% annual interest rate.

We must repay the convertible bonds at their principal amount at the latest March 31, 2025, unless they are converted prior to that time into shares, at the option of Kreos Capital, at a fixed conversion price of €0,648.

We issued for the benefit of Kreos Capital 2,218,293 warrants giving the right to subscribe to new Biophytis ordinary shares, on the basis of one share for one warrant. The warrants may be exercised over a 7-year period after being issued. The exercise price of the share warrants has been set at €0.56.

By subscribing to the BSAs, Kreos Capital has expressly waived the right to exercise the 2018 BSAs as held following their detachment from the non-convertible bonds subscribed on September 10, 2018 within the framework of the 2018 loan structure.

As required under the terms of the venture loan agreement, we pledged a security interest in our assets for the benefit of Kreos. We also granted a security interest in the business as a going concern (*nantissement de fonds de commerce*), including a portion of the Company's patents, to Kreos.

Pursuant to the terms of the agreements, we have the right, at any time but with no less than 30 days prior notice to Kreos, to prepay or purchase the bonds, exclusively in full. The prepayment will be equal to (i) the principal amount outstanding, plus (ii) the sum of all interest repayments which would have been paid throughout the remainder of the term of the relevant tranche discounted by 10% per annum.

Pursuant to the terms of the agreements, in the event conversion occurs on the repayment date, Kreos shall repay to Biophytis, upon issuance of the conversion shares, an amount equal to 10% of the total interest paid by Biophytis. In case of a partial conversion upon that date, the amount shall be reduced accordingly.

Convertible notes issued to NEGMA

In August 2019, we signed an agreement with NEGMA providing for up to €24 million in financing to us through the issuance of multiple tranches of convertible notes with attached warrants (ORNANEBSA), at our sole discretion.

On August 21, 2019, a first tranche of 300 ORNANE plus a commitment fee of 30 ORNANE, with attached warrants to purchase 585,936 ordinary shares (BSA_{T1}), was issued resulting in gross proceeds to us of €3 million. On December 27, 2019, a second tranche of 300 ORNANE, out of which 50% were paid by NEGMA in 2019, with attached warrants to purchase 694,444 ordinary shares (BSA_{T2}), was issued resulting in gross proceeds to us of €1.5 million.

On April 6, 2020, in the context of the execution of an issuance and subscription agreement with ATLAS, we terminated the contract with NEGMA.

Following this termination, NEGMA undertook legal action in order to claim damages of €910,900 from us as well as the delivery of 7,000,000 of our ordinary shares that NEGMA considers it was entitled to pursuant to the only Biophytis ORNANES still held by NEGMA, issued in consideration for a loan of €1,400,000 in principal (140 bonds with par value of €10 thousand each).

The sum of €910,900 claimed by NEGMA corresponds to the contractual penalties alleged by NEGMA under the terms of the NEGMA contract 2019, which provided for the payment of such penalties in the event of conversion of bonds into shares when the stock price is below the par value of the shares. Biophytis vigorously disputes this legal action and these requests for payment and delivery of shares.

Pursuant to a summary judgment dated May 7, 2020, NEGMA obtained a decision partially responding to its claims ordering us under penalty (which amounted to €7 thousand), to pay to NEGMA in an amount of €378 thousand (plus €7 thousand in penalties) as a settlement according to the contractual terms of the Negma agreement on ORNANE for which Negma had sent a conversion notice before April 6, 2020 and to deliver to NEGMA 2,050,000 of our ordinary shares.

We appealed this decision to the Court of Appeals of Paris. By decision dated November 18, 2020, the Court of Appeal reversed the May 7, 2020 order and ordered NEGMA to pay the costs of the trial and appeal proceedings. As a result, NEGMA was ordered to return the 2,050,000 ordinary shares to us and pay us an amount of €378 thousand. NEGMA has satisfied these obligations as of the date of this annual report by paying €419 thousand (including penalty interest and legal costs) and delivering 2,050,000 ordinary shares to us on January 19, 2021. In addition, NEGMA initiated proceedings on the merits in order to obtain what had not been awarded by the May 7, 2020 court order. Since the decision of the Court of Appeals of Paris dated November 18, 2020, NEGMA has modified its claims on the merits in order to obtain 7,000,000 shares. Pursuant to a judgement dated March 16, 2021, NEGMA obtained an enforceable decision responding to its claims ordering us under penalty to pay to NEGMA in an amount of €910 thousand as a settlement according to the contractual terms of the Negma agreement and to deliver to NEGMA 7,000,000 of our ordinary shares. We appealed this decision to the Court of Appeals of Paris.

In April 2021, we entered into an escrow agreement with the Delubac bank pursuant to which we placed into escrow 2,050,000 of our ordinary shares.

On June 22, 2021, NEGMA undertook legal actions in order to liquidate the penalty ordered by the March 16, 2021 decision. Pursuant to an execution judgement dated July 16, 2021, NEGMA obtained the liquidation of €1.5 million penalty and added a new penalty to the execution of the March 16, 2021 decision. On July 27, 2021, we paid NEGMA the €1.5 million penalty. On July 30, 2021, we instructed Delubac to release the 2,050,000 shares into escrow to NEGMA and issued 4,950,000 new ordinary shares to NEGMA.

During the year ended December 31, 2021, the Company has paid (i) the contractual penalties (€910 thousand recorded in the financial liability due to NEGMA as of December 31, 2020), (ii) the fine for non-performance imposed by the Judgment €1,500 thousand, (iii) €100 thousand and €8 thousand pursuant to Article 700 of the Code of Civil Procedure and (iv) late payment interest of €87 Thousand. As a result, the Company recorded financial indemnities of €1,695 thousand in the statement of operations during the year ended December 31, 2021.

As of the date of this Annual Report, the decision of the Court of Appeals of Paris has not been rendered.

In 2019, 242 convertible notes had been converted resulting in the issuance of 10,499,841 ordinary shares. In 2020, 68 bonds held by NEGMA were converted into ordinary shares generating the issuance of 3,400,000 shares.

NEGMA also exercised all BSA_{T2} in 2020 generating the issuance of 694,444 shares. NEGMA also exercised all BSA_{T1} in 2021 generating the issuance of 585,936 shares.

Convertible notes issued to ATLAS

In April 2020, we signed a convertible note financing of €24 million from ATLAS to continue the development of Sarconeos (BIO101).

The 960 3-year note warrants require their holder to exercise them, at our request, in tranches of 120 warrants each. Each warrant grants its holder the right to one ORNANE. Note warrants may not be transferred and will not be subject to a request for admission to trading on the Euronext Growth market.

The ORNANE have a par value of €25,000 and are issued at a subscription price of 97% of the nominal value. They do not bear interest and have a 24-month maturity from issuance. Holders of ORNANE may request at any time to convert them during their maturity period, and at that time, we will be able to redeem the ORNANE in cash. At the end of the maturity period, and if the ORNANE have not yet been converted or redeemed, the holder will have to convert them.

ORNANE may be transferred by their holders only to Affiliates and will not be subject to a request for admission to trading on the Euronext Growth market.

We issued the eighth and last tranche of €3 million in December 2021. As of December 31, 2021, there are 224 outstanding convertible notes issued to ATLAS. A commitment fee of €375 thousand was withheld from the proceeds received for the first tranche. Other issuance costs were incurred by us for approximately €66 thousand (€16 thousand for the first tranche, €23 thousand for the second tranche and €27 thousand for the third tranche).

As of December 31, 2020, 330 convertible notes had been converted resulting in the issuance of 17,178,683 ordinary shares.

As of December 31, 2021, 376 convertible notes had been converted resulting in the issuance of 16,379,256 ordinary shares.

On June 14, 2021, we signed a new convertible bond financing of €32 million with ATLAS. Pursuant to the terms of the agreement, ATLAS agreed to subscribe for up to €32 million in convertible bonds, to be issued by us in up to eight tranches of €4 million each. The first tranche has not been issued yet.

Public Offering of Share Subscription Warrants

On April 3, 2020, we decided to launch a public offering of share subscription warrants. The main objective of the transaction was to allow existing shareholders to participate in the new COVA program and our future development, and eventually to consolidate its equity.

Upon completion of the public offering, we issued 7,475,708 share subscription warrants, after full exercise of the extension clause.

The subscription price was €0.06 per warrant. The warrants can be exercised for a period of 5 years from April 30, 2020, at an exercise price of €0.27 per new share.

Each warrant will give its holder the right to subscribe to one new Biophytis share.

Total subscriptions amounted to €449 thousand. In 2020, warrants were exercised for €833 thousand, and in 2021 warrants were exercised for €302 thousand

The subscription and the exercise of the investors warrants by our CEO was settled by the remaining amount of €630 thousand due our CEO as part of the Intellectual Property agreement (€177 thousand for the subscription of warrants and €453 thousand for the exercise of warrants).

Commitments provided as part of license agreements

We have signed several agreements to license industrial property to further our research and developments efforts with royalties due to the counterparties that are variable starting the year after the first marketing of a product and royalty arrangements. However, there are certain guaranteed annual minimum amounts due starting in various future years. These guaranteed annual minimum amounts are shown in the table above. Other than these minimum guaranteed amounts (as further described below), amounts of royalties to be paid after 2024 cannot be determined precisely.

The following table discloses the commitments given as part of the licensing agreements mentioned above:

Agreements for the exploitation of industrial property	Commitments given
SARCOB commercialization agreement—SATT Lutech Agreement of January 1, 2016, as amended on April 2, 2019, on November 6, 2020 and on December 17, 2020	This agreement covers the S1 through S9 patent families. The contractual structure of the consideration payable by us is as follows: firstly, in the year after the first marketing of a product and in any event at the latest, from 2023 onwards, we will pay a guaranteed annual minimum amount of €40 thousand, which will be deducted from the amount of royalties effectively due annually to SATT Lutech. With regard to the direct exploitation, the agreement provides for an annual royalty for a figure based on the net sales of products, distinguishing between sales of nutraceutical and medicinal products. With regards to indirect exploitation, the agreement provides for annual double-digit royalties based on income received from licensees, distinguishing: (i) between the sales of nutraceutical products (double-digit royalties) and drug products (two or one-digit royalties) and (ii) the product development phase (Phase 1, 2 or 3) at the time of the conclusion of the licensing agreement. The royalty payments will end upon termination of the agreement.
MACULIA commercialization agreement—SATT Lutech Agreement of January 1, 2016, as amended on December 17, 2020	This agreement covers the MI through MIV patent families. The contractual structure of the consideration payable by us is as follows: firstly, in the year following the first marketing of a nutraceutical product and in any event no later than in 2020, we will pay an annual guaranteed minimum amount of €15 thousand. In the same way, we will pay a guaranteed minimum amount of €50 thousand in the event of marketing of a drug product and in any event no later than from 2026. These amounts will be deducted from the amount of royalties effectively due annually to SATT Lutech. For direct exploitation, the agreement also provides for an annual royalty of a figure based on net sales of products, distinguishing between sales of nutraceutical and medicinal drugs. For indirect exploitation, it also provides for annual double-digit royalties based on income received from licensees, distinguishing (i) between the sales of nutraceuticals (double-digit royalties) and drug products (one or two-digit royalties) and (ii) the product development phase of these products (Phase 1, 2 or 3) at the time of conclusion of the licensing agreement. The royalty payments will end upon termination of the agreement.

Off-Balance Sheet Arrangements

We do not have variable interests in variable interest entities or any off-balance sheet arrangements as defined under the SEC rules, such as relationships with unconsolidated entities or financial partnerships, which are often referred to as structured finance or special purpose entities, established for the purpose of facilitating financing transactions that are not required to be reflected on our statements of financial position.

C. Research and Development

For a discussion of our research and development activities, see “Item 4.B—Business Overview” and “Item 5.A—Operating Results.”

D. Trend Information

For a discussion of trends, see “Item 4.B—Business Overview,” “Item 5.1—Operating Results” and “Item 5.B—Liquidity and Capital Resources.”

E. Critical Accounting Estimates

To prepare the Financial Statements in accordance with IFRS, judgments and estimates were made by the Company’s management.

Such estimates are based on the assumption of a going concern and are based on the information available at the time of their preparation. These estimates are ongoing and are based on past experience as well as diverse other factors judged to be reasonable and form the basis for the assessments of the book value of assets and liabilities. These estimates may be revised if the circumstances on which they are based change or as a result of new information. Actual results may differ significantly from such estimates if assumptions or conditions change.

The main judgments and estimates made by management relate to the following in particular:

- The fair value measurement of founders' warrants, warrants and free shares granted to employees and board members:
    - The fair value measurement of share-based payments is based on the Black-Scholes option valuation model which makes assumptions about complex and subjective variables. These variables notably include the value of the Company's shares, the expected volatility of the share price over the lifetime of the instrument, and the present and future behavior of holders of those instruments. There is a high inherent risk of subjectivity when using an option valuation model to measure the fair value of share-based payments in accordance with IFRS 2 *Share-based Payment*.
- The fair value measurement of warrants issued to Negma:
    - The fair value measurement of the equity instruments issued to Negma is based on the Black-Scholes option valuation model which makes assumptions about complex and subjective variables. These variables notably include the value of the Company's shares, the expected volatility of the share price over the lifetime of the instrument, and the present and future behavior of holders of those instruments. There is a high inherent risk of subjectivity when using an option valuation model to measure the fair value of derivative instruments and of the equity instruments in accordance with IAS 32 *Financial Instruments – Presentation* ("IAS 32") and IFRS 9.
- The fair value measurement of convertible notes and non-convertible bonds issued to Kreos with attached warrants:
    - The fair value measurement of the derivative related to the conversion option to Kreos and the warrants issued to Kreos is based on the Black-Scholes option valuation model which makes assumptions about complex and subjective variables. These variables notably include the value of the Company's shares, the expected volatility of the share price over the lifetime of the instrument, and the present and future behavior of holders of those instruments. There is a high inherent risk of subjectivity when using an option valuation model to measure the fair value of derivative instruments and of the equity instruments in accordance with IAS 32 *Financial Instruments – Presentation* ("IAS 32") and IFRS 9. The fair value measurement of the debt component of the convertible notes was determined by discounting cash flows at market rate (unobservable input). The accounting for the day one losses resulting from those valuation are consequently subject to judgement.
- The fair value measurement of notes convertible into ordinary shares and/or redeemable in cash with attached warrants issued to Negma and notes convertible into ordinary shares and/or redeemable in cash with Atlas:
    - The fair value measurement of the convertible notes issued to Negma and Atlas is based on the binomial valuation model which makes use of assumptions and unobservable inputs. The inputs used notably include the quoted price of the Company's shares, the expected volatility of the share price over the expected maturity of the convertible notes, and the present and future behavior of the Company and of the holders of those instruments. There is a high inherent risk of subjectivity when using an option valuation model to measure the fair value of convertible notes in accordance with IFRS 9 and IAS 32.

Item 6. Directors, Senior Management and Employees.

A. Directors and Senior Management

The following table presents information about our officers and directors as of the date of this annual report.

NAME	AGE	POSITION
Executive Officers		
Stanislas Veillet	56	Chairman of the Board, Chief Executive Officer and Director
Philippe Rousseau	51	Chief Financial Officer
Benoit Canolle	44	Chief Business Officer
Pierre J. Dilda	52	Chief Scientific Officer
Waly Dioh	53	Chief Clinical Operations Officer
Rob Van Maanen	52	Chief Medical Officer
Non-Employee Directors		
Claude Allary	67	Director
Dimitri Batsis	56	Director
Nadine Coulm	59	Director
Jean Mariani	72	Director

There are no family relationships among any of our executive officers or directors. Unless otherwise indicated, the current business addresses for our executive officers and directors is Sorbonne University—BC 9, Bâtiment A 4ème étage, 4 place Jussieu 75005 Paris, France.

Biographies

Executive Officers

Stanislas Veillet is the co-founder of Biophytis. He has served as our President since the Company's inception and served as Chief Executive Officer (Directeur Général) and chairman of our board since May 2015. He began his career in Brazil as a researcher at the Centre de coopération international en recherche agronomique pour le développement, or CIRAD from 1989 to 1993, before obtaining a Ph.D. in Genetics. From 1994 to 2001, Mr. Veillet managed a biotechnology laboratory for the Cargill Group, then Pharmacia-Monsanto, to develop a high throughput platform for whole genome genotyping. From 2002 to 2006, he managed the Life Sciences Department of the Danone Group, where he developed several products, including Danacol and Danaten for the prevention of cardiovascular diseases. Mr. Veillet has a degree in Engineering and a Ph.D. in Genetics from AgroParisTech. Mr. Veillet is also a member of the board of directors and chairman of the compensation committee of Drone Volt S.A.

Philippe Rousseau has served as Chief Financial Officer since April 4, 2022. Before joining us, he spent 25 years in the biotech industry in C-level positions in Europe and the United States. He was notably Chief Operating Officer of Pherecydes Pharma from 2020 to 2022 (which became public in 2021), CEO of CYTOO Inc from 2013 to 2018, Chief Financial Officer and head of Investor Relations of Vivalis from 2009 to 2013, Chief Financial Officer and then interim CEO of ExonHit Therapeutics from 2003 to 2009 (which became public in 2005). Mr. Rousseau holds a MBA in Finance and Management from HEC in Paris (France).

Benoit Canolle has served as our Chief Business Officer since August 2021. Prior to joining us, he served as Director of the Corporate Medical Portfolio Department at Pierre Fabre from 2020 to 2021. Benoit has spent 16 years in pharmaceutical companies (2004 to 2015 at Sanofi, 2015 at Nestlé Skin Health and 2016 to 2021 at Pierre Fabre, mostly in positions of project direction). Benoit Canolle holds a PhD in Neurosciences and is completing an executive MBA at Kedge Business School.

Pierre J. Dilda has served as our Chief Scientific Officer since October 2019 and previously served as our Vice President of Research from 2015 to 2019. Before joining us, he was Senior Research Fellow at the Lowy Cancer Research Center at the University of New South Wales (UNSW) in Sydney, Australia, from 2006 to 2015, where he was responsible for advancing several cancer therapeutics. Dr. Dilda holds a bachelor's degree in biochemistry and a Masters in biochemistry and immunology from the University of Paris VII (Denis Diderot), Faculty of Sciences, Paris, France, and a Masters in physiology and physiopathology and a PhD in pharmacology from the University of Paris V, Faculty of Medicine, Paris, France.

Waly Dioh has served as our Chief Clinical Operating Officer since October 2019 and previously served as Vice President of Clinical Development from October 2015 to October 2019 and as our Director of Research and Development from October 2006 to October 2015. Previously, Mr. Dioh worked at Monsanto Company, initially in France and then in the United States. Mr. Dioh received a DUES in natural sciences from Dakar University in Senegal, a masters in biology/plant pathology from Pierre and Marie Curie University Paris VI in Paris, France, a PhD in plant pathology from his doctorate from the University of Paris XI, Orsay in Paris, France and an MBA from the ESLSCA Business School in Paris, France.

Rob Van Maanen has served as our Chief Medical Officer since September 2021. Prior to joining us, he served as Chief Medical Officer for Khondrion, a dutch clinical-stage company discovering and developing therapies targeting orphan inherited mitochondtrial diseases. Before that he was Senior Medical Director at Astellas in Leiden, the Netherlands. Dr. Van Maanen holds an MBA from University of Amsterdam (NL), as well as medical licences in the UK (as specialist in the Pharmaceutical Medicine) and the Netherlands. He is an expert in global drug development, medical affairs, and pharmacovigilance with more than 20 years of experience in both large pharmaceutical companies and small biotechs.

Non-Employee Directors

Claude Allary has served as a director since July 2021. Mr. Allary has been working in health industries for the past 40 years. He is currently a Senior Advisor for Bionest Partners, which he co-founded in 2002. He is also a co-founder and Director of Institut Colisée, a think tank for the betterment of human relationship in companies and organizations. Mr. Allary graduated from ESSEC, a French Business School and holds a Ph.D. in Management Sciences from Paris II University.

Dimitri Batsis has served as a director since May 2018. Mr. Batsis is the founder, of the web agency Zeni-Corporation, which was acquired by Keyrus group in 2007. Mr. Batsis is the founder of Drone Volt S.A., a company specializing in the design, meeting and commercialization of civilian drones over the world. He also founded and has served as the Chief Executive Officer of Dimitri Batsis Investments since May 2012.

Nadine Coulm has served as a director since May 2015.She has over 30 years of experience in Corporate Finance, with a focus on Investor Relations and Financing. Ms. Coulm served as the Vice President of Investor Relations and Financing for the Korian Group, which provides long-term care to the elderly, from March 2017 to August 2019. Previously, she served as the Vice President Financing and Investor Relations for FNAC Group, a consumer electronics company, from January 2013 to March 2017. From November 2006 to November 2011, she served as Vice President of Fianancial Communication and Investor Relations at Casino Group. From 1988 to 2006, she held various positions at Danone Group.. Ms. Coulm received an MBA in Finance from HEC Paris.

Jean Mariani has served as a director since October 2019. Dr. Mariani was employed by the Company from October 2017 to September 2019. Since October 2019, Dr. Mariani has served as president Successful Life SAS. He has served as a Professor Emeritus at the faculty of Medecine of Sorbonne University since October 2017. He has served as director of the team Brain Development Aging and Repair in the UMR UPMC-CNRS 8256 (Research laboratory) since 2014. He has been director of the UMR UPMC-CNRS 7102 (Research laboratory) from 2001 to 2013. He has been director of the University Hospital Department FAST (Fight Ageing and Stress) from 2013 to 2018 and of the Institute of Longevity Charles Foix since 2008. He has been a professor and hospital practitioner since September 2005. He was member of the Scientific Council of the Faculty of Medicine Pierre et Marie Curie from 2011 to 2015. Dr. Mariani has been a member of the Scientific Council of the Ataxia Telangectasia Fund since 1997 and president of the Society for Research on Cerebellum and Ataxia since 2012. Dr. Mariani holds an MD and a DSc in Biochemistry. Dr. Mariani has been credited with 241 scientific articles and 25 book chapters.

Board Diversity

The table below provides certain information regarding the diversity of our board of directors as of the date of this Annual Report.

Board Diversity Matrix

Country of Principal Executive Offices:	France
Foreign Private Issuer	Yes
Disclosure Prohibited under Home Country Law	Yes
Total Number of Directors	5

	Female	Male	Non-Binary	Did Not Disclose Gender
Part I: Gender Identity				
Directors	1	4	—	—
Part II: Demographic Background				
Underrepresented Individual in Home Country Jurisdiction		—		
LGBTQ+		—		
Did Not Disclose Demographic Background		—		

B. Compensation

The aggregate compensation paid and benefits in kind granted by us to our current executive officers and directors, including share-based compensation, for the year ended December 31, 2021, was €5.0 million. For the year ended December 31, 2021, we allocated €135 thousand to be accrued to provide retirement indemnity to our directors or executive officers, except to the extent required by French law.

We implemented a 401(k) plan for the executive officers of Biophytis, Inc., our U.S. wholly-owned subsidiary, which became effective in January of 2019, through which we will match up to 4% of employee contributions.

There are no agreements or contracts between us (or our subsidiaries) and any of our directors or executive officers that provide for benefits to the directors upon termination of service or to the executive officers upon termination of employment.

Director Compensation

The following table sets forth the total compensation paid to our non-employee directors for service on our board of directors during the year ended December 31, 2021.

Name	Total Compensation(1) (€)
Stanislas Veillet (2)	109,200
Claude Allary(3)	0
Dimitri Batsis	31,500
Nadine Coulm	42,000
Jean Franchi(3)	37,060
Jean Mariani	38,500

(1) Represents meeting attendance fees paid to or earned by directors.

(2) Mr. Veillet's Directos compensation paid in 2021 also include his compensation for the years 2018 and 2019 that were not paid to him at that time

(3) Mr. Allary became a Director in July 2021 and had not received compensation as of December 31, 2021.

(4) Ms. Franchi has left our Board of Directors since July 2021.

Chief Executive Officer Compensation

The following table sets forth information regarding compensation paid to or earned by our Chief Executive Officer during the year ended December 31, 2021.

Nature of Compensation	Amounts Paid or Earned (€)
Fixed remuneration(1)	250,000
Variable annual remuneration(2)	75,000
Benefits in kind(3)	25,329
Total	350,329

(1) Mr. Veillet receives a fixed annual remuneration of €250,000 payable over 12 months.

(2) Mr. Veillet was entitled to receive variable annual remuneration of up to €75,000 for the year ended December 31, 2021, based on satisfaction of the following 2020 annual targets: (i) complete patients recruitment deliver final results for SARA-INT before end of 2020, (ii) first patient in for the MYODA-PK program before end of 2020, (iii) sign a regional license agreement with Asia for a Sarconeos program and/or private placement with an investor from Asia for at EUR 6,000,000 and (iv) secure a minimum capital increase of EUR 12,000,000 for the Company. Based on full satisfaction of these targets, the Compensation and Governance Committee determined that Mr. Veillet was entitled to receive €75,000, which amount was paid to him in March 2021.

(3) Mr. Veillet benefits from a "GSC" private unemployment insurance policy. In France, directors and officers do not have employee status and are not covered by the legal unemployment regime. "GSC" enables directors and officers to receive income in the event of unemployment.

Mr. Veillet is also entitled to receive reimbursement of expenses incurred within the context of performing his duties as Chairman and Chief Executive Officer.

Employment Agreements with Executive Officers and Change of Control Severance Benefits

We have entered into employment agreements with our executive officers, except for our CEO who is a corporate officer (*mandataire social*) and does not have an employment contract. Each of our executive officers is employed for a continuous term unless either we or the executive officer gives prior notice to terminate such employment. We may terminate the employment of our executive officers for just cause (*cause réelle et sérieuse*), at any time, with the notice and indemnification requirements provided by French law and the applicable collective bargaining agreement. An executive officer may terminate his or her employment at any time with the prior written notice period provided by French law and the applicable collective bargaining agreement.

Each executive officer has agreed to maintain the confidentiality of any confidential information, both during and after the employment agreement expires or is earlier terminated. In addition, all executive officers have agreed to be bound by a non-solicitation covenant that prohibits each executive officer from soliciting our customers, or soliciting or hiring our executive employees and those of our employees working in the same team as our executive officer, during his or her employment and for one year after the termination of his or her employment. In addition, our executive employees (other than René Lafont), are bound by a non-compete covenant that prohibits each executive officer from competing with us, directly or indirectly, during his or her employment and for six months after the termination of his or her employment.

In accordance with statutory provisions, Mr. Veillet may be freely removed from his position as Chairman and/or Chief Executive Officer by the board of directors. As director, he may be removed by decision of the shareholders. When the Chief Executive Officer does not hold the position of Chairman of the board of directors, he may be entitled to receive an indemnity in the event that he is removed without just cause. Mr. Veillet benefits from a "GSC" private unemployment insurance policy, the cost of which is borne by the Company as a benefit in kind.

Limitations on Liability and Indemnification Matters

Under French law, provisions of by-laws that limit the liability of directors are prohibited. However, French law allows *sociétés anonymes* to contract for and maintain liability insurance against civil liabilities incurred by any of their directors and officers involved in a third-party action, provided that they acted in good faith and within their capacities as directors or officers of the company. Criminal liability cannot be indemnified under French law, whether directly by the company or through liability insurance.

We expect to maintain customary liability insurance coverage for our directors and executive officers, including insurance against liability under the Securities Act, and we intend to enter into agreements with our directors and executive officers to provide contractual indemnification. With certain exceptions and subject to limitations on indemnification under French law, these agreements will provide for indemnification for damages and expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding arising out of his or her actions in that capacity. We believe that this insurance and these agreements are necessary to attract qualified directors and executive officers.

These agreements may discourage shareholders from bringing a lawsuit against our directors and executive officers for breach of their fiduciary duty. These provisions also may have the effect of reducing the likelihood of derivative litigation against directors and executive officers, even though such an action, if successful, might otherwise benefit us and our shareholders. Furthermore, a shareholder's investment may be adversely affected to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these insurance agreements.

Certain of our non-employee directors may, through their relationships with their employers or partnerships, be insured against certain liabilities in their capacity as members of our board of directors.

Equity Incentives

We believe our ability to grant equity incentives is a valuable and necessary compensation tool that allows us to attract and retain the best available personnel for positions of substantial responsibility, provides additional incentives to employees and promotes the success of our business. Due to French corporate law and tax considerations, we have historically granted two different equity incentive instruments to our directors, executive officers, employees and other service providers, including:

- founders' share warrants (otherwise known as *bons de souscription de parts de créateurs d'entreprise*, or BSPCE), which are granted to our officers and employees; and

- share warrants (otherwise known as *bons de souscription d'actions*, or BSA), which have historically only been granted to non-employee directors;

Our board of directors' authority to grant these equity incentive instruments and the aggregate amount authorized to be granted under these instruments must be approved by a two-thirds majority of the votes by our shareholders present, represented or voting by authorized means, at the relevant extraordinary shareholders' meeting. Once approved by our shareholders, our board of directors can grant share warrants (BSA) or founder's share warrants (BSPCE) for up to 18 months from the date of the applicable shareholders' approval. The authority of our board of directors to grant equity incentives may be extended or increased only by extraordinary shareholders' meetings. As a result, we typically request that our shareholders authorize new pools of equity incentive instruments at every annual shareholders' meeting.

All vested shares must be exercised within exercise periods set forth in the grant documents. In the event of certain changes in our share capital structure, such as a consolidation or share split or dividend, French law and applicable grant documentation provides for appropriate adjustments of the numbers of shares issuable and/or the exercise price of the outstanding warrants.

As of February 28, 2022, founders' share warrants and share warrants granted pursuant to equity incentive awards were outstanding allowing for the purchase of an aggregate of 6,832,358 ordinary shares at a weighted average exercise price of €0.59 per ordinary share.

Founder's Share Warrants (BSPCE)

Employee warrants may only be issued by growth companies meeting certain criteria. Most significantly, the issuer must have been registered for less than 15 years and 25% of the issuer's share capital must have been continuously held since the

company's formation by natural persons or by holding companies, of which 75% of such holding company's share capital is held by natural persons. The calculation of such threshold does not include venture capital mutual investment fund (*fonds commun de placement à risques*), specialized professional funds (*fonds professionnels spécialisés*), private equity funds (*fonds professionnels de capital investissement*), local investment funds (*fonds d'investissement de proximité*) and innovation-focused mutual funds (*fonds commun de placement dans l'innovation*).

Founder's share warrants have traditionally been granted to certain of our employees and/or officers who were French tax residents because the warrants carry favorable tax and social security treatment for French tax residents. Since French law n°2019-486 of May 22, 2019 relating to the growth and transformation of companies, we may grant founder's share warrants to our directors. Similar to options, founder's share warrants entitle a holder to exercise the warrant for the underlying vested shares at an exercise price per share determined by our board of directors and at least equal to the fair market value of an ordinary share on the date of grant. However, unlike options, the exercise price per share is fixed as of the date of implementation of the plans pursuant to which the warrants may be granted, rather than as of the date of grant of the individual warrants. Founder's share warrants may only be exercised if, at the exercise date, the employee is employed by us. The table below summarizes our outstanding founder's share warrants to employees employed by us as of February 28, 2022.

Name	Number of ordinary shares underlying Founders' warrants	Date of General Meeting	Date of Board Meeting	Purchase Price per share (€)	Start Date for Exercise	Expiration Date	Exercise Price (€)	Number of Shares subscribed to date	Founders' warrants outstanding as of 2/28/2022
Stanislas Veillet	940,249 (1)	8/8/2019	3/4/2020	0	8/4/2020	8/4/2026	0.27	313,417	626,832
Pierre Dilda	50,424 (1)	8/8/2019	3/4/2020	0	8/4/2020	8/4/2026	0.27	0	50,424
	100,848 (2)	5/28/2020	12/22/2020	0	12/22/2020	12/22/2026	0.47	0	100,848
	267,394 (3)	10/5/2021	9/15/2021	0	9/15/2021	9/15/2027	0.73		267,394
Waly Dioh	79,201 (1)	8/8/2019	3/4/2020	0	8/4/2020	8/4/2026	0.27	0	79,201
	158,401 (2)	5/28/2020	12/22/2020	0	12/22/2020	12/22/2026	0.47	0	158,401
	419,994 (3)	10/5/2021	9/15/2021	0	9/15/2021	9/15/2027	0.73		419,994
Dimitri Batsis	103,946 (1)	8/8/2019	3/4/2020	0	8/4/2020	8/4/2026	0.27	0	103,946
	207,892 (2)	5/28/2020	12/22/2020	0	12/22/2020	12/22/2026	0.47	0	207,892
	551,218 (3)	10//2021	9/15/2021	0	9/15/2021	9/15/2027	0.73		551,218
Nadine Coulm	103,946 (1)	8/8/2019	3/4/2020	0	8/4/2020	8/4/2026	0.27	0	103,946
	207,892 (2)	5/28/2020	12/22/2020	0	12/22/2020	12/22/2026	0.47	0	207,892
	551,218 (3)	10/5/2021	9/15/2021	0	9/15/2021	9/15/2027	0.73		551,218
Jean Mariani	103,946 (1)	8/8/2019	3/4/2020	0	8/4/2020	8/4/2026	0.27	0	103,946
	207,892 (2)	5/28/2020	12/22/2020	0	12/22/2020	12/22/2026	0.47	0	207,892
	551,218 (3)	10/5/2021	9/15/2021	0	9/15/2021	9/15/2027	0.73		551,218
Claude Allargy	551,218 (3)	10/5/2021	9/15/2021	0	9/15/2021	9/15/2027	0.73		551,218
Benoît Canolle	267,394 (3)	10/5/2021	9/15/2021	0	9/15/2021	9/15/2027	0.73		267,394
Rob Van Maanen	267,394 (3)	10/5/2021	9/15/2021	0	9/15/2021	9/15/2027	0.73		267,394

(1) These founder's share warrants are exercisable for (i) 33.33% between the grant date and the second anniversary of the grant date, (ii) for 66.66% between the second anniversary of the grant date and the fourth anniversary of the grant date and (iii) in full beginning on the fourth anniversary of the grant date.

(2) These founder's share warrants are exercisable for (i) 33.33% between the grant date and the second anniversary of the grant date, (ii) for 66.66% between the second anniversary of the grant date and the fourth anniversary of the grant date and (iii) in full beginning on the fourth anniversary of the grant date.

(3) These founder's share warrants are exercisable for (i) 33.33% between the grant date and the first anniversary of the grant date, (ii) for 66.66% between the first anniversary of the grant date and the second anniversary of the grant date and (iii) in full beginning on the second anniversary of the grant date.

Share Warrants (BSA)

Similar to options, share warrants entitle a holder to exercise the warrant for the underlying vested shares at an exercise price per share determined by our board of directors. However, unlike options, the exercise price per share is fixed as of the date of implementation of the plans pursuant to which the warrants may be granted, rather than as of the date of grant of the individual warrants. The table below summarizes our outstanding share warrants as of February 28, 2022.

Name	Number of ordinary shares underlying share warrants	Date of General Meeting	Date of Board Meeting	Purchase Price per share (€)	Start Date for Exercise	Expiration Date	Exercise Price per share (€)	Number of Shares subscribed to date	Warrants outstanding as of 2/28/2022
Dimitri Batsis	329,218 (2)	8/8/2019	3/4/2020	0.06	4/30/2020	4/30/2025	0.27	309,218	20,000
Nadine Coulm	27,956 (2)	8/8/2019	3/4/2020	0.06	4/30/2020	4/30/2025	0.27	535	27,956
Jean Mariani	25,566 (2)	8/8/2019	3/4/2020	0.06	4/30/2020	4/30/2025	0.27	0	25,566
Stanislas Veillet	2,935,701 (2)	8/8/2019	3/4/2020	0.06	4/30/2020	4/30/2025	0.27	2,853,201	82,500
Pierre Dilda	20,000 (2)	8/8/2019	3/4/2020	0.06	4/30/2020	4/30/2025	0.27	2,000	18,000
Waly Dioh	26,428 (2)	8/8/2019	3/4/2020	0.06	4/30/2020	4/30/2025	0.27	0	26,428

(1) These share warrants are exercisable for (i) 33.33% between the subscription date and the first anniversary of the subscription date, (ii) for 66.66% between the first anniversary of the subscription date and the second anniversary of the subscription date and (iii) in full, beginning on the second anniversary of the subscription date.

(2) These share warrants are exercisable in full, beginning on the subscription date.

C. Board Practices

Board Composition

We currently have five directors.

Under French law and our Articles of Association, our board of directors must be comprised of between three and 18 members. Within this limit, the number of directors is determined by our shareholders. Directors are elected, re-elected and may be removed at a shareholders' general meeting with a simple majority vote of our shareholders. Pursuant to our by-laws, our directors are elected for three-year terms. In accordance with French law, our by-laws also provide that our directors may be removed with or without cause by the affirmative vote of the holders of at least a majority of the votes of the shareholders present, represented by a proxy or voting by mail at the relevant ordinary shareholders' meeting, and that any vacancy on our board of directors resulting from the death or resignation of a director, provided there are at least three directors remaining, may be filled by vote of a majority of our directors then in office provided that there has been no shareholders meeting since such death or resignation. Directors chosen or appointed to fill a vacancy shall be elected by the board of directors for the remaining duration of the current term of the replaced director. The appointment must then be ratified at the next shareholders' general meeting. In the event the board of directors would be composed of less than three directors as a result of a vacancy, the remaining directors shall immediately convene a shareholders' general meeting to elect one or several new directors so there are at least three directors serving on the board of directors, in accordance with French law.

The following table sets forth the names of our directors, the years of their initial appointment as directors and the expiration dates of their current term.

Name	Current Position	Year of Initial Appointment	Term Expiration Year
Stanislas Veillet	Chairman	2015	2024
Claude Allary	Director	2021	2023
Dimitri Batsis	Director	2018	2024
Nadine Coulm	Director	2015	2024
Jean Mariani	Director	2019	2023

Director Independence

As a foreign private issuer, under the listing requirements and rules of Nasdaq, we are not required to have independent directors on our board of directors, except with respect to our audit committee, for which Nasdaq listing requirements permit specified phase-in schedules.

Nevertheless, our board of directors has undertaken a review of the independence of the directors and considered whether any director has a material relationship with us that could compromise his or her ability to exercise independent judgment in carrying out his or her responsibilities. Based upon information requested from, and provided by, each director concerning such director's background, employment and affiliations, including family relationships, our board of directors determined that all of our directors, except for Mr. Veillet and Mr. Mariani, qualify as "independent directors" as defined under applicable rules of Nasdaq and the independence requirements contemplated by Rule 10A-3 of the Exchange Act. In making these determinations, our board of directors considered the current and prior relationships that each non-employee director has with our company and all other facts and circumstances that our board of directors deemed relevant in determining their independence, including the beneficial ownership of our ordinary shares by each non-employee director and his or her affiliated entities (if any).

Our board of directors also determined that, except for Stanislas Veillet and Jean Mariani, all of our directors qualify as "independent directors" as defined by the Corporate Governance Code (*Code de Gouvernement d'Entreprise*) for small and mid-cap companies as published in September 2016 by MiddleNext and validated as a reference code by the French Financial Markets Authority (*Autorité des Marchés Financiers*).

Board Committees

The board of directors has established an audit committee and a compensation and governance committee, which operate pursuant to rules of procedure adopted by our board of directors. The board of directors has also established a scientific committee, which is responsible for analyzing and reviewing our clinical and regulatory strategy. Subject to available exemptions, the composition and functioning of all of our committees will comply with all applicable requirements of the French Commercial Code, the by-laws, the Exchange Act, Nasdaq and SEC rules and regulations.

In accordance with French law, committees of our board of directors only have an advisory role and can only make recommendations to our board of directors based on their area of competence. As a result, all decisions will be made by our board of directors taking into account non-binding recommendations of the relevant board committee.

Audit Committee

The Audit Committee consists of at least two members appointed by our board of directors. The members of the Audit Committee may or may not be directors or shareholders of the Company; provided, however, that as far as possible, the members of the Audit Committee consists of independent members and, in any event, the Audit Committee must include at least one independent director. The Chairperson of the Audit Committee is appointed by our board of directors for the duration of his or her mandate as a board member.

The current members of our Audit Committee are Nadine Coulm (Chairwoman) and Claude Allary, both independent directors. We intend to rely on the exemption available to foreign private issuers for the requirement that an audit committee be comprised of at least three members, although we may, in the future, look to expand this committee.

The duration of the mandates of the members of the Audit Committee is three years, ending at the first board meeting held after the Ordinary General Meeting called to approve the financial statements. The mandates of the members of the Audit Committee are renewable.

The Audit Committee is responsible for assisting the board of directors in:

- ensuring the truthfulness of the financial statements, the quality of internal controls and the quality and relevance of the financial information provided;
- assessing the existence and relevance of the financial control and internal audit procedures;
- assessing the relevance of the Company's accounting policy;
- examining the accounts of the Company, as well as the information issued before their submission to the board of directors;
- examining the changes and adaptations of accounting principles and rules used in the context of drawing up of financial statements, as well as their relevance;
- examining the candidates proposed to the positions of statutory auditor or substitute auditor, or proposing the appointment of the auditors;
- guaranteeing the independence and competence of auditors and ensuring the proper performance of their duties; and
- examining the significant risks for the Company and notably the off-balance-sheet risks and commitments.

In this capacity, the Audit Committee issues opinions, proposals and recommendations to our board of directors and regularly reports to it on its work.

The Audit Committee meets as often as it considers necessary, but at least four times a year, including twice a year before the meeting of the board of directors at which the annual and interim financial statements of the Company are reviewed.

Compensation and Governance Committee

The Compensation and Governance Committee consists of at least two members, appointed by our board of directors. The members of the Compensation and Governance Committee may or may not be directors or shareholders of the company; provided, however, that the Compensation and Governance Committee must include at least one independent director. No member of the board of directors exercising management functions within the Company may be a member of the Compensation and Governance Committee. The Chairman of the Compensation and Governance Committee is appointed by the board of directors of the Company for the duration of his or her mandate as Committee member.

The current members of our Compensation and Governance Committee are Dimitri Batsis (Chairman) and Nadine Coulm, both independent directors.

The duration of the mandates of the members of the Compensation and Governance Committee is three years, ending at the first meeting of the board of directors held after the Ordinary General Meeting called to approve the financial statements. The mandate of the members of the Compensation and Governance Committee is renewable.

The Compensation and Governance Committee is responsible for:

- making recommendations to the board of directors (i) on remuneration (fixed and variable) of company officers and key executives and notably contributing to the review of remuneration procedures, setting objectives and bonuses for objectives reached and incentives for the company's officers; (ii) the recruitment, training, development, retention of employees with remuneration programs; and (iii) the shareholder policy and incentive tools for managers and employees, taking into account the objectives of the Company and individual and collective performance, including the fixing and/or modification of the conditions for the award or exercise of securities granted to the officers or of the employees, and, where appropriate, the

achievement of objectives permitting the exercise of the said securities, as provided under the terms and conditions of the said securities;

- participating in the implementation of the Company's governing bodies;
- identifying, assessing and proposing the appointment of independent directors with a view to the good governance of the Company; and
- pronouncing on any other issue relating to human resources which it considers appropriate or which is referred to it by the board of directors.

The Compensation and Governance Committee has only consultative powers. The Compensation and Governance Committee reports on its mission to the board of directors and communicates its recommendations, specifications, and opinions.

The Compensation and Governance Committee meets as often as it considers necessary, but at least twice a year.

D. Employees

As of December 31, 2021, we had 26 employees, all of whom are full-time, 20 of whom are engaged in research and development activities and 6 of whom are engaged in general and administrative activities. As of the date of this annual report, 100% of our employees are located in France. None of our employees are subject to a collective bargaining agreement. We consider our relationship with our employees to be good. France-based employees are subject to the national collective bargaining agreement for the pharmaceutical industry (the *convention collective nationale de l'industrie pharmaceutique*).

E. Share Ownership

For information regarding the share ownership of our directors and senior management, see "Item 6.B—Compensation" and "Item 7.A—Major Shareholders."

Item 7. Major Shareholders and Related Party Transactions.

A. Major Shareholders

The following table sets forth information with respect to the beneficial ownership of our ordinary shares as of February 18, 2022 for:

- each beneficial owner of more than 5% of our outstanding ordinary shares;
- each of our directors and executive officers; and
- all of our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities and include ordinary shares that can be acquired within 60 days of February 28, 2022. The percentage ownership information shown in the table is based upon 140,084,309 ordinary shares outstanding as of February 28, 2022.

Except as otherwise indicated, all of the shares reflected in the table are ordinary shares and all persons listed below have sole voting and investment power with respect to the shares beneficially owned by them, subject to applicable community property laws. The information is not necessarily indicative of beneficial ownership for any other purpose.

In computing the number of ordinary shares beneficially owned by a person and the percentage ownership of that person, we deemed outstanding ordinary shares subject to options and warrants held by that person that are immediately exercisable or exercisable within 60 days of February 28, 2022. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person. Beneficial ownership representing less than 1% is denoted with an asterisk (*). The information in the table below is based on information known to us or ascertained by us from public filings made by the shareholders.

Except as otherwise indicated in the table below, addresses of the directors, executive officers and named beneficial owners are in care of Biophytis S.A., Sorbonne University—BC 9, Bâtiment A 4ème étage, 4 place Jussieu 75005 Paris, France.

Owner	Number of Ordinary Shares	Percentage
Directors and Executive Officers:		
Stanislas Veillet(1)	3,142,534	2.2 %
Philippe Rousseau	—	*
Benoît Canolle (2)	89,131	*
Pierre Dilda(3)	174,363	*
Waly Dioh(4)	297,027	*
Rob Van Maanen(5)	89,131	*
Claude Allary (6)	184,139	*
Dimitri Batsis(7)	342,353	*
Nadine Coulm(8)	351,540	*
Jean Mariani(9)	347,930	*
All directors, executive officers and key employees as a group (10 persons)(10)	5,134,152	3.7 %

* Represents beneficial ownership of less than 1%.

(1) The shares beneficially owned by Mr. Veillet include 395,916 shares issuable upon the exercise of warrants that are currently exercisable or exercisable within 60 days of February 28, 2022.

(2) The shares beneficially owned by Mr. Canolle include 89,131 shares issuable upon the exercise of warrants that are currently exercisable or exercisable within 60 days of February 28, 2022

(3) The shares beneficially owned by Mr. Dilda consist of 174,363 shares issuable upon the exercise of warrants that are currently exercisable or exercisable within 60 days of February 28, 2022.

(4) The shares beneficially owned by Mr. Dioh include 272,027 shares issuable upon the exercise of warrants that are currently exercisable or exercisable within 60 days of February 28, 2022.

(5) The shares beneficially owned by Mr. Van Maanen include 89,131 shares issuable upon the exercise of warrants that are currently exercisable or exercisable within 60 days of February 28, 2022.

(6) The shares beneficially owned by Mr. Allary include 183,739 shares issuable upon the exercise of warrants that are currently exercisable or exercisable within 60 days of February 28, 2022.

(7) The shares beneficially owned by Mr. Batsis include 342,353 shares issuable upon the exercise of warrants that are currently exercisable or exercisable within 60 days of February 28, 2022.

(8) The shares beneficially owned by Ms. Coulm include 350,290 shares issuable upon the exercise of warrants that are currently exerciable or exercisable within 60 days of February 28, 2022.

(9) The shares beneficially owned by Mr. Mariani include 347,930 shares issuable upon the exercise of warrants that are currently exercisable or exercisable within 60 days of February 28, 2022.

(10) The shares beneficially owned by our officers and directors as a group include an aggregate of 2,255,918shares issuable upon the exercise of warrants that are currently exercisable or exercisable within 60 days of February 28, 2022.

Each of our shareholders is entitled to one vote per ordinary share. None of the holders of our shares has different voting rights from other holders of shares. We are not aware of any arrangement that may, at a subsequent date, result in a change of control of our company.

As of February 28, 2022, assuming that all of our ordinary shares represented by ADSs are held by residents of the United States, we estimate that approximately 3% of our outstanding ordinary shares were held in the United States by one registered holder of record, BNY Mellon, our ADS depositary. The actual number of holders is greater than these numbers of record holders and includes beneficial owners whose ADSs are held in street name by brokers and other nominees. This number of holders of record also does not include holders whose shares may be held in trust by other entities.

B. Related Party Transactions

Since January 1, 2021, we have engaged in the following transactions with our directors, executive officers and holders of more than 5% of our outstanding voting securities and their affiliates, which we refer to as our related parties.

Transactions with Our Affiliates, Principal Shareholders, Directors and Executive Officers

Intellectual Property Agreement with Stanislas Veillet

Our CEO, who is a corporate officer (mandataire social) but not an employee of the Company under French law, is involved in our research and development activities. He has developed inventions with us for which we have submitted patent applications in which he is listed as a co-inventor and other inventions that we expect may give rise to patent applications in the future for which we expect he will be included as a co-inventor. As an inventor, our CEO has certain rights under French intellectual property law. These rights are distinct from the statutory rights that usually apply to employee inventors under French law. In order to define a framework within which any intellectual property resulting from our CEO's research and development activities is properly assigned to us, we entered into an agreement on May 22, 2019 and into an amendment agreement to this agreement on April 6, 2020, both of which were approved by our board of directors. Pursuant to this agreement (as amended), our CEO is entitled to the following payments for his contributions:

- a first lump sum cash payment of €90 thousand to be paid within 30 days of filing of a patent application based on the assigned rights;
- a second lump sum cash payment of €90 thousand, to be paid within 30 days of publication of a patent application based on the assigned rights; and
- a 6.5% royalty payment with respect to any license income and/or any net sales by us of products manufactured with the patents filed on the basis of the assigned rights.

These three payments will be capped at €2.1 million on a platform per platform basis, a platform being defined in the agreement as the research and development works which cover the same family of chemical molecules targeting the same molecular receptor or biological pathway for a family of pathologies which are clinically connected.

In the event that a third party pharmaceutical and/or biotech company acquires 100% of our capital and voting rights, payments will be accelerated, so that the cap (€2.1 million per platform), less any amount previously paid in respect of a platform, will become immediately payable.

The agreement shall remain in effect until no further payments are due. However, the provisions of this agreement will only apply to results generated during the period in which our CEO occupies the position of a corporate officer of the Company or any of its affiliates. Any party to the agreement may, upon material breach of the agreement by the other party, terminate the agreement.

As part of the Intellectual Property agreement signed with our CEO and its amendment, the total patents rights acquired from our CEO amounted to €630 thousand in 2019, €450 thousand and €270 thousand in 2021. Of this amount, €270 thousand, €180 thousand and €270 thousand were paid to the Company's CEO in 2019, 2020 and 2021, respectively. As part of the subscription and the exercise of the investors warrants by our CEO, the remaining amount of €630 thousand was used to offset the amounts owed pursuant to such subscription and exercise.

Agreements with Biophytis, Inc.

We have entered into a current account advance agreement with Biophytis, Inc., dated November 9, 2015, which provides for certain cash advances to be made to Biophytis, Inc. by us. The amounts advanced to Biophytis, Inc. under this agreement bear interest

from the date such advances are made at the quarterly average effective rate of floating-rate loans with an initial maturity of more than two years, as used by credit institutions and published by the Banque de France. Biophytis, Inc. undertakes to reimburse us for the sums borrowed at any time, subject to budget constraints and immediately upon ceasing to be under our direct or indirect control. However, no repayment schedule has been set. Since January 1, 2021, the largest amount owed by Biophytis, Inc. to us under this agreement was € 1,466,980. The outstanding amount owed by Biophytis, Inc. to us as of March 15, 2022 is € 1,561,049.

We are also party to a debt compensation agreement with Biophytis, Inc., dated March 14, 2017, with retroactive effect as of January 1, 2017. This agreement provides that in exchange for services rendered to Biophytis, Inc., Biophytis, Inc. will pay us the amounts we invoice to them and that amounts billed to Biophytis, Inc. will bear interest at the quarterly average effective rate of floating-rate loans with an initial maturity of more than two years, as used by credit institutions and published by the Bank of France. Since January 1, 2021, the largest amount owed by Biophytis, Inc. to us was nil. The outstanding amount owed by Biophytis, Inc. to us as of March 15, 2022 is nil.

On March 22, 2019, we also entered into a services agreement with Biophytis, Inc., effective as of January 1, 2019. Pursuant to the terms of the agreement, Biophytis, Inc. has agreed to provide certain clinical and regulatory assistance to us (including supporting our clinical development efforts, assisting with the preparation and submission of regulatory and clinical documents to the various regulatory agencies and interacting with those agencies, and assisting with the preparation of other scientific communications) and certain financial and communication services (including financial and accounting support and investor relations services). In consideration for their services, we have agreed to reimburse Biophytis, Inc. for all of their direct and indirect costs and expenses in providing the services plus a 5% margin. The agreement is effective for one year and may be renewed for subsequent one year periods. On June 7, 2019, this agreement was amended to expand the financial services to be provided to us by Biophytis, Inc. under the agreement. Since January 1, 2021, the largest amount owed by us to Biophytis, Inc. was nil. The outstanding amount owed by us to Biophytis, Inc. as of March 15, 2022 is nil.

Agreements with Biophytis Instituto Do Brasil Serviços, Comércio, Importação E Exportação de Alimentos Ltda.

Since 2009, we have entered into several loan contracts providing for advances to Biophytis Instituto Do Brasil Serviços, Comércio, Importacao E Exportaçao de Alimentos Ltda, or Biophytis Brazil. We own 94.6% of Biophytis Brazil's share capital and voting rights. Biophytis Brazil's other shareholder is M. Wayne Clayton Correa, manager of Biophytis Brazil. Since January 1, 2021, the largest aggregate amount outstanding under these loan contracts was € 596,443. The outstanding amount owed by Biophytis Brazil to us as of March 15, 2022 was € 646,443. The terms of these loan contracts do not provide for interest or penalty in the event of default or late repayment. If Biophytis Brazil fails to pay the principal of the loan at the maturity date, we may extend the loan for a new term as agreed with Biophytis Brazil.

We have entered into a current account advance agreement with Biophytis Brazil dated December 28, 2020, with retroactive effect as of January 1, 2020, which provides for certain cash advances to be made to Biophytis Brazil by us. The amounts advanced to Biophytis Brazil under this agreement bear interest from the date such advances are made at the quarterly average effective rate of floating-rate loans with an initial maturity of more than two years, as used by credit institutions and published by the Banque de France. Biophytis Brazil undertakes to reimburse us for the sums borrowed at any time, subject to budget constraints and immediately upon ceasing to be under our direct or indirect control. However, no repayment schedule has been set.Since January 1, 2021, the largest aggregate amount outstanding under this agreement was nil. The outstanding amount owed by Biophytis Brazil to us as of March 15, 2022 was nil.

We are also party to a debt compensation agreement with Biophytis Brazil, dated December 28, 2020, with retroactive effect as of July 1, 2020. This agreement provides that in exchange for services rendered to Biophytis Brazil, Biophytis Brazil will pay us the amounts we invoice to them, as soon as its financial resources allow it reasonably, and that amounts billed to Biophytis Brazil will bear interest at the quarterly average effective rate of floating-rate loans with an initial maturity of more than two years, as used by credit institutions and published by the Bank of France. Since January 1, 2021, the largest aggregate amount outstanding under this agreement was nil. The outstanding amount owed by Biophytis Brazil to us as of March 15, 2022 was nil.

On December 28, 2020, we also entered into a services agreement with Biophytis Brazil, with retroactive effect as of July 1, 2020. Pursuant to the terms of the agreement, Biophytis Brazil has agreed to provide certain clinical and regulatory assistance to us (including supporting our clinical development efforts, assisting with the preparation and submission of regulatory and clinical documents to the various regulatory agencies and interacting with those agencies, and assisting with the preparation of other scientific communications). In consideration for their services, we have agreed to reimburse Biophytis Brazil for all of their direct and indirect costs and expenses in providing the services plus a 5% margin. The agreement is effective for one year and will be renewed by tacit

agreement for subsequent one year periods. Since January 1, 2021, the largest aggregate amount outstanding under this agreement was nil. The outstanding amount owed by us to Biophytis Brazil as of March 15, 2022 was nil.

Services Agreement with Successful Life

On October 1, 2019, we entered into a services agreement with Successful Life SAS in which Jean Mariani, its legal representative, has a controlling interest. This agreement was entered into for a period of one year and was renewed by written amendment dated October 1, 2020 for an additional period of one year, tacitly renewable. This agreement has been terminated and a new agreement has been signed for a period of one year tacitly renewable with effect as from January 1, 2021 following the March 9, 2021 Board decision.The contract runs by tacit renewal for one additionnal year in 2022. This services agreement provides for the scientific and strategic advice in relation to the biology of aging. The agreement provides for a fixed remuneration of €450 per day within the cap of €32,400 per year and reimbursement of costs and expenses upon presentation of supporting documentation. On July 7th, 2021, we signed a second agreement with Successful Life SAS by which Jean Mariani is to serve as interim Chief Medical officer until September 8th, 2021, as approved by the July 7th, 2021 Board decision, for a fixed remuneration of €15,000 per month. This agreement was extended on August 31 until September 30th 2022, and approved by the September 15, 2021 Board decision.

Indemnification Agreement

We have entered into nominative indemnification agreements with our directors and executive officers, pursuant to which we have undertaken to provide, in the event of claims, indemnification against any and all losses of and the advancement of expenses to, our directors and executive officers who become a party to or are threatened to be made a party to any claim.

Director and Executive Officer Compensation

See "Item 6.B—Compensation" of this annual report for information regarding compensation of directors and executive officers.

Related Person Transaction Policy

Under French law, transactions between a company and its general managers, directors, shareholders holding more than 10% of the voting rights of the company and any company controlling a shareholder holding more than 10% of the voting rights of the company, other than transactions in the ordinary course of business and at arm's length, must be (i) approved by the board of directors of the company prior to entering into the transaction, (ii) reported to the statutory auditors who must then prepare a report on such transaction, and (iii) ratified by the company's shareholders at the annual general meeting.

C. Interests of Experts and Counsel

Not applicable.

Item 8. Financial Information.

A. Consolidated Statements and Other Financial Information

Consolidated Financial Statements

Our consolidated financial statements are appended at the end of this annual report, starting at page F-1, and are incorporated by reference herein.

Legal Proceedings

From time to time, we may be involved in various claims and legal proceedings relating to claims arising out of our operations, including those described in Note 14 of our consolidated financial statements for the year ended December 31, 2021 appended to this annual report.

On June 14, 2016, the *Autorité des marchés financiers*, the French securities regulator or AMF, notified us that it had opened an inquiry as to (i) whether we had timely disclosed to the market the change in the expected timeline for the clinical trials of two of

our products, and (ii) whether we had provided the market with full and fair information regarding the approval of a clinical trial by a regulatory authority. On April 18, 2018, the AMF informed us that its inquiry had been completed and that its Board (*Collège*) had decided to refer the matter to its Sanctions Commission, limiting the scope to timely disclosure only and alleging a breach of Article 223-2 of the AMF General Regulation (i.e., delayed disclosure of information) by us and our Chief Executive Officer, as the legal representative of our corporate entity. As a result, the matter was investigated by the AMF Sanctions Commission (*Commission des sanctions*). The AMF Sanctions Commission appointed a *rapporteur*, who was charged with investigating the alleged breach and preparing a report to the Sanctions Commission. On March 19, 2019, the *rapporteur* interviewed us our Chief Executive Officer. During this interview, our Chief Executive Officer answered further questions regarding the alleged breach and agreed to provide further documentation to the *rapporteur* as requested. On June 28, 2019, the *rapporteur* issued his report, in which he concluded that our disclosures had not been timely made, but noted that the change in the expected timeline for our clinical trials was limited to three to six months and was not due to any unfavorable new information of a financial, regulatory or scientific nature, and that neither our Chief Executive Officer nor the Company had benefited in any way from such failure to timely disclose the information. The Sanctions Commission hearing was held September 13, 2019, and the Sanctions Commission's decision was handed down on October 1, 2019. Considering that the delay in communication was too long to meet the requirements of article 223-2 of the AMF General Regulations, the Sanctions Commission considered that the breach was committed and imposed a fine of €100,000 against the Company. As the breach was attributable to our Chief Executive Officer in his capacity as an executive officer of the Company pursuant to article 221-1 of the AMF General Regulations, the Sanctions Commission imposed a fine of €20,000 against him. The Sanctions Commission also ordered that the decision be published. We and our Chief Executive Officer appealed this decision by declaration dated December 3, 2019, lodged at the registry of the Court of Appeals of Paris. The AMF filed a counterclaim in which it requested that the sanctions against the Company and our Chief Executive Officer be increased to €150,000 and €50,000, respectively. The hearing before the Court of Appeals of Paris was held on October 8, 2020. The decision of the Court of Appeals was issued on December 10, 2020 and confirmed the decisions of the Sanctions Commission (i.e., a fine of €100,000 for the Company and a fine of €20,000 for our CEO).

On August 19, 2019, the Company, as borrower, entered into an agreement, or the NEGMA Agreement, with NEGMA, as lender, to issue bonds redeemable in cash and/or convertible into new and/or existing shares with attached warrants (*ORNANE BSA*), the execution of which proved to be conflicting. The Company terminated the NEGMA Agreement on April 6, 2020. Following the termination, NEGMA initiated summary proceedings before the Commercial Court of Paris (*Tribunal de commerce de Paris*) to obtain the legal escrow of 7,000,000 ordinary shares of the Company and payment of €910,000 as contractual penalties. Pursuant to an order dated May 7, 2020, the President of the Commercial Court of Paris partially granted NEGMA's claims and ordered the Company to (i) pay NEGMA an amount of €378 thousand as penalty and (ii) deliver 2,050,000 shares, or the May 7th Court Order. The Company complied with the court's order on June 5, 2020. The Company appealed the May 7th Court Order before the Court of Appeals of Paris. By decision dated November 18, 2020, the Court of Appeals of Paris reversed the May 7th Court Order and ordered NEGMA to pay the costs of the trial and appeal proceedings. As a result, NEGMA was ordered to return 2,050,000 ordinary shares to us and pay us the amount of €378 thousand. NEGMA has satisfied these obligations as of the date of this annual report by paying €419 thousand (including penalty interest and legal cost) and delivering 2,050,000 ordinary shares to us on January 19, 2021. In addition, NEGMA initiated proceedings on the merits in order to obtain what had not been awarded by the May 7th Court Order. Since the decision of the Court of Appeals of Paris dated November 18, 2020, NEGMA has modified its claims on the merits in order to obtain 7,000,000 shares. Pursuant to a judgement dated March 16, 2021, NEGMA obtained an enforceable decision responding to its claims ordering us under penalty to pay to NEGMA in an amount of €910 thousand as a settlement according to the contractual terms of the Negma agreement and to deliver to NEGMA 7,000,000 of our ordinary shares. We appealed this decision to the Court of Appeals of Paris.

In April 2021, we entered into an escrow agreement with the Delubac bank by which we put into escrow 2,050,000 of our ordinary shares.

On June 22, 2021, NEGMA undertook legal actions in order to liquidate the penalty ordered by the March 16, 2021 decision. Pursuant to an execution judgement dated July 16, 2021, NEGMA obtained the liquidation of €1.5 million penalty and added a new penalty to the execution of the March 16, 2021 decision. On July 27, 2021, we paid NEGMA the €1.5 million penalty. On July 30, 2021, we instructed Delubac to release the 2,050,000 shares into escrow to NEGMA and issued 4,950,000 new ordinary shares to NEGMA.

As of the date of this Annual Report, the decision of the Court of Appeals of Paris has not been rendered.

Other than the legal proceeding described above, we are not currently a party to any legal proceedings that, in the opinion of our management, are likely to have a material adverse effect on our business. Regardless of outcome, litigation can have an adverse impact on us because of defense and settlement costs, diversion of management resources and other factors.

Dividend Distribution Policy

We have never declared or paid any cash dividends on our ordinary shares. We do not anticipate paying cash dividends on our equity securities in the foreseeable future and intend to retain all available funds and any future earnings for use in the operation and expansion of our business.

Subject to the requirements of French law and our by-laws, dividends may only be distributed from our distributable profits, plus any amounts held in our reserves other than those reserves that are specifically required by law. Article 34 of our By-laws imposes additional limitations on our ability to declare and pay dividends and there may be taxes imposed on you if we elect to pay a dividend. Dividend distributions, if any, will be made in euros and converted into U.S. dollars with respect to the ADSs, as provided in the deposit agreement.

B. Significant Changes

Not applicable.

Item 9. The Offer and Listing.

A. Offer and Listing Details

Our ADS have been listed on the Nasdaq Capital Market under the symbol “BPTS” since February 10, 2021. Prior to that date, there was no public trading market for ADSs. Our ordinary shares have been trading on Euronext Growth Paris under the symbol “ALBPS” since July 13, 2015. Prior to that date, there was no public trading market for our ordinary shares.

B. Plan of Distribution

Not applicable.

C. Markets

Our ADSs have been listed on the Nasdaq Capital Market under the symbol “BPTS” since February 10, 2021 and our ordinary shares have been trading on Euronext Growth Paris under the symbol “ALBPS” since July 13, 2015.

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

Item 10. Additional Information.

A. Share Capital

Not applicable.

B. Memorandum and Articles of Association

The information set forth in the final prospectus dated February 11, 2021 as part of our Registration Statement on Form F-1 (File No. 333-252225), declared effective by the SEC on February 9, 2021, under the headings "Description of Share Capital and Aricles of Association—Key Provisions of Our Articles of Incorporation and Articles of Association and French Law Affecting Our Ordinary Shares," "Description of Share Capital—Differences in Corporate Law" and "Limitations Affecting Shareholders of a French Company" is incorporated herein by reference.

C. Material Contracts

We entered into an underwriting agreement with H.C. Wainwright & Co., or H.C. Wainwright, as underwriter, on February 9, 2021, with respect to the ADSs sold in our U.S. initial public offering. We have agreed to indemnify H. C. Wainwright against certain liabilities, including liabilities under the Securities Act, and to contribute to payments H.C. Wainwright may be required to make in respect of such liabilities.

For additional information regarding our material contracts, please see "Item 4—Information on the Company", "Item 6—Directors, Senior Management and Employees," and "Item 7.B—Related Party Transactions" of this annual report.

D. Exchange Controls

Under current French foreign exchange control regulations there are no limitations on the amount of cash payments that we may remit to residents of foreign countries. Laws and regulations concerning foreign exchange controls do, however, require that all payments or transfers of funds made by a French resident to a non-resident such as dividend payments be handled by an accredited intermediary. All registered banks and substantially all credit institutions in France are accredited intermediaries.

E. Taxation

Material U.S. Federal Income Tax Considerations

The following is a summary of certain material U.S. federal income tax considerations relating to the acquisition, ownership and disposition of ADSs by a U.S. holder (as defined below). This summary addresses such U.S. federal income tax considerations only for U.S. holders that are initial purchasers of the ADSs and that will hold such ADSs as capital assets within the meaning of Section 1221 of the U.S. Internal Revenue Code of 1986, as amended (the "Code"). This summary does not address all U.S. federal income tax matters that may be relevant to a particular U.S. holder, including U.S. federal estate, gift, or alternative minimum tax considerations, or any U.S. state, local, or non-U.S. tax considerations of the acquisition, ownership and disposition of the ADSs. This summary also does not address tax considerations applicable to a U.S. holder of ADSs that may be subject to special tax rules including, without limitation, the following:

- banks, financial institutions or insurance companies;
- brokers, dealers or traders in securities, currencies, commodities, or notional principal contracts;
- tax-exempt entities or organizations, including an "individual retirement account" or "Roth IRA" as defined in Section 408 or 408A of the Code (as defined below), respectively;
- an entity subject to special tax rules prescribed pursuant to Section 7874 of the Code (as defined below);
- real estate investment trusts, regulated investment companies or grantor trusts;
- persons that hold the ADSs as part of a "hedging," "integrated," "wash sale" or "conversion" transaction or as a position in a "straddle" for U.S. federal income tax purposes;
- S corporations;
- certain former citizens or long term residents of the United States;

- persons subject to Section 451(b) of the Code;
- persons that received ADSs as compensation for the performance of services;
- persons acquiring ADSs in connection with a trade or business conducted outside of the United States, including a permanent establishment in France;
- holders that own directly, indirectly, or through attribution 10% or more of the voting power or value of the ADSs and shares or, in the case of the discussion of French tax consequences, 5% or more of the voting stock or our share capital; and
- holders that have a "functional currency" other than the U.S. dollar.

For the purposes of this description, a "U.S. holder" is a beneficial owner of ADSs that is (or is treated as), for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a domestic corporation; or
- an estate, the income of which is subject to U.S. federal income taxation regardless of its source; or a trust, if a court within the United States is able to exercise primary supervision over its administration and one or more U.S. persons have the authority to control all of the substantial decisions of such trust, or if such trust has a valid election in effect under applicable U.S. Treasury regulations to be treated as a U.S. person.

If a partnership (or any other entity treated as a partnership for U.S. federal income tax purposes) holds ADSs, the U.S. federal income tax consequences relating to an investment in the ADSs will depend in part upon the status of the partner and the activities of the partnership. Such a partner or partnership should consult its tax advisor regarding the U.S. federal income tax considerations of acquiring, owning and disposing of the ADSs in its particular circumstances.

The discussion in this section is based in part upon the representations of the depositary and the assumption that each obligation in the deposit agreement and any related agreement will be performed in accordance with its terms. In general, and taking into account the earlier assumptions, for U.S. federal income tax purposes, a U.S. holder holding ADSs should be treated as the owner of the ordinary shares represented by the ADSs. Accordingly, no gain or loss should be recognized upon an exchange of ADSs for ordinary shares. The U.S. Treasury has expressed concerns that intermediaries in the chain of ownership between the holder of an ADS and the issuer of the security underlying the ADS may be taking actions that are inconsistent with the beneficial ownership of the underlying security. Accordingly, the creditability of foreign taxes, if any, as described below, could be affected by actions taken by intermediaries in the chain of ownership between the holders of ADSs and our company if as a result of such actions the holders of ADSs are not properly treated as beneficial owners of the underlying ordinary shares.

This summary is based on the Code, final, proposed and temporary U.S. Treasury regulations promulgated thereunder and administrative and judicial interpretations thereof, in each case as in effect and available on the date hereof. All the foregoing is subject to change, which change could apply retroactively, and to differing interpretations, all of which could affect the tax considerations described below. There can be no assurances that the IRS will not take a position concerning the tax consequences of the acquisition, ownership and disposition of the ADSs or that such a position would not be sustained by a court. Holders should consult their tax advisers concerning the U.S. federal, state, local and non-U.S. tax consequences of acquiring, owning and disposing of the ADSs in their particular circumstances.

PERSONS CONSIDERING AN INVESTMENT IN THE ADSs SHOULD CONSULT THEIR TAX ADVISORS AS TO THE PARTICULAR TAX CONSEQUENCES APPLICABLE TO THEM RELATING TO THE ACQUISITION, OWNERSHIP AND DISPOSITION OF THE ADSs, INCLUDING THE APPLICABILITY OF U.S. FEDERAL, STATE AND LOCAL TAX LAWS AND OTHER NON-U.S. TAX LAWS.

Distributions. Subject to the discussion under "*—Passive Foreign Investment Company Considerations,*" below, the gross amount of any distribution (including any amounts withheld in respect of foreign tax) actually or constructively received by a U.S. holder with respect to the ADSs will be taxable to the U.S. holder as a dividend to the extent of the U.S. holder's pro rata share of our current and accumulated earnings and profits as determined under U.S. federal income tax principles. Distributions in excess of

earnings and profits will be non-taxable to the U.S. holder to the extent of, and will be applied against and reduce, the U.S. holder's adjusted tax basis in the ADSs. Distributions in excess of earnings and profits and such adjusted tax basis generally will be taxable to the U.S. holder as either long-term or short-term capital gain depending upon whether the U.S. holder has held the ADSs for more than one year as of the time such distribution is received. However, since we do not calculate our earnings and profits under U.S. federal income tax principles, it is expected that any distribution will be reported as a dividend, even if that distribution would otherwise be treated as a non-taxable return of capital or as capital gain under the rules described above. Non-corporate U.S. holders may qualify for the preferential rates of taxation with respect to dividends on ADSs applicable to long-term capital gains (i.e., gains from the sale of capital assets held for more than one year) applicable to "qualified dividend income" (as discussed below) if we are a "qualified foreign corporation" and certain other requirements (discussed below) are met. A non-U.S. corporation (other than a corporation that is classified as a PFIC for the taxable year in which the dividend is paid or the preceding taxable year) generally will be considered to be a qualified foreign corporation (a) if it is eligible for the benefits of a comprehensive tax treaty with the United States which the Secretary of Treasury of the United States determines is satisfactory for purposes of this provision and which includes an exchange of information provision, or (b) with respect to any dividend it pays on ADSs which are readily tradable on an established securities market in the United States. The Company, which is incorporated under the laws of France, believes that it qualifies as a resident of France for purposes of, and is eligible for the benefits of, the Convention between the Government of the United States of America and the Government of the French Republic for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income and Capital, signed on August 31, 1994, as amended and currently in force (the "U.S.-France Tax Treaty"), although there can be no assurance in this regard. Further, the IRS has determined that the U.S.-France Tax Treaty is satisfactory for purposes of the qualified dividend income rules and that it includes an exchange-of-information program. The ADSs are listed on the Nasdaq Capital Market, which is an established securities market in the United States. There can, however, be no assurance that the ADSs will be considered readily tradable on an established securities market in the United States in later years. Therefore, subject to the discussion under "*—Passive Foreign Investment Company Considerations*," below, dividends on ADSs generally will be "qualified dividend income" in the hands of individual U.S. holders, provided that a holding period requirement (more than 60 days of ownership, without protection from the risk of loss, during the 121-day period beginning 60 days before the ex-dividend date) and certain other requirements are met. The dividends will not be eligible for the dividends-received deduction generally allowed to corporate U.S. holders.

A U.S. holder generally may claim the amount of any French withholding tax as either a deduction from gross income or a credit against its U.S. federal income tax liability. However, the foreign tax credit is subject to numerous complex limitations that must be determined and applied on an individual basis. Generally, the credit cannot exceed the proportionate share of a U.S. holder's U.S. federal income tax liability that such U.S. holder's taxable income bears to such U.S. holder's worldwide taxable income. In applying this limitation, a U.S. holder's various items of income and deduction must be classified, under complex rules, as either "foreign source" or "U.S. source." In addition, this limitation is calculated separately with respect to specific categories of income. The amount of a distribution with respect to the ADSs that is treated as a "dividend" may be lower for U.S. federal income tax purposes than it is for French income tax purposes, potentially resulting in a reduced foreign tax credit for the U.S. holder. Each U.S. holder should consult its tax advisor regarding the foreign tax credit rules.

In general, the amount of a distribution paid to a U.S. holder in a foreign currency will be the dollar value of the foreign currency calculated by reference to the spot exchange rate on the day the depositary receives the distribution, regardless of whether the foreign currency is converted into U.S. dollars at that time. Any foreign currency gain or loss a U.S. holder realizes on a subsequent conversion of foreign currency into U.S. dollars will be U.S. source ordinary income or loss. If dividends received in a foreign currency are converted into U.S. dollars on the day they are received, a U.S. holder should not be required to recognize foreign currency gain or loss in respect of the dividend.

Sale, Exchange or Other Taxable Disposition of the ADSs. A U.S. holder generally will recognize gain or loss for U.S. federal income tax purposes upon the sale, exchange or other taxable disposition of ADSs in an amount equal to the difference between the U.S. dollar value of the amount realized from such sale, exchange or other taxable disposition and the U.S. holder's tax basis in those ADSs, determined in U.S. dollars. Subject to the discussion under "*—Passive Foreign Investment Company Considerations*" below, this gain or loss generally will be a capital gain or loss. The adjusted tax basis in the ADSs generally will be equal to the cost of such ADSs. Capital gain from the sale, exchange or other taxable disposition of ADSs of a non-corporate U.S. holder generally is eligible for a preferential rate of taxation applicable to capital gains, if the non-corporate U.S. holder's holding period determined at the time of such sale, exchange or other taxable disposition for such ADSs exceeds one year (i.e., such gain is long-term capital gain). The deductibility of capital losses for U.S. federal income tax purposes is subject to limitations. Any such gain or loss that a U.S. holder recognizes generally will be treated as U.S. source gain or loss for foreign tax credit limitation purposes.

For a cash basis taxpayer, units of foreign currency paid or received are translated into U.S. dollars at the spot rate on the settlement date of the purchase or sale. In that case, no foreign currency exchange gain or loss will result from currency fluctuations between the trade date and the settlement date of such a purchase or sale. An accrual basis taxpayer may elect the same treatment required of cash basis taxpayers with respect to purchases and sales of the ADSs that are traded on an established securities market, provided the election is applied consistently from year to year. Such election may not be changed without the consent of the IRS. For an accrual basis taxpayer who does not make such election, units of foreign currency paid or received are translated into U.S. dollars at the spot rate on the trade date of the purchase or sale. Such an accrual basis taxpayer may recognize exchange gain or loss based on currency fluctuations between the trade date and the settlement date. Any foreign currency gain or loss a U.S. Holder realizes will be U.S. source ordinary income or loss.

Medicare Tax. Certain U.S. holders that are individuals, estates or trusts are subject to a 3.8% tax on all or a portion of their "net investment income," which may include all or a portion of their dividend income and net gains from the disposition of ADSs. Each U.S. holder that is an individual, estate or trust is urged to consult its tax advisor regarding the applicability of such tax to its income and gains in respect of its investment in the ADSs.

Passive Foreign Investment Company Considerations. If we are classified as a PFIC in any taxable year, a U.S. holder will be subject to special rules generally intended to reduce or eliminate any benefits from the deferral of U.S. federal income tax that a U.S. holder could derive from investing in a non-U.S. company that does not distribute all of its earnings on a current basis.

PFIC Tests. We will be classified as a PFIC for U.S. federal income tax purposes in any taxable year in which, after applying certain look-through rules with respect to the income and assets of our subsidiaries, either: (i) at least 75% of our gross income is "passive income" (the "PFIC Income Test"), or (ii) at least 50% of the average quarterly value of our total gross assets (which would generally be measured by the fair market value of our assets, and for which purpose the total value of our assets may be determined in part by the market value of the ADSs and our ordinary shares, which are subject to change) is attributable to assets that produce "passive income" or are held for the production of "passive income" (the "PFIC Asset Test").

Passive income for purposes of the PFIC Income Test and PFIC Asset Test generally includes dividends, interest, royalties, rents, gains from commodities and securities transactions, the excess of gains over losses from the disposition of assets which produce passive income, and amounts derived by reason of the temporary investment of funds raised in offerings of the ADSs. If a non-U.S. corporation owns directly or indirectly at least 25% by value of the stock of another corporation, the non-U.S. corporation is treated for purposes of the PFIC Income Test and the PFIC Asset Test as owning its proportionate share of the assets of the other corporation and as receiving directly its proportionate share of the other corporation's income. If we are classified as a PFIC in any year with respect to which a U.S. holder owns the ADSs, we will continue to be treated as a PFIC with respect to such U.S. holder in all succeeding years during which the U.S. holder owns the ADSs, regardless of whether we continue to meet the PFIC Income Test and/or the PFIC Asset Test.

For purposes of the PFIC Asset Test, the market value of our assets may be determined in large part by reference to the market price of the ADSs and our ordinary shares, which is likely to fluctuate. In addition, whether we meet PFIC Income Test for any taxable year may depend on whether we receive certain non-refundable grants or subsidies and whether such amounts and reimbursements of certain refundable research tax credits constitute gross income for purposes of PFIC Income Test. Because PFIC status under the PFIC Income Test and the PFIC Asset Test is a factual determination made annually after the end of each taxable year, there can be no assurance that we will not be considered a PFIC in any taxable year. Based on the composition of our gross income, assets, activities, and market capitalization in 2021, and on reasonable assumptions, we believe that it is more likely than not that we were not a PFIC for our taxable year ending December 31, 2021. However, there can be no assurance that we will not be a PFIC for our current taxable year ending December 31, 2022 or for any prior or future taxable year. Our U.S. counsel expresses no opinion regarding our conclusions regarding our PFIC status.

If we are a PFIC, and you are a U.S. holder that does not make one of the elections described below, a special tax regime will apply to both (a) any gain realized on the sale, exchange, or other taxable disposition of ADSs and (b) any "excess distribution" by us to you (generally, your ratable portion of distributions in any year that are greater than 125% of the average annual distribution received by you in the shorter of the three preceding years or your holding period for the ADSs), unless you elect to treat us as a "qualified electing fund" (a "QEF") or make a "mark-to-market" election, each as discussed below. Under this regime, any excess distribution and realized gain will be treated as ordinary income and will be subject to tax as if (a) the excess distribution or gain had been realized ratably over your holding period, (b) the amount deemed realized in each year had been subject to tax in each year of that holding period at the highest marginal rate for such year (other than income allocated to the current period or any taxable period before we became a PFIC, which would be subject to tax at the U.S. holder's regular ordinary income rate for the current year and

would not be subject to the interest charge discussed below), and (c) the interest charge generally applicable to underpayments of tax had been imposed on the taxes deemed to have been payable in those years. In addition, dividend distributions made to you will not qualify for the lower rates of taxation applicable to "qualified dividend income" discussed above under "*—Distributions*."

If we are determined to be a PFIC, the general tax treatment for U.S. holders described in this section would apply to indirect distributions and gains deemed to be realized by U.S. holders in respect of any of our subsidiaries that also may be determined to be PFICs.

If a U.S. holder owns ADSs during any taxable year in which we are a PFIC, the U.S. holder generally will be required to file an IRS Form 8621 (Information Return by a Shareholder of a Passive Foreign Investment Company or Qualified Electing Fund) with respect to the Company, generally with the U.S. holder's federal income tax return for that year.

PFIC Elections. Certain elections may alleviate some of the adverse consequences of PFIC status and would result in an alternative treatment of the ADSs.

A U.S. holder may make a "mark-to-market" election with respect to its ADSs if the ADSs meet certain minimum trading requirements, as described below. If a U.S. holder makes a mark-to-market election, the U.S. holder generally will recognize as ordinary income any excess of the fair market value of the ADSs at the end of each taxable year over their adjusted tax basis, and will recognize an ordinary loss in respect of any excess of the adjusted tax basis of the ADSs over their fair market value at the end of the taxable year (but only to the extent of the net amount of income previously included as a result of the mark-to-market election). If a U.S. holder makes a mark-to-market election, the U.S. holder's tax basis in the ADSs will be adjusted to reflect these income or loss amounts. Any gain recognized on the sale, exchange, or other taxable disposition of ADSs in a taxable year when we are a PFIC will be treated as ordinary income and any loss will be treated as an ordinary loss (but only to the extent of the net amount of income previously included as a result of the mark-to-market election). The mark-to-market election is available only if we are a PFIC and the ADSs are "regularly traded" on a "qualified exchange." The ADSs will be treated as "regularly traded" in any calendar year in which more than a de minimis quantity of the ADSs are traded on a qualified exchange on at least 15 days during each calendar quarter (subject to the rule that trades that have as one of their principal purposes the meeting of the trading requirement as disregarded). The Nasdaq Capital Market is a qualified exchange for this purpose and, consequently, if the ADSs are regularly traded, the mark-to-market election should be available to a U.S. holder.

As an alternative to making a mark-to-market election, the excess distribution rules may be avoided if a U.S. holder makes a QEF election effective beginning with the first taxable year in the U.S. holder's holding period in which we are treated as a PFIC with respect to such U.S. holder. A U.S. holder that makes a QEF election with respect to a PFIC is required to include in income its pro rata share of the PFIC's ordinary earnings and net capital gain as ordinary income and capital gain, respectively, subject to a separate election to defer payment of taxes, which deferral is subject to an interest charge.

In general, a U.S. holder makes a QEF election by attaching a completed IRS Form 8621 (Information Return by a Shareholder of a Passive Foreign Investment Company or Qualified Electing Fund) to a timely filed (taking into account any extensions) U.S. federal income tax return for the taxable year beginning with which the QEF election is to be effective. In certain circumstances, a U.S. holder may be able to make a retroactive QEF election. A QEF election can be revoked only with the consent of the IRS. In order for a U.S. holder to make a valid QEF election, the corporation must annually provide or make available to the U.S. holder certain information.

We do not currently intend to provide the information necessary for U.S. holders to make or maintain QEF elections if we are treated as a PFIC for any taxable year. U.S. holders should consult their tax advisors to determine whether any of these elections would be available and if so, what the consequences of the alternative treatments would be in their particular circumstances.

THE U.S. FEDERAL INCOME TAX RULES RELATING TO PFICS ARE COMPLEX. U.S. HOLDERS ARE URGED TO CONSULT THEIR TAX ADVISERS WITH RESPECT TO THE CONSEQUENCES OF THE ACQUISITION, OWNERSHIP AND DISPOSITION OF THE ADSs, THE CONSEQUENCES TO THEM OF AN INVESTMENT IN A PFIC, ANY ELECTIONS AVAILABLE WITH RESPECT TO THE ADSs AND THE IRS INFORMATION REPORTING OBLIGATIONS WITH RESPECT TO THE ACQUISITION, OWNERSHIP AND DISPOSITION OF THE ADSs.

Backup Withholding and Information Reporting. U.S. holders generally will be subject to information reporting requirements with respect to dividends on the ADSs and on the proceeds from the sale, exchange or other taxable disposition of the ADSs that are paid within the United States or through U.S.-related financial intermediaries, unless the U.S. holder is an "exempt

recipient." In addition, U.S. holders may be subject to backup withholding on such payments, unless the U.S. holder provides a taxpayer identification number and a duly executed IRS Form W-9 or otherwise establishes an exemption from backup withholding. Backup withholding is not an additional tax, and the amount of any backup withholding should be allowed as a credit against a U.S. holder's U.S. federal income tax liability and may entitle such holder to a refund, provided that the required information is timely furnished to the IRS. U.S. holders are urged to consult their tax advisors regarding the application of the information reporting and backup withholding rules to its particular circumstances.

Certain Reporting Requirements With Respect to Payments of Offer Price. U.S. holders paying more than U.S. $100,000 for the ADSs generally may be required to file IRS Form 926 reporting the payment of the Offer Price for the ADSs to us. Substantial penalties may be imposed upon a U.S. holder that fails to comply. Each U.S. holder should consult its own tax advisor as to the possible obligation to file IRS Form 926.

Foreign Asset Reporting. Certain individual U.S. holders are required to report information relating to an interest in the ADSs, subject to certain exceptions (including an exception for shares held in accounts maintained by U.S. financial institutions) by filing IRS Form 8938 (Statement of Specified Foreign Financial Assets) with their federal income tax return. In addition, U.S. holders should consider their possible obligation to file FinCEN Form 114 (Foreign Bank and Financial Accounts Report) with the U.S. Treasury, as a result of holding the ADSs. Moreover, U.S. holders who paid us more than U.S. $100,000 for the ADSs generally may be required to file IRS Form 926 to report such payment and substantial penalties may be imposed upon a U.S. holder that fails to comply. U.S. holders are urged to consult their tax advisors regarding their information reporting obligations, if any, with respect to their ownership and disposition of the ADSs.

Material French Tax Considerations

The following describes the material French income tax consequences to U.S. holders of purchasing, owning and disposing of the ADSs. This discussion does not purport to be a complete analysis or listing of all potential tax effects of the acquisition, ownership or disposition of the ADSs to any particular investor, and does not discuss tax considerations that arise from rules of general application or that are generally assumed to be known by investors. All of the following is subject to change. Such changes could apply retroactively and could affect the consequences described below.

The description of the French income tax and wealth tax consequences set forth below is based on the Convention Between the Government of the United States of America and the Government of the French Republic for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income and Capital of August 31, 1994, or the Treaty, which came into force on December 30, 1995 (as amended by any subsequent protocols, including the protocol of January 13, 2009), and the tax guidelines issued by the French tax authorities in force as of the date of this annual report.

This discussion applies only to investors that are entitled to Treaty benefits under the "Limitation on Benefits" provision contained in the Treaty.

In 2011, France introduced a comprehensive set of new tax rules applicable to French assets that are held by or in foreign trusts. These rules provide inter alia for the inclusion of trust assets in the settlor's net assets for the purpose of applying the French wealth tax, for the application of French gift and death duties to French assets held in trust, for a specific tax on capital on the French assets of foreign trusts not already subject to the French wealth tax and for a number of French tax reporting and disclosure obligations. The following discussion does not address the French tax consequences applicable to securities (including ADSs) held in trusts. If ADSs are held in trust, the grantor, trustee and beneficiary are urged to consult their own tax advisor regarding the specific tax consequences of acquiring, owning and disposing of securities (including ADSs).

U.S. holders are urged to consult their own tax advisors regarding the tax consequences of the purchase, ownership and disposition of securities in light of their particular circumstances, especially with regard to the "Limitations on Benefits" provision.

Estate and Gift Taxes and Transfer Taxes

In general, a transfer of securities by gift or by reason of death of a U.S. holder that would otherwise be subject to French gift or inheritance tax, respectively, will not be subject to such French tax by reason of the Convention between the Government of the United States of America and the Government of the French Republic for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Estates, Inheritances and Gifts, dated November 24, 1978, unless (i) the donor or the

transferor is domiciled in France at the time of making the gift or at the time of his or her death, or (ii) the securities were used in, or held for use in, the conduct of a business through a permanent establishment or a fixed base in France.

Pursuant to Article 235 ter ZD of the Code général des impôts (French Tax Code, or FTC), purchases of shares or ADSs of a French company listed on a regulated market of the European Union or on a foreign regulated market formally acknowledged by the AMF are subject to a 0.3% French tax on financial transactions, or the TFT, provided that the issuer's market capitalization exceeds €1 billion as of December 1 of the year preceding the taxation year.

A list of relevant French companies whose market capitalization exceeds €1 billion as of December 1 of the year preceding the taxation year within the meaning of Article 235 ter ZD of the FTC used to be published annually by the French Ministry of Economy. It is now published by the French tax authorities, and could be amended at any time. Pursuant to Regulations BOI-ANNX-000467- 29/12/2021 issued on December 29, 2021, we are currently not included in such list. Such list may be updated from time to time, or may not be published anymore in the future.

As a result, neither the ADSs nor the ordinary shares are currently within the scope of the TFT. However, following our U.S. initial public offering, purchases of our securities may be subject to TFT, provided that our market capitalization exceeds €1 billion.

In the case where Article 235 ter ZD of the FTC is not applicable, transfers of shares issued by a listed French company are subject to uncapped registration duties at the rate of 0.1% if the transfer is evidenced by a written statement ("acte") executed either in France or outside France. Although there is no case law or official guidelines published by the French tax authorities on this point, transfers of ADSs should remain outside of the scope of the aforementioned 0.1% registration duties.

Tax on Sale or Other Disposition

As a matter of principle, under French tax law, a U.S. holder should not be subject to any French tax on any capital gain from the sale, exchange, repurchase or redemption by us of ordinary shares or ADSs, provided such U.S. holder is not a French tax resident for French tax purposes and has not held more than 25% of our dividend rights, known as *"droits aux benefices sociaux,"* at any time during the preceding five years, either directly or indirectly, and, as relates to individuals, alone or with relatives (as an exception, a U.S holder resident, established or incorporated in a non-cooperative state or territory as defined in Article 238-0 A of the FTC should be subject to a 75% withholding tax in France on any such capital gain, regardless of the fraction of the dividend rights it holds).

Under application of the Treaty, a U.S. holder who is a U.S. resident for purposes of the Treaty and entitled to Treaty benefit will not be subject to French tax on any such capital gain unless the ordinary shares or the ADSs form part of the business property of a permanent establishment or fixed base that the U.S. holder has in France. U.S. holders who own ordinary shares or ADSs through U.S. partnerships that are not resident for Treaty purposes are advised to consult their own tax advisors regarding their French tax treatment and their eligibility for Treaty benefits in light of their own particular circumstances. A U.S. holder that is not a U.S. resident for Treaty purposes or is not entitled to Treaty benefit (and in both cases is not resident, established or incorporated in a non-cooperative State or territory as defined in Article 238-0 A of the FTC) and has held more than 25% of our dividend rights, known as *"droits aux benefices sociaux,"* at any time during the preceding five years, either directly or indirectly, and, as relates to individuals, alone or with relatives will be subject to a levy in France at the rate (i) of 12.8% for individuals, and (ii) corresponding to the standard corporate income tax set forth in Article 219-I of the FTC legal persons (i.e., 25% for financial years beginning on or after January 1, 2022).

Taxation of Dividends

Dividends paid by a French corporation to non-residents of France are generally subject to French withholding tax at a rate (i) aligned on the standard corporate income tax rate set forth in Article 219-I of the FTC for financial years beginning January 1, 2022, for payments benefitting legal persons who are not French tax residents (i.e. 25% for financial years beginning on or after January 1, 2022), and (ii) equal to 12.8% for payments benefitting individuals who are not French tax residents. Dividends paid by a French corporation in a non-cooperative State or territory, as defined in Article 238-0 A of the FTC, will generally be subject to French withholding tax at a rate of 75%. However, eligible U.S. holders entitled to Treaty benefits under the "Limitation on Benefits" provision contained in the Treaty who are U.S. residents, as defined pursuant to the provisions of the Treaty, will not be subject to the above-mentioned withholding tax rates, but may be subject to the withholding tax at a reduced rate (as described below).

Under the Treaty, the rate of French withholding tax on dividends paid to an eligible U.S. holder who is a U.S. resident as defined pursuant to the provisions of the Treaty and whose ownership of the ordinary shares or ADSs is not effectively connected with

a permanent establishment or fixed base that such U.S. holder has in France, is generally reduced to 15%, or to 5% if such U.S. holder is a corporation and owns directly or indirectly at least 10% of the share capital of the issuer; such U.S. holder may claim a refund from the French tax authorities of the amount withheld in excess of the Treaty rates of 15% or 5%, if any.

For U.S. holders that are not individuals but are U.S. residents, as defined pursuant to the provisions of the Treaty, the requirements for eligibility for Treaty benefits, including the reduced 5% or 15% withholding tax rates contained in the "Limitation on Benefits" provision of the Treaty, are complex, and certain technical changes were made to these requirements by the protocol of January 13, 2009. U.S. holders are advised to consult their own tax advisors regarding their eligibility for Treaty benefits in light of their own particular circumstances. Dividends paid to an eligible U.S. holder may immediately be subject to the reduced rates of 5% or 15% provided that:

- such holder establishes before the date of payment that it is a U.S. resident under the Treaty by completing and providing the depositary with a treaty form (Form 5000); or

- the depositary or other financial institution managing the securities account in the United States of such holder provides the French paying agent with a document listing certain information about the U.S. holder and its ordinary shares or ADSs and a certificate whereby the financial institution managing the U.S. holder's securities account in the United States takes full responsibility for the accuracy of the information provided in the document.

Otherwise, dividends paid to a U.S. holder will be subject to French withholding tax at the rate of 12.8%, 25%, or 75% if paid in a non-cooperative State or territory (as defined in Article 238-0 A of the FTC), and may then be reduced at a later date to 5% or 15%, provided that such holder duly completes and provides the French tax authorities with the treaty forms Form 5000 and Form 5001 before December 31 of the second calendar year following the year during which the dividend is paid.

Certain qualifying pension funds and certain other tax-exempt entities are subject to the same general filing requirements as other U.S. holders except that they may have to supply additional documentation evidencing their entitlement to these benefits.

Form 5000 and Form 5001, together with instructions, will be provided by the depositary to all U.S. holders registered with the depositary. The depositary will arrange for the filing with the French tax authorities of all such forms properly completed and executed by U.S. holders of ordinary shares or ADSs and returned to the depositary in sufficient time so that they may be filed with the French tax authorities before the distribution in order to immediately obtain a reduced withholding tax rate. Otherwise, the depositary must withhold tax at the full rate of 12.8%, 30% or 75% as applicable. In that case, the U.S. holders may claim a refund from the French tax authorities of the excess withholding tax, if any.

Wealth Tax

The French wealth tax (*impôt de solidarité sur la fortune*) has been repealed by the finance bill for 2018 (*loi de finances pour 2018*), dated December 30, 2017. The French wealth tax used to apply only to individuals and did not generally apply to securities held by an eligible U.S. holder who is a U.S. resident, as defined pursuant to the provisions of the Treaty, provided that such U.S. holder does not own directly or indirectly more than 25% of the issuer's financial rights and that the securities did not form part of the business property of a permanent establishment or fixed base in France. It has been replaced by a new real estate wealth tax (*impôt sur la fortune immobilière*) as from January 1, 2018. The scope of such new tax is narrowed to real estate assets (and certain assets deemed to be real estate assets) or rights, directly or indirectly through one or more legal entities and whose net taxable assets amount to at least €1,300,000. Our securities owned by a U.S. Holder should not fall within the scope of the new real estate wealth tax provided that such U.S. Holder does not own directly or indirectly a shareholding exceeding 10% of the financial rights and voting rights of the company.

THE DISCUSSION ABOVE IS A SUMMARY OF THE MATERIAL U.S. FEDERAL AND FRENCH INCOME TAX CONSEQUENCES OF AN INVESTMENT IN THE ADSs OR ORDINARY SHARES AND IS BASED UPON LAWS AND RELEVANT INTERPRETATIONS THEREOF IN EFFECT AS OF THE DATE OF THIS ANNUAL REPORT, ALL OF WHICH ARE SUBJECT TO CHANGE, POSSIBLY WITH RETROACTIVE EFFECT. EACH PROSPECTIVE INVESTOR IS URGED TO CONSULT ITS TAX ADVISOR ABOUT THE TAX CONSEQUENCES TO IT OF AN INVESTMENT IN ADSs OR ORDINARY SHARES IN LIGHT OF THE INVESTOR'S OWN CIRCUMSTANCES.

F. Dividends and Paying Agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on Display

We are subject to the information reporting requirements of the Exchange Act applicable to foreign private issuers and file reports with the SEC under those requirements. Such reports may be inspected without charge at the locations described below. As a foreign private issuer, we are exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements, and our officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we are not required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as United States companies whose securities are registered under the Exchange Act. Nevertheless, we will file with the SEC an Annual Report on Form 20-F each year containing financial statements that have been examined and reported on, with and opinion expressed by an independent registered public accounting firm.

We maintain a corporate website at *www.biophytis.com*. We intend to post our annual report on our website promptly following it being filed with the SEC. Information contained on, or that can be accessed through, our website does not constitute a part of this annual report. We have included our website address in this annual report solely as an inactive textual reference.

The Securities and Exchange Commission maintains a website (*www.sec.gov*) that contains reports, proxy and information statements and other information regarding registrants, such as Biophytis S.A., that file electronically with the SEC.

With respect to references made in this annual report to any contract or other document of our company, such references are not necessarily complete and you should refer to the exhibits attached or incorporated by reference to this annual report for copies of the actual contract or document.

I. Subsidiary Information

Not required.

Item 11. Quantitative and Qualitative Disclosures About Market Risk.

We are exposed to a variety of financial risks: market risk (including interest rate risk and foreign exchange risk), credit risk and liquidity risk. Our overall risk management program focuses on preservation of capital given the unpredictability of financial markets. For additional information on general risk factors, please see the section of this Annual Report titled “Item 3.D—Risk Factors.”

Market risk

Interest rate risk

Interest rate risk reflects the Company’s exposure to fluctuations in interest rates in the market.

Changes in interest rate could affect returns achieved on cash and fixed-term deposits but this risk is not considered material given the current low returns on deposits held by the Company.

Change in interest rate could affect the statement of consolidated operations for financial liabilities but this risk is considered as not significant given the implementation by the Company of debts bearing fixed interest rate.

Foreign exchange risk

The major risks linked to foreign exchange rate are considered not significant due to the low level of activity of its foreign subsidiaries.

The Company currently does not use hedging instruments to protect its activity from exchange rate fluctuations. However, any major development in its activity may result in an increase of its exposure to exchange rate risk. Should such increase materialize, the Company may consider adopting an appropriate policy to hedge such risks.

Equity risk

The Company entered into ORNANE agreement with Negma and Atlas, loan agreement and bonds issue agreement with Kreos providing financing through the issuance of multiple tranches of convertible notes eventually with attached warrants. As part of these agreements, the Company is exposed to changes in the market price of its own shares.

Credit risk

Credit risk is linked to deposits with banks and financial institutions.

The Company seeks to minimize the risk related to banks and financial institutions by placing cash deposits with highly rated financial institutions. The maximum level of the credit risk corresponds to the book value of the financial assets. As outstanding receivables consist primarily of Research Tax Credit "CIR" granted by the French government, the Company does not carry significant credit risk.

Liquidity risk

Since our inception, we have funded our operations and growth by strengthening our shareholders' equity through capital increases (including the capital increase realized during its French IPO in July 2015), bank loans and notes, and obtaining public aid for innovation and reimbursement of CIR receivables, including the prefinancing arrangement initiated in 2019.

Significant research and development expenses have been incurred since inception generating negative cash flows from operating activities of €15,051 thousand, €9,743 and €23,795 thousand for the years ended December 31, 2019, 2020 and 2021, respectively.

The Financial Statements have been approved on a going concern basis by the Board of Directors (refer to Item 17 note 2.1).

The Company will continue to have major funding requirements in the future to support the development of its drug candidates. The precise extent of funding required is difficult to predict accurately and will depend in part on factors outside the Company's control. Areas subject to significant uncertainty include, but are not limited to:

- The Company's ability to conduct successful clinical trials, including the capacity to recruit patients in a timely-manner for the Company's clinical trials;
- the change in the regulatory landscape; and
- the approval for other drugs on the market that may potentially reduce the attractiveness for the Company's drug candidates.

Should the Company find itself unable to finance its own growth through partnership agreements, the Company would be dependent on other sources of financing, including equity and/or debt funding or research grants

Item 12. Description of Securities Other than Equity Securities.

A. Debt Securities

Not applicable.

B. Warrants and Rights

Not applicable.

C. Other Securities

Not applicable.

D. American Depositary Shares

The Bank of New York Mellon, as depositary, registers and deliver ADSs. Each ADS represents 10 ordinary shares (or a right to receive 10 ordinary shares) deposited with Societe Generale, as custodian for the depositary in France. Each ADS will also represent any other securities, cash or other property which may be held by the depositary. The deposited shares together with any other securities, cash or other property held by the depositary are referred to as the deposited securities. The depositary's office at which the ADSs will be administered and its principal executive office are located at 240 Greenwich Street, New York, New York 10286.

A deposit agreement among us, the depositary and the ADS holders sets out the ADS holder rights as well as the rights and obligations of the depositary. New York law governs the deposit agreement and the ADSs. A copy of the deposit agreement is incorporated by reference as an exhibit to this annual report.

Fees and Charges

Pursuant to the terms of the deposit agreement, the holders of ADSs will be required to pay the following fees:

Persons depositing or withdrawing ordinary shares or ADS holders must pay:	For:
$5.00 (or less) per 100 ADSs (or portion of 100 ADSs)	• Issuance of ADSs, including issuances resulting from a distribution of ordinary shares or rights or other property • Cancellation of ADSs for the purpose of withdrawal, including if the deposit agreement terminates
$.05 (or less) per ADS	• Any cash distribution to ADS holders
A fee equivalent to the fee that would be payable if securities distributed to you had been ordinary shares and the ordinary shares had been deposited for issuance of ADSs	• Distribution of securities distributed to holders of deposited securities (including rights) that are distributed by the depositary to ADS holders
$.05 (or less) per ADS per calendar year	• Depositary services
Registration or transfer fees	• Transfer and registration of ordinary shares on our share register to or from the name of the depositary or its agent when you deposit or withdraw ordinary shares
Expenses of the depositary	• Cable (including SWIFT) and facsimile transmissions (when expressly provided in the deposit agreement) • Converting foreign currency to U.S. dollars
Taxes and other governmental charges the depositary or the custodian has to pay on any ADSs or ordinary shares underlying ADSs, such as stock transfer taxes, stamp duty or withholding taxes	• As necessary
Any charges incurred by the depositary or its agents for servicing the deposited securities	• As necessary

The depositary collects its fees for delivery and surrender of ADSs directly from investors depositing shares or surrendering ADSs for the purpose of withdrawal or from intermediaries acting for them. The depositary collects fees for making distributions to investors by deducting those fees from the amounts distributed or by selling a portion of distributable property to pay the fees. The depositary may collect its annual fee for depositary services by deduction from cash distributions or by directly billing investors or by charging the book-entry system accounts of participants acting for them. The depositary may collect any of its fees by deduction from any cash distribution payable (or by selling a portion of securities or other property distributable) to ADS holders that are obligated to pay those fees. The depositary may generally refuse to provide fee-attracting services until its fees for those services are paid.

From time to time, the depositary may make payments to us to reimburse us for costs and expenses generally arising out of establishment and maintenance of the ADS program, waive fees and expenses for services provided to us by the depositary or share revenue from the fees collected from ADS holders. In performing its duties under the deposit agreement, the depositary may use brokers, dealers, foreign currency dealers or other service providers that are owned by or affiliated with the depositary and that may earn or share fees, spreads or commissions.

The depositary may convert currency itself or through any of its affiliates, or the custodian or we may convert currency and pay U.S. dollars to the depository. Where the depository converts currency itself or through any of its affiliates, the depository acts as principal for its own account and not as agent, advisor, broker or fiduciary on behalf of any other person and earns revenue, including, without limitation, transaction spreads, that it will retain for its own account. The revenue is based on, among other things, the

difference between the exchange rate assigned to the currency conversion made under the deposit agreement and the rate that the depositary or its affiliate receives when buying or selling foreign currency for its own account. The depositary makes no representation that the exchange rate used or obtained by it or its affiliates in any currency conversion under the deposit agreement will be the most favorable rate that could be obtained at the time or that the method by which that rate will be determined will be the most favorable to ADS holders, subject to the depositary's obligation under to act without negligence or bad faith. The methodology used to determine exchange rates used in currency made by the depositary is available upon request. Where the custodian converts currency, the custodian has no obligation to obtain the most favorable rate that could be obtained at the time or to ensure that the method by which that rate will be determined will be the most favorable to ADS holders, and the depositary makes no representation that the rate is the most favorable rate and will not be liable for any direct or indirect losses associated with the rate. In certain instances, the depositary may receive dividends or other distributions in U.S. dollars that represent the proceeds of a conversion of foreign currency or translation from foreign currency at a rate that was obtained or determined by us and, in such cases, the depositary will not engage in, or be responsible for, any foreign currency transactions and neither it nor we make any representation that the rate obtained or determined by us is the most favorable rate and neither it nor we will be liable for any direct or indirect losses associated with the rate.

Payment of Taxes

ADS Holders are responsible for any taxes or other governmental charges payable on the ADSs or on the deposited securities represented by any of the ADSs. The depositary may refuse to register any transfer of the ADSs or allow you to withdraw the deposited securities represented by the ADSs until those taxes or other charges are paid. It may apply payments owed to you or sell deposited securities represented by the ADSs to pay any taxes owed and you will remain liable for any deficiency. If the depositary sells deposited securities, it will, if appropriate, reduce the number of ADSs to reflect the sale and pay to ADS holders any proceeds, or send to ADS holders any property, remaining after it has paid the taxes.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies.

Not applicable.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds.

Global Offering

On February 12, 2021, we completed our U.S. initial public offering of an aggregate of 12,000,000 ordinary shares represented by 1,200,000 ADSs, each ADS representing 10 ordinary shares, at an offering price of $16.75 per ADS, for aggregate gross proceeds of €16.58 million ($20.1 million). The offering commenced on February 9, 2021 and did not terminate before all of the securities registered in the registration statement were sold.

H.C. Wainwright acted as sole book-running manager for the Offering.

We received net offering proceeds of approximately €13.49 million ($16.35 million, using the exchange rate of €1.00 =$ 1.212 on February 12, 2021, the closing date) from the offering, after deducting underwriting discounts and commissions, management fee and offering expenses. The total expenses incurred by us in connection with the offering was approximately €3.1 million ($3.8 million, using the exchange rate of €1.00 =$ 1.212 on February 12, 2021, the closing date), which included approximately €1.2 million ($1.5 million, using the exchange rate of €1.00 =$ 1.212 on February 12, 2021, the closing date) in underwriting discounts and commissions, a management fee of €0.2 million ($0.2 million, using the exchange rate of €1.00 =$ 1.212 on February 12, 2021, the closing date), and €1.7 million ($2.0 million, using the exchange rate of €1.00 =$ 1.212 on February 12, 2021, the closing date) in offering expenses. None of the transaction expenses included payments to our directors or officers or their associates, persons owning more than 10% or more of our equity securities or our affiliates.

All of the net proceeds from our U.S. initial public offering have been used, as described in the final prospectus for the offering filed with the U.S. Securities and Exchange Commission on February 10, 2021. None of the net proceeds of our global offering were paid directly or indirectly to any director, officer, general partner of ours or to their associates, persons owning ten percent or more of any class of our equity securities, or to any of our affiliates.

Item 15. Controls and Procedures.

A. Disclosure Controls and Procedures

We maintain "disclosure controls and procedures," as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed in our reports filed or submitted under the Exchange Act is accumulated and communicated to management, including our chief executive officer (principal executive officer) and chief financial officer. Based on that evaluation, our chief executive officer (principal executive officer) and chief financial officer (principal financial officer) concluded that our disclosure controls and procedures were not effective as of December 31, 2021.

B. Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external reporting purposes in accordance with generally accepted accounting principles.

Under the supervision and with the participation of our management, including our Chief Executive Officer (principal executive officer) and Chief Financial Officer (principal financial officer), we conducted an evaluation of the effectiveness of our internal control over financial reporting as of December 31, 2021 based on the guidelines established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

Based on our assessment as of December 31, 2021, our management believes that our internal control over financial reporting was not effective due to the aggregation of internal control deficiencies related to our failure to correctly apply IFRS 9 "Financial Instruments" to the fair value assessment of our convertible notes, and its related interpretations and rules with respect to their accounting treatment. The deficiencies, which aggregate to a material weakness, were the result of:

- A lack of sufficient formalized and documented policies and procedures to monitor the accounting treatment of complex financial instruments.

- A lack of sufficient technical resources and expertise within the Company to evaluate the accounting treatment for complex financial instruments, including ensuring that all provisions of such instruments are incorporated into the accounting analysis and the fair value assessment, to develop the required complex valuation models, and to oversee third party experts engaged to assist with such accounting analysis and creation of valuation models.

Notwithstanding this material weakness and management's assessment that internal control over financial reporting was ineffective as of December 31, 2021, provided the Company's remediation plan as described hereunder, our management, including our chief executive officer (*principal executive officer*) and chief financial officer (*principal financial officer*), believes that the consolidated financial statements contained in this Annual Report as of December 31, 2021 present fairly, in all material respects, our financial position, results of operations and cash flows for the periods presented in conformity with IFRS.

Management's Plan for Remediation

In response to the material weakness described above, the Company's management will implement a remediation plan, which includes the following:

- Updating our policies and procedures and redesigning controls to include evaluation of existing accounting for financial instruments at each reporting period.

- Improving documentation of control procedures over review of qualified third-party specialist analyses.

- Implementing systematic reviews of IFRS accounting treatments proposed by qualified third-party specialists.

- Providing additional training to staff and management on accounting for complex financial instruments.

The Company's Management believes that the measures described above will remediate the material weakness that has been identified and is committed to improving the Company's disclosure controls and procedures and internal control over financial reporting. As the Company continues to evaluate and work to improve its internal control over financial reporting, it may determine to take additional measures to address control deficiencies or determine to modify certain of the remediation measures described above. We cannot assure that the measures we have taken to date and may take in the future, will be sufficient to remediate the control deficiencies that led to our material weakness in internal control over financial reporting or that we will prevent or avoid potential future material weaknesses. Effective internal controls are necessary for us to provide reliable financial reports. These remediation measures may be time consuming and costly and there is no assurance that these initiatives will ultimately have the intended effects.

If we identify any new material weaknesses in the future, any such newly identified material weakness could limit our ability to prevent or detect a misstatement of our accounts or disclosures that could result in a material misstatement of our annual or interim financial statements. In such case, we may be unable to maintain compliance with securities law requirements regarding timely filing of periodic reports in addition to applicable stock exchange listing requirements, investors may lose confidence in our financial reporting and our stock price may decline as a result. We cannot assure you that the measures we have taken to date, or any measures we may take in the future, will be sufficient to avoid potential future material weaknesses.

C. Attestation Report of the Registered Public Accounting Firm

Because we qualify as an emerging growth company under the JOBS Act, this Annual Report does not include an attestation report of our independent registered public accounting firm regarding internal control over financial reporting as required by Section 404(b) of the Sarbanes Oxley Act of 2002.

D. Changes in Internal Control Over Financial Reporting

In order to comply with Section 404(a) of the Sarbanes Oxley Act of 2002, in addition to implementing our remediation plan described above, we have also established a risk matrix for our operations, and implemented internal control procedures to mitigate the risks moving forward, as follows:

We identified and analyzed risks associated with financial and operational processes, and implemented new and/or improved control activities to mitigate these risks. We developed written standard operating procedures for major processes and training programs to inform employees regarding SOX best practices and newly implemented internal controls. We also put into service a new purchasing system that has improved controls over our procurement process, including vendor management, automatic approval workflow for purchase orders and invoices, automatic matching of orders and invoices, and improved financial and supplier reports.

We will continue to put into place additional improvements and/or corrective actions to control activities and procedures, and expanding our corporate training programs going forward, as well as implement a plan to test key controls during 2022 to help ensure the effectiveness of internal controls over financial reporting and processes. Our objective is to fully comply with Section 404 (b) before 2026.

Item 16A. Audit Committee Financial Expert.

Our board of directors has determined that Nadine Coulm is an "audit committee financial expert" as defined by the rules and regulations of the Securities and Exchange Commission and has the requisite financial sophistication under the applicable rules and regulations of the Nasdaq Stock Market. Ms. Coulm is also independent as such term is defined in Rule 10A-3 under the Exchange Act and under the listing standards of the Nasdaq Stock Market.

Item 16B. Code of Ethics.

We have adopted a Code of Business Conduct and Ethics, or the Code of Conduct, applicable to all of our employees, executive officers and directors. The Code of Conduct is available on our website at *www.biophytis.com*. The board of directors is responsible for administering the Code of Conduct, but has delegated day-to-day responsibility for administering and interpreting the Code of Conduct to our Chief Financial Officer, who has been appointed Compliance Officer under the Code of Conduct. Any waivers of the Code of Conduct for employees, executive officers and directors must be approved by the board of directors and promptly disclosed to our shareholders. We expect that any amendments to the Code of Conduct, or any waivers of its requirements, will be disclosed on our website.

Item 16C. Principal Accountant Fees and Services.

Ernst & Young et Autres, or E&Y, served as our independent registered public accounting firm for 2020 and 2021. Our accountants billed the following fees to us for professional services in each of those fiscal years:

	Year Ended December 31,	
	2020	2021
	(in € thousands)	
Audit Fees	428	332
Audit-Related Fees	—	—
Tax Fees	—	—
Other Fees	—	—
Total	428	332

"Audit Fees" are the aggregate fees billed for the audit of our annual financial statements. This category also includes services that E&Y provides, such as consents and assistance with and review of documents filed with the SEC.

"Audit-Related Fees" are the aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit and are not reported under Audit Fees.

"Tax Fees" are the aggregate fees billed for professional services rendered by E&Y for tax compliance, tax advice and tax planning related services.

"Other Fees" are any additional amounts billed for products and services provided by E&Y.

Audit and Non-Audit Services Pre-Approval Policy

The audit committee has responsibility for reviewing the candidates for the position of (and proposing in some cases their appointment), setting compensation of and overseeing the work of the independent registered public accounting firm. The audit committee ensures the independence and competence of the independent registered public accounting firm. Unless a type of service to be provided by our independent registered public accounting firm has received general pre-approval from the audit committee, it requires specific pre-approval by the audit committee. The payment for any proposed services in excess of pre-approved cost levels requires specific pre-approval by the audit committee.

Item 16D. Exemptions from the Listing Standards for Audit Committees.

Not applicable.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers.

Not applicable.

Item 16F. Change in Registrant's Certifying Accountant.

Not applicable.

Item 16G. Corporate Governance.

As a French société anonyme, we are subject to various corporate governance requirements under French law. In addition, as a foreign private issuer listed on the Nasdaq Capital Market, we are subject to Nasdaq's corporate governance listing standards. However, Nasdaq's listing standards provide that foreign private issuers are permitted to follow home country corporate governance practices in lieu of Nasdaq's rules, with certain exceptions. Certain corporate governance practices in France may differ significantly from corporate governance listing standards. For example, neither the corporate laws of France nor our bylaws require that (i) a majority of our directors be independent, (ii) our compensation committee include only independent directors, or (iii) our independent directors hold regularly scheduled meetings at which only independent directors are present. Other than as set forth below, we currently intend to comply with the corporate governance listing standards of Nasdaq to the extent possible under French law. However, we may choose to change such practices to follow home country practice in the future.

As a foreign private issuer, we are required to comply with Rule 10A-3 of the Exchange Act relating to audit committee composition and responsibilities. Rule 10A-3 of the Exchange Act provides that the audit committee must have direct responsibility for the nomination, compensation and choice of our auditors, as well as control over the performance of their duties, management of complaints made, and selection of consultants. However, if the laws of a foreign private issuer's home country require that any such matter be approved by the board of directors or the shareholders, the audit committee's responsibilities or powers with respect to such matter may instead be advisory. Under French law, the audit committee may only have an advisory role and appointment of our statutory auditors, in particular, must be decided by the shareholders at our annual meeting.

In addition, Nasdaq rules require that a listed company specify that the quorum for any meeting of the holders of common stock be at least $33\frac{1}{3}\%$ of the outstanding shares of the company's common voting stock. Consistent with French law, our by-laws provide and will continue to provide that a quorum requires the presence of shareholders having at least (1) 20% of the shares entitled to vote in the case of an ordinary shareholders' general meeting or at an extraordinary shareholders' general meeting where shareholders are voting on a capital increase by capitalization of reserves, profits or share premium, or (2) 25% of the shares entitled to vote in the case of any other extraordinary shareholders' general meeting. If a quorum is not present, the meeting is adjourned. There is no quorum requirement when an ordinary general meeting is reconvened, but the reconvened meeting may consider only

questions which were on the agenda of the adjourned meeting. When an extraordinary general meeting is reconvened, the quorum required is 20% of the shares entitled to vote, except where the reconvened meeting is considering capital increases through capitalization of reserves, profits or share premium. For these matters, no quorum is required at the reconvened meeting. If a quorum is not present at a reconvened meeting requiring a quorum, then the meeting may be adjourned for a maximum of two months. See the section of this annual report titled "Description of Share Capital—Key Provisions of Our By-laws and French Law Affecting Our Ordinary Shares."

Item 16H. Mine Safety Disclosure.

Not applicable.

Item 16I.Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

Not applicable.

PART III

Item 17. Financial Statements.

See pages F-1 through F-61 of this annual report.

Item 18. Financial Statements.

Not applicable.

Item 19. Exhibits.

Exhibit No.	Description of Exhibit
1.1	By-laws (status) of the registrant (English translation) dated April 7, 2022
2.1	Form of Deposit Agreement (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form F-1/A (File No. 333-252225) filed on February 2, 2021)
2.2	Form of American Depositary Receipt (included in Exhibit 4.1) (incorporated by reference to Exhibit 4.1 to the Registration Statement on Form F-1/A (File No. 333-252225) filed on February 2, 2021)
2.3	Description of Ordinary Shares (incorporated by reference to Exhibit 2.3 to the Annual Report on Form 20-F (File No. 001-38974) filed on March 12, 2021)
4.1	Venture Loan Agreement by and between Biophytis S.A. and Kreos Capital V (UK) Ltd., dated September 10, 2018 (incorporated by reference to Exhibit 10.1 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.2	Bonds Issue Agreement by and between Biophytis S.A. and Kreos Capital V (UK) Ltd., dated September 10, 2018 (incorporated by reference to Exhibit 10.2 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.3†	Goodwill Pledge Agreement by and between Biophytis S.A. and Kreos Capital V (UK) Ltd., dated September 10, 2018 (English translation) (incorporated by reference to Exhibit 10.3 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.4†	Accord d'Exploitation (License Agreement), dated January 1, 2016, by and among Biophytis S.A. and L'Universite Pierre et Marie Curie, Le Centre National de la Recherche Scientifique and L'Institut National de la Sante et de la Recherche Medicale (English translation) (incorporated by reference to Exhibit 10.4 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.5†	Accord d'Exploitation (License Agreement), dated January 1, 2016, by and among Biophytis S.A., L'Universite Pierre et Marie Curie, Le Centre National de la Recherche Scientifique and L'Institut National de la Recherche Agronomique (English translation) (incorporated by reference to Exhibit 10.5 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.6†	Amendment No. 1 to the License Agreement by and between Biophytis S.A., L'Universite Pierre et Marie Curie, Le Centre National de la Recherche Scientifique and L'Institut National de la Recherche Agronomique dated April 2, 2019 (English translation) (incorporated by reference to Exhibit 10.6 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.7†	Amendment No. 2 to the License Agreement by and between Biophytis S.A., Sorbonne Universite, Le Centre National de la Recherche Scientifique and L'Institut National de la Recherche Agronomique dated November 6, 2020 (English translation) (incorporated by reference to Exhibit 10.7 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)

4.8†	Amendment No. 3 to the License Agreement by and between Biophytis S.A., Sorbonne Universite, Le Centre National de la Recherche Scientifique and L'Institut National de la Recherche Agronomique dated December 17, 2020 (English translation) (incorporated by reference to Exhibit 10.8 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.9†	Amendment No. 1 to the License Agreement by and between Biophytis S.A., Sorbonne Universite, Le Centre National de la Recherche Scientifique and L'Institut National de la Sante et de la Recherche Medicale dated December 17, 2020 (English translation) (incorporated by reference to Exhibit 10.9 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.10†	Co-ownership Agreement relating to patents S1 by and between Biophytis S.A., Universite Pierre et Marie Curie and Le Centre de la Recherche Scientifique, dated July 10, 2008 with effect as from November 30, 2007 (English translation) (incorporated by reference to Exhibit 10.10 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.11†	Co-ownership Agreement relating to patents S2 by and between Biophytis S.A. and Universite Pierre et Marie Curie, dated March 29, 2016 with effect as from November 10, 2011 (English translation) (incorporated by reference to Exhibit 10.11 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.12†	Co-ownership Agreement Considered as Partial Transfer of Share Patent relating to patents S3 by and between Biophytis S.A., L'Institut National de la Recherche Agronomque and Universite Pierre et Marie Curie, dated July 6, 2017 with effect as from December 13, 2011 (English translation) (incorporated by reference to Exhibit 10.12 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.13†	Co-ownership Agreement relating to patents S4 by and between Biophytis S.A. and Universite Pierre et Marie Curie, dated November 18, 2016 with effect as from May 20, 2014 (English translation) (incorporated by reference to Exhibit 10.13 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.14	Co-ownership Agreement Constituting Partial Transfer of Shares by and between Biophytis S.A., Sorbonne Universite and Le Centre National de la Recherche Scientifique, dated October 9, 2019 (English translation) (incorporated by reference to Exhibit 10.14 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.15†	Co-ownership Agreement Considered as a Transfer of Sale relating to patents MI by and between the Institut Biophytis and Universite Pierre et Marie Curie, dated November 10, 2014 with effect as from June 25, 2009 (English translation) (incorporated by reference to Exhibit 10.15 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.16†	Co-ownership Agreement a Partial Assignment of Share relating to patents MII by and between the Institut Biophytis, Universite Pierre et Marie Curie and Le Centre de la Recherche Scientifique, dated May 11, 2017 with effect as from May 13, 2011 (English translation) (incorporated by reference to Exhibit 10.16 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.17†	Co-ownership Agreement Constituting the Partial Transfer of the Share relating to patents MIII by and between Biophytis S.A., Universite Pierre et Marie Curie, Le Centre de la Recherche Scientifique and Inserm Transfer SA, dated October 16, 2017 with effect as from April 30, 2015 (English translation) (incorporated by reference to Exhibit 10.17 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.18†	Co-ownership Agreement relating to patents MIV by and between Biophytis S.A., Universite Pierre et Marie Curie, Le Centre de la Recherche Scientifique and Inserm Transfer SA, dated December 18, 2017 with effect as from May 27, 2015 (English translation) (incorporated by reference to Exhibit 10.18 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.19†	Collaboration Agreement by and between Biophytis S.A., Sorbonne Universite, Le Centre de la Recherche Scientifique and Institut National de la Santé et de la Recherche Médicale dated March 2, 2020 (English translation) (incorporated by reference to Exhibit 10.19 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)

4.20†	Collaboration Agreement by and between Biophytis S.A., Sorbonne Universite and Le Centre de la Recherche Scientifique dated February 1, 2019 (English translation) (incorporated by reference to Exhibit 10.20 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.21†	Amendment No. 1 to the Collaboration Agreement by and between Biophytis S.A., Sorbonne Universite and Le Centre de la Recherche Scientifique (English translation) (incorporated by reference to Exhibit 10.21 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.22†	Collaboration Agreement by and between Biophytis S.A., Universite Paris Descartes and SATT Ile de France Innov with effect as from September 10, 2018 (English translation) (incorporated by reference to Exhibit 10.22 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.23	Services Agreement relating to the SARA INT clinical data platform between Biophytis S.A. and BlueCompanion Ltd., dated December 22, 2017 (incorporated by reference to Exhibit 10.23 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.24	Amendment 1 to the Services Agreement relating to the SARA INT clinical data platform between Biophytis S.A. and BlueCompanion Ltd., dated July 20, 2018 (incorporated by reference to Exhibit 10.24 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.25	Amendment 2 to the Services Agreement relating to the SARA INT clinical data platform between Biophytis S.A. and BlueCompanion Ltd., dated October 31, 2019 (incorporated by reference to Exhibit 4.25 to the Annual Report on Form 20-F (File No. 001-38974) filed on March 12, 2021)
4.26†	Amendment 3 to the Services Agreement relating to the SARA INT clinical data platform between Biophytis S.A. and BlueCompanion Ltd., dated March 3, 2020 (incorporated by reference to Exhibit 4.26 to the Annual Report on Form 20-F (File No. 001-38974) filed on March 12, 2021)
4.27	Services Agrement regarding SARA DATA/OBS clinical platform between Biophytis S.A. and BlueCompanion Ltd., dated May 16, 2017 (incorporated by reference to Exhibit 10.25 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.28	Amendment 1 to the Services Agreement regarding SARA DATA/OBS clinical data platform between Biophytis S.A. and BlueCompanion Ltd., dated December 22, 2017 (incorporated by reference to Exhibit 10.26 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.29	Amendment 2 to the Services Agreement regarding SARA DATA/OBS clinical data platform between Biophytis S.A. and BlueCompanion Ltd., dated December 7, 2018 (incorporated by reference to Exhibit 10.27 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.30	Services Agreement by and between Biophytis S.A. and Biophytis, Inc., dated March 22, 2019 (English translation) (incorporated by reference to Exhibit 10.28 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.31	Amendment No. 1 to the Services Agreement by and between Biophytis S.A. and Biophytis, Inc., dated June 7, 2019 (English translation) (incorporated by reference to Exhibit 10.29 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.32	Assignment Agreement between Biophytis S.A. and Stanislas Veillet, dated May 22, 2019 (incorporated by reference to Exhibit 10.30 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.33	Amendment to Assignment Agreement between Biophytis S.A. and Sanislas Veillet, dated April 6, 2020 (incorporated by reference to Exhibit 10.31 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)

4.34†	Consultant Service Agreement between Biophytis S.A. and Successful Life SAS, dated October 1, 2019 (English translation) (incorporated by reference to Exhibit 10.32 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.35	Amendment No. 1 to the Consultant Service Agreement between Biophytis S.A. and Successful Life SAS, dated October 1, 2020 (English translation) (incorporated by reference to Exhibit 10.33 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.36	Amendment No. 2 to the Consultant Service Agreement between Biophytis S.A. and Successful Life SAS, dated March 9, 2020 (English translation) (incorporated by reference to Exhibit 4.36 to the Annual Report on Form 20-F (File No. 001-38974) filed on March 12, 2021)
4.37†	Issuance and Subscription Agreement for bonds with an option for exchange in cash and/or conversion into new or existing shares between Biophytis S.A. and Atlas Special Opportunities LLC (in the presence of Atlas Capital Markets), dated April 5, 2020 (incorporated by reference to Exhibit 10.34 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.38†	Amendment Agreement to the Issuance and Subscription Agreement for bonds with an option for exchange in cash and/or conversion into new or existing shares between Biophytis S.A. and Atlas Special Opportunities LLC (in the presence of Atlas Capital Markets), dated June 18, 2020 (incorporated by reference to Exhibit 10.35 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
4.39*	Amendment Agreement to the Issuance and Subscription Agreement for bonds with an option for exchange in cash and/or conversion into new or existing shares between Biophytis S.A. and Atlas Special Opportunities LLC (in the presence of Atlas Capital Markets), dated May 26, 2021
4.40*	Issuance and Subscription Agreement for bonds with an option for exchange in cash and/or conversion into new or existing shares between Biophytis S.A. and Atlas Special Opportunities LLC (in the presence of Atlas Capital Markets), dated June 14, 2021
4.41*†	Subscription Agreement for convertible and non-convertible bonds between Biophytis S.A. and Kreos Capital VI (UK) Ltd and Kreos Capital VI (Expert Fund) LP dated November 19, 2021
4.42*	Bonds Issue Agreement for non-convertible bonds between Biophytis S.A. and Kreos Capital VI (UK) Ltd dated November 19, 2021
4.43*	Convertible Bonds Issue Agreement for convertible bonds between Biophytis S.A. and Kreos Capital VI (Expert Fund) LP dated November 19, 2021
4.44*	Business Pledge Agreement between Biophytis S.A. and Kreos Capital VI (UK) Ltd dated November 19, 2021
4.45*	Bank Account Pledge Agreement between Biophytis S.A. and Kreos Capital VI (UK) Ltd dated November 19,
4.46*	IP Pledge Agreement between Biophytis S.A. and Kreos Capital VI (UK) Ltd dated November 19, 2021
4.47	Services Agreement by and between Biophytis S.A. and Institut Biophytis Do Brasil, dated July 1, 2020 (English translation) (incorporated by reference to Exhibit 10.36 to the Registration Statement on Form F-1 (File No. 333-252225) filed on January 19, 2021)
8.1	List of subsidiaries of the registrant (incorporated by reference to Exhibit 8.1 to the Annual Report on Form 20-F (File No. 001-38974) filed on March 12, 2021)
12.1*	Certificate of Principal Executive Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
12.2*	Certification by the Principal Financial Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

13.1**	Certification by the Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
13.2**	Certification by the Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

101.INS XBRL Instance Document*

101.SCH XBRL Taxonomy Extension Schema Document**

101.CAL XBRL Taxonomy Extension Calculation Linkbase Document**

101.DEF XBRL Taxonomy Extension Definition Linkbase Document**

101.LAB XBRL Taxonomy Extension Label Linkbase Document**

101.PRE XBRL Taxonomy Presentation Linkbase Document**

104 Inline XBRL for the cover page of this Annual Report on Form 20-F(embedded within the Inline XBRL document)

† Confidential portions of the exhibit have been omitted.

* Filed herewith.

** Furnished herewith.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

BIOPHYTIS S.A.

By: /s/ Stanislas Veillet
Stanislas Veillet
Chief Executive Officer and Chairman

Date: April 21, 2022

BIOPHYTIS S.A.

Index to the Financial Statements

Financial Statements for the Years Ended December 31, 2019, 2020 and 2021

Auditor Firm Id: 1704 **Auditor Name: Ernst & Young et Autres** **Auditor Location: Courbevoie, France**

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Shareholders of Biophytis S.A.,

Opinion on the Financial Statements

We have audited the accompanying statements of consolidated financial position of Biophytis S.A. (the Company) as of December 31, 2021 and 2020, the related statements of consolidated operations, comprehensive loss, changes in consolidated shareholders' equity and cash flows for each of the three years in the period ended December 31, 2021, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2021 and 2020, and the results of its consolidated operations and its cash flows for each of the three years in the period ended December 31, 2021, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS") and in accordance with International Financial Reporting Standards as endorsed by the European Union.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young et Autres

We have served as the Company's auditor since 2016.

Paris-La Défense, France

April 21, 2022

STATEMENTS OF CONSOLIDATED FINANCIAL POSITION

(amounts in thousands of euros)	Notes	AS OF DECEMBER 31, 2020	2021
ASSETS			
Patents and software	3	2,673	2,757
Property, plant and equipment	4	114	563
Other non-current financial assets	5, 9	413	1,251
Total non-current assets		**3,200**	**4,571**
Other receivables and prepaid expenses	7, 9	5,239	6,536
Other current financial assets	6	12,924	1,229
Cash and cash equivalents	8, 9	5,847	23,926
Total current assets		**24,010**	**31,691**
TOTAL ASSETS		**27,210**	**36,262**
LIABILITIES AND SHAREHOLDERS' EQUITY			
Shareholders' equity			
Share capital	10	20,151	27,191
Premiums related to the share capital	10	22,538	27,781
Treasury shares	10	(42)	(51)
Foreign currency translation adjustment		(72)	(73)
Accumulated deficit - attributable to shareholders of Biophytis		(14,759)	(17,865)
Net loss - attributable to shareholders of Biophytis		(25,517)	(31,246)
Shareholders' equity - attributable to shareholders of Biophytis		**2,299**	**5,737**
Non-controlling interests		(31)	(32)
Total shareholders' equity		**2,268**	**5,705**
Liabilities			
Employee benefit obligations	13	188	205
Non-current financial liabilities	9, 12	1,833	6,293
Non-current derivative financial instruments		12	916
Total non-current liabilities		**2,021**	**7,414**
Current financial liabilities	9, 12	13,219	12,370
Provisions	14	2	—
Trade payables	9,5.1	7,985	7,606
Tax and social liabilities	15.2	1,446	1,998
Current derivative financial instruments	12	—	788
Other creditors and miscellaneous liabilities	15.3	269	381
Total current liabilities		**22,921**	**23,143**
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY		**27,210**	**36,262**

The accompanying Notes form an integral part of these consolidated financial statements

STATEMENTS OF CONSOLIDATED OPERATIONS

(amounts in thousands of euros, except share and per share data)	Notes	FOR THE YEARS ENDED DECEMBER 31, 2019	2020	2021
Revenue		—	—	
Cost of sales		—	—	
Gross margin		**—**	**—**	
Research and development expenses, net	16.1	(9,089)	(9,921)	(19,665)
General and administrative expenses	16.2	(6,593)	(4,021)	(7,150)
Operating loss		**(15,682)**	**(13,942)**	**(26,815)**
Financial expenses		(1,496)	(1,531)	(2,581)
Financial income		18	34	24
Change in fair value of financial instruments		(1,867)	(10,080)	(1,875)
Net financial expense	17	**(3,344)**	**(11,575)**	**(4,432)**
Loss before taxes		**(19,026)**	**(25,517)**	**(31,247)**
Income taxes benefit		80	—	—
Net loss		**(18,946)**	**(25,517)**	**(31,247)**
Attributable to shareholders of Biophytis		(18,946)	(25,517)	(31,246)
Non-controlling interests		—	—	(1)
Basic and diluted weighted average number of shares outstanding		16,882,661	59,974,486	118,282,679
Basic loss per share (€/share)	19	**(1.12)**	**(0.43)**	**(0.26)**
Diluted loss per share (€/share)	19	**(1.12)**	**(0.43)**	**(0.26)**

The accompanying Notes form an integral part of these consolidated financial statements

STATEMENTS OF CONSOLIDATED COMPREHENSIVE LOSS

(amounts in thousands of euros)	FOR THE YEARS ENDED DECEMBER 31, 2019	2020	2021
Net loss for the year	**(18,946)**	**(25,517)**	**(31,247)**
Items that will not be reclassified to profit or loss			
Actuarial gains and losses	87	(14)	23
Items that will be reclassified to profit or loss			
Foreign currency translation adjustment	(18)	10	—
Other comprehensive income (loss)	**69**	**(4)**	**23**
Total comprehensive loss	**(18,877)**	**(25,521)**	**(31,224)**
Attributable to shareholders of Biophytis	(18,877)	(25,521)	(31,223)
Non-controlling interests	—	—	(1)

The accompanying Notes form an integral part of these consolidated financial statements

STATEMENT OF CHANGES IN CONSOLIDATED SHAREHOLDERS' EQUITY

(amounts in thousands of euros, except share data)	Notes	Share capital – number of shares	Share capital	Premiums related to the share capital	Accumulated deficit and net loss	Foreign currency translation adjustment	Share based payment	Split accounting impact related to convertible notes and warrants attached to non - convertible bonds	Treasury Shares	Shareholders' equity - Attributable to shareholders of Biophytis	Non-controlling interests	Shareholders' equity
As of December 31, 2018		*13,463,413*	**2,693**	**44,263**	**(45,115)**	**(64)**	**4,673**	**738**	**(151)**	**7,037**	**(31)**	**7,006**
Net loss for the period		—	—	—	(18,946)	—	—	—	—	(18,946)	—	(18,946)
Other comprehensive income (loss)		—	—	—	87	(18)	—	—	—	69	—	69
Total comprehensive income (loss)		**—**	**—**	**—**	**(18,860)**	**(18)**	**—**	**—**	**—**	**(18,878)**	**—**	**(18,878)**
Conversion of convertible notes	12	*10,499,841*	2,100	771	—	—	—	—	—	2,871	—	2,871
Issuance of warrants attached to non-convertible bonds	12	—	—	—	—	—	—	286	—	286	—	286
Deferred tax liabilities on the issuance of warrants		—	—	—	—	—	—	(80)	—	(80)	—	(80)
Treasury shares net movements	10	—	—	—	—	—	—	—	134	134	—	134
Gains and losses, net related to treasury shares		—	—	—	(131)	—	—	—	—	(131)	—	(131)
Equity settled share-based payments	11	—	—	—	—	—	63	—	—	63	—	63
Costs incurred in relation to equity transactions		—	—	445	—	—	—	—	—	445	—	445
As of December 31, 2019		*23,963,254*	**4,793**	**45,478**	**(64,105)**	**(82)**	**4,736**	**944**	**(17)**	**(8,253)**	**(31)**	**(8,284)**
Net loss for the period		—	—		(25,517)	—	—	—	—	**(25,517)**	**—**	**(25,517)**
Other comprehensive income (loss)		—	—		(14)	10	—	—	—	**(4)**	**—**	**(4)**
Total comprehensive income (loss)		**—**	**—**		(25,531)	10	**—**	**—**	**—**	**(25,521)**	**—**	**(25,521)**
Conversion of convertible notes	12	*22,628,683*	4,526	10,186	—	—	—	—	—	**14,712**	**—**	**14,712**
Share capital increase	12	*49,295,005*	9,858	13,628	—	—	—	—	—	**23,486**	**—**	**23,486**
Exercise of warrants	11	*4,870,155*	974	341	—	—	—	—	—	**1,315**	**—**	**1,315**
Subscription of warrants	11	—		449	—	—	—	—	—	**449**	**—**	**449**
Allocation of premiums to retained earnings (1)		—		(44,047)	(44,047)	—	—	—	—	**—**	**—**	**—**
Treasury shares net movements		—	—	—	—	—	—	—	(25)	**(25)**	**—**	**(25)**
Gains and losses, net related to treasury shares		—	—		61	—	—	—	—	**61**	**—**	**61**
Equity settled share-based payments	11	—	—	—	—		785	—	—	**785**	**—**	**785**
Biophytis shares to be received from Negma (2)	12.2.1				(1,212)					**(1,212)**		**(1,212)**
Costs incurred in relation to public offering on the Nasdaq	10		—	(787)	—	—	—	—	—	**(787)**	**—**	**(787)**
Costs incurred in relation to equity transactions (3)	10		—	(2,709)	—	—	—	—	—	**(2,709)**	**—**	**(2,709)**
As of December 31, 2020		*100,757,097*	**20,151**	**22,538**	**(46,740)**	**(72)**	**5,521**	**944**	**(42)**	**2,299**	**(31)**	**2,268**
Net loss for the period					(31,246)					(31,246)	(1)	**(31,247)**
Other comprehensive income (loss)					23					23	—	**23**
Total comprehensive income (loss)					**(31,223)**					**(31,223)**	**(1)**	**(31,224)**
Conversion of convertible notes	12	*16,379,256*	3,276	7,664	—	—	—	—	—	10,940	—	10,940
Share capital increase	10	*16,950,000*	3,390	16,814	—	—	—	—	—	20,204	—	20,204
Exercise of warrants	11	*1,867,304*	373	369	—	—	—	—	—	742	—	742
Cancellation of 2018 Kreos warrants	12.2.3	—	—	—	—	—	—	(62)	—	(62)	—	(62)
Biophits shares delivered to Negma	12.2.1	—	—	—	1,521	—	—	—	—	1,521	—	1,521
Allocation of premiums to retained earnings (1)		—	—	(17,505)	17,505	—	—	—	—	—	—	—
Treasury shares net movements		—	—	—	—	—	—	—	(9)	(9)	—	(9)
Gains and losses, net related to treasury shares		—	—	—	2	—	—	—	—	2	—	2
Equity settled share-based payments	11	—	—	—	—	—	3,422	—	—	3,422	—	3,422
Costs incurred in relation to equity transactions	10	—	—	(2,099)	—	—	—	—	—	(2,099)	—	(2,099)
As of December 31, 2021		*135,953,657*	**27,191**	**27,781**	**(58,935)**	**(72)**	**8,943**	**882**	**(51)**	**5,737**	**(32)**	**5,705**

(1) The general meetings held on May 28, 2020 and on May 10,2021 decided the allocation of premiums to accumulated deficit.

(2) The judgment of the Paris Court of Appeal of November 18, 2020 ordered the return by Negma of the 2,050,000 Biophytis shares previously delivered following the judgment of May 7, 2020. As a result, the Company recognized at the date of the judgment of November 18, 2020 the right to receive the 2,050,000 shares to be returned by Negma in equity for € 1,212 thousand and a corresponding increase of the financial liability (see notes 12.2 and 14).

(3) Costs incurred by the Company in relation to private placements totaling €23.5 million that occurred in February, June, July and October 2020.

The accompanying Notes form an integral part of these consolidated financial statements

STATEMENTS OF CONSOLIDATED CASH FLOWS

(amounts in thousands of euros)	Notes	FOR THE YEARS ENDED DECEMBER 31, 2019	2020	2021
Cash flows from operating activities				
Net loss for the period		**(18,946)**	**(25,517)**	**(31,247)**
Adjustments to reconcile net loss to cash flows from operating activities				
Amortization and depreciation of intangible and tangible assets	3, 4	262	280	311
Additions of provisions, net of reversals	13, 14	(33)	34	39
Expenses associated with share-based payments	11	63	785	3,422
Change in deferred tax		(80)	—	—
Costs incurred in relation to equity transactions, initially recognized as a reduction from shareholders' equity		445	—	—
Financial interest		1,080	628	562
Conversion settled with cash payment		301	—	—
Amortization of the day one losses	12.2	—	—	54
Changes in fair value of financial instruments	12.2	1,867	10,080	1,875
Interests on investment accounts		(4)	(1)	(4)
Financial indemnity, net, Negma	12.2	—	(34)	1,675
Unwinding of conditional advances and other financial expenses	12.1	—	452	397
Amortized cost of non-convertible bonds and debt component of the convertible notes	12.2	328	189	132
Operating cash flows before change in working capital requirements		**(14,718)**	**(13,104)**	**(22,785)**
(-) Change in working capital requirements (net of depreciation of trade receivables and inventories)		**333**	**(3,361)**	**1,010**
(Decrease) increase in other non-current financial assets		—	(4)	(2)
(Decrease) increase in other receivables		2,941	(2,654)	1,297
Decrease (increase) in trade payables		(2,641)	(479)	380
Decrease (increase) in tax and social security liabilities		137	(183)	(242)
Decrease (increase) in other creditors and miscellaneous liabilities		(104)	(41)	(113)
Cash flows used in operating activities		**(15,051)**	**(9,743)**	**(23,795)**
Cash flows used in investing activities				
Acquisition of intangible and tangible assets	3, 4	(282)	(214)	(344)
Interests on investment accounts		4	1	4
Purchase of term deposits classified as other current financial assets	6	—	(12,500)	—
Sale of term deposits classified as other current financial assets		—	—	12,500
Cash flows used in investing activities		**(278)**	**(12,713)**	**12,160**
Cash flows from financing activities				
Proceeds from share capital increase	10	—	23,486	16,584
Costs paid in relation to equity transactions	10	—	(3,496)	(2,099)
Net financial indemnity received from/ (paid to) Negma	12.2	—	34	(1,675)
Subscription of warrants (BSA)	12	—	271	—
Exercise of warrants (BSA) and founders' warrants (BSPCE)	12	—	862	742
Proceeds from research tax credit prefinancing, net of guarantee deposit	12	4,355	1,964	3,011
Reimbursement of the prefinanced CIR receivables, net of guarantee deposit	12	—	(4,589)	(2,252)
Proceeds from conditional advances	12.1	73	—	400
Repayment of conditional advances			(136)	(279)
Financial interest paid		(1,080)	(628)	(562)
Conversion settled with cash payment	12.2	(301)	—	(910)
Proceeds from the issuance of convertible notes and non-convertible bonds	12.2	6,920	8,730	20,484
Repayment non-convertible bonds	12.2	(2,292)	(3,214)	(3,550)
Repayment of convertible notes		—	(863)	—
Costs incurred in relation to the issuance of convertible notes and non-convertible bonds	12.2	(350)	(453)	(125)
Repayment of lease obligations		(47)	—	(54)
Change in short-term bank overdrafts		—	(15)	—
Cash flows from financing activities		**7,278**	**21,953**	**29,715**
Net effect of exchange rate changes on cash and cash equivalents		(18)	13	(1)
Increase (decrease) in cash and cash equivalents		**(8,069)**	**(490)**	**18,079**
Cash and cash equivalents at the beginning of the period		14,406	6,337	5,847
Cash and cash equivalents at the end of the period		6,337	5,847	23,926

The accompanying Notes form an integral part of these consolidated financial statements

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(in thousand euros unless otherwise noted, except for share and per share data)

Note 1: General information about the Company

Incorporated in September 2006, Biophytis is a clinical-stage biotechnology company focused on the development of therapeutics that slow the degenerative processes associated with aging and improve functional outcomes for patients suffering from age-related diseases.

Sarconeos (BIO101), the Company's leading drug candidate, is a small molecule, administered orally, and currently in clinical Phase 2b in sarcopenia (SARA-INT) in the United States and Europe. A pediatric formulation of Sarconeos (BIO101) is being developed for the treatment of Duchenne Muscular Dystrophy (DMD).

Since April 2020, Sarconeos (BIO101) is also being developed as a treatment for patients with COVID-19 related respiratory failure in a Phase 2/3 clinical study (COVA) in the United States, Europe and Latin America. Enrollment of the study, however, has ended earlier than planned due to the progression of the pandemic and the difficulty in enrolling patients.

Biophytis is a French joint stock company (*société anonyme*) and has its registered office located at 14, avenue de l'Opéra, 75001 Paris, France (register Number at the Company's house: 492 002 225 RCS PARIS).

The ordinary shares of the Company are listed on Euronext Growth Paris (Ticker: ALBPS-ISIN: FR0012816825). The ADSs (American Depositary Shares) are listed on the Nasdaq Capital Market since February 10, 2021 under the symbol "BPTS".

Biophytis and its subsidiaries are referred to hereinafter as "**Biophytis,**" or the "**Company.**"

The following information constitutes the Notes to the consolidated financial statements for the years ended December 31, 2019, 2020 and 2021.

The consolidated financial statements of Biophytis, or the "**Financial Statements**", have been prepared under the responsibility of management of the Company and were approved and authorized for issuance by the Company's Board of Directors on April 4, 2022.

Note 2: Accounting principles, rules and methods

2.1 Principles used in preparing the Financial Statements

The Financial Statements are presented in thousands of euros unless stated otherwise. Some amounts may be rounded for the calculation of financial information contained in the Financial Statements. Accordingly, the totals in some tables may not be the exact sum of the preceding figures.

Statement of compliance

The Company has prepared its Financial Statements for the years ended December 31, 2021, December 31, 2020 and December 31, 2019 in accordance with International Financial Reporting Standards, or IFRS, as issued by the International Accounting Standards Boards, or IASB. The term "IFRS" refers collectively to international accounting and financial reporting standards (IASs and IFRSs) and to interpretations of the interpretations committees (IFRS Interpretations Committee, or IFRS IC, and Standing Interpretations Committee, or SIC), whose application is mandatory for the periods presented.

Due to the listing of ordinary shares of the Company on Euronext Growth Paris (formerly known as Alternext Paris) and in accordance with the European Union's regulation No. 1606/2002 of July 19, 2002, the Financial Statements of the Company are also prepared in accordance with IFRS as adopted by the European Union, or EU, whose application is mandatory for the periods presented.

As of December 31, 2019, 2020 and 2021, all IFRS that the IASB has published and that are mandatory are the same as those endorsed by the EU and mandatory in the EU. As a result, the Financial Statements comply with IFRS as issued by the IASB and as adopted by the EU.

Going concern

The Board of Directors approved the Financial Statements on a going concern basis despite the 2021 loss of €31,247 thousand. This analysis takes into account:

- Cash and cash equivalents as of December 31, 2021 amounted to €23.9 million;
- The potential use of a funding line of convertible notes set up with Atlas (or "2021 Atlas Contract") that could lead up to additional funding of up to €32 million (see Note 12.2.2). The first tranche of €4 million has been issued in April 2022 (see Note 23).

The Company believes that the level of cash and cash equivalents, supplemented by the availability of existing funding lines, is sufficient to cover the Company's cash requirements for the next 12 months from the date of approval of the Financial Statements.

Accounting methods

The accounting principles adopted for the Financial Statements as of and for the year ended December 31, 2021 are the same for the year ended December 31, 2020 with the exception of the following new standards, amendments and interpretations whose application was mandatory for the Company as of January 1, 2021:

- Amendments to IFRS 9, IAS 39, IFRS 4, IFRS 7 and IFRS 16 – *Benchmark Interest Rates Reform: Phase 2* issued on August 27, 2020; and
- IFRS IC Decision dated April 20, 2021 *Attributing Benefit to Periods of Service*.

Adoptions of these standards or IFRS IC decision have not had a material impact on the Financial Statements (see Note 2.2).

Recently issued accounting pronouncements that may be relevant to the Company's operations but have not yet been adopted are as follows:

- Amendments to IFRS 16 *Leases*: Covid-19-Related Rent Concessions beyond June 30, 2021 issued on March 31, 2021 and whose application is for annual reporting periods beginning on or after April 1, 2021;
- Amendments to IFRS 3 *Business combinations*, IAS 16 *Property, Plant and Equipment* and IAS 37 *Provisions*, *Contingent Liabilities and Contingent Assets*, Annual improvements 2018-2020, all issued on May 14, 2020 and whose application is for annual reporting periods beginning on or after January 1, 2022;
- Amendments to IAS 1 *Presentation of Financial Statements*: Classification of Liabilities as Current or Non-current and Classification of Liabilities as Current or Non-current – Deferral of Effective Date issued on January 23, 2020 and July 15, 2020 respectively and whose application is for annual reporting periods beginning on or after January 1, 2023; ·
- Amendments to IAS 1 *Presentation of Financial Statements* and IFRS Practice Statement 2: Disclosure of Accounting policies issued on February 12, 2021 and whose application is for annual reporting periods beginning on or after January 1, 2023; ·
- Amendments to IAS 8 *Accounting policies, Changes in Accounting Estimates and Errors*: Definition of Accounting Estimates issued on February 12, 2021 and whose application is for annual reporting periods beginning on or after January 1, 2023; and

- Amendments to IAS 12 *Income Taxes*: Deferred Tax related to Assets and Liabilities arising from a Single Transaction issued on May 7, 2021 and whose application is for annual reporting periods beginning on or after January 1, 2023.

The Company has not early adopted these new accounting standards, amendments and interpretations. It currently does not anticipate any significant impact on its Financial Statements at adoption date.

2.2 Change in accounting methods

For the preparation of its Financial Statements, the Company adopted in 2021 the IFRS IC Decision dated April 20, 2021 *Attributing Benefit to Periods of Service (IAS 19 Employee Benefits)*.

IFRIC decision lead to shorten the period to which benefits are attribued by deferring the date from which an expense is recognised. The difference has been considered as not material as of December 31, 2020 and as of December 31, 2019. The Company recognized the full impact of €30 thousand for the year ended December 31, 2021 in Other Comprehensive Income and Employee benefit obligation.

Adoptions of the other new standards identified in Note 2.1 have not had a material impact on the Financial Statements as of and for the year ended December 31, 2021.

2.3 Use of judgments and estimates

To prepare the Financial Statements in accordance with IFRS, judgments and estimates were made by the Company's management; these may have had an effect on the amounts presented under assets and liabilities, the contingent liabilities at the date of preparation of the Financial Statements and the amounts under income and expenses for the period.

Such estimates are based on the assumption of a going concern and are based on the information available at the time of their preparation. These estimates are ongoing and are based on past experience as well as diverse other factors judged to be reasonable and form the basis for the assessments of the book value of assets and liabilities. These estimates may be revised if the circumstances on which they are based change or as a result of new information. Actual results may differ significantly from such estimates if assumptions or conditions change.

The main judgments and estimates made by management relate to the following in particular:

- The fair value measurement of founders' warrants, warrants and free shares granted to employees and board members:
    - The fair value measurement of share-based payments is based on the Black-Scholes option valuation model which makes assumptions about complex and subjective variables. These variables notably include the value of the Company's shares, the expected volatility of the share price over the lifetime of the instrument, and the present and future behavior of holders of those instruments. There is a high inherent risk of subjectivity when using an option valuation model to measure the fair value of share-based payments in accordance with IFRS 2 *Share-based Payment*; and
    - The valuation assumptions adopted are disclosed in Note 11.
- The fair value measurement of warrants issued to Negma:
    - The fair value measurement of the equity instruments issued to Negma is based on the Black-Scholes option valuation model which makes assumptions about complex and subjective variables. These variables notably include the value of the Company's shares, the expected volatility of the share price over the lifetime of the instrument, and the present and future behavior of holders of those instruments. There is a high inherent risk of subjectivity when using an option valuation model to measure the fair value of derivative instruments and of the equity instruments in accordance with IAS 32 *Financial Instruments – Presentation* ("IAS 32") and IFRS 9;and

- The valuation assumptions utilized are disclosed in Note 12.2.

- The fair value measurement of convertible notes and non-convertible bonds issued to Kreos with attached warrants:
  - The fair value measurement of the derivative related to the conversion option to Kreos and the warrants issued to Kreos is based on the Black-Scholes option valuation model which makes assumptions about complex and subjective variables. These variables notably include the value of the Company's shares, the expected volatility of the share price over the lifetime of the instrument, and the present and future behavior of holders of those instruments. There is a high inherent risk of subjectivity when using an option valuation model to measure the fair value of derivative instruments and of the equity instruments in accordance with IAS 32 *Financial Instruments – Presentation* ("IAS 32") and IFRS 9. The fair value measurement of the debt component of the convertible notes was determined by discounting cash flows at market rate (unobservable input). The accounting for the day one losses resulting from those valuation are consequently subject to judgement.
  - The valuation assumptions utilized are disclosed in Note 12.2.

- The fair value measurement of notes convertible into ordinary shares and/or redeemable in cash with attached warrants issued to Negma and notes convertible into ordinary shares and/or redeemable in cash with Atlas:
  - The fair value measurement of the convertible notes issued to Negma and Atlas is based on the binomial valuation model which makes use of assumptions and unobservable inputs. The inputs used notably include the quoted price of the Company's shares, the expected volatility of the share price over the expected maturity of the convertible notes, and the present and future behavior of the Company and of the holders of those instruments. There is a high inherent risk of subjectivity when using an option valuation model to measure the fair value of convertible notes in accordance with IFRS 9 and IAS 32; and
  - The valuation assumptions utilized are disclosed in Note 12.2.

- Non-recognition of deferred tax assets net of deferred tax liabilities:
  - The determination of the amount of deferred tax assets which can be recognized requires that management makes estimates on both the consumption period of tax losses carried forward, and the level of future taxable income, in terms of strategies for fiscal management; and
  - The accounting principles applied by the Company in terms of recognition of deferred tax assets are detailed in Note 2.23.

2.4 Consolidation scope and methods

Biophytis controls all the legal entities included in the consolidation. An investor consolidates an investee when it controls the investee. The investor controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its control over the investee. This principle applies to all investees, including structured entities.

An investor must possess all of the following elements to be deemed to control an investee:

- Control over the investee, which is described as having existing rights that give the current ability to direct the activities of the investee that significantly affect the investee's returns;
- Exposure, or rights, to variable returns from its involvement with the investee; and
- Ability to exert control over the investee to affect the amount of the investor's returns.

The subsidiaries are consolidated beginning on the date on which the Company acquires control. They are deconsolidated beginning on the date on which control ceases to be exercised.

Intra-company transactions and balances are eliminated. The financial statements of the subsidiaries are prepared for the same reference period as those of the parent company, on the basis of the same accounting methods.

As of the date of publication of these Financial Statements, the Company has the control over the following two subsidiaries:

- Instituto Biophytis Do Brasil, a company incorporated in July 2006 under Brazilian law and registered in the state of Sao Paulo. Biophytis holds a 94.6% ownership stake in this subsidiary; and

- Biophytis Inc., a company incorporated in September 2015 under United States law and registered in the state of Delaware. Biophytis holds a 100% ownership stake in this subsidiary.

2.5 Foreign currency translation

For each entity, the Company determines the functional currency and items included in the Financial Statements of each entity are measured using that functional currency.

The parent company's functional currency is the euros (€), which is the reporting currency of the Company and represented in the Financial Statements.

2.5.1 Recognition of transactions in foreign currencies

Transactions in foreign currencies are converted into the Company's functional currency by applying the exchange rate at the date of the transactions. The monetary assets and liabilities denominated in foreign currencies are converted at the closing date into the functional currency using the rate of exchange on that date.

Foreign exchange gains and losses resulting from the conversion of monetary items correspond to the difference between the amortized cost denominated in the functional currency at the beginning of the period, adjusted for the impact of the effective interest rate and payments over the period, and the amortized cost denominated in the foreign currency converted at the exchange rate on the closing date.

2.5.2 Translation of the financial statements of foreign subsidiaries

The financial statements of entities whose functional currency is not the euro are translated as follows:

- assets and liabilities are translated using the closing rate of the period;

- income statement items are translated using the average rate of the period; and

- equity items are translated using the historical rate.

The exchange differences arising on translation are directly recognized in shareholders' equity under "Foreign currency translation adjustment."

The exchange rates used for the preparation of the Financial Statements are as follows:

EXCHANGE RATE	Closing rate AS OF DECEMBER 31,			Average rate FOR THE YEAR ENDED DECEMBER 31		
	2019	2020	2021	2019	2020	2021
BRL	4.5157	6.3735	6.3101	4.4134	5.8943	6.3779
USD	1.1234	1.2271	1.1326	1.1195	1.1422	1.1827

2.6 Impact of the COVID-19 health crisis on the December 31, 2021 accounts

The Company has, like many other companies, experienced disruptions due to the COVID 19 pandemic. Given the rapid changes associated with COVID 19, we have and are continuing to take the necessary precautions to protect our employees, partners and operations. For example, the Company has encouraged its employees in France and in the United States to work from home and to organize meetings and events in a virtual way whenever possible. The Company has also imposed restrictions on travel, which is now limited to professional imperatives only.

The Company's ongoing and planned clinical studies have been impacted by COVID 19. The Company's SARA-INT trial in sarcopenia has been impacted by the emergence of COVID 19 and subsequent lockdowns in Belgium and several American states (California and New York in particular). In light of the various measures adopted by governments and health authorities to restrict movement and protect the safety of patients, the Company had to adapt its SARA-INT protocol in order to ensure the continuity of the trial, in particular by closing all on-site activities, replacing them by phone calls, organizing Investigational Product delivery to patients' homes, and expanding the treatment from six to nine months for some patients. Despite these interruptions of in-office study visits and other disruptions that were imposed due to the COVID 19 pandemic, the Company was able to retain most of the study participants. The last patient completed his final on-treatment visit in December 2021. Despite the impediments, a total of 203 participants completed the SARA-INT study. However only 106 patients could perform the 400m walk test, which was the primary endpoint of our study.

In addition, our MYODA program in DMD and MACA program for dry AMD, both planned for 2022 and 2023, respectively may be delayed if there is a resurgence of COVID-19 or emergence of new vaccine resistant strains.

Due to the lack of severely ill COVID-19 patients meeting the enrollment criteria, we have decided to stop enrollment in the COVA study with immediate effect and we plan to obtain topline results after the end of the 28-day treatment period during the second quarter of 2022 and complete results in the third quarter of 2022.[1]2.7 Intangible assets.

2.7 Intangible assets

2.7.1 Research and development expenses

Research and development costs are recognized as expenses when incurred. Costs incurred on development projects are recognized as intangible assets when the following criteria are fulfilled:

- it is technically feasible to complete the intangible asset so that it will be available for use or sale;
- management intends to complete the intangible asset and use or sell it;
- there is an ability to use or sell the intangible asset;
- it can be demonstrated how the intangible asset will generate probable future economic benefits;
- adequate technical, financial and other resources to complete the development and to use or sell the intangible asset are available; and
- the expenditure attributable to the intangible asset during its development can be reliably measured.

In the opinion of management, due to uncertainties inherent in the development of the Company's drug candidates, the criteria for research and development costs to be recognized as an intangible asset, as prescribed by IAS 38 *Intangible Assets*, have not been met and all research and development costs historically have been expensed.

[1] RvM rev.

2.7.2 Patents and software

Patents and software license acquisition costs are recorded as assets based on the costs incurred to acquire the related patents and licenses.

2.7.3 Amortization duration and expense

When intangible assets have a finite useful life, amortization is calculated using the straight-line method over this period, specifically:

Items	Amortization period
Development costs	Estimated useful life of the project
Acquired patents	Estimated useful life of the patents
Metabrain	*19 years*
Iris Pharma	*20 years*
Stanislas Veillet (BIO101)	*19 years*
Software	3 to 5 years

The value of intangible assets is tested when there is any indication that it may be impaired. The quantitative and qualitative factors are reviewed at each reporting date, in particular factors linked to research and development portfolio, pharmacovigilance, patents litigation and new competitors. When a factor indicates that an asset may have lost value, Biophytis estimates its recoverable value. The test consists of comparing the net book value of these assets with their recoverable amount. When the net book value exceeds the recoverable amount, an impairment loss is recognized for the difference.

2.8 Property, plant and equipment

Property, plant and equipment are valued at their cost of acquisition (purchase price and incidental expenses to ready the assets for their intended use) or their cost of production by the Company.

Assets are depreciated on a straight-line basis over their useful life.

They are depreciated using the straight-line method over the following periods:

Items	Depreciation periods
General facilities, fixtures and fittings	3 to 15 years
Technical installations, equipment and tooling	5 to 7 years
Office and IT equipment	3 to 5 years
Furniture	3 to 5 years
Transport equipment	3 to 5 years

The depreciation expenses for property, plant and equipment are recognized in the statement of consolidated operations under:

- “General and administrative expenses” for depreciation of facilities, fixtures and fittings, office and IT equipment, and furniture; and
- “Research and development expenses” for depreciation of laboratory equipment.

2.9 Lease agreements

Items held under lease agreements as defined by IFRS 16, *Leases,* and that do not meet the criteria for accounting exemptions for tenants (low-value asset leases and short-term agreements of less than 12 months) are shown as right of use assets in the statements of consolidated financial position. The corresponding liability is reported under “Financial liabilities” as a lease liability.

Leases payments that meet the exemptions criteria are recognized under expenses in the statements of consolidated operations on a straight-line basis over the term of the contract (refer to Note 21.1).

2.10 Recoverable value of non-current assets

Assets with an indefinite useful life are not depreciated and are subjected to an annual impairment test. Definite-lived assets are subject to an impairment test whenever there is any internal or external indicator that their value may be impaired.

Impairment indicators include in particular:

- mixed or negative results from preclinical and clinical trials;
- significant delay with the clinical trial development schedule.

2.11 Financial assets

As of December 31, 2020 and 2021, the financial assets of the Company are classified into two categories depending on their nature and objectives for keeping such assets in accordance with IFRS 9:

- financial assets at fair value through profit or loss; and
- financial assets at amortized costs.

All financial assets are initially recognized at their fair value plus acquisition costs. All purchases and sales of financial assets are recognized on the settlement date.

Financial assets are derecognized when the rights to receive cash flows from the investments have expired or have been transferred and the Company has transferred substantially all risks and rewards of ownership.

The financial assets related to the guarantee deposits and the related financial liabilities are presented separately in accordance with IAS 32.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss consist of:

- cash and cash equivalents as of December 31, 2021 and 2020;
- short-term deposits as of December 31, 2021 presented in other current financial assets;

Gains or losses arising from changes in the fair value of the “financial assets at fair value through profit or loss” category as determined at each reporting date are presented in the statements of consolidated operations within “Financial income (loss)” in the period in which they arise.

Other financial assets may also voluntarily be classified in this category.

Financial assets at amortized cost

Financial assets at amortized cost are mainly non-current financial assets, other current financial assets, loans and other receivables, and trade receivables measured at amortized cost using the effective interest rate method, adjusted for expected credit losses.

Impairment of financial assets measured at amortized cost

The Company considers that a financial asset is impaired according to the expected loss method in order to take into account any defaults during the asset holding period. The amount of the expected loss is recognized in the statements of financial position. Impairment losses are recognized in the statements of consolidated operations.

2.12 Cash and cash equivalents

Cash and cash equivalents recognized in the statements of consolidated financial position include bank deposits, cash at hand and short-term deposits with an initial maturity of less than three months.

Cash equivalents are easily convertible into a known amount of cash and are subject to an insignificant risk of changes in value. They are held for the purpose of meeting short term cash commitments They are assessed at fair value and changes in value are recognized under "Financial income (loss)".

2.13 Fair value of financial instruments

Borrowings and financial debts (excluding derivative financial instruments and convertible notes issued to Atlas and Negma) are initially recognized at fair value and subsequently measured at amortized cost, measured using the effective interest rate (EIR) method.

Convertible notes issued to Negma and Atlas were measured at fair value through profit or loss in accordance with IFRS 9.
The fair value of trade receivables and trade payables is considered as their book value, given their very short payment maturities. The same principle applies to other receivables, other current financial assets and other current liabilities.

The Company has distinguished three categories of financial instruments depending on their valuation methods and uses this classification to disclose some of the information required by IFRS 7 *Financial Instruments: Disclosures*:

- Level 1: financial instruments listed on an active market;
- Level 2: financial instruments whose valuation methods rely on observable inputs; and
- Level 3: financial instruments whose valuation methods rely entirely or partly on unobservable inputs, an unobservable input being defined as one whose measurement relies on assumptions or correlations that are not based on the prices of observable market transactions for a given instrument or on observable market data on the valuation date.

The Company's financial instruments that are recognized at fair value through profit or loss are:

- short term deposits which are classified as Level 1; and
- derivative financial instruments and convertible notes issued to Negma and Atlas (see Note 12.2), which are classified as Level 3.

2.14 Liquidity agreement

Following its listing on the stock market "Alternext Paris" (now called Euronext Growth Paris), the Company signed a liquidity agreement with a specialized institution in order to limit the "intra-day" volatility of Biophytis' shares.

For this purpose, the Company made an initial advance payment of €300 thousand to this institution in order that the latter can take long or short positions in the Company's shares. Shares acquired under this arrangement are recorded as treasury shares of the Company at cost.

Gain and losses from the disposal of these treasury shares is recognized under shareholders' equity.

The cash reserve related to the liquidity agreement is presented under "Non-current financial assets."

2.15 Public subsidies

Conditional advances

The Company benefits from conditional advances. The detail of these public grants is provided in Note 12.1.

They are recognized in accordance with IAS 20 *Accounting for government's grants and disclosures of governments assistance*. These are financial advances granted at interest rates lower than those of the market and are valued at amortized cost in accordance with IFRS 9, as follows:

- The rate advantage is determined by using a discount rate corresponding to a market rate at the grant date. The amount resulting from the rate advantage obtained at the grant date of the conditional advance is considered as a subsidy recognized in the statements of consolidated operations; and

- The financial cost of the conditional advances calculated at market rates is subsequently recognized in financial expenses.

The subsidies related to the rate advantage are presented as a reduction under the "Research and Development" line item.

These advances are recognized in "Non-current financial liabilities" or "Current financial liabilities" depending on their maturities. In the event of failure of the project, the debt is written off and recognized as a subsidy.

Subsidies

Subsidies received by the Company are recognized as soon as the corresponding receivable becomes certain, taking into account conditions imposed for the grant of the subsidy.

Operating subsidies are deducted from research and development expenses.

Research tax credit

The Company benefits from certain provisions of the French General Tax Code relating to research tax credits.

The Company receives certain specific project-related research tax credits ("Crédit d'Impôt Recherche", or "CIR"), which are granted to companies incorporated in France as an incentive for technical and scientific research. Companies with expenses that meet the eligibility criteria receive a tax credit that (i) can be used to offset against corporate income tax due in the year, as well as in the following three financial years, in which it is granted, or, (ii) under certain circumstances, can be paid directly to the Company for its surplus.

If a company meets certain criteria in terms of sales, headcount or assets to be considered as a small / medium size company as defined by the European Union, it may request an immediate payment of the research tax credit. Biophytis meets such criteria.

The Company considers the research tax credit received from French Tax Authorities as government grants based on the fact that the tax credits are received independently from tax payments. The Company recognizes these credits as other current receivables given the expected time of collection. These credits are presented in the statements of consolidated operations as credits to research and development expense.

Research tax credits are subject to audit by the French Tax Authorities.

2.16 Receivables

Receivables are valued at their nominal value.

Impairment allowances include expected losses as required by IFRS 9, rather than incurred losses. No impairment allowances were determined to be necessary as of December 31, 2021 or 2020.

Other receivables include the nominal value of the CIR research tax credit which is recognized when expenses eligible to the research tax credit are incurred.

2.17 Capital

Classification as equity depends on the specific analysis of the characteristics of each instrument issued. The Company's ordinary shares are classified as equity instruments.

Costs directly attributable to the issuance of shares are recognized, net of tax, as a reduction from shareholders' equity.

2.18 Share-based payments

Since its incorporation, the Company has implemented several compensation plans settled in equity instruments in the form of warrants ("BSA"), founders' warrants ("BSPCE") and free shares attributed to employees and board members.

In accordance with IFRS 2 *Share-based Payment*, the cost of transactions settled in equity instruments is recognized under expenses in the period in which the rights to benefit from the equity instruments are acquired by the holder.

The fair value of the warrants granted to employees is measured using the Black-Scholes option valuation model. The same is true for warrants granted to other individuals supplying similar services, the market value of the latter not being determinable.

The assumptions used in measuring the fair value of such compensation plan equity issuances are described in Note 11.

2.19 Employment benefit obligations

The French employees of the Company are entitled to retirement benefits provided for under French law, and include:

- a retirement benefit, paid by the Company at the time of their retirement (defined benefit plan); and
- payment of retirement pensions by the Social Security bodies, which are financed by contributions from companies and employees (defined contribution plan).

Retirement plans, related payments and other company benefits which are classified as defined benefit plans (plans in which the Company undertakes to guarantee a defined amount or level of benefit) are recognized in the statements of consolidated financial position on the basis of an actuarial valuation of the commitments at the end of the period, after deduction of the fair value of the related plan assets dedicated to them.

This valuation is based on the projected unit credit method, taking into account staff turnover and mortality rates. Any actuarial variances are recognized in consolidated shareholders' equity under "Other comprehensive income (loss)."

The payments made by the Company for defined contribution plans are recognized as expense in the statements of consolidated operations for the period to which they relate.

2.20 Provisions

A provision is recognized if, as a result of a past event, a company has a present legal or constructive obligation that can be estimated reliably, and it is probable that an outflow of economic benefits will be required to settle the obligation.

The amount recognized as a provision is the best estimate of the expenditure required to settle the present obligation at the reporting date.

2.21 Financial liabilities

Financial liabilities are classified into two categories and include:

- financial liabilities recognized at amortized cost; and
- financial liabilities recognized at fair value through profit or loss.

Financial liabilities recognized at amortized cost

Borrowings and other financial liabilities, such as conditional advances, are recognized at amortized cost calculated using the effective interest rate. The portion of financial liabilities due in less than one year is presented under current financial liabilities.

During the year ended December 31, 2018, the Company issued three tranches of non-convertible bonds with warrants attached to the first tranche. This financial instrument includes: a debt component related to the non-convertible bonds (measured at amortized cost) and an equity instrument related to the warrants (measured at fair value at the issue date in equity instruments in accordance with IAS 32 / IFRS 9). The fourth tranche of non-convertible bonds was issued during the year ended December 31, 2019. Transaction costs are allocated to the debt component and the equity instrument in proportion to their respective estimated values.

The accounting treatment of this compound financial instrument is detailed in Note 12.2.3.

During the year ended December 31, 2021, the Company issued non-convertible bonds and convertible notes to Kreos. Non-convertible bonds and debt component of the convertible notes were initially recorded at fair value and subsequently measured at amortized cost.

Financial liabilities recognized at fair value through profit or loss

During the years ended December 31, 2020 and 2021, the Company issued notes convertible into ordinary shares and/or redeemable in cash, with attached warrants to Negma and Atlas. This financial instrument includes: a hybrid component related to the convertible notes (measured at fair value through profit or loss in accordance with IFRS 9) and an equity instrument related to the warrants (measured at fair value at the issuance date in equity instruments in accordance with IAS 32). Transactions costs are recognized in financial expenses at the issuance date of the convertible notes.

At issuance date, a day one loss has been recognized in financial expense for the difference between the fair value of the convertible notes plus the fair value of the attached warrants (if any) as estimated by the Company on the one hand, and the transaction price (i.e. proceeds received on the other hand).

The accounting treatment of this hybrid financial instrument is detailed in Notes 12.2.1 and 12.2.2.

During the year ended December 31, 2021, the Company issued three tranches of the loan concluded on November 19, 2021 with Kreos consisting of non-convertible bonds and convertible notes with attached warrants.

This financial instrument includes several components measured at fair value through profit or loss in accordance with IFRS 9: a derivative financial instrument related to the conversion option of the convertible notes and a derivative financial instrument related to the warrants.

Day one loss

At issuance date, initial measurement at fair value of the convertible notes and the warrants issued to Kreos resulted in the recognition of day one losses.

As the fair value of these day one losses are based on unobservable inputs (Level 3), these day one losses have been deferred in accordance with IFRS 9 B5.1.2A. The deferred day one losses have been recognized as separate assets under other non-current

financial asset and other current financial asset lines items and are amortized over their underlying respective maturity through profit or loss.

The accounting treatment of this hybrid financial instrument is detailed in Note 12.2.3.

2.22 Income tax

The tax assets and liabilities payable for the fiscal year and the previous fiscal year are valued at the amount that the Company expects to recover from or pay to the tax authorities.

The tax rates and the tax regulations used to determine these amounts are those which have been enacted at the balance sheet date. Deferred taxes are recognized using the liability method on temporary differences at the balance sheet date between the tax bases of assets and liabilities and their book values in the Financial Statements as well as on tax losses carried forward.

Deferred tax assets are recognized in respect of tax losses that may be carried forward when it is probable that the Company will have future taxable profits to which these unused tax losses can be allocated. The determination of the amount of deferred tax assets that can be recognized requires management to make estimates both concerning the period during which the tax losses will be used and the level of future taxable profits taking into account tax strategies developed by management as well as any deferred tax liabilities that exist.

2.23 Segment information

The Company operates in only one segment: the development of drug candidates that slow the degenerative processes associated with aging and improve functional outcomes for patients suffering from age-related diseases.

The assets, liabilities and the operating loss presented in the Financial Statements are based on the parent company's operations located in France and the expansion of the Company into the United States which began in 2018. A majority of the research and development expenses and general and administrative expenses have been incurred in France and since 2018, such expenses have also been incurred in the United States.

2.24 Earnings per share

Basic earnings (loss) per share is calculated by dividing the net income (loss) attributable to shareholders of Biophytis by the weighted average number of ordinary shares outstanding during the period.

Diluted earnings (loss) per share is calculated by adjusting the net income (loss) attributable to shareholders of Biophytis and the weighted average number of ordinary shares in circulation by the effects of all potentially dilutive ordinary shares. If the inclusion of instruments giving deferred access to capital (warrants, founders' warrants, free shares or convertible notes) creates an anti-dilutive effect, those instruments are not taken into account.

Note 3: Patents and software

(amounts in thousands of euros)	Patents	Software	Total
GROSS AMOUNT			
As of January 1, 2020	**2,930**	**32**	**2,962**
Addition	450	—	450
Disposal	—	—	—
As of December 31, 2020	**3,380**	**32**	**3,412**
Addition	272	—	272
Disposal	—	—	—
As of December 31, 2021	**3,652**	**32**	**3,684**
AMORTIZATION			
As of January 1, 2020	**547**	**15**	**562**
Increase	168	9	177
Decrease	—	—	—
As of December 31, 2020	**715**	**24**	**739**
Increase	180	8	188
Decrease	—	—	—
As of December 31, 2021	**895**	**32**	**927**
NET BOOK VALUE			
As of January 1, 2020	**2,383**	**17**	**2,400**
As of December 31, 2020	**2,665**	**8**	**2,673**
As of December 31, 2021	**2,757**	**—**	**2,757**

No impairment was recognized on intangible assets of the Company in the years ended December 31, 2020, and 2021, respectively. The Company determined that the COVID-19 pandemic had limited impact on the development of the clinical studies and ultimately on the company's assets.

The Company co-owns certain patents with state-owned partners.

As part of the Intellectual Property agreement signed with the Company's CEO (see Note 20.2) and its amendment, the total patents rights acquired from the Company's CEO as of December 31, 2021 amounted to €1,350 thousand (€1,080 thousand as of December 31, 2020) and are amortized over a 19-year period.

Of this amount, €270 thousand was paid to the Company's CEO in 2019, €180 thousand in 2020 and €270 thousand in 2021. The remaining amount was applied to the CEO's subscription and the exercise of Founders warrants in 2020 (see Note 11).

Note 4: Property, plant and equipment

(Amounts in thousands of euros)	Equipment and tooling	Equipment and tooling (right of use)	Fixture and fittings	Office, IT equipment, furniture	Buildings (right of use)	Total
GROSS AMOUNT						
As of January 1, 2020	**285**	**181**	**90**	**92**	—	**648**
Addition	30	—	—	5	—	35
Exchange effect	(18)	—	(5)	(3)	—	(26)
As of December 31, 2020	**297**	**181**	**85**	**94**	—	**657**
Addition	43	—	29	—	500	572
Exchange effect	—	—	—	2	—	2
As of December 31, 2021	**340**	**181**	**114**	**96**	**500**	**1,231**
DEPRECIATION						
As of January 1, 2020	**190**	**143**	**71**	**59**	—	**463**
Increase	40	37	18	9	—	104
Exchange effect	(18)	—	(4)	(1)	—	(23)
As of December 31, 2020	**212**	**180**	**85**	**67**	—	**544**
Increase	38	1	21	6	56	122
Exchange effect	—	—	—	2	—	2
As of December 31, 2021	**250**	**181**	**106**	**75**	**56**	**668**
NET BOOK VALUE						
As of January 1, 2020	**95**	**38**	**19**	**33**	—	**185**
As of December 31, 2020	**85**	**1**	**—**	**26**	—	**114**
As of December 31, 2021	**90**	**—**	**8**	**21**	**444**	**563**

No impairment was recognized on tangible assets of the Company in the years ended December 31, 2020, and 2021, respectively. The increase in the buildings right of use in 2021 is due to the lease arrangement for the Company's premises located in France for its headquarter.

As of December 31, 2020, no lease liability nor right of use were recognized, considering that the lease arrangement had a term of less than 12 months.

In late August 2021, the Company initiated a negotiation with Sorbonne University to enter into a new lease arrangement for its headquarter. The terms and conditions of the new lease arrangement were finalized at the end of September 2021 (see Note 21). Given the finalization of the terms and conditions with Sorbonne University in September 2021 and an estimated lease term greater than 12 months, the Company recognized a right-of-use asset and a lease liability as at September 30, 2021 in accordance with IFRS 16.22.

The Company is reasonably certain to exercise the option to extend the lease arrangement by an additional maximum period of 12 months. As a result, in accordance with IFRS 16.18, the lease term has been set on December 14, 2023.

Given the nature of the right of use (premises) and the term (2 years), the Company determined that its incremental borrowing rate at 2%.

Note 5 : Non-current financial assets

(amounts in thousands of euros)	AS OF DECEMBER 31, 2020	2021
Cash reserve related to the liquidity agreement	80	72
Guarantee deposit related to the non-convertible bonds (Kreos 2018 contract)	320	—
Guarantee deposit related to the 2021 Kreos loan contract (see note 12.2.3)	—	104
Deferred day one loss related to debt component of the convertible notes and warrants issued to Kreos in 2021	—	1,065
Miscellaneous	13	10
Total non-current financial assets	**413**	**1,251**

Deferred day one losses related to the debt component of the convertible notes and to the warrants issued to Kreos in 2021 were recognized at issuance date. The deferred day one losses are amortized over the maturity of the related instruments. See Note 12.2.3.

Note 6: Other current financial assets

(amounts in thousands of euros)	AS OF DECEMBER 31, 2020	2021
Guarantee deposit as part of the research tax credit prefinancing from NEFTYS (see note 12)	424	584
Guarantee deposit related to the non-convertible bonds (Kreos 2018 contract)	—	320
Deferred day one loss related to debt component of the convertible notes and warrants issued to Kreos in 2021	—	325
Short term deposits	12,500	—
Total other current financial assets	**12,924**	**1,229**

As of December 31, 2020, the Company owned three short-term deposits for a total amount of €12,500 thousand with an initial maturity of 6 months:

- A short-term deposit of €1,000 thousand with a maturity in March 2021 and an interest rate of 0.05%;
- A short-term deposit of €3,000 thousand with a maturity in March 2021 and an interest rate of 0.05%; and
- A short-term deposit of €8,500 thousand with a maturity in April 7, 2021 and an interest rate of 0.02%.

In accordance with IAS 7, these short-term deposits were recorded under current financial assets.

As of December 31, 2021, no short-term deposit has been recorded under financial assets.

Note 7: Other receivables and prepaid expenses

(amounts in thousands of euros)	AS OF DECEMBER 31, 2020	2021
Research tax credit (1)	3,199	3,941
Value added tax	1,562	1,008
Prepaid expenses(2)	29	1,418
Suppliers – advances payment and debit balance	127	125
Receivable from CACEIS in relation with the exercises of BSA/BSPCE (3)	266	2
Miscellaneous	57	42
Total other receivables and prepaid expenses	**5,239**	**6,536**

(1) Research tax credit (CIR)

Subject to certain conditions (see Note 2.15), CIR is payable by the government in the year following its recognition when there is no taxable net income to be offset. Those conditions are met by Biophytis as of December 31, 2021.

CIR recorded for the years ended December 31, 2020 and December 31, 2021 are:

- CIR 2020: €3,328 thousand; and
- CIR 2021: €4,080 thousand.

In December 2020, a portion of the CIR receivables for 2020 was prefinanced with NEFTYS (see note 12).

In December 2021, a portion of the CIR receivables for 2021 was prefinanced with NEFTYS (see note 12).

(2) Prepaid expenses mainly relate to research services provided by an external provider.

(3) Receivables from CACEIS, a company providing financial services to institutional investors, were recognized following the exercise of warrants and founders' warrants for €266 thousand on December 31, 2020 and €2 thousand on December 31, 2021.

Note 8: Cash and cash equivalents

Cash and cash equivalents are broken down as follows:

	AS OF DECEMBER 31,	
(amounts in thousands of euros)	**2020**	**2021**
Bank accounts	3,347	16,926
Short term deposits	2,500	7,000
Total cash and cash equivalents	**5,847**	**23,926**

Cash and cash equivalents are mainly held in euros.

As of December 31, 2020, the Company owned one short-term deposits with a maturity on January 18, 2021 and an interest rate of 0.03%. Its nominal value is €2,500 thousand.

As of December 31, 2021, the Company owned two short-term deposits for a total amount of €7,000 thousand with initial maturity of 1 month:

- A short-term deposit of €2,000 thousand with a maturity in January 1, 2022 and an interest rate of 0.03%;
- A short-term deposit of €5,000 thousand with a maturity in January 26, 2022 and an interest rate of 0.03%.

In accordance with IAS 7, these short-term deposits were recorded under cash and cash equivalents as (i) their initial maturity is less than three months, (ii) they are easily convertible into a known amount of cash and (iii) are subject to an insignificant risk of changes in value.

Note 9: Financial assets and liabilities and impacts on statements of consolidated operations

The Company's financial assets and liabilities are measured as follows as of December 31, 2020 and 2021, respectively:

	AS OF DECEMBER 31, 2020			
			Measurement – Statement of financial position (IFRS 9)	
(amounts in thousands of euros)	Measurement – Statement of financial position	Fair value	Fair value through profit or loss	Amortized cost
Non-current financial assets	413	413	—	413
Other receivables (excluding prepaid expenses)	5,210	5,210	—	5,210
Other current financial assets	12,924	12,924	—	12,924
Cash and cash equivalents	5,847	5,847	5,847	—
Total assets	**24,394**	**24,394**	**5,847**	**18,547**
Non-current financial liabilities	1,833	1,833	—	1,833
Current financial liabilities	13,219	13,219	7,357	5,862
Trade payables	7,985	7,985	—	7,985
Total liabilities	**23,037**	**23,037**	**7,357**	**15,680**

	AS OF DECEMBER 31, 2021			
			Measurement – Statement of financial position (IFRS 9)	
(amounts in thousands of euros)	Measurement – Statement of financial position	Fair value	Fair value through profit or loss	Amortized cost
Non-current financial assets (excluding deferred day one loss)	187	187		187
Other receivables (excluding prepaid expenses)	5,119	5,119	—	5,119
Other current financial assets (excluding deferred day one loss)	905	905	—	905
Cash and cash equivalents	23,926	23,926	23,926	—
Total assets	**30,137**	**30,137**	**23,926**	**6,211**
Non-current financial liabilities	6,293	6,386	—	6,386
Non-current derivative financial instruments	916	916	916	—
Current financial liabilities	12,370	12,370	6,627	5,743
Current derivative financial instruments	788	788	788	—
Trade payables	7,606	7,606	—	7,606
Tax and social liabilities	1,998	1,998	—	1,998
Other creditors and miscellaneous liabilities	381	381	—	381
Total liabilities	**30,352**	**30,445**	**8,331**	**22,114**

The impact of the Company's financial assets and liabilities on the statements of consolidated operations are as follows for the years ended December 31, 2020 and 2021:

	FOR THE YEARS ENDED DECEMBER 31,					
	2019		2020		2021	
(amounts in thousands of euros)	Interest	Change in fair value	Interest	Change in fair value	Interest	Change in fair value
Profit or loss impact of liabilities						
Liabilities at fair value : derivative financial instruments					—	(174)
Liabilities at fair value : convertible notes	—	(1,867)	—	(10,080)	—	(1,701)
Non-convertible bonds at amortized costs and interest of convertible notesissued to Kreos	(1,125)	—	(817)	—	(565)	—
Liabilities at amortized cost: advances	(33)	—	(24)	—	(33)	—

Note 10: Share capital

	AS OF DECEMBER 31,		
	2019	2020	2021
Share capital (in thousands of euros)	4,793	20,151	27,191
Number of outstanding shares	23,963,254	100,757,097	135,953,657
Nominal value per share (in euros)	€ 0.20	€ 0.20	€ 0.20

Share capital and issue premium

As of December 31, 2021, the share capital of the Company was €27,190,731.40 divided into 135,953,657 fully subscribed ordinary shares with a nominal value of €0.20 per share.

Outstanding shares exclude warrants ("BSA") granted to certain investors, free shares and founders' warrants ("BSPCE") granted to certain employees and members of the Board of Directors that have not yet been exercised.

As of December 31, 2021, the premiums of the Company were €27,781 thousand. This included the recognition of costs incurred as part of the Company's US IPO in the amount of €2,099 thousand.

The general meeting held on May 10, 2021 decided the allocation of premiums to accumulated deficit for amount of €17,505 thousand.

Changes in share capital

For the year ended December 31, 2019:

242 bonds held by NEGMA Group Limited (see Note 12.2.1) were converted to the Company's new shares through the issuance of 10,499,841 shares with a nominal value of €0.20 per share, representing a share capital increase of €2,100 thousand and a premium of €320 thousand.

Following the Company's decision to postpone the issuance of its shares in connection with a listing of the Company's equity securities on the Nasdaq, related costs initially recognized as a reduction from shareholders' equity in 2018 were recognized in the 2019 statement of consolidated operations.

For the year ended December 31, 2020:

The Company completed several private placements during the period totaling €23,486 thousand (share capital increase of €9,859 thousand and an issue premium of €13,627 thousand), which can be detailed as follows:

- In February 2020: a private placement amounting to €3.3 million through the issuance of 12,394,071 new shares at a share price of €0.27. This transaction generated a share capital increase of €2,479 thousand and an issue premium of €868 thousand.
- June 2020:
    - issuance of 2,050,000 new shares at a share price of €0.68, reserved for Negma, pursuant to summary judgement dated May 7, 2020 (see Note 12.2). This transaction generated a capital increase of €410 thousand and an issue premium of €984 thousand.
    - a private placement of €4.0 million by issuing 6,060,606 new shares at a share price of €0.66. This transaction generated a capital increase of €1,212 thousand and an issue premium of €2,788 thousand.

- In July 2020: a private placement amounting to €6.1 million by issuing 9,563,732 new shares at a share price of €0.642. This transaction generated a capital increase of €1,913 thousand and an issue premium of €4,227 thousand.

- In October 2020: a private placement amounting to €10 million through the issuance of 21,276,596 new shares at a share price of €0.47. This transaction generated a share capital increase of €4,255 thousand and an issue premium of €5,745 thousand.

The Company converted certain bonds into new shares in the year ended December 31, 2020 which can be detailed as follows:

- 68 bonds held by Negma were converted into new shares generating the issuance of 3,400,000 shares with a share price of €0.20, or a capital increase of €680 thousand, and an issue premium of -€6 thousand (based on the fair value of shares issued at the date of conversion).

- 330 bonds held by Atlas were converted into new shares generating the issuance of 17,178,683 shares with a share price of €0.20, representing a capital increase of €3,436 thousand and an issue premium of €9,208 thousand(based on the fair value of shares issued at the date of conversion).

- Pursuant to a summary judgement dated May 7, 2020, 41 bonds held by Negma were converted into new shares generating the issuance of 2,050,000 shares with a share price of €0.20, representing a capital increase of €410 thousand and an issue premium of €984 thousand.

The costs incurred by the Company in connection with the 2020 share capital increases and the Initial Public Offering on Nasdaq Capital Market in February 2021 were recognized as a reduction from shareholders' equity for respectively €2,709 thousand and €787 thousand.

Following the exercise of warrants during the period, the share capital was increased by €1,315 thousand through the issuance of 4,870,155 new shares, with a nominal value of €0.20, or €974 thousand, and an issue premium of €341 thousand.

For the year ended December 31, 2021:

On February 12, 2021, Biophytis announced the closing of the ADS Offering. The gross proceeds from the Offering were $20,100 thousand (€16,584 thousand, using the exchange rate of €1.00 = $1.212 on February 12, 2021, the closing date) and the aggregate net proceeds to Biophytis, after deducting underwriting discounts and commissions, management fee, and other offering expenses payable by the Company, were approximately $16.35 million (€13.49 million, using the exchange rate of €1.00 = $1.212 on February 12, 2021, the closing date). All of the securities sold in the Offering were offered by Biophytis. This transaction generated the issuance of 12,000,000 shares representing a share capital increase of €2,400 thousand and an issue premium of €14,184 thousand.

On July 30, 2021, 4,950,000 new shares were issued to Negma generating a share capital increase of €990 thousand and an issue premium of €2,629 thousand (see Note 12.2.1).

During the year ended December 31, 2021, 376 bonds held by Atlas were converted into new shares generating the issuance of 16,379,256 shares with a share price of €0.20, representing a capital increase of €3,276 thousand and an issue premium of €7,664 thousand (based on the fair value of shares issued at the date of conversion).

The costs incurred during the period by the Company in connection with the Initial Public Offering on Nasdaq Capital Market in February 2021 were recognized as a reduction from shareholders' equity for €2,099 thousand.

Following the exercise of warrants during the period, the share capital was increased by €373 thousand through the issuance of 1,867,304 new shares, with a premium totaling €369 thousand.

Distribution of dividends

The Company did not distribute any dividends during the years ended December 31, 2020 and 2021, respectively.

Capital management

The Company's policy is to maintain a solid capital base in order to preserve the confidence of investors and creditors and to support future growth.

In this respect, the Company entered into a liquidity agreement with Banque Parel. In connection with this liquidity agreement:

- 100,793 treasury shares were recognized at cost (€50 thousand) as a reduction from shareholders' equity as of December 31, 2021, 48,228 treasury shares were recognized at cost (€43 thousand) as a reduction from shareholders' equity as of December 31, 2020 and 83,479 treasury shares were recognized at cost (€17 thousand) as a reduction from shareholders' equity as of December 31, 2019; and

- €72 thousand of cash was included in non-current financial assets as of December 31, 2021, €80 thousand of cash was included in non-current financial assets as of December 31, 2020 and €45 thousand of cash was included in non-current financial assets as of December 31, 2019.

Note 11: Warrants and founders' warrants

BSA warrants issued to investors

On July 10, 2015, as part of a bond agreement the Company issued investors warrants to subscribe for 270,414 shares at an exercise price of €6.00 per share for a non-refundable issue price of €162 thousand. These warrants have a term of 4 years. These BSA warrants are considered equity instruments and are recorded in shareholders' equity at their subscription price in accordance with IAS 32.

On April 3, 2020, the Company decided to launch a public offering of share subscription warrants. The main objective of the transaction was to allow existing shareholders to participate in the new COVA program and the future development of the Company, and eventually to consolidate its equity.

Upon completion of its public offering, the Company issued 7,475,708 share subscription warrants, after full exercise of the extension clause.

The subscription price was €0.06 per warrant. The warrants can be exercised for a period of 5 years from April 30, 2020, at an exercise price of €0.27 per new share.

Each warrant gives its holder the right to subscribe to one new Biophytis share. Total subscriptions amounted to €449 thousand in 2020. During the periods ended December 31, 2020 and 2021, warrants were exercised for €1,042 thousand and €302 thousand respectively.

The Company's CEO participated in 2020 in the subscription and the exercise of the investors warrants which was settled by the amount of €630 thousand due to the Company's CEO as part of the Intellectual Property agreement (see Notes 3 and 20.2) (€177 thousand for the subscription of warrants and €453 thousand for the exercise of warrants).

These BSA warrants are considered as equity instruments and are recorded in shareholders' equity at their subscription price in accordance with IAS 32.

Activity for BSA warrants issued to investors that were outstanding during the year ended December 31, 2020 are summarized in the table below:

		Number of outstanding warrants					Number of shares which can be subscribed
Type	Grant date	As of 1/1/2020	Granted	Exercised	Lapsed	As of 12/31/2020	
Warrants 2020	04/07/2020	—	7,475,708	(3,860,142)	—	3,615,566	3,615,566

Activity for BSA warrants issued to investors that were outstanding during the year ended December 31, 2021 are summarized in the table below:

		Number of outstanding warrants					Number of shares which can be subscribed
Type	Grant date	As of 1/1/2021	Granted	Exercised	Lapsed	As of 12/31/2021	
Warrants 2020	04/07/2020	3,615,566	—	(1,122,695)	—	2,492,871	2,492,871

BSA warrants issued to Bracknor

In 2017, the Company issued warrants for the benefit of Bracknor Fund Ltd with an average exercise price of €3.48 per ordinary share for the purpose of a funding line that was fully repaid in 2017 and is now terminated. The number of shares that can be issued if the warrants are exercised is 442,477 ordinary shares as of December 31, 2021.

BSA warrants issued to Negma Group

See note 12.2.1

BSA warrants issued pursuant to equity-compensation plan

The following table summarizes the data related to the warrants issued pursuant to equity-compensation plans as well as the assumptions adopted for valuation in accordance with IFRS 2:

		Characteristics			Assumptions		IFRS2 Initial valuation (Black-Scholes) in thousands of euros
Type	Grant date	Number of warrants granted	Maturity date	Exercise price	Volatility	Risk-free rate	
Warrants 2017	07/21/2017	**72,000**	07/21/2021	€ 3.30	59.95 %	-0.62%	**153**

All BSA warrants issued pursuant to equity-compensation plans were fully vested on the grant date.

Activity for BSA warrants issued pursuant to equity-compensation plans that were outstanding during the year ended December 31, 2020 are summarized in the table below:

		Number of outstanding warrants					Number of shares which can be subscribed
Type	Grant date	As of 1/1/2020	Granted	Exercised	Lapsed	As of 12/31/2020	
Warrants 2017	07/21/2017	72,000	—	—	—	72,000	72,000

Activity for BSA warrants issued pursuant to equity-compensation plans that were outstanding during the year ended December 31, 2021 are summarized in the table below:

		Number of outstanding warrants					Number of shares which can be subscribed
Type	Grant date	As of 1/1/2021	Granted	Exercised	Lapsed	As of 12/31/2021	
Warrants 2017	07/21/2017	72,000	—	—	(72,000)	—	—

Founders' warrants ("BSPCE")

The following table summarizes the data related to BSPCE founder's warrants issued as well as the assumptions adopted for valuation in accordance with IFRS 2:

		Characteristics				Assumptions		
Type	Grant date	Number of warrants granted	Maturity date	Expected term	Exercise price	Volatility	Risk-free rate	IFRS 2 Initial valuation (Black-Scholes) in thousands of euros
Founders' warrants$_{2017\text{-}1}$	07/21/2017	**227,000**	07/21/2021	3 years	€ 3.30	54.07 %	-0.53%	**347**
Founders' warrants$_{2017\text{-}2}$	07/21/2017	**127,000**	07/21/2021	3 years	€ 3.30	57.25 %	-0.65%	**421**
Founders' warrants$_{2019\text{-}1}$	04/03/2020	**1,333,333**	04/03/2026	2 years	€ 0.27	48.36 %	-0.62%	**674**
Founders' warrants$_{2019\text{-}2}$	04/03/2020	**666,667**	04/03/2026	4 years	€ 0.27	53.32 %	-0.56%	**356**
Founders' warrants$_{2020\text{-}1}$	12/22/2020	**999,393**	12/22/2026	2 years	€ 0.47	57.80 %	-0.77%	**508**
Founders' warrants$_{2020\text{-}2}$	12/22/2020	**499,696**	12/22/2026	4 years	€ 0.47	57.91 %	-0.77%	**284**
Founders' warrants$_{2021\text{-}1}$	09/15/2021	**2,919,415**	09/15/2027	1 year	€ 0.73	79.11 %	-0.73%	**677**
Founders' warrants$_{2021\text{-}2}$	09/15/2021	**1,459,707**	09/15/2027	2 years	€ 0.73	106.04 %	-0.75%	**595**

Activity for BSPCE founder's warrants that were outstanding during the year ended December 31, 2020 are summarized in the table below:

		Number of outstanding warrants					Number of shares which can be subscribed
Type	Grant date	At 1/1/2020	Granted	Exercised	Lapsed	At 31/12/2020	
Founders' warrants$_{2017\text{-}1}$	07/21/2017	148,000	—	—	—	148,000	148,000
Founders' warrants$_{2017\text{-}2}$	07/21/2017	74,000	—	(2,152)	(9,000)	62,848	62,848
Founders' warrants$_{2019\text{-}1}$	04/03/2020	—	1,333,333	(313,417)	(8,607)	1,011,309	1,011,309
Founders' warrants$_{2019\text{-}2}$	04/03/2020	—	666,667	—	(4,304)	662,363	662,363
Founders' warrants$_{2020\text{-}1}$	12/22/2020	—	999,393	—	—	999,393	999,393
Founders' warrants$_{2020\text{-}2}$	12/22/2020	—	499,696	—	—	499,696	499,696
Total		**222,000**	**3,499,089**	**(315,569)**	**(21,911)**	**3,383,609**	**3,383,609**

Activity for BSPCE founder's warrants that were outstanding during the year ended December 31, 2021 are summarized in the table below:

		Number of outstanding warrants					Number of shares which can be subscribed
Type	Grant date	At 1/1/2021	Granted	Exercised	Lapsed	At 31/12/2021	
Founders' warrants$_{2017\text{-}1}$	07/21/2017	148,000	—	—	(148,000)	—	—
Founders' warrants$_{2017\text{-}2}$	07/21/2017	62,848	—	—	(62,848)	—	—
Founders' warrants$_{2019\text{-}1}$	04/03/2020	1,011,309	—	(35,739)	(99,897)	875,673	875,673
Founders' warrants$_{2019\text{-}2}$	04/03/2020	662,363	—	(17,870)	(49,948)	594,545	594,545
Founders' warrants$_{2020\text{-}1}$	12/22/2020	999,393	—	(74,346)	(199,797)	725,250	725,250
Founders' warrants$_{2020\text{-}2}$	12/22/2020	499,696	—	(37,173)	(99,898)	362,250	362,250
Founders' warrants$_{2021\text{-}1}$	09/15/2021	—	2,919,415	—	(45,645)	2,873,769	2,873,769
Founders' warrants$_{2021\text{-}2}$	09/15/2021	—	1,459,707	—	(22,823)	1,436,885	1,436,885
Total		**3,383,609**	**4,379,122**	**(165,128)**	**(728,856)**	**6,868,747**	**6,868,747**

The vesting period of these BSPCE founder's warrants are summarized in the table below:

Type	Vesting period		
Founders' warrants$_{2017\text{-}1}$	1/3 as of 07/21/2017	1/3 as of 07/21/2018	1/3 as of 07/21/2019
Founders' warrants$_{2017\text{-}2}$	1/3 as of 07/21/2017	1/3 as of 07/21/2018	1/3 as of 07/21/2019
Founders' warrants$_{2019\text{-}1}$	1/3 as of 04/10/2020	1/3 as of 04/10/2022	1/3 as of 04/10/2024
Founders' warrants$_{2019\text{-}2}$	1/3 as of 04/10/2020	1/3 as of 04/10/2022	1/3 as of 04/10/2024
Founders' warrants$_{2020\text{-}1}$	1/3 as of 12/22/2020	1/3 as of 12/22/2022	1/3 as of 12/22/2024
Founders' warrants$_{2020\text{-}2}$	1/3 as of 12/22/2020	1/3 as of 12/22/2022	1/3 as of 12/22/2024
Founders' warrants$_{2021\text{-}1}$	1/3 as of 09/15/2021	1/3 as of 09/15/2022	1/3 as of 09/15/2023
Founders' warrants$_{2021\text{-}2}$	1/3 as of 09/15/2021	1/3 as of 09/15/2022	1/3 as of 09/15/2023

Free shares

		Characteristics			Assumptions		IFRS 2 Initial
Type	Grant date	Number of warrants granted	Maturity date	Exercise price	Volatility	Risk-free rate	valuation (Black-Scholes) in thousands of euros
Free shares $_{2020}$	12/22/2020	**2,500,911**	N/A	N/A	N/A	N/A	**2,311**
Free shares $_{2021}$	09/15/2021	**6,631,068**	N/A	N/A	N/A	N/A	**4,936**

Activity for the free shares that were outstanding during the year ended December 31, 2020 are summarized in the table below:

		Number of outstanding free shares					Number of shares which can be issued
Type	Grant date	As of 1/1/2020	Granted	Exercised	Lapsed	As of 12/31/2020	
Free shares $_{2020}$	12/22/2020	—	2,500,911	—	—	2,500,911	2,500,911
Total		—	2,500,911	**—**	**—**	**2,500,911**	**2,500,911**

Activity for the free shares that were outstanding during the year ended December 31, 2021 are summarized in the table below:

		Number of outstanding free shares					Number of shares which can be issued
Type	Grant date	As of 1/1/2021	Granted	Exercised	Lapsed	As of 12/31/2021	
Free shares $_{2020}$	12/22/2020	2,500,911	—	—	—	2,500,911	2,500,911
Free shares $_{2021}$	09/15/2021	—	6,631,068	—	—	6,631,068	6,631,068
Total		**2,500,911**	6,631,068	**—**	**—**	**9,131,979**	**9,131,979**

The vesting period of these free shares are summarized in the table below:

Type	Vesting period
Free shares$_{2020}$	Vesting period of 2 years followed by a holding period of 2 years
Free shares$_{2021}$	Vesting period of 1 year followed by a holding period of 1 year

Stock based compensation expense recognized for the years ended December 31, 2020 and 2021.
(amounts in thousands of euros)

	DECEMBER 31, 2020				DECEMBER 31, 2021			
Type	Probable cost of the plan	Cumulative expenses - beginning of period	Expense for the period	Cumulative expense to date	Probable cost of the plan	Cumulative expenses - beginning of period	Expense for the period	Cumulative expense to date
Warrants $_{2017}$	153	153	—	153	153	153	—	153
Founders' warrants$_{2017\text{-}1}$	347	347	—	347	347	347	—	347
Founders' warrants$_{2017\text{-}2}$	369	369	—	369	369	369	—	369
Founders' warrants$_{2019\text{-}1}$	674	—	447	447	640	447	124	570
Founders' warrants$_{2019\text{-}2}$	356	—	52	52	320	52	62	113
Founders' warrants$_{2020\text{-}1}$	508	—	257	257	218	257	84	341
Founders' warrants$_{2020\text{-}2}$	284	—	1	1	435	1	42	43
Founders' warrants$_{2021\text{-}1}$	—	—	—	—	838	—	339	339
Founders' warrants$_{2021\text{-}2}$	—	—	—	—	419	—	169	169
Free shares $_{2020}$	2,311	—	28	28	2,311	28	1,155	1,184
Free shares $_{2021}$	—	—	—	—	4,936	—	1,447	1,447
Sub-total			**785**				**3,422**	
Social contribution (1)			2				308	
Total			**787**				**3,730**	

(1) Free shares are subject to social contribution to be paid upon the issuance of the free shares at the term of the vesting period. This social contribution is recognized on a straight-line basis over the vesting period and adjusted at each closing based on the Company's share price. This social contribution is recorded in social security liabilities (refer to Note 15.2) and amounted to €310 thousand as of December 31, 2021 and €2 thousand as of December 31, 2020 resulting in a change of €308 thousand in 2021.

Note 12: Borrowings and financial liabilities

(amounts in thousands of euros)	AS OF DECEMBER 31, 2020	2021
Conditional advances	893	906
Non-convertible bonds	940	2,945
Convertible bonds	—	2,217
Non-current lease obligations	—	225
Non-current financial liabilities	**1,833**	**6,293**
Non-current derivative financial instruments	—	916

(amounts in thousands of euros)	AS OF DECEMBER 31, 2020	2021
Conditional advances	274	377
Non-convertible bonds	3,454	1,858
Convertible notes	7,357	6,627
Financial liabilities related to the prefinancing of a portion of the research tax credit receivables (1)	2,134	3,287
Current lease obligations	—	221
Current financial liabilities	**13,219**	**12,370**
Current derivative financial instruments	—	788

(1) Financial liabilities related to the prefinancing of a portion of the research tax credit (CIR) receivables

A portion of the 2020 and 2021 CIR receivables was prefinanced by FONDS COMMUN DE TITRISATION PREDIREC INNOVATION 3 with NEFTYS CONSEIL SARL as arranger, or NEFTYS in 2020 and 2021, respectively. Consequently, the Company recorded:

- a liability for the amount due to NEFTYS at the time of CIR collection;
- a financial asset for the amounts deducted by NEFTYS on the receivables sold (considered as a guarantee deposit, see Note 6), and
- a current asset for the CIR research tax credits payable by the French State.

In accordance with IFRS 9, the financial liability due to NEFTYS was determined using the amortized cost method:

- CIR 2020: €2,134 thousand as of December 31, 2020; and
- CIR 2021: €3,287 thousand as of December 31, 2021.

Breakdown of financial liabilities by maturity, at value on redemption

The maturity of financial liabilities is broken down as follows:

(amounts in thousands of euros)	AS OF DECEMBER 31, 2021	Current < 1 year	Non-current 1 to 5 years	Non-current > 5 years
Conditional advances	1,354	379	815	160
Non-convertible bonds Kreos 2018 contract	944	944	—	—
Non-convertible bonds Kreos 2021 contract	3,926	1,000	2,926	
Convertible notes Kreos 2021 contract	2,250	—	2,250	—
Convertible notes Atlas	5,600	5,600	—	—
Lease obligations	446	221	225	—
Derivative financial instruments	1,704	788	916	
Financial liabilities related to the prefinancing of a portion of the research tax credit receivables	3,450	3,450	—	—
Total financial liabilities	**19,674**	**12,382**	**7,132**	**160**

12.1 Conditional advances

The table sets out the changes in conditional advances:

(amounts in thousands of euros)	BPI - Sarcob	BPI – BIO101	AFM – Téléthon	BPI – BIO201	Total
As of January 1, 2020	**135**	**774**	**370**	**—**	**1,279**
(+) Proceeds from conditional advances	—	—	—	—	—
(-) Repayment	(26)	(110)	—	—	(136)
Subsidies	—	—	—	—	—
Financial expenses	3	13	8	—	24
As of December 31, 2020	**112**	**677**	**378**	**—**	**1,167**
(+) Proceeds from conditional advances	—	—	—	400	400
(-) Repayment	(59)	(220)	—	—	(279)
Subsidies	—	—	—	(38)	(38)
Financial expenses	3	18	8	5	33
As of December 31, 2021	**56**	**474**	**386**	**367**	**1,283**

Breakdown of conditional advances by maturity, at value on redemption

(amounts in thousands of euros)	BPI -Sarcob	BPI - BIO101	AFM – Téléthon	BPI - BIO201	Total
As of December 31, 2021	**59**	**495**	**400**	**400**	**1,354**
Less than one year	59	220	100	—	379
One to five years	—	275	300	240	815
More than five years	—	—	—	160	160

12.1.1 BPI France conditional advance - "Sarcob" project

On February 4, 2015, Biophytis entered into an agreement with BPI France for an interest-free conditional advance of €260 thousand payable in milestone installments for the "in vitro, in vivo and pharmacokinetic characterization of a candidate drug."

The Company received €260 thousand in aggregate in connection with this agreement. The project has been successfully completed.

This initial repayment schedule pursuant to the successful completion of the project is:

- €6.5 thousand per quarter from June 30, 2017 to March 31, 2018 (4 payments);
- €13 thousand per quarter from June 30, 2018 to March 31, 2021 (12 payments); and
- €19.5 thousand per quarter from June 30, 2021 to March 31, 2022 (4 payments).

Following the COVID-19 health crisis, the Company managed to postpone the repayments of the first and second quarters of 2020 which extended the initial repayment schedule by two more quarters. The repayment schedule after considering these changes is as follows:

- €13 thousand per quarter from June 30, 2020 to March 31, 2021 (3 repayments);
- €19.5 thousand per quarter from June 30, 2021 to March 31, 2022 (4 repayments); and
- €32.5 thousand per quarter from June 30, 2022 to December 31, 2022 (2 repayments).

The commitments provided by the Company pursuant to this agreement can be found in Note 21.2.

Under IFRS, since the conditional advance does not bear annual interest, it is treated as an interest-free loan for the Company (i.e. under conditions more favorable than market rates). The difference between the amount of the advance at historical cost and the advance discounted at market rates is considered as a public grant.

12.1.2 BPI France conditional advance – "BIO101" project

On November 28, 2016, the Company entered into an agreement with BPI France for an interest-free conditional advance of €1,100 thousand payable in milestone installments for the "production of clinical batches, regulatory preclinical and clinical stages for Phase I of BIO101 for the sarcopenia obesity treatment."

The Company received €1,100 thousand in aggregate in connection with this agreement. The project has been successfully completed.

The initial repayment schedule pursuant to the successful completion of the project is:

- €55 thousand per quarter from December 31, 2018 to September 30, 2023 (20 payments). The first quarterly repayment was made by the Company in January 2019.

Following the COVID-19 health crisis, the Company managed to postpone the repayments of the first and second quarters of 2020 which extended the initial repayment schedule by two more quarters. The repayment schedule after considering these changes is as follows:

- €55 thousand per quarter from June 30, 2020 to March 31, 2024 (11 repayments).

The commitments provided by the Company pursuant to this agreement can be found in Note 21.2.

Under IFRS, since the conditional advance does not bear annual interest, it is treated as an interest-free loan for the Company (i.e. under conditions more favorable than market rates). The difference between the amount of the advance at historical cost and the advance discounted at market rates is accounted for as a public grant.

12.1.3 Collaboration agreement with AFM-Telethon – « BIO 101 » project

Biophytis entered into a collaboration agreement effective as of June 3, 2019 with AFM-Telethon focusing on the development of its lead drug candidate, Sarconeos (BIO101) for the treatment of Duchenne Muscular Dystrophy (DMD) through its MYODA clinical program.

Under the terms of the collaboration, AFM-Telethon provided funding of €400,000 to Biophytis for certain additional preclinical studies and for the preparations for the MYODA clinical program, which may become repayable under certain circumstances.

The repayment is scheduled over a two−year period (constant semi-annual reimbursement) following the approval to launch Phase 3 of the MYODA clinical program.

Under IFRS, since the conditional advance does not bear annual interest, it is treated as an interest-free loan for the Company (i.e. under conditions more favorable than market rates). The difference between the amount of the advance at historical cost and the advance discounted at market rates is accounted for as a public grant.

12.1.4 BPI France conditional advance – "BIO 201" project

On August 23, 2019, the Company entered into an agreement with BPI France for an interest-free conditional advance of €600 thousand payable in milestone installments for its MACA program of Macuneos (BIO201) in dry Age-Related Macular Degeneration (AMD). The proceeds were subject to financial conditions that have been met in April 2021.

The Company received €400 thousand in April 2021 in connection with this agreement. The balance of €200 thousand will be received once the Company finalizes the program.

The repayment of this conditional advance is subject to the successful completion of the project:

- In case of technical and economic failure, a minimum repayment of €240 thousand is due at the end of the project timeline (36 months after first conditional advance received); and

- In case of successful completion, repayment over a 5-year period will commence in September 2022.

Under IFRS, since the conditional advance does not bear annual interest, it is treated as an interest-free loan for the Company (i.e., under conditions more favorable than market rates).

The difference between the amount of the advance at historical cost and the advance discounted at market rates is accounted for as a public grant.

As part of this agreement, the Company was entitled to receive a grant of €380 thousand, of which €260 thousand was received in April 2021. As of December 31, 2021, €178 thousand was recorded as deferred income since 53% of the budget of research and development expenses were incurred on that project at the closing date (see Note 15.3).

12.2 Convertible notes and non-convertible bonds

12.2.1 Issuance of convertible notes to NEGMA

(amounts in thousands of euros)	NEGMA ORNANEBSA
As of January 1, 2020	**2,909**
(+) Change in fair value	5,304
(-) Shares issued pursuant to May 7, 2020 court decision	(1,394)
(-) Conversion settled with cash payment pursuant to May 7, 2020 court decision	(378)
(+) Shares to be returned pursuant November 18, 2020 court decision	1,212
(+) Cash returned pursuant to November 18, 2020 court decision	378
(-) Conversion settled with issuance of shares	(674)
As of December 31, 2020	**7,357**
(+) Change in fair value	(1,307)
(-) 2,050,000 shares delivered on August 13, 2022 pursuant to July 16,2021 court decision	(1,521)
(-) 4,950,000 shares issued on July 30, 2022 pursuant to July 16, 2021 court decision	(3,619)
(-) Conversion with cash-settlement	(910)
As of December 31, 2021	—

On August 21, 2019, the Company signed an agreement with Negma Group Limited providing for up to €24 million in financing to the Company through the issuance of multiple tranches of convertible notes with attached warrants (ORNANEBSA), at the sole discretion of the Company.

Main characteristics of the ORNANE note warrants
The 2,400 4-year note warrants require their holder to exercise them, at the Company's request, in tranches of 300 warrants each. Each note warrant grants its holder the right to one ORNANEBSA. Note warrants may not be transferred and will not be subject to a request for admission to trading on the Euronext Growth market. Note warrants will be detached immediately from ORNANE once ORNANEBSA are issued.

Main characteristics of the ORNANE
The ORNANE have a par value of 10,000 euros. They do not bear interest and have a 12-month maturity from issuance. Holders of ORNANE may request at any time to convert them during their term, and at that time, the Company has the option to redeem the ORNANE in cash. At the end of the maturity period, and if the ORNANE have not yet been converted, the ORNANE are automatically converted.

The holder may ask to convert the ORNANE at any time at the conversion parity determined by the following formula: N = CA /(CP), where

- "N" is the number of shares yielded by the conversion,
- "CA" is the par value of the ORNANEs, i.e., 10,000 euros,
- "CP" is the conversion price, i.e., 92% of the lowest volume weighted average price over the 15 trading days preceding the date on which conversion is requested.

On the day of the conversion request, the Company may redeem the ORNANE in cash using the following formula: V = CA/CP x closing VWAP on the conversion date.

Pursuant to this agreement, when the conversion price is less than the nominal value of the share, a conversion penalty applies.

ORNANE may be transferred by their holders only to Affiliates and will not be subject to a request for admission to trading on the Euronext Growth market.

Pursuant to this agreement, the Board of Directors decided the issuance of the following convertible notes and warrants during the year ended December 31, 2019:

- A first tranche on August 21, 2019 of 300 ORNANE plus a commitment fee of 30 ORNANE, with attached warrants to purchase 585,936 shares (BSA_{T1}), resulting in gross proceeds to the Company of €3 million; and

- A second tranche on December 27, 2019 of 300 ORNANE, out of which 50% were paid by Negma Group as of December 31, 2019, resulting in gross proceeds to the Company of €1.5 million and with attached warrants to purchase 694,444 shares (BSA_{T2}).

On April 6, 2020, as part of the implementation of the Atlas agreement described below, the Company terminated the contract with Negma.

Following this termination, Negma undertook legal action in order to claim damages of €911 thousand from Biophytis as well as the delivery of 7,000,000 Biophytis shares, that Negma considers it was entitled to pursuant to the only Biophytis ORNANES still held by Negma, issued in consideration for a loan of €1,400 thousand (140 bonds with par value of €10 thousand each).

The sum of €911 thousand claimed by Negma corresponds to the contractual penalties alleged by Negma under the terms of the Negma Contract 2019, which provided for the payment of such penalties in the event of conversion of notes into shares when the stock price is below the par value of the shares. Biophytis vigorously disputed this legal action and these requests for payment and delivery of shares.

Pursuant to a summary judgment dated May 7, 2020, Negma obtained a decision partially responding to its claims ordering, under penalty (which amounted to €7 thousand), Biophytis to pay €378 thousand as a settlement according to contractual terms of the Negma agreement on ORNANE for which Negma had sent a conversion notice before April 6, 2020 and deliver 2,050,000 Biophytis shares.

Biophytis and Negma appealed the decision of the Paris Commercial Court.

On November 18, 2020, Paris Court of Appeal cancelled the May decision and sentenced Negma to return to Biophytis the 2,050,000 shares previously delivered as well as the provision of €378 thousand. In addition, Negma was ordered to pay €41 thousand to Biophytis as additional compensation recorded in financial income during the year ended December 31, 2020.

As of December 31, 2020, the Company recognized the right to receive the 2,050,000 shares to be returned by Negma in equity for €1,210 thousand in counterparts of the recognition of a financial liability. As of December 31, 2020, the financial liability due to Negma amounted to €7,357 thousand which represent 7,000,000 shares at fair value (€6,447 thousand) and the contractual penalties alleged by NEGMA (€910 thousand).

During the year 2020, 68 bonds held by Negma were converted into new shares generating the issuance of 3,400,000 shares under the formula mentioned above for tranche 1 and tranche 2.

Negma Group also exercised all BSA_{T2} during the year ended December 31, 2020 generating the issuance of 694,444 shares at a share price of €0.27.

On March 16, 2021, the Paris Commercial Court rendered a judgement in Negma Group's favor and ordered Biophytis to:

- pay Negma Group a principal sum of €910 thousand in contractual penalties with late payment interest calculated at the LIBOR rate + 10%;

- deliver to Negma Group 7,000,000 shares, subject to a penalty of €50 thousand per day of delay as from the tenth day after the notification of the judgment and for a period of 30 days; and

- pay Negma Group €100 thousand under article 700 of the French Code of Civil Procedure as well as the expenses and legal costs.

Biophytis filed a petition with the Paris Commercial Court on the ground of failure of the Judgment to rule on certain claims made by the Company in the proceedings and appealed the Judgment to the Paris Court of Appeal.

In addition, as regards to the execution of this Judgement, Biophytis has served Negma Group with a petition filed with the Presiding Judge of the Paris Court of Appeal requesting that immediate enforcement of the Judgment be stayed or, alternatively, that it be modified. Oral argument on this matter occurred on September 6, 2021 and the court is still deliberating.

In the meantime, on June 24, 2021, Negma Group served Biophytis with a petition filed with the judge of the Paris Court of Justice charged with overseeing the execution of judgments requesting (i) the payment of the fine for non-performance imposed by the Judgment in connection with its order to Biophytis to deliver 7,000,000 shares and (ii) that a final fine for non-performance be set.

Pursuant to a judgment rendered on July 16, 2021, the judge of the Paris Court of Justice in charge of overseeing the execution of judgments partially granted Negma Group's claims:

- ordered Biophytis to pay the fine for non-performance imposed by the Judgment for €1,500 thousand;
- imposed a new provisional fine for non-performance of €50 thousand per day of delay in complying with the Judgment's order against Biophytis, as of the tenth day from service of this judgment, for a period of 30 days;
- ordered Biophytis to pay Negma Group €8 thousand pursuant to Article 700 of the Code of Civil Procedure; and
- ordered Biophytis to pay the costs of the proceedings.

Biophytis has fulfilled all of its obligations under the above two judgments.

During the period, the Company has paid the contractual penalties and the fine for non-performance imposed by the Judgment.

With regard in particular to the delivery of 7,000,000 shares to Negma Group, Biophytis has:

- delivered in August 2021 to Negma Group the 2,050,000 shares created and delivered to Negma Group in June 2020 and returned by Negma Group to Biophytis under the judgment of the Paris Court of Appeal dated November 18, 2020, which Biophytis had kept in self-holding; and
- issued 4,950,000 new shares to Negma Group in August 2021 as part of a capital increase reserved for it on the basis of the 13th delegation of the general meeting of May 10, 2021.

Biophytis has appealed against this judgment and, more generally, is taking all measures to safeguard its interests.

Negma Group also exercised all BSA_{T1} during the year ended December 31, 2021 generating the issuance of 585,936 shares at a share price of €0.64.

Accounting treatment

The Company determined that it could not reliably estimate separately the fair value of the conversion option embedded in the convertible bonds and therefore concluded that the entire hybrid contract should be measured at fair value through profit or loss until settlement.

Until December 31, 2019, the fair value was measured using a binomial valuation model. Given that the maturity of the bonds was expected to be short, the day one loss (including the redemption premium and/or issuance premium) was immediately recognized in profit or loss.

Following the unilateral decision by the Company to terminate the contract with Negma Group on April 6, 2020, given the uncertainties associated with the pending outcome of the ongoing litigation with Negma, the Company has since measured the liability to Negma based on the fair value of the shares to be issued as well as additional contractual cash payments resulting from Negma's conversion requests.

In June 2020, the delivery of 2,050,000 shares resulting from the May 2020 summary judgement valued at €1,394 thousand was treated as a conversion under the terms of our agreement with Negma.

As of December 31, 2020, the financial liability due to Negma Group amounted to €7,357 thousand which represent 7,000,000 shares at fair value (€6,447 thousand) and the contractual penalties alleged by NEGMA (€910 thousand).

During the year ended December 31, 2021, Biophytis has:

- paid the contractual penalties alleged by NEGMA (€910 thousand);
- delivered the 2,050,000 shares already created (fair value of €1,521 thousand);
- issued 4,950,000 new shares to Negma Group (fair value of €3,619 thousand).

As of December 31, 2021, the financial liability due to Negma Group is nil.

The table below summarizes the accounting treatment of the convertible notes:

Convertible notes	**Tranche 1**				**Tranche 2**			
Negma	**As of the issue date (08/21/2019)**	**As of December 31, 2019**	**As of December 31, 2020**	**As of December 31, 2021**	**As of the issue date (12/27/2019)**	**As of December 31, 2019**	**As of December 31, 2020**	**As of December 31, 2021**
Number of outstanding convertible notes	300	58	—	—	150	150	99	—
Number of shares issuable upon conversion	6,976,744	3,222,222	—	—	7,500,000	7,500,000	7,000,000	—
Conversion price	€ 0.43	€ 0.18	—	—	€ 0.20	€ 0.20	N/A	—
Expected term	3 months	1 month	—	—	3 months	3 months	N/A	—
Volatility	83.16 %	101.29 %	—	—	119.15 %	119.15 %	N/A	—
Risk-free rate	-0.78%	-0.68%	—	—	-0.78%	-0.78%	N/A	—
Value of the convertible notes (in thousands of €)	**4,122**	**753**	**—**	**—**	**2,262**	**2,156**	**7,358**	**—**

As of the issue dates, the quoted market price of the Company has been used to determine the value of the convertible notes.

Upon conversion of the notes, the difference between the fair value of the financial liabilities and the valuation of the shares issued at the spot rate (quoted market price) is recorded in financial expense.

Pursuant to this agreement, when the conversion price is less than the nominal value of the share, a conversion penalty applies.

During the year ended December 31, 2019, the company recorded conversion penalties for €301 thousand that were considered as conversion settled with cash payment recorded as financial expense.

Main characteristics of the warrants

The warrants are detached from ORNANE immediately. They may be transferred by their holders only to Affiliates and will not be subject to a request for admission to trading on the Euronext Growth market. They may be exercised for a period of five years from their date of issuance. Each warrant gives its holder a right to subscribe one new Biophytis share for a fixed price determined at the issuance date of the Warrants.

The warrants issued to Negma as part of each tranche were recognized at fair value (based on the Black-Scholes valuation model) in equity instruments at the issuance date in accordance with IAS 32.

Warrants NEGMA	Tranche 1 As of the issue date (08/21/2019)	Tranche 2 As of the issue date (12/27/2019)
Number of outstanding warrants	585,936	694,444
Exercise price per share	€ 0.64	€ 0.27
Expected term	3 months	3 months
Volatility	83.16 %	119.15 %
Risk-free rate	-0.96%	-0.96%
Value of the equity instrument (in thousands of €)	**175**	**111**

The Company recognized:

- A deferred tax liability with respect to the equity instrument for €80 thousand in 2019, as a decrease of equity on initial recognition under IAS 12 Income Taxes; and
- A deferred tax asset with respect to net operating losses (NOLs) carried forward as a result of the deferred tax liabilities generated, resulting in a deferred tax benefit of €80 thousand in 2019 in the statement of consolidated operations.

12.2.2 Issuance of convertible notes to ATLAS

(amounts in thousands of euros)	ATLAS ORNANE - 2020 Atlas Contract
As of January 1, 2020	—
(+) Net proceeds (1)	8,730
(+/-) Change in the fair value of financial liabilities	4,776
(-) Repayment	(863)
(-) Conversion	(12,643)
As of December 31, 2020	—
(+) Net proceeds (1)	14,550
(+/-) Change in the fair value of financial liabilities	3,017
(-) Conversion	(10,940)
As of December 31, 2021	**6,627**

(1) Net proceeds of €8,730 thousand (subscription price of 97% of the nominal value of €9,000 thousand) in 2020 and net proceeds of €14,550 thousand (subscription price of 97% of the nominal value of €15,000 thousand) in 2021.

In April 2020, the Company signed a new convertible bond financing of up to €24 million from ATLAS to continue the development of Sarconeos (BIO 101) through the issuance of multiple convertible notes. This contract replaces the Negma contract.

The Company issued a first tranche of €3 million on April 29, 2020, a second tranche of €3 million on June 19, 2020 and a third tranche of €3 million on August 28, 2020. On May 27, 2021, the Company issued a fourth and fifth tranche of €3 million each. On September 20, 2021, the Company issued a sixth and seventh tranche of €3 million each. On December 20, 2021, the Company issued the last tranche of €3 million.

Those bonds were issued with a discount of 3% of nominal value (i.e., €450 thousand for the fourth tranche, the fifth tranche, the sixth tranche, the seventh tranche and the eighth tranche).

A commitment fee of €375 thousand was withheld from the proceeds of the first tranche. Other issuance costs were incurred by the Company for approximately €66 thousand in 2020 (for the first tranche, the second tranche and the third tranche) and €125 thousand in 2021 (for the fourth tranche, the fifth tranche, the sixth tranche, the seventh tranche and the eighth tranche).

Main characteristics of the ORNANE note warrants

The 960 3-year "note warrants" require their holder to exercise them, at the Company's request, in tranches of 120 warrants each. Each warrant grants its holder the right to one ORNANE. "Note warrants" may not be transferred and are not subject to a request for admission to trading on the Euronext Growth market.

Main characteristics of the ORNANE

The ORNANE (Bonds) have a par value of €25 thousand and are issued at a subscription price of 97% of the nominal value.

They do not bear interest and have a 24-month maturity from issuance. Holders of ORNANE may request at any time to convert them during their maturity period, and at that time, the Company will be able to redeem the ORNANE in cash. At the end of the term, and if the ORNANE have not yet been converted or redeemed, the holder will have to convert them.

The holder may ask to convert the ORNANE at any time at the conversion parity determined by the following formula: N = CA /CP, where

- "N" is the number of shares yielded by the conversion,
- "CA" is the par value of the ORNANEs (i.e., €25 thousand),
- "CP" is the conversion price (i.e., 97% of the lowest volume weighted average price over the 10 trading days preceding the date on which conversion is requested).

On the day of the conversion request, the Company may redeem the ORNANE in cash using the following formula: V = CA/CP x CPr, where

- "V" is the amount redeemed to the holder,
- "CPr" is the lowest price between (i) the weighted average closing price prior to the conversion and (ii) the lowest weighted average prices of the previous 10 trading days x 1.15
- ORNANE may be transferred by their holders only to Affiliates and will not be subject to a request for admission to trading on the Euronext Growth market.

Accounting treatment

The Company determined that it could not reliably estimate separately the fair value of the conversion option embedded in the convertible bonds and therefore concluded that the entire hybrid contract should be measured at fair value through profit or loss until settlement.

The fair value is measured using a binomial valuation model. Given that the maturity of the bonds is expected to be short, the day one loss (including the redemption premium and/or issuance premium) is immediately recognized in profit or loss.

The table below summarizes the key inputs to measure the fair value of the convertible notes:

ATLAS	Tranche 1		Tranche 2		Tranche 3	
	As of the issue date (04/29/2020)	As of December 31, 2020	As of the issue date (06/19/2020)	As of December 31, 2020,	As of the issue date (08/28/2020)	As of December 31, 2020
Number of outstanding convertible notes	120	—	120	—	120	—
Conversion price	€ 0.94	—	€ 0.75	—	€ 0.62	—
Volatility	85.54 %	—	68.05 %	—	48.60 %	—
Risk-free rate	-0.57%	—	-0.55%	—	-0.59%	—
Fair value of the convertible notes (in thousands of €)	**4,031**	**—**	**4,001**	**—**	**3,542**	**—**

ATLAS	Tranche 4		Tranche 5	
	As of the issue date (05/27/2021)	As of December 31, 2021	As of the issue date (05/27/2021)	As of December 31, 2021
Number of outstanding convertible notes	120	—	120	—
Conversion price	€ 0.89	—	€ 0.89	—
Volatility	38.82 %	—	38.82 %	—
Risk-free rate	-0.63%	—	-0.63%	—
Fair value of the convertible notes (in thousands of €)	**3,456**	**—**	**3,456**	**—**

ATLAS	Tranche 6		Tranche 7		Tranche 8	
	As of the issue date (09/20/2021)	As of December 31, 2021	As of the issue date (09/20/2021)	As of December 31, 2021	As of the issue date (12/19/2021)	As of December 31, 2021
Number of outstanding convertible notes	120	—	120	104	120	120
Conversion price	€ 0.74	—	€ 0.74	€ 0.46	€ 0.44	€ 0.46
Volatility	46.34 %	—	46.34 %	49.65 %	59.48 %	49.65 %
Risk-free rate	-0.68%	—	-0.68%	-0.73%	-0.78%	-0.73%
Fair value of the convertible notes (in thousands of €)	**3,518**	**—**	**3,518**	**3,077**	**3,646**	**3,550**

During the year ended as of December 31, 2020, 330 convertible notes had been converted in accordance with the formula above, resulting in the issuance of 17,178,683 new shares pursuant to Tranche 1, 2 and 3.30 notes issued with the third tranche have been repaid in cash for a total amount of €750 thousand.

During the year ended as of December 31, 2021, 376 convertible notes had been converted in accordance with the formula above, resulting in the issuance of 16,379,256 new shares pursuant to Tranche 4, 5, 6 and 7.

During the year ended as of December 31, 2021, 224 convertibles notes issued for the benefit of Atlas have not been converted. Pursuant to the 2020 Atlas contract, all ORNANEs have been issued to ATLAS.

The table below summarizes the sensitivity analysis on the level of the valuation of the convertible notes performed through the change of inputs in the valuation of volatility:

Sensitivity analysis	As of December 31, 2021			
	Tranche 7		Tranche 8	
Volatility	85% over 12 months	61% over 6 months	85% over 12 months	61% over 6 months
Fair value of the convertible notes (in thousands of €)	**3,383**	**3,173**	**3,903**	**3,661**

Issuance of convertible notes to ATLAS – 2021 Atlas Contract

In June 2021, the Company signed a new convertible bond financing of up to €32 million (8 tranches with a nominal value of €4 million each) with Atlas (the "2021 Atlas Contract") to continue the development of Sarconeos (BIO 101) through the issuance of multiple convertible notes.

The new financing instrument provides for the issuance of up to 1,280 bonds with an option for exchange in cash and/or conversion into new or existing shares (ORNANE). The €32 million total financing can be drawn by Biophytis over the next three years, without obligation, through eight successive tranches of €4 million each. This facility is intended to secure the Company cash position in order to continue the development of its clinical activities in particular further development of Sarconeos (BIO 101).

The convertible notes agreement with ATLAS imposes certain operating and financial restrictions. These covenants may limit our ability and the ability of our subsidiaries, under certain circumstances, to, among other things:

- incur additional indebtedness;
- create or incur liens;
- sell or transfer assets; and
- pay dividends and distributions.

This agreements also contains certain customary affirmative covenants and events of default, including a change of control.

In April 2022, the Company issued the first tranche of 160 ORNANEs for a total of €4 million as part of its 2021 bond financing agreement with Atlas.

Main characteristics of the ORNANE

The ORNANE will have a par value of €25 thousand and are issued at a subscription price of 0.96% of the nominal value. They will not bear interest and will have a 24-month maturity from issuance.

The holder of ORNANE may request at any time to convert them into shares during their maturity period, and the Company shall have the right to redeem the ORNANE in cash. In case of cash redemption, the amount reimbursed will be limited to 110% of the principal.

At the end of the maturity period, and in the case where the ORNANE would not have been redeemed either in cash or in new or existing shares, the holder will have the obligation to convert the ORNANE.

The holder can ask to convert the ORNANE at any time at the conversion parity determined by the following formula:
N = CA / CP, where

- "N" is the number of shares yielded by the conversion,
- "CA" is the par value of the ORNANEs (i.e., €25 thousand each),
- "CP" is the conversion price (i.e., 100% of the Pricing Period VWAP during the Pricing Period of 10 trading days preceding the reception of the Conversion Notice).

On the day of the conversion request, the Company may redeem the ORNANE in cash using the following formula: V = (CA/CP) * CPr, where

- "V" is the amount to be redeemed to the holder.

- "CPr" is the revised price.

The revised price is the lowest price between (i) the volume weighted average price over the 10 trading days preceding the date on which conversion is requested and (ii) P*1.10.

The ORNANE may be transferred by their holders only to Affiliates and will not be subject to a request for trading admission on the Euronext Growth market.

As of December 31, 2021, no tranche of convertible notes related to the 2021 Atlas Contract were issued.

In April 2022, the Company issued the first tranche of 160 ORNANEs for a total of €4 million as part of its 2021 bond financing agreement with Atlas.

12.2.3 Issuance of non-convertible bonds and convertible notes to Kreos

(amounts in thousands of euros)	KREOS 2018 contract Non-Convertible bonds	KREOS 2021 contract Non-Convertible bonds	KREOS 2021 contract Convertible notes	Total
As of January 1, 2020	**7,417**	**—**	**—**	**7,417**
(+/-) Amortized cost	189	—	—	189
(-) Repayment	(3,214)	—	—	(3,214)
As of December 31, 2020	**4,392**	**—**	**—**	**4,392**
(+) Gross Proceeds received	—	3,822	2,250	6,072
(+) Guarantee Deposit	—	104	—	104
(-) Bifurcation of the conversion option recognized as derivative financial instruments	—	—	(819)	(819)
(+/-) Day one loss	—	—	795	795
(-) Transactions costs	—	(97)	—	(97)
(+/-) Amortized cost	96	35	(10)	121
(-) Repayment	(3,550)	—	—	(3,550)
As of December 31, 2021	**938**	**3,864**	**2,216**	**7,018**

Issuance of non-convertible bonds to Kreos – 2018 contract

On September 10, 2018, the Company signed a venture loan agreement and bonds issue agreement with Kreos, which provide for up to €10 million in financing to the Company through the issuance by the Company to Kreos of non-convertible bonds in four separate tranches of €2.5 million each, plus the issuance of attached warrants in connection with the first tranche. As required under the terms of the venture loan agreement, the Company pledged a security interest in the Company's assets for the benefit of Kreos. The Company also granted a security interest in the business as a going concern, including a portion of the Company's patents, to Kreos. Each tranche of non-convertible bonds bears a 10% annual interest rate and must be repaid in cash in 36 monthly installments commencing in April 2019.

Pursuant to the terms of the agreements, the Company has the right, at any time but with no less than 30 days prior notice to Kreos, to prepay or purchase the non-convertible bonds, exclusively in full. The prepayment will be equal to (i) the principal amount outstanding, plus (ii) the sum of all interest repayments which would have been paid throughout the remainder of the term of the relevant tranche discounted by 10% per annum.

The first and second tranches of non-convertible bonds were issued on September 10, 2018, the third tranche was issued on December 17, 2018, and the last one was issued on March 1, 2019, for total gross proceeds to the Company of €10 million.

Guarantee deposits totaling €320 thousand (€80 thousand per tranche) were withheld by Kreos from the proceeds received by the Company. The amount withheld will be deducted from the last installment to be repaid by the Company. It is presented under "Non-current financial assets" in 2020 and in "Current financial assets" in 2021.

The BSA warrants issued to Kreos as part of the first tranche give the holder the right to subscribe for up to 442,477 ordinary shares at an exercise price of €2.67 per share for a term of 7 years. These warrants were valued at €319 thousand and were recorded in equity and as a reduction of the debt value.

Accounting treatment

In accordance with IFRS 9, the non-convertible debt component was initially recognized at fair value and subsequently measured at amortized cost. The effective interest rate post recognition of warrants as a reduction of the debt was 13.59%.

The non-convertible debt component amounted to €0.9 million as of December 31, 2021 and to €4.4 million as of December 31, 2020.

Issuance of non-convertible bonds and convertible notes to Kreos – 2021 contract

On November 19, 2021, the Company signed a new venture loan agreement and bonds issue agreement which could provide for up to €10 million in financing to the Company through the issuance by the Company to Kreos of non-convertible bonds for €7.75 million (straight bonds) and convertible notes of €2.25 million, plus the issuance of attached warrants to the first tranche.

The loan agreement includes four tranches of respectively €2.5 million, €3.0 million, €2.5 million and €2.0 million. The two first tranches were drawn upon signing of the contract on November 19, 2021, the third tranche limited to €677 thousand was drawn up in December 31, 2021 and the last tranche was not drawn by the Company.

Non-convertible bonds bear a 10% annual interest rate and must be repaid in cash in 36 monthly installments commencing on April 1, 2022. Convertible notes bear a 9.5% annual interest rate.

The Company shall repay the convertible bonds at their principal amount at the latest March 31, 2025, unless they are converted before into shares, at the option of Kreos Capital, at a fixed conversion price of €0,648 for one share (unless dividends are paid by the Company).

Pursuant to the terms of the agreements, the Company has the right, at any time but with no less than 30 days prior notice to Kreos, to prepay or purchase the non-convertible bonds and convertible notes, exclusively in full. The prepayment will be equal to (i) the principal amount outstanding, plus (ii) the sum of all interest repayments which would have been paid throughout the remainder of the term of the relevant tranche discounted by 10% per annum.

Pursuant to the terms of the agreements, in the event conversion occurs on the repayment date, Kreos shall repay to Biophytis, upon issuance of the conversion shares, an amount equal to 10% of the total interest paid by Biophytis. In case of a partial conversion upon that date, the amount shall be reduced accordingly.

Kreos can decide to exercise only part of the warrants, in which case it will receive from Biophytis a cash payment determined based on a formula that takes into account the difference between the strike price of the warrants and the market price (VWAP) of Biophytis shares at the exercise date.

Biophytis issued for the benefit of Kreos Capital 2,218,293 warrants giving the right to subscribe to new Biophytis ordinary shares, on the basis of one share for one BSA. The warrants can be exercised over a 7-year period after being issued. The exercise price of the share warrants has been set at €0.56.

By subscribing to the BSAs, Kreos Capital has expressly waived the right to exercise the 2018 BSAs as held following their detachment from the non-convertible bonds subscribed on September 10, 2018 within the framework of the 2018 loan structure.

As required under the terms of the venture loan agreement, the Company pledged a security interest in the Company’s assets for the benefit of Kreos. The Company also granted a security interest in the business as a going concern, including a portion of the Company’s patents, to Kreos.

The venture loan agreement and bonds issue agreement with Kreos imposes certain operating and financial restrictions. These covenants may limit our ability and the ability of our subsidiaries, under certain circumstances, to, among other things:

- incur additional indebtedness;
- create or incur liens;
- sell or transfer assets; and
- pay dividends and distributions.

This agreement also contains certain customary affirmative covenants and events of default, including a change of control.

Accounting treatment of the non-convertible bonds

In accordance with IFRS 9, the debt components related to non-convertible bonds were initially recognized at fair value and subsequently measured at amortized cost. The effective interest rate of the debt components was 11.68% for the first two tranches and 9.94% for the third tranche.

The non-convertible bonds amounted to €3,865 thousand as of December 31, 2021.

Accounting treatment of the convertible notes

Due to contractual clauses, the Company determined that the conversion option could not be settled in all circumstances by the exchange of a fixed amount of cash for a fixed number of the Company's own equity instrument. As a result, in accordance with IFRS 9, the convertible notes were considered as an hybrid contract with a debt component and a derivative instrument related to the conversion option.

In accordance with IFRS 9, the convertible notes were initially recognized at fair value and subsequently bifurcated in a debt component recorded at amortized cost and a derivative instrument recorded at fair value through profit or loss. The Company determined that the fair value of the convertible notes and warrants on initial recognition differs from the transation price. A day one loss has been recognized at issuance date as a separate asset under other non-current financial asset and other current financial asset lines items and is amortized over the maturity of the instruments.

The exercise of the right for the Company to prepay or purchase the non-convertible bonds and the occurrence of the conversion on the repayment date have been considered as unlikely in the valuation model as of the issue date and as of December 31, 2021.

The table below summarizes the accounting treatment of the convertible notes:

Fair value of the convertible notes, the debt component and derivative instruments KREOS 2021		**As of the issue date (11/19/2021)**
Number of outstanding convertible notes		2,250,000
Number of shares issuable upon conversion		2,250,000
Share price	€	0.451
Conversion price	€	0.648
Volatility over 12 months		85 %
Risk-free rate		—
Credit spread		10 %
Fair value of the convertible notes (in thousands of €) (A)		**3,046**
Fair value of the debt component (in thousands of €) (B)		**2,227**
Fair value of the derivative instruments (in thousands of €) (C = A - B)		**819**
Change in fair value of the derivative instruments (in thousands of €)		

The difference between the fair value of the debt component (€2,227 thousand) and the transaction price after bifurcation of the derivative instrument (€2,250 thousand minus €819 thousand) has been recognized as a "Day one" loss as of the issue date for €795 thousand.

The table below summarizes the valuation of the derivative instrument as of December 31, 2021:

Fair value of the derivative instruments KREOS 2021	As of December 31, 2021
Number of outstanding convertible notes	2,250,000
Number of shares issuable upon conversion	2,250,000
Share price	€ 0.494
Conversion price	€ 0.648
Volatility over 12 months	85 %
Risk-free rate	—
Credit spread	10 %
Fair value of the derivative instruments (in thousands of €)	**916**
Change in fair value of the derivative instrument in 2021 (in thousands of €)	**97**

The table below summarizes the sensitivity analysis on the level of the valuation of the convertible notes and the day-one loss performed through the change of inputs in the valuation of volatility and the credit spread:

Sensitivity analysis	As of the issue date (11/19/2021)		
Volatility	85% over 12 months	85% over 12 months	61% over 6 months
Credit spread	10 %	13 %	9.5 %
Fair value of the convertible notes (in thousands of €) (A)	**3,045**	**2,883**	**2,814**
Fair value of the debt component (in thousands of €) (B)	**2,227**	**2,043**	**2,259**
Fair value of the derivative instruments (in thousands of €) (C = A - B)	**819**	**839**	**555**
"Day one" loss	**795**	**633**	**564**

The table below summarizes the sensitivity analysis on the level of the valuation of the convertible notes and the day-one loss performed through the change of inputs in the valuation of volatility and the credit spread:

Sensitivity analysis	As of December 31, 2021		
Volatility	85% over 12 months	85% over 12 months	61% over 6 months
Credit spread	10 %	13 %	9.5 %
Fair value of the derivative instruments (in thousands of €)	**915**	**938**	**642**

Accounting treatment of the warrants

Due to contractual clauses, the Company determined that the warrants could not be settled in all circumstances by the exchange of a fixed amount of cash for a fixed number of the Company's own equity instrument. As a result, the warrants issued to Kreos in November 2021 at the same time as the loan arrangement with Kreos have been considered as derivative instruments recorded at fair value through profit or loss. Subsequent changes in fair value of the warrants are recognized in the statement of consolidated operations in accordance with IFRS 9. Subsequent changes in fair value of the warrants are recognized in the statement of consolidated operations in accordance with IFRS 9.

The warrants issued to Kreos in 2018 were initially recognized as equity instruments. By subscribing to the 2021 warrants, Kreos Capital has expressly waived the right to exercise the 2018 warrants. As a result, the 2018 warrants were measured at fair value (based on the Black-Scholes valuation model) on November 19, 2021. The cancellation of 2018 warrants was recognized as a reduction of equity.

The table below summarizes the accounting treatment of the derivative instruments:

Warrants – KREOS 2021 Derivative instruments	As of the issue date (11/19/2021)	As of December 31, 2021
Number of outstanding warrants	2,218,293	2,218,293
Exercise price per share	€ 0.56	€ 0.56
Expected term	7 years	6.88 years
Volatility	85.41 %	85.41 %
Risk-free rate	-0.49%	-0.49%
Fair value of 2021 warrants issued to KREOS (in thousands of €) (1)	**711**	**788**
Change in fair value of the derivative instruments (in thousands of €)		**77**

(1) The Company recognized a day one loss on instruments issued to Kreos at the same time (Convertible bonds and warrants). The initial fair value of the warrants (net of the fair value of the 2018 warrants Kreos cancelled in 2021, see below) was included in the valuation of the day one loss.

The table below summarizes the accounting treatment of the cancellation of the 2018 warrants issued to Kreos:

Warrants – KREOS 2018 Equity instruments	Warrants 2018 As of the cancellation date (11/19/2021)
Number of outstanding warrants	442,477
Exercise price per share	€ 2.67
Expected term	3.75 years
Volatility	96.40 %
Risk-free rate	-0.70%
Fair value of 2018 warrants issued to KREOS (in thousands of €) recorded as a reduction of equity and as a reduction of the day one loss	**62**

The table below summarizes the accounting treatment of the day one loss that has been deferred and amortized on a straight-line basis over the maturity of the instruments:

Change in deferred day one loss (in thousands of €)	As of December 31, 2021
Day one loss as of the issue date (11/19/2021)	1,444
Straight-line amortization of the day one loss through financial expense	(54)
Deferred day one loss recognized as financial asset (see Notes 5 and 6)	**1,390**

Change in financial liabilities

(amounts in thousands of euros)	12/31/2020	Proceeds	Repayment	Effect of amortized costs	New lease obligations	Bifurcation	Fair-value at initial recognition	Change in fair Value through profit or loss	IAS 20 Grant	Transaction costs Interest	Conver—sion in equity	Guarantee deposit	Transfer non current to current	12/31/2021
Conditional advances	893	400	(279)	33					(38)	—			(103)	906
Non-convertible bonds	940	3,718		35						7		104	(1,859)	2,945
Convertible bonds	—	2,217		(10)		(819)	795	—		34				2,217
Non-current financial lease obligations	—		(54)		500					—			(221)	225
Non-current financial liabilities	**1,833**	**6,334**	**(333)**	**58**	**500**	**(819)**	**795**	**—**	**(38)**	**41**	**—**	**104**	**(2,183)**	**6,293**
Non-current financial derivative instrument	**—**					**819**		**97**					**—**	**916**
Conditional advances	274	—											103	377
Non-convertible bonds	3,454	—	(3,550)	96									1,859	1,859
Convertible bonds	7,357	14,550	(910)	—				1,710			(16,082)		—	6,626
CIR prefinancing debt	2,134	3,011	(2,252)	43						79		272		3,287
Current financial lease obligations	—												221	221
Current financial liabilities	**13,219**	**17,561**	**(6,712)**	**139**	**—**	**—**		**1,710**		**79**	**(16,082)**	**272**	**2,183**	**12,370**
Current financial derivative instrument	**—**					**—**	**711**	**77**					**—**	**788**

Note 13: Employee benefit obligation

The employee benefit obligation consists of the provision for retirement indemnity, assessed in accordance with the applicable collective bargaining agreement (i.e., the Collective Agreement of the “Pharmaceutical industry”).

This commitment only applies to employees under French law. The main actuarial assumptions used for the valuation of the retirement indemnity are as follows:

	AS OF DECEMBER 31,	
	2020	2021
Retirement age	Voluntary retirement between 65 and 67 years old	
Collective agreement	Pharmaceutical industry	Pharmaceutical industry
Discount rate (IBOXX Corporates AA)	0.33%	0.98%
Mortality table	INSEE 2017	INSEE 2017
Salary increases	2.00%	2.00%
Turn-over	Medium	Medium
Social security contributions	43%	43%

The provision for the retirement indemnity has evolved as follows:

(amounts in thousands of euros)	Employee benefit obligation
As of January 1, 2020	**142**
Service cost	31
Interests cost	1
Actuarial gains and losses	14
As of December 31, 2020	**188**
Service cost	40
Interests cost	1
Actuarial gains and losses	(23)
As of December 31, 2021	**205**

Note 14: Provisions

(amounts in thousands of euros)	As of 01/01/2020	Additions	Reversals	Release of surplus provisions	As of 12/31/2020
Provisions for litigation	—	—	—	—	—
Provisions for risks	—	2	—	—	2
Total provisions	**—**	**2**	**—**	**—**	**2**

(amounts in thousands of euros)	As of 12/31/2020	Additions	Reversals	Release of surplus provisions	As of 12/31/2021
Provisions for litigation (1)	—	1,508	(1,508)	—	—
Provisions for risks	2	—	(2)	—	—
Total provisions	**2**	**1,508**	**(1,510)**	**—**	**—**

(1) As of June 30, 2021, the Company recorded a provision of €1,508 thousand for the fine for non-performance and penalties following the judgment rendered on July 16, 2021 by the judge of the Paris Court of Justice in charge of overseeing the execution of judgments related to the Negma litigation (see note 12.2.1). This amount has been paid in 2021.

Note 15: Current liabilities

15.1 Trade payables

(amounts in thousands of euros)	AS OF DECEMBER 31, 2020	2021
Research and development suppliers	5,408	6,669
General and administrative suppliers	2,577	937
Total trade payables	**7,985**	**7,606**

The change in trade payables to research and development suppliers is primarily due to the increase in expenses associated with the Company's ongoing clinical trials and research costs (refer to Note 16.1) and in particular, expenses related to the SARA clinical program and the launch of the COVA program.

The decrease in trade payables to general and administrative suppliers is primarily due to due to the costs incurred by the Company in late 2020 as part of the Nasdaq IPO.

15.2 Tax and social liabilities

(amounts in thousands of euros)	AS OF DECEMBER 31, 2020	2021
Personnel expenses	521	658
Social security expenses (1)	790	1,202
Other taxes	136	138
Total tax and social liabilities	**1,446**	**1,998**

Liabilities related to social security expenses include social contribution to be paid upon the issuance of the free shares at the term of the vesting period. This social contribution is recognized on a straight-line basis over the vesting period and amounted to €310 thousand as of December 31, 2021 and €2 thousand as of December 31, 2020.

15.3 Other creditors and miscellaneous liabilities

(amounts in thousands of euros)	AS OF DECEMBER 31, 2020	2021
Attendance fees	242	202
Deferred income (1)	13	175
Other	13	4
Total other creditors and miscellaneous liabilities	**268**	**381**

(1) as part of the BPI France conditional advance "BIO 201" project, the Company was entitled to receive a grant of €380 thousand (see Note 12.1) which has been recorded as deferred income as of December 31, 2021 for €178 thousand (€202 thousand recognized as a grant).

Note 16: Details of expenses and products by function

16.1 Research and Development expenses

(amounts in thousands of euros)	FOR THE YEAR ENDED DECEMBER 31, 2019	2020	2021
Personnel expenses	(3,063)	(2,553)	(4,392)
Purchases and external expenses	(8,660)	(10,459)	(19,345)
Other	(214)	(251)	(264)
Research and development expenses	**(11,937)**	**(13,263)**	**(24,001)**
Research tax credit	2,807	3,328	4,080
Subsidies	41	14	256
Research tax credit and subsidies	**2,848**	**3,342**	**4,336**
Research and development expenses, net	**(9,089)**	**(9,921)**	**(19,665)**

Research and development expenses relate to activities in connection with conducting clinical trials, non-clinical studies of the drug candidates for the treatment of age-related diseases and the treatment of severe respiratory failure in patients suffering from COVID-19.

The increase of the purchases and external expenses in 2021 compared to 2020 is primarily related to the progression of our COVA Phase 2-3 study as well as the finalization of our SARA-INT phase 2 study. These expenses consisted primarily of the cost of Contract Research Organization ("CROs") in conducting clinical trials and non-clinical studies, as well as the costs of CDMOs (Contract Distribution Manufacturing Organizaton) for the manufacturing scaling-up of Sarconeos (BIO101) in preparation of a potential filing with Regulatory Authorities upon positive results from COVA.

The increase in purchases and external expenses between 2019 and 2020 is related to our studies and research costs linked to the progression of our SARA-INT study and the launch of our COVA study. These expenses consisted primarily of the cost of CROs in conducting clinical trials and non-clinical regulatory studies.

The decrease in personnel expenses in 2020 compared to 2019 is related to the downsizing of the Company's structure initiated during the second half of 2019 and also to a lower average salary for new employees in 2020.

The increase in personnel expenses in 2021 compared to 2020 is related to the staff reinforcement as part of the COVA clinical study and expenses relating to share-based payment for €2,125 thousand in 2021 compared to €367 thousand in 2020.

As part of the BPI France conditional advance "BIO 201" project, the Company was entitled to receive a grant of €380 thousand, out of which €202 thousand was recognized as a subsidy in 2021 since 53% of the budget of research and development expenses were incurred at the closing date.

16.2 General and administrative expenses

(amounts in thousands of euros)	FOR THE YEAR ENDED DECEMBER 31, 2019	2020	2021
Personnel expenses	(1,998)	(1,796)	(3,107)
Purchases and external expenses	(2,393)	(2,188)	(3,991)
Other expenses	(2,203)	(37)	(52)
General and administrative expenses	**(6,593)**	**(4,021)**	**(7,150)**

Between 2020 and 2021, personnel expenses, including share-based payments, for general management and administrative staff increased by €1.0 million mainly due to the costs of being listed on Nasdaq, the reinforcement of the Company's staff, mostly for business development and legal compliance, as well as to the impact of the stock based compensation expense related to Founders' warrants and free shares granted in late 2020 and in 2021.

Between 2019 and 2020, personnel expenses, including share-based payments, for general management and administrative staff decreased by €0.2 million in 2020 due to the restructuring of the finance function, and the decrease of 2 employees.

Other purchases and external expenses consisted primarily of administrative expenses associated with being a public listed company in France and in the United States since early 2021, accounting and audit fees, insurance and legal fees.

In its decision dated October 1, 2019, the French Stock Exchange Authority, the AMF, imposed a financial penalty of €100 thousand on Biophytis for failing to communicate as soon as possible to the market the privileged information relating to the significant delay in the entry in phase 2 of clinical studies of two drug candidates. The Company has settled this liability along with a late-filing penalty of €10 thousand. This amount is included in the general and administrative expenses in 2019.

The general and administrative expenses for the year ended December 31, 2019 is impacted by the recognition as other expenses of the one-off fees related to the postponed project of listing the Company's equity securities on the Nasdaq in July 2019.

16.3 Personnel expenses

(amounts in thousands of euros)	FOR THE YEAR ENDED DECEMBER 31, 2019	2020	2021
Wages and salaries	(4,998)	(3,562)	(3,770)
Share-based payments (1)	(63)	(787)	(3,730)
Personnel expenses	**(5,061)**	**(4,349)**	**(7,499)**

(1) the share-based payments expenses include €308 thousand of social contribution recognized on a straight-line basis over the vesting period.

The Company's average headcount is 27 as of December 31, 2021 compared to 20 as of December 31, 2020 and to 21 as of December 31, 2019.

Note 17: Net financial expense

(amounts in thousands of euros)	FOR THE YEAR ENDED DECEMBER 31, 2019	2020	2021
Financial interest and amortized cost of the loan agreement with Kreos(1)	(1,125)	(817)	(555)
Changes in fair value of convertible notes and derivative instruments (1) (2)	(1,867)	(10,080)	(1,875)
NEGMA financial indemnities (3)	—	—	(1,695)
Other financial expenses	(51)	(231)	(166)
Transaction costs related to the issuance of convertible notes	(320)	(453)	(125)
Net financial income related to Negma returning to Biophytis damages paid	—	34	20
Other financial income	4	1	4
Amortization of the deferred day one losses	—	—	(54)
Foreign exchange gains (losses)	14	(29)	14
Total net financial expense	**(3,344)**	**(11,575)**	**(4,432)**

(1) Refer to Note 12.2 Convertible notes and non-convertible bonds

(2) During the year ended December 31, 2021, the change in fair value of convertible notes and derivative instruments was related to (i) the change in fair value of the ORNANE issued to Negma for €1,306 thousand, (ii) the change in fair value of the ORNANE issued to Atlas for (€3,017) thousand, (iii) the change in fair value of the derivative instruments for (€174) thousand.

During the year ended December 31, 2020, the change in fair value of convertible notes and derivative instruments was related to (i) the change in fair value of the ORNANE issued to Negma for (€5,304) thousand, (ii) the change in fair value of the ORNANE issued to Atlas for (€4,776) thousand.

(3) During the year ended December 31, 2021, the financial indemnities paid to Negma is comprised of the fine for non-performance imposed by the Judgment €1,500 thousand (see Notes 14 and 12.2), (iii) €100 thousand and €8 thousand pursuant to Article 700 of the Code of Civil Procedure and (iv) late payment interest of €87 Thousand. As a result, the Company recorded financial indemnities of €1,695 thousand during the year ended December 31, 2021.

Note 18: Income taxes

The Company has carried-forward tax losses of €130,378 thousand as of December 31, 2021 comprising:

- French tax losses which can be carried forward indefinitely for €128,994 thousand;
- U.S. subsidiary tax losses which can be carried forward were €1,383 thousand (being $1,566 thousand translated using the December 31, 2021 exchange rate), of which:
    - €1,008 thousand indefinitely;
    - €188 thousand expiring in 2037;
    - €144 thousand expiring in 2036; and
    - €43 thousand expiring in 2035.
- Brazilian subsidiary tax losses for €1 thousand which can be carried forward indefinitely.

The tax rate applicable to:

- Biophytis, is the current rate in France, i.e. 26.5%. This rate will decrease gradually to reach 25% in 2022.

- Instituto Biophytis Do Brasil, is the current rate in Brazil, i.e. 34%.
- Biophytis Inc., is the current rate in the United States, i.e. 21%.

In accordance with the accounting principles described in Note 2.22, no deferred tax asset has been recognized in the Financial Statements apart from those to offset deferred tax liabilities for the same tax juridictions and over the same period of recovery.

Reconciliation between theoretical tax and effective tax

(amounts in thousands of euros)	FOR THE YEAR ENDED DECEMBER 31, 2019	2020	2021
Net loss	(18,946)	(25,517)	(31,247)
Income taxes	80	—	—
Loss before taxes	**(19,026)**	**(25,517)**	**(31,247)**
Current tax rate in France	28.00 %	28.00 %	26.50 %
Theoretical income tax (expense) benefit	**5,327**	**7,145**	**8,280**
Items not subject to tax deduction	502	788	880
Share based payments	(18)	(220)	(907)
Non recognition of deferred tax assets related to tax losses and temporary differences	(5,779)	(7,711)	(8,253)
Tax rate differences	48	(2)	—
Group income taxes (expense) benefit	**80**	**—**	**—**
Effective tax rate	*-0.4%*	0.0 %	0.0 %

The permanent differences include the impact of the research tax credit (non-taxable operating income).

Nature of deferred taxes

(amounts in thousands of euros)	AS OF DECEMBER 31, 2019	2020	2021
Temporary differences	277	1,381	421
Losses carried forward	18,082	23,505	32,539
Total of items with a nature of deferred tax assets	**18,359**	**24,886**	**32,960**
Temporary differences	(605)	(528)	(526)
Total of items with a nature of deferred tax liabilities	**(605)**	**(528)**	**(526)**
Net total of deferred tax assets (liabilities)	**17,754**	**24,358**	**32,434**
Unrecognized deferred tax	(17,754)	(24,358)	(32,434)
Net total of deferred tax	**—**	—	—

Note 19: Earnings (loss) per share

	FOR THE YEAR ENDED DECEMBER 31, 2019	2020	2021
Weighted average number of outstanding shares	16,966,140	60,022,714	118,332,562
Treasury shares	83,479	48,228	49,882
Weighted average number of outstanding shares (without Treasury shares)	16,882,661	59,974,486	118,282,679
Net loss (in thousands of euros)	(18,946)	(25,517)	(31,247)
Basic loss per share (€/share)	**(1.12)**	**(0.43)**	**(0.26)**
Diluted loss per share (€/share)	**(1.12)**	**(0.43)**	**(0.26)**

As the inclusion of the Company's awards (warrants, free shares and founders' warrants) creates an anti-dilutive effect, those instruments were not taken into account for the presented years (see Notes 11 and 12.2).

Note 20: Related Parties

20.1 Compensation due to executive officers and directors

	FOR THE YEAR ENDED DECEMBER 31,		
(amounts in thousands of euros)	2019	2020	2021
Fixed compensation	1,405	960	1,125
Variable compensation	286	272	269
Benefits in kind	15	34	25
Directors fees	230	263	301
Share-based payments	53	581	3,294
Consulting fees	—	—	30
Total compensation of executive officers	**1,989**	**2,110**	**5,044**

Post-employment benefits have not been granted to our Chief Executive Officer or members of the Board of Directors.

20.2 Intellectual Property Agreement signed with the Company's CEO

The Company's CEO, who is a corporate officer but not an employee of the Company under French law, is involved in our research and development activities. He has developed inventions with the Company for which the Company has submitted patent applications in which the Company's CEO is listed as a co-inventor and other inventions that the Company expects may give rise to patent applications in the future for which the Company expects he will be included as a co-inventor.

As an inventor, the Company's CEO has certain rights under French intellectual property law. These rights are distinct from the statutory rights that usually apply to employee inventors under French law.

In order to define a framework within which any intellectual property resulting from the Company's CEO's research and development activities is properly assigned to the Company, the Company has entered into an agreement, which has been approved by the Company's board of directors pursuant to which he is entitled to the following payments for his contributions:

(a) a first lump sum cash payment of €90 thousand to be paid within 30 days of filing of a patent application based on the assigned rights; and

(b) a second lump sum cash payment of €90 thousand to be paid within 30 days of publication of a patent application based on the assigned rights; and

(c) a 6.5% royalty payment with respect to any license income and/or any net sales by the Company of products manufactured with the patents filed on the basis of the assigned rights.

These three payments will be capped at €2.1 million on a platform per platform basis.

In the event that a third-party pharmaceutical and/or biotech company acquires 100% of the Company's capital and voting rights, payments will be accelerated, so that the cap (€2.1 million per platform), less any amount previously paid in respect of a platform, will become immediately payable.

Following the signature of this agreement, an amount of €450 thousand was due to the Company's CEO, as certain patent applications covered by the agreement had already been filed and therefore triggered payment of the first lump sum. Additional amounts of €180 thousand and €270 thousand were due to the Company's CEO in 2019 and 2020, respectively.

In April 2020, the Company entered into an amendment to the Intellectual Property agreement signed with the Company's CEO to cover two publications of patent applications not included under the existing contract. This amendment was approved by the Board of Directors on April 3, 2020, under which the Company's CEO is entitled to the payment of a lump sum in cash amounting to €180 thousand.

The total patents rights acquired from the Company's CEO as of December 31, 2021 amounted to €1,350 thousand and are amortized over a 19-year period.

€270 thousand was paid to the Company's CEO in 2019, €180 thousand in 2020 and €270 thousand in 2021. The remaining amount of €630 thousand was used for the subscription and the exercise of the investors warrants by the Company's CEO (see Note 11).

20.3 Consultant contract concluded with Successful Life

On October 1, 2019, the Company entered into a services agreement with Successful Life SAS in which Jean Mariani (Non-employee Director of Biophytis since October 2019), its legal representative, has a controlling interest. This services agreement provides for the preparation of meetings of the Scientific Committee, scientific and strategic advice regarding the biology of aging. The agreement provides for a fixed remuneration of €450 per day within the cap of €32.4 thousand per year and reimbursement of costs and expenses upon presentation of supporting documentation. This agreement was entered into for a period of one year and was renewed by written amendment dated October 1, 2020 for an additional period of one year, tacitly renewable.

On July 7, 2021, the Company entered into a new service agreement with Successful Life for the replacement of the CMO (Chief Medical Officer) position until the arrival of the new CMO. This agreement replaces the previous service agreement until the arrival of the new CMO and provides for a fixed remuneration of €15 thousand per month until September 30, 2021.

20.4 Company's CEO's Share loan agreement with Negma

As part of the implementation of the financing agreement with Negma (see note 12.2), the Company's CEO has entered into a loan agreement for his shares in the Company for the benefit of Negma in order to facilitate the various issuance and conversion transactions.

Following the delivery of the 2,050,000 shares to Negma (see note 14) and the termination of the agreement, the share loan agreement was terminated.

20.5 Escrow Agreement

In order to comply with the requirements of the order of the President of Paris Commercial Court, dated May 7, 2020 by which the Company were ordered to place in escrow 2,050,000 of the Company's shares until their delivery to Negma, and as the Company did not hold a sufficient number of its own shares, the Company asked its CEO, by a letter dated May 19, 2020, to place in escrow some of the shares of the Company he owned. The letter (which was countersigned by the Company's CEO) included a provision for the indemnification by the Company of the Company's CEO for any loss he may suffer as a result of this arrangement. As the delivery of the shares to Negma took place on June 5, 2020, the escrow was released in full, including the shares in escrow owned by the Company's CEO, which were returned to him.

Note 21: Off-balance-sheet commitments

21.1 Commercial Leases

Leases on premises

As part of its activity, the Company signed operating leases for its administrative offices and laboratories, which are summarized below:

France:

Address:	Sorbonne Université (formerly Université Pierre et Marie Curie) 4, place Jussieu - 75005 Paris
Lease arrangement which expired on December 15, 2019	
Surface area:	638.15 square meters
Period:	December 15, 2018 – December 15, 2019 (which can be renewed twice with a simple amendment)
Annual rent:	€215,011.87
Refurbishment costs:	Sorbonne Université agreed to contribute to the refurbishment costs up to €100 thousand
Lease arrangement which expired as of December 15, 2021	
Surface area:	504 square meters
Period:	December 15, 2020 – December 15, 2021
Annual rent:	€159,278.23
Refurbishment costs:	Sorbonne Université agreed to contribute to the refurbishment costs up to €50 thousand

United States:

The Company does not currently have a lease agreement in this jurisdiction.

Brazil:

The Company does not currently have a lease agreement in this jurisdiction.

21.2 Commitments linked to financial debts

Commitments given

(Amounts in thousands of euros)			
Borrowing	**Commitments given**	**Nominal amount**	**Residual amount as of 12/31/2021**
BPI France conditional advance “Sarcob” project	The agreement provides for an annual repayment on March 31 of each year, effective on January 1, 2016, corresponding to 40% of the ex-tax proceeds from the sale or assignment of licenses, patents or know-how relating to all or part of the results of the aided project, received for the previous year and 40% of the ex-tax proceeds generated by the marketing or use by the beneficiary for its own purposes, of prototypes, pre-series or models produced as part of the aided project. These amounts shall be assigned as a priority and by offsetting them against the last payment to BPI France. The application of this mechanism will not lead the Company to pay more than the amount received.	260	59
BPI France conditional advance -"BIO101" project	The agreement provides for an annual repayment on March 31 of each year, effective on January 1, 2018, corresponding to 35.81% of the ex-tax proceeds from the sale or assignment of licenses, patents or know-how relating to all or part of the results of the aided project, received for the previous year and 35.81% of the ex-tax proceeds generated by the marketing or use by the beneficiary for its own purposes, of prototypes, pre-series or models produced as part of the aided project. These amounts shall be assigned as a priority and by offsetting them against the last payment to BPI France. The application of this mechanism will not lead the Company to pay more than the amount received.	1,100	495

Agreements for the exploitation of industrial property	**Commitments given**
SARCOB commercialization agreement - SATT Lutech Agreement dated January 1, 2016, as amended on April 2, 2019, on November 6, 2020 and on December 17, 2020	This agreement covers the S1 through S9 patent families. The contractual structure of the consideration payable by us is as follows: firstly, in the year after the first marketing of a product and in any event at the latest, from 2023 onwards, we will pay a guaranteed annual minimum amount of €40 thousand, which will be deducted from the amount of royalties effectively due annually to SATT Lutech. With regard to the direct exploitation, the agreement provides for an annual royalty for a figure based on the net sales of products, distinguishing between sales of nutraceutical and medicinal products. With regards to indirect exploitation, the agreement provides for annual double-digit royalties based on income received from licensees, distinguishing: (i) between the sales of nutraceutical products (double-digit royalties) and drug products (two or one-digit royalties) and (ii) the product development phase (Phase 1, 2 or 3) at the time of the conclusion of the licensing agreement. The royalty payments will end upon termination of the agreement.
MACULIA commercialization agreement - SATT Lutech Agreement dated January 1, 2016, as amended on December 17, 2020	This agreement covers the MI through MIV patent families. The contractual structure of the consideration payable by us is as follows: firstly, in the year following the first marketing of a nutraceutical product and in any event no later than in 2020, we will pay an annual guaranteed minimum amount of €15 thousand. In the same way, we will pay a guaranteed minimum amount of €50 thousand in the event of marketing of a drug product and in any event no later than from 2026. These amounts will be deducted from the amount of royalties effectively due annually to SATT Lutech. For direct exploitation, the agreement also provides for an annual royalty of a figure based on net sales of products, distinguishing between sales of nutraceutical and medicinal drugs. For indirect exploitation, it also provides for annual double-digit royalties based on income received from licensees, distinguishing (i) between the sales of nutraceuticals (double-digit royalties) and drug products (one or two-digit royalties) and (ii) the product development phase of these products (Phase 1, 2 or 3) at the time of conclusion of the licensing agreement. The royalty payments will end upon termination of the agreement.

As required under the terms of the venture loan agreements signed with Kreos on September 10, 2018 (see Note 12.2.3) and on November 19, 2021 (see Note 12.2.3), the Company pledged a security interest in the Company’s assets for the benefit of Kreos. The Company also granted a security interest in the business as a going concern, including a portion of the Company’s patents, to Kreos.

Note 22: Management and assessment of financial risks

Biophytis may find itself exposed to various types of financial risk, including market risk, liquidity risk and credit risk. Biophytis is implementing measures consistent with the size of the Company to minimize the potentially adverse effects of those risks on its financial performance.

Biophytis' policy prohibits the use of financial instruments for speculative purposes.

Market risk

Interest rate risk

Interest rate risk reflects the Company's exposure to fluctuations in interest rates in the market.

Changes in interest rate could affect returns achieved on cash and fixed-term deposits but this risk is not considered material given the current low returns on deposits held by the Company.

Change in interest rate could affect the statement of consolidated operations for financial liabilities but this risk is considered as not significant given the implementation by the Company of debts bearing fixed interest rate.

Foreign exchange risk

The major risks linked to foreign exchange rate are considered not significant due to the low level of activity of its foreign subsidiaries.

The Company currently does not use hedging instruments to protect its activity from exchange rate fluctuations. However, any major development in its activity may result in an increase of its exposure to exchange rate risk. Should such increase materialize, the Company may consider adopting an appropriate policy to hedge such risks.

Equity risk

The Company entered into ORNANE agreement with Atlas and Negma, loan agreement and bonds issue agreement with Kreos providing financing through the issuance of multiple tranches of convertible notes eventually with attached warrants. As part of these agreements, the Company is exposed to changes in the market price of its own shares

Credit risk

Credit risk is linked to deposits with banks and financial institutions.

The Company seeks to minimize the risk related to banks and financial institutions by placing cash deposits with highly rated financial institutions. The maximum level of the credit risk corresponds to the book value of the financial assets. As outstanding receivables consist primarily of Research Tax Credit "CIR" granted by the French government, the Company does not carry significant credit risk.

Liquidity risk

Since its incorporation, the Company has funded its operations and growth by strengthening its shareholders' equity through capital increases (including the capital increase realized during its French IPO in July 2015), bank loans and notes, and obtaining public aid for innovation and reimbursement of CIR receivables, including the prefinancing arrangement initiated in 2020.

Significant research and development expenses have been incurred since inception generating negative cash flows from operating activities of €15,051 thousand, €9,743 thousand and €23,795 thousand for the years ended December 31, 2019, 2020 and 2021, respectively.

The following table discloses aggregate information about material contractual obligations and periods in which payments were due as of December 31, 2021. Future events could cause actual payments to differ from these estimates.

Amounts in thousands of euros)	Year ended December 31, 2021 Total	2022 Less than 1 year	2023 / 2024 1-3 years	2025 / 2026 3-5 years	Thereafter More than 5 years
Non-convertible bonds issued to Kreos (a)	5,548	2,282	3,015	251	—
Conditional advances	1,354	379	620	195	160
Lease liability	446	221	226	—	—
Licence agreements (d)	180	15	110	55	(d)
Convertible notes issued to Kreos(b)	2,945	214	428	2,303	—
Convertible notes ATLAS (c)	5,600	5,600	—	—	—
Financial liabilities related to the prefinancing of a portion of the research tax credit receivables	3,450	3,450	—	—	—
Derivative instruments	1,704	788	916	—	—
Total	**21,001**	**12,799**	**5,238**	**2,804**	**160**

(a) The contractual obligations related to non-convertible bonds issued to Kreos include the principal repayments and the 10% annual interest payments for the non-convertible bonds.

(b) On November 19, 2021, we signed a new KREOS venture loan agreement with a €2.25 million convertible bonds issuance. The contractual obligations related to convertible notes issued to Kreos include the principal repayments and the 9.5% annual interest payments for the non-convertible bonds.

(c) In April 2020, we signed a new convertible note financing of €24 million from ATLAS to continue the development of Sarconeos (BIO101) through the issuance of multiple convertible notes. Holders of ORNANE may request at any time to convert them during their maturity period, and at that time, we will be able to redeem the ORNANE in cash. At the end of the term, and if the ORNANE have not yet been converted or redeemed, the holder will have to convert them. We issued a first tranche of €3 million on April 29, 2020, a second tranche of €3 million on June 19, 2020, a third tranche of €3 million on August 28, 2020, a fourth and fifth tranches of €6 million on May 27, 2021, a sixth and seventh tranches of €6 million on September 20, 2021 and a eight tranche of €3 million on December 20, 2021. As of December 31, 2021, there are 224 outstanding convertible notes issued to ATLAS.

(d) The Company signed several agreements to license industrial property to further our research and developments efforts with royalties due to the counterparties that are variable starting the year after the first marketing of a product and royalty arrangements (see Note 21). However, there are certain guaranteed annual minimum amounts due starting in various future years. These guaranteed annual minimum amounts are shown in the table above. Other than these minimum guaranteed amounts (as further described below), amounts of royalties to be paid after 2024 cannot be determined precisely and therefore, no royalties amounts are included in the table above.

The Financial Statements have been approved on a going concern basis by the Board of Directors (refer to Note 2.1).

The Company will continue to have major funding requirements in the future to support the development of its drug candidates. The precise extent of funding required is difficult to predict accurately and will depend in part on factors outside the Company's control. Areas subject to significant uncertainty include, but are not limited to:

- The Company's ability to conduct successful clinical trials, including the capacity to recruit patients in a timely-manner for the Company's clinical trials;
- the change in the regulatory landscape; and
- the approval for other drugs on the market that may potentially reduce the attractiveness for the Company's drug candidates.

Should the Company find itself unable to finance its own growth through partnership agreements, the Company would be dependent on other sources of financing, including equity and/or debt funding or research grants.

Note 23: Subsequent events

Approval from ANVISA (Brazil) – February 2022

Biophytis received approval from ANVISA (Brazil) to give access to Sarconeos (BIO101) to hospitalized COVID-19 patients through an Expanded Access Program.

War in Ukraine – February 2022

The war in Ukraine launched by Russia on February 24, 2022 will have significant economic and financial consequences at the global level. Sanctions against Russia are expected to have significant implications for companies with business activities or relationship with Russia.

As of December 31, 2021, the Company has no business activity in Russia. As part of its global intellectual property protection, the Company issued patents and filed patents application in Russia that are currently under examination.

The Company's activities could be impacted directly or indirectly by the consequences of the conflict, which it is not possible to quantify precisely to date.

In particular, the Company could be exposed to increasing costs of its clinical studies due to rising energy prices and medical supplies. As of the date of publication of these Financial Statements, the Company believes that the consequences on its 2022 accounts will be limited.

Atlas – April 2022

The Company announced the issue of 160 ORNANEs for a total of €4 million as part of its 2021 bond financing agreement with Atlas (first tranche of the eight tranches contract).

Exhibit 1.1

Translation for information purposes only

BIOPHYTIS
Public limited company with Board of Directors and capital of 29,687,574.40 Euros
Registered office: 14 avenue de l'Opéra - 75001 Paris
492 002 225 RCS Trade and Company Register of Paris

ARTICLES OF ASSOCIATION

Updated by the decision
of the Chief Executive Officer dated 7 April 2022

Certified by the Chairman and Chief Executive Officer

/s/ Stanislas Veillet
Mr Stanislas Veillet

Translation for information purposes only

TITLE I FORM - PURPOSE - CORPORATE NAME - REGISTERED OFFICE - TERM

Article 1 – Form

The Company Biophytis, created in the form of a Simplified Joint Stock Company has, pursuant to articles L.224-3 and L.227-9 of the French Commercial Code, adopted the form of a public limited company, following a decision of the partners dated 12 September 2014, without this resulting in the creation of a new legal entity.

The company is governed by these Articles of Association and the legislative or regulatory provisions in force, in particular by the provisions of second Book of the Commercial Code, as well as by all subsequent legislative and regulatory texts or by those that may be applicable during the company's life.

Article 2 - Purpose

The Company has as its purpose, in France and in all countries:

- the creation, operation, lease and rental management of all business, plants and institutions, the acquisition of holdings in any company, as well as all business, financial or industrial transactions, as well as those involving movable and immovable assets annexed or related directly or indirectly to the research, production, distribution and sale of any product and service beneficial to animal or human health;

- the research and development of drug and nutraceutical candidates, especially in the field of ageing related illnesses;

- and, more generally, all financial, commercial, industrial, civil, real estate or property transactions that could be directly or indirectly related, in whole or in part, to either objects specified above or to any other similar or related purposes.

Article 3 - Corporate name

The Company's corporate name is:

BIOPHYTIS

In all instruments and documents issued by the Company, the corporate name must always be preceded or immediately and legibly followed by the words "corporation" or the initials "S.A.," with a statement of its share capital as well as the place and registration number of the Trade and Companies Register in which it is registered.

Article 4 – Registered office

The registered office is located at: 14 avenue de l'Opéra - 75001 Paris

It may be transferred to any place in the department or to an adjacent department by a simple decision of the Board of Directors, subject to the ratification of this decision by the next Ordinary General Meeting, and in any case by a decision of the Extraordinary General Meeting of Shareholders. When a transfer is decided by the Board of Directors, the articles of association shall be amended accordingly.

Article 5 - Term

The Company will have a term of ninety-nine years from the date of its registration in the Trade and Companies Register, except in case of early dissolution or extension.

At least one year before the expiry of the Company, the Board of Directors should call for an Extraordinary General Meeting of Shareholders in order to decide whether the Company is to be extended. Failing this, any Shareholder may ask the President of the Commercial Court, acting upon request, to appoint an agent of justice tasked with convening the meeting and the decision provided for above.

TITLE II SHARE CAPITAL - SHARES

Article 6 – Contributions

At the incorporation of the company, a contribution was made by Mr Stanislas VEILLET, sole shareholder, for a sum in cash of SIXTY-THREE THOUSAND Euros (€63,000) corresponding to the amount of the share capital.

The sum of thirty-one thousand five hundred Euros (€31,500) was deposited on 7 September 2006 on behalf of the Company being formed into an account opened with the bank CIC located at 11, rue Aguesseau (75008) PARIS.

The balance, that is to say, the sum of thirty-one thousand five hundred Euros (€31,500), has been deposited with the above-mentioned CIC bank as a result of a certificate issued by that establishment on 25 May 2007.

Following a decision by the sole shareholder dated 30 July 2008, the Chairman observed on 1st August 2008 the performance of a capital increase of TWO HUNDRED FOUR THOUSAND Euros (€204,000) by a cash contribution in the amount of TWENTY-FOUR THOUSAND Euros (€24,000) and by an offset against liquid and payable claims due on the company for the amount of ONE HUNDRED EIGHTY THOUSAND Euros (€180,000).

Following a decision of the general meeting dated 18 December 2008, the partners have noted the performance of a capital increase of a total amount of EIGHT HUNDRED THOUSAND TWELVE Euros AND SEVEN CENTS (€800,012.07) including the issue premium, by a cash contribution.

Following a decision of the general meeting dated 29 June 2009, the partners have observed:

- the performance of a capital increase in an amount of two million two hundred twenty thousand and one Euros and thirty-five cents (€2,220,001.35) including the issue premium, by a cash contribution.

- the performance of a capital increase in the amount of twenty-one thousand eight hundred four (21,804) Euros by means of exercising a full ratchet attached to the 50,859 preferential shares in the P class existing on that date and the conversion into 72,663 preferential shares in the "Pbis" class, with the 21,804 new shares being released by a sum of 21,804 Euros on the account "Issue premium''.

By a decision of the Chairman dated 18 July 2012, the Company's share capital was increased, in cash, by a nominal amount of eighteen thousand forty-six Euros (€18,046), to take it from five hundred forty-one thousand two hundred ninety-eight Euros (€541,298) to five hundred fifty-nine thousand three hundred forty-four Euros (€559,344), corresponding to the subscription of a total amount of one hundred ninety-eight thousand six hundred eighty-six Euros and forty-six cents (€198,686.46), including the issue premium, by the creation and issue at the unit price of eleven Euros and one cent (€11.01), with an issue premium of ten Euros and one cent (€10.01), of eighteen thousand and forty-six (18,046) new ordinary shares of the O Class, subscribed by way of the conversion of 13.500 convertible bonds named "OCA Reserved$_{2011}$" and 4,546 convertible bonds named "OCA $_{2011}$" that were fully paid up at the time of subscription by offsetting them against the bond debt.

By a decision of the Mixed General Meeting (Extraordinary and ordinary) dated 18 July 2012:

- the Company's share capital was increased, in cash, by a nominal amount of one hundred seventy-five thousand ninety-nine Euros (€175,099), to take it from five hundred fifty-nine thousand three hundred forty-four Euros (€559,344) to seven hundred thirty-four thousand four hundred forty-three Euros (€734,443), corresponding to the subscription of a total amount of one million eight hundred thousand seventeen Euros and seventy-two cents (1,800,017.72 €), including the issue premium, by the creation and issue at the unit price of ten Euros and twenty eight cents (€10.28), with an issue premium of nine Euros and eighteen cents (€9.28), of one hundred seventy-five thousand ninety-nine (175,099) new preferential shares of the "P2" class, subscribed in cash and fully paid up at the time of subscription;

- the eighteen thousand forty-six (18,046) new ordinary shares of the O Class, issued by way of the conversion of 13,500 convertible bonds, named "OCA Biophytis Reserved2on", and 4,546 convertible bonds called "OCA Biophytis2011", have been converted into eighteen thousand and forty-six (18,046) shares

By a decision of the Chairman dated 18 July 2012, the Company's share capital was increased, in cash, by a nominal amount of nineteen thousand four hundred eighty-four Euros (€19,484), to take it from seven hundred thirty-four thousand four hundred forty-three Euros (€734,443) to seven hundred fifty-three thousand, nine hundred twenty-seven Euros (€753,927), by means of exercising a full ratchet attached to the 201,635 preferential shares of the "P" class, and 72,663 existing preferential shares in the "Pbis" class as of such date, and the conversion of said shares into two hundred ninety-three thousand seven hundred eighty-two (293,782) preferential shares of the "Pbis" class, including nineteen thousand four hundred eighty-four (19,484) new preferential shares of the "Pbis" class issued at par, with 19,484 new preferential shares of the "Pbis" class being released by the deduction of a sum of 19,484 Euros on the "Issue premium."

By a decision of the General Meeting of Shareholders dated 22 May 2015, the par value of the shares was divided by five to be twenty Euro cents (€0.20).

By a decision of the Board of Directors of 10 July 2015 acting on behalf of the Mixed General Meeting of Shareholders held on 27 May 2015, the Company's share capital was increased, in cash, by a nominal amount of 334,500 Euros to take it from 753,927 Euros to 1,088,427 Euros, corresponding to the subscription of a total amount of 10,035,000, including the issue premium, by the creation and issue at the unit price of 6 Euros, with an issue premium of 5.80 Euros, of 1,672,500 new ordinary shares, subscribed in cash and fully paid up at the time of subscription.

By a decision of the Board of Directors of 7 August 2015 acting on behalf of the Mixed General Meeting of Shareholders held on the 27 May 2015, the Company's share capital was increased, in cash, by a nominal amount of 133,340 Euros to take it from 1,088,427 Euros to 1,221,767 Euros, corresponding to the subscription of a total amount of 6,000,300, including the issue premium, by the creation and issue at the unit price of 9 Euros, with an issue premium of 8.80 Euros, of 666,700 new ordinary shares, subscribed in cash and fully paid up at the time of subscription.

By a decision of the Board of Directors on 23 September 2015 acting on behalf of the Mixed General Meeting of Shareholders held on 27 May 2015, the Company's share capital was increased, in cash, by a nominal amount of 4,583.20 Euros to take it from 1,221,767 Euros to 1,226,350.20 Euros corresponding to the subscription of a total amount of 137,496.00, including the issue premium, by the creation and issue at the unit price of 6.00 Euros, with an issue premium of 5.80 Euros, of 22,916 new ordinary shares, subscribed in cash and fully paid up at the time of subscription.

By a decision of the Board of Directors of 4 December 2015 acting on behalf of the Mixed General Meeting of Shareholders held on 27 May 2015, the Company's share capital was increased, in cash, by a nominal amount of 11,550 Euros to take it from 1,226,350.20 Euros to 1,237,900.20 Euros, corresponding to the subscription of a total amount of 346,500 Euros, including the issue premium, by the creation and issue at the unit price of 6.00 Euros, with an issue premium of 5.80 Euros, of 57,750 new ordinary shares, subscribed in cash and fully paid up at the time of subscription.

By a decision of the Board of Directors of 15 March 2016 acting on behalf of the Mixed General Meeting of Shareholders held on 27 May 2015, the Company's share capital was increased, in cash, by a nominal amount of 1,200 Euros to take it from 1,237,900.20 Euros to 1,239,100.20 Euros, corresponding to the subscription of a total amount of 50,400 Euros, including the issue premium, by the creation and issue at the unit price of 8.40 Euros, with an issue premium of 8.20 Euros, of 6,000 new ordinary shares, subscribed in cash and fully paid up at the time of subscription.

By a decision of the Board of Directors of 29 September 2016 acting on behalf of the Mixed General Meeting of Shareholders held on 22 May 2015, the Company's share capital was increased, in cash, by a nominal amount of 5,600 Euros to take it from 1,239,100.20 Euros to 1,244,700.20 Euros, corresponding to the subscription of a total amount of 57,680 Euros, including the issue premium, by the creation and issue at the unit price of 2.06 Euros, with an issue premium of 1.86 Euros, of 28,000 new ordinary shares, subscribed in cash and fully paid up at the time of subscription.

By a decision of the Board of Directors dated 3 April 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 10 June 2016, the Company's share capital was increased, in cash, by a nominal amount of 223,489.80 Euros to take it from 1,244,700.20 Euros to 1,468,190 Euros, corresponding to the subscription of a total amount of 3,184,729.65 Euros, including the issue premium, by the creation and issue at the unit price of 2.85 Euros, with an issue premium of 2.65 Euros, of 1,117,449 new ordinary shares, subscribed in cash and fully paid up at the time of subscription.

By a decision of the Board of Directors dated 3 April 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 10 June 2016, the Company's share capital was increased, in cash, by a nominal amount of 38,596.40 Euros to take it from 1,468,190 Euros to 1,506,786.40 Euros, corresponding to the subscription of a total amount of 549,998.70 Euros, including the issue premium, by the creation and issue at the unit price of 2.85 Euros, with an issue premium of 2.65 Euros, of 192,982 new ordinary shares, subscribed in cash and fully paid up at the time of subscription.

By a decision of the Chief Executive Officer dated 16 May 2017, acting by a delegation of the Board of Directors dated 3 April 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 10 June 2016, the Company's share capital was increased, in cash, by a nominal amount of 24,489.80 Euros to take it from 1,506,786.40 Euros to 1,531,276.20 Euros, corresponding to the subscription of a total amount of 376,604.08 Euros by the conversion of 30 bonds redeemable in cash and/or into new and/or existing shares, each with a par value of 10,000.00, into 122,449 new ordinary shares at a conversion price of 2.45 Euros each.

By a decision of the Chief Executive Officer dated 16 May 2017, acting by a delegation of the Board of Directors dated 3 April 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 10 June 2016, the Company's share capital was increased, in cash, by a nominal amount of 36,734.60 Euros to take it from 1,531,276.20 Euros to 1,568,010.80 Euros corresponding to the subscription of a total amount of 564,906.12 Euros by the conversion of 45 bonds redeemable in cash and/or into new and/or existing shares, each with a par value of 10,000.00, into 183,673 new ordinary shares at a conversion price of 2.45 Euros each.

By a decision of the Chief Executive Officer dated 27 May 2017, acting by a delegation of the Board of Directors dated 3 April 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 10 June 2016, the Company's share capital was increased by a nominal amount of 20,491.80 Euros to take it from 1,568,010.80 Euros to 1,588,502.60 Euros, corresponding to the subscription of a total amount of 272,264.34 Euros by the conversion of 25 bonds redeemable in cash and/or into new and/or existing shares, each with a par value of 10,000.00, into 102,459 new ordinary shares at a conversion price of 2.44 Euros each.

By a decision of the Chief Executive Officer dated 31 May 2017, acting by a delegation of the Board of Directors dated 3 April 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 10 June 2016, the Company's share capital was increased by a nominal amount of 20,833.20 Euros to take it from 1,588,502.60 Euros to 1,609,335.80 Euros, corresponding to the subscription of a total amount of 268,309.43 Euros by the conversion of 25 bonds redeemable in cash and/or into new and/or existing shares, each with a par value of 10,000.00, into 104,166 new ordinary shares at a conversion price of 2.40 Euros each.

By a decision of the Chief Executive Officer, dated 2 June 2017, acting by a delegation of the Board of Directors dated 3 April 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 10 June 2016, the Company's share

capital was increased by a nominal amount of 17,021.20 Euros to take it from 1,609,335.80 Euros to 1,626,357 Euros, corresponding to the subscription of a total amount of 217,038.30 Euros by the conversion of 20 bonds redeemable in cash and/or into new and/or existing shares, each with a par value of 10,000.00, into 85,106 new ordinary shares at a conversion price of 2.35 Euros each.

By a decision of the Chief Executive Officer dated 7 June 2017, acting by a delegation of the Board of Directors dated 3 April 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 10 June 2016, the Company's share capital was increased by a nominal amount of 17,021.20 Euros to take it from 1,626,357 Euros to 1,643,378.20 Euros corresponding to the subscription of a total amount of 217,038.30 Euros by the conversion of 20 bonds redeemable in cash and/or into new and/or existing shares, each with a par value of 10,000.00, into 85,106 new ordinary shares at a conversion price of 2.35 Euros each.

By a decision of the Chief Executive Officer dated 9 June 2017, acting by a delegation of the Board of Directors dated 3 April 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 10 June 2016, the Company's share capital was increased by a nominal amount of 52,765.80 Euros to take it from 1,643,378.20 Euros to 1,696,144 Euros corresponding to the subscription of a total amount of 720,545.53 Euros by the conversion of 62 bonds redeemable in cash and/or into new and/or existing shares, each with a par value of 10,000.00, into 263,829 new ordinary shares at a conversion price of 2.35 Euros each.

By a decision of the Chief Executive Officer dated 9 June 2017, acting by a delegation of the Board of Directors dated 3 April 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 10 June 2016, the Company's share capital was increased by a nominal amount of 87,659.40 Euros to take it from 1,696,144 Euros to 1,783,803.40 Euros, corresponding to the subscription of a total amount of 1,291,751.49 Euros by the conversion of 103 bonds redeemable in cash and/or into new and/or existing shares, each with a par value of 10,000.00, into 438,297 new ordinary shares at a conversion price of 2.35 Euros each.

By a decision dated 7 July 2017, acting by a delegation of the Board of Directors dated 3 April 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 10 June 2016, the Company's share capital was increased by a nominal amount of 136,986.20 Euros to take it from 1,783,803.40 Euros to 1,920,789.60 Euros corresponding to the subscription of a total amount of 3,102,054 Euros by the conversion of 200 bonds redeemable in cash and/or into new and/or existing shares, each with a par value of 10,000.00 Euros, into 684,931 new ordinary shares at a conversion price of 2.92 Euros each.

By a decision dated 10 July 2017, acting by a delegation of the Board of Directors dated 3 April 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 10 June 2016, the Company's share capital was increased by a nominal amount of 68,493 Euros to take it from 1,920,789.60 Euros to 1,989,282.60 Euros, corresponding to the subscription of a total amount of 1,369,175 Euros by the conversion of 100 bonds redeemable in cash and/or into new and/or existing shares, each with a par value of 10,000.00 Euros, into 342,465 new ordinary shares at a conversion price of 2.92 Euros each.

By a decision of the Chief Executive Officer dated 12 October 2017, acting by a delegation of the Board of Directors dated 10 October 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 16 June 2017, the Company's share capital was increased, in cash, by a nominal amount of 397,800 Euros to take it from 1,989,282.60 Euros to 2,387,082.60 Euros corresponding to the subscription of a total amount of 10,442,250 Euros, including the issue premium, by the creation and issue at the unit price of 5.25 Euros, with an issue premium of 5.05 Euros, of 1,989,000 new ordinary shares, subscribed in cash and fully paid up at the time of subscription.

By a decision of the Board of Directors on 26 October 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 22 May 2015, the Company's share capital was increased, in cash, by a nominal amount of 3,000 Euros to take it from 2,387,082.60 Euros to 2,390,082.60 Euros corresponding to the subscription of a total amount of 30,900 Euros, including the issue premium, by the creation and issue at the unit price of 2.06 Euros with an issue premium of 1.86 Euros, of 15,000 new ordinary shares, subscribed in cash and fully paid up at the time of subscription.

By a decision of the Chief Executive Officer dated 2 November 2017, acting by a delegation of the Board of Directors dated 31 October 2017, acting on behalf of the Mixed General Meeting of Shareholders held on 16 June 2017, the

Company's share capital was increased, in cash, by a nominal amount of 302,600 Euros to take it from 2,390,082.60 Euros to 2,692,682.60 Euros corresponding to the subscription of a total amount of 7,565,000 Euros, including the issue premium, by the creation and issue at the unit price of 5 Euros with an issue premium of 4.8 Euros, of 1,513,000 new ordinary shares, subscribed in cash and fully paid up at the time of subscription.

By a decision dated 30 October 2019, acting by delegation of the Board of Directors dated 8 August 2019, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 619,968.20 Euros to raise it from 2,692,682.60 Euros to 3,312,650.80 Euros through the conversion of 94 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 9 December 2019, acting by delegation of the Board of Directors date 8 August 2019, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 710,000 Euros to raise it from 3,312,650.80 Euros to 4,022,650.80 Euros through the conversion of 71 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 20 December 2019, acting by delegation of the Board of Directors dated 8 August 2019, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 570,000 Euros to raise it from 4,022,650.80 Euros to 4,592,650.80 Euros through the conversion of 57 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 30 January 2020, acting by delegation of the Board of Directors dated 8 August 2019, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 540,000 Euros to raise it from 4,592,650.80 Euros to 5,132,650.80 Euros through the conversion of 54 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 11 February 2020, acting by delegation of the Board of Directors dated 8 August 2019, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 240,000 Euros to raise it from 5,132,650.80 Euros to 5,372,650.80 Euros through the conversion of 24 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 19 February 2020, acting by delegation of the Board of Directors dated 12 February 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 2,478,814.20 Euros to raise it from 5,372,650.80 Euros to 7,851,465 Euros through the issue of 12,394,071 new ordinary shares.

By a decision dated 26 March 2020, acting by delegation of the Board of Directors dated 8 August 2019, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 100,000 Euros to raise it from 7,851,465 Euros to 7,951,465 Euros through the conversion of 10 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 20 May 2020, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 336,000 Euros to raise it from 7,951,465 Euros to 8,287,465 Euros through the exercise of 1,680,000 warrants to subscribe for the Company's shares.

By a decision dated 26 May 2020, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 16,029 Euros to raise it from 8,287,465 Euros to

8,303,494 Euros through the exercise of 80,145 warrants to subscribe for the Company's shares.

By a decision dated 5 June 2020, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 148,824.80 Euros to raise it from 8,303,494 Euros to 8,452,318.80 Euros through the exercise of 744,124 warrants to subscribe for the Company's shares.

By a decision dated 5 June 2020, acting by delegation of the Board of Directors dated 2 June 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 28 May 2020, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 410,000 Euros to raise it from 8,452,318.80 Euros to 8,862,318.80 Euros following the reserved issue of 2,050,000 new ordinary shares of the Company.

By a decision dated 9 June 2020, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 38,465.60 Euros to raise it from 8,862,318.80 Euros to 8,900,784.40 Euros through the exercise of 192,328 warrants to subscribe for the Company's shares.

By a decision dated 15 June 2020, acting by the delegation of the Board of Directors dated 8 August 2019, acting by the delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 138,888.80 Euros to raise it from 8,900,784.40 Euros to 9,039,673.20 Euros through the exercise of six hundred and ninety-four thousand four hundred and forty-four (694,444) warrants to subscribe for the Company's shares.

By a decision dated 17 June 2020, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 66,184.80 Euros to raise it from 9,039,673.20 Euros to 9,105,858 Euros through the exercise of 330,924 warrants to subscribe for the Company's shares.

By a decision dated 19 June 2020, acting by the delegation of the Board of Directors dated 18 June 2020, acting by the delegation of the Mixed General Meeting of Shareholders dated 28 May 2020, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 637,654.40 Euros to raise it from 9,105,858 Euros to 9,743,512.40 Euros through the conversion of 80 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 24 June 2020, acting by delegation of the Board of Directors dated 22 June 2020, acting by delegation of the Mixed General Meeting of Shareholders dated 28 May 2020, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 1,212,121.20 Euros to raise it from 9,743,512.40 Euros to 10,955,633.60 Euros through the issue of 6,060,606 new ordinary shares.

By a decision dated 29 June 2020, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 10,545.40 Euros to raise it from 10,955,633.60 Euros to 10,966,179 Euros through the exercise of 52,727 warrants to subscribe for the Company's shares.

By a decision dated 2 July 2020, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 816.60 Euros to raise it from 10,966,179 Euros to 10,966,995.60 Euros through the exercise of 4,083 warrants to subscribe for the Company's shares.

By a decision dated 2 July 2020, acting by the delegation of the Board of Directors dated 18 June 2020, acting by the delegation of the Mixed General Meeting of Shareholders dated 28 May 2020, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 308,291.80 Euros to raise it from 10,966,995.60 Euros to 11,275,287.40 Euros through the conversion of 40 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 7 July 2020, acting by delegation of the Board of Directors dated 2 July 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 28 May 2020, the Chief Executive Officer acknowledged the

increase in the Company's share capital by a nominal amount of 1,912,746.40 Euros to raise it from 11,275,287.40 Euros to 13,188,033.80 Euros through the issue of 9,563,732 new ordinary shares.

By a decision dated 17 July 2020, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 7,177.80 Euros to raise it from 13,188,033.80 Euros to 13,195,211.60 Euros through the exercise of 35,889 warrants to subscribe for the Company's shares.

By a decision dated 5 August 2020, acting by delegations of the Board of Directors dated 3 April 2020 and
18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders on 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 4,996.60 Euros to raise it from 13,195,211.60 Euros to 13,200,208.20 Euros through the exercise of 22,831 warrants to subscribe for the Company's shares and 2,152 business creator warrants in the Company.

By a decision dated 14 August 2020, acting by delegation of the Board of Directors dated 18 June 2020, acting by delegation of the Mixed General Meeting of Shareholders dated 28 May 2020, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 241,434.80 Euros to raise it from 13,200,208.20 Euros to 13,441,643 Euros through the conversion of 30 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 7 September 2020, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 3,914.80 Euros to raise it from 13,441,643 Euros to 13,445,557.80 Euros through the exercise of 19,574 warrants to subscribe for the Company's shares.

By a decision dated 16 September 2020, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 725 Euros to raise it from 13,445,557.80 Euros to 13,446,282.80 Euros through the exercise of 3,625 warrants to subscribe for the Company's shares.

By a decision dated 28 September 2020, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 281.20 Euros to raise it from 13,446,282.80 Euros to 13,446,564 Euros through the exercise of 1,406 warrants to subscribe for the Company's shares.

By a decision dated 29 September 2020, acting by delegation of the Board of Directors dated 18 June 2020, acting by delegation of the Mixed General Meeting of Shareholders dated 28 May 2020, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 1,561,223.20 Euros to raise it from 13,446,564 Euros to 15,007,787.20 Euros through the conversion of 120 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 2 October 2020, acting by delegation of the Board of Directors dated 29 September 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 28 May 2020, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 4,255,319.20 Euros to raise it from 15,007,787.20 Euros to 19,263,106.40 Euros through the issue of 21,276,596 new ordinary shares.

By a decision dated 3 November 2020, acting by delegations of the Board of Directors dated 3 April 2020 and 18 June 2020, acting by delegation of the Mixed General Meeting of Shareholders dated 28 May 2020, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 687,132.40 Euros to raise it from 19,263,106.40 Euros to 19,950,238.80 Euros through the conversion of 60 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 4 November 2020, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 6,823 Euros to raise it from 19,950,238.80 Euros to 19,957,061.80 Euros through the exercise of 34,115 warrants to subscribe for the Company's shares.

By a decision dated 1 December 2020, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 3,608.40 Euros to raise it from 19,957,061.80 Euros to 19,960,670.20 Euros through the exercise of 18,042 warrants to subscribe for the Company's shares.

By a decision dated 16 December 2020, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 6,816.60 Euros to raise it from 19,960,670.20 Euros to 19,967,486.80 Euros through the exercise of 34,083 warrants to subscribe for the Company's shares.

By a decision dated 4 January 2021, acting by delegations of the Board of Directors dated 3 April 2020 and 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 183,932.60 Euros to raise it from 19,967,486.80 Euros to 20,151,419.40 Euros through the exercise of 606,246 warrants to subscribe for the Company's shares and 313,417 warrants to subscribe for business creator shares in the Company.

By a decision dated 18 January 2021, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 5,975.20 Euros to raise it from 20,151,419.40 Euros to 20,157,394.60 Euros through the exercise of 29,876 warrants to subscribe for the Company's shares.

By a decision dated 3 February 2021, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 41,218.40 Euros to raise it from 20,157,394.60 Euros to 20,198,613 Euros through the exercise of 206,092 warrants to subscribe for the Company's shares.

By a decision dated 10 February 2021, acting by delegation of the Board of Directors dated 9 February 2021, acting by delegation of the Extraordinary General Meeting of Shareholders dated 28 May 2020, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 2,400,000 Euros to raise it from 20,198,613 Euros to 22,598,613 Euros the issue of 12,000,000 new ordinary shares.

By a decision dated 26 February 2021, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 28,248.40 Euros to raise it from 22,598,613 Euros to 22,626,861.40 Euros through the exercise of 141,242 warrants to subscribe for the Company's shares.

By a decision dated 22 March 2021, acting by delegation of the Board of Directors dated 8 August 2019, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 117,187 Euros to raise it from 22,626,861.40 Euros to 22,744,048.60 Euros through the exercise of five hundred eighty-five thousand nine hundred thirty-six (585,936) warrants to subscribe for shares.

By a decision dated 7 April 2021, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 5,152.80 Euros to raise it from 22,744,048.60 Euros to 22,749,515 Euros through the exercise of 25,764 warrants to subscribe for the Company's shares.

By a decision dated 3 May 2021, acting by delegation of the Board of Directors dated 18 May 2020 and 22 December 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019 and by delegation of the General Meeting of Shareholders dated 28 May 2020, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 10,313.60 Euros to raise it from 22,749,201.40 Euros to 22,759,515

Euros through the exercise of 4,303 warrants to subscribe for the Company's shares.

By a decision dated 8 June 2021, acting by delegation of the Board of Directors dated 3 April 2020, 18 May 2020 and 22 December 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019 and by delegation of the General Meeting of Shareholders dated 28 May 2020, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 11.444 Euros to raise it from 22,759,515 Euros to 22,770,959 Euros through the exercise of 50,424 warrants to subscribe for business creator shares in the Company.

By a decision dated 25 June 2021, acting by delegation of the Board of Directors dated 18 May 2021, acting by delegation of the Mixed General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 239,973.60 Euros to raise it from 22,770,959 Euros to 23,010,932.60 Euros through the conversion of 40 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 1 July 2021, acting by delegation of the Board of Directors dated 3 April 2020, 18 May 2020 and 22 December 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019 and by delegation of the General Meeting of Shareholders dated 28 May 2020, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 150,915.60 Euros to raise it from 23,010,932.60 Euros to 23,161,848.20 Euros through the exercise of 103,946 warrants to subscribe for business creator shares in the Company.

By a decision dated 19 July 2021, acting by delegation of the Board of Directors dated 18 May 2021, acting by delegation of the Mixed General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 277.242,8 Euros to raise it from 23.161.848,20 Euros to 23.439.091 Euros through the conversion of 40 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 2 August 2021, acting by delegation of the Board of Directors dated 20 July 2021, acting by delegation of the Extraordinary General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 990,000 Euros to raise it from 23,439,091 Euros to 24,429,091 Euros through the issue of 4,950,000 new ordinary shares.

By a decision dated 4 August 2021, acting by delegation of the Board of Directors dated 18 May 2020 and 18 May 2021, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019 and by delegation of the Mixed General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 232,288.20 Euros to raise it from 24,429,091 Euros to 24,661,379.20 Euros through the conversion of 32 bonds repayable in cash and/or new and/or existing shares and the exercise of 1,793 warrants to subscribe for the Company's shares.

By a decision dated 6 September 2021, acting by delegation of the Board of Directors dated 18 May 2021, acting by delegation of the Mixed General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 288,937 Euros to raise it from 24,661,379.20 Euros to 24,950,316.20 Euros through the conversion of 40 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 8 September 2021, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 1,087.80 Euros to raise it from 24,950,316.20 Euros to 24,951,404 Euros through the exercise of 5,439 warrants to subscribe for the Company's shares.

By a decision dated 15 September 2021, acting by delegation of the Board of Directors dated 18 May 2021, acting by delegation of the Mixed General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 201,044.40 Euros to raise it from 24,951,404 Euros to 25,152,448.40 Euros through the conversion of 28 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 4 October 2021, acting by delegation of the Board of Directors dated 18 May 2020 and 18 May 2021, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019 and by delegation of the Mixed General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 462,132.54 Euros to raise it from 25,152,448.40 Euros to

25,614,320.40 Euros through the conversion of 60 bonds repayable in cash and/or new and/or existing shares and the exercise of 3,722 warrants to subscribe for the Company's shares.

By a decision dated 5 November 2021, acting by delegation of the Board of Directors dated 18 May 2020, acting by delegation of the Extraordinary General Meeting of Shareholders dated 8 August 2019, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 243.40 Euros to raise it from 25,614,320.40 Euros to 25,614,563.80 Euros through the exercise of 1,217 warrants to subscribe for the Company's shares.

By a decision dated 17 November 2021, acting by delegation of the Board of Directors dated 18 May 2021, acting by delegation of the Mixed General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 200,083.20 Euros to raise it from 25,614,563.80 Euros to 25,814,647 Euros through the conversion of 20 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 3 December 2021, acting by delegation of the Board of Directors dated 18 May 2021, acting by delegation of the Mixed General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 600,304.60 Euros to raise it from 25,814,647 Euros to 26,414,951.60 Euros through the conversion of 50 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 17 December 2021, acting by delegation of the Board of Directors dated 18 May 2021, acting by delegation of the Mixed General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 472,469.20 Euros to raise it from 26,414,951.60 Euros to 26,887,420.80 Euros through the conversion of 40 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 23 December 2021, acting by delegation of the Board of Directors dated 18 May 2021, acting by delegation of the Mixed General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 118,117.20 Euros to raise it from 26,887,420.80 Euros to 27,005,538 Euros through the conversion of 10 bonds repayable in cash and/or new and/or existing shares.

By a decision dated 6 January 2022, acting by delegation of the Board of Directors dated 18 May 2021, acting by delegation of the Mixed General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 300,329.40 Euros to raise it from 27,005,538 Euros to 27,305,867.40 Euros through the conversion of 26 bonds repayable in cash and/or new and/or existing shares and the exercise of 2,404 warrants to subscribe for the Company's shares.

By a decision dated 10 February 2022, acting by delegation of the Board of Directors dated 18 May 2021, acting by delegation of the Mixed General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 710,138.20 Euros to raise it from 27,305,867.40 Euros to 28,016,005.60 Euros through the conversion of 56 bonds repayable in cash and/or new and/or existing shares and the exercise of 141 warrants to subscribe for the Company's shares.

By a decision dated 18 March 2022, acting by delegation of the Board of Directors dated 18 May 2021, acting by delegation of the Mixed General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 704,561 Euros to raise it from 28,016,005.60 Euros to 28,720,556.60 Euros through the conversion of 32 bonds repayable in cash and/or new and/or existing shares and the exercise of 4,281 warrants to subscribe for the Company's shares.

By a decision dated 7 April 2022, acting by delegation of the Board of Directors dated 18 May 2021, acting by delegation of the Mixed General Meeting of Shareholders dated 10 May 2021, the Chief Executive Officer acknowledged the increase in the Company's share capital by a nominal amount of 967,007.80 Euros to raise it from 28,720,556.60 Euros to 29,687,574.40 Euros through the conversion of 44 bonds repayable in cash and/or new and/or existing shares and the exercise of 2,535 warrants to subscribe for the Company's shares.

Article 7 – Share capital

The share capital is set at the sum of twenty-nine million six hundred eighty-seven thousand five hundred seventy-four euros and forty cents (€ 29,687,574.40).

It is divided into one hundred forty-eight million four hundred thirty-seven thousand eight hundred seventy-two (148,437,872) ordinary shares of 0.20 euros each, fully subscribed and paid up and all of the same class.

Article 8 - Change to the capital

1. -The share capital may be increased by any methods and according to any procedures required by the law.

The Extraordinary General Meeting is solely authorised to decide, on the report of the Board of Directors, any immediate or future capital increases. It may delegate its competence or its powers to the Board of Directors.

Shareholders have, proportionally to the number of shares they hold, a preferential subscription right for shares issued for cash in order to carry out a capital increase, a right which they may individually waive. The Extraordinary General Meeting may decide to delete these preferential subscription rights under the legal conditions.

2. The capital reduction is authorised or decided by the Extraordinary General Meeting and can in no way impair the equality of shareholders.

Reducing the capital to an amount below the legal minimum may only be decided under the condition precedent of a capital increase intended to take it at least to the legal minimum, unless the Company does not become a company of another form requiring a capital greater than the share capital after its reduction.

Failing this, any interested party may legally request the dissolution of the Company. This may not be pronounced if, on the day the court rules on the merits, the situation has been rectified.

Article 9 - Depreciation of capital

The depreciation of capital may be decided by the Extraordinary General Meeting of Shareholders and must be completed, by means of distributable income within the meaning of Article L.232-11 of the Commercial Code, by way of equal reimbursement on each share of the same class. This does not entail capital reduction. Fully or partially depreciated shares lose accordingly against the right to the reimbursement of the par value. They conserve all their other rights.

Article 10 - The payment of shares

During a capital increase, cash shares are paid up to at least one quarter of their nominal value and, if applicable, of the entire issue premium.

The remainder must be paid in one or several instalments when called by the Board of Directors, within five years from the date on which the operation became final in the event of a capital increase.

Calls for funds are brought to the attention of subscribers and shareholders at least one month before the date set for each payment by registered letter with acknowledgement of receipt or by an announcement inserted in a newspaper that publishes legal notices at the location of the registered office.

A shareholder who does not make the payments due on the shares at their maturity is, automatically and without prior

notice, liable vis-à-vis the Company for late interest, calculated on a daily basis, from the date of the maturity, at the legal rate for commercial matters, increased by three points.

The Company shall have, in order to obtain the payment of these sums, the right of execution and penalties provided for by articles L.228-27 et seq. of the Commercial Code.

Article 11 – The form of shares

Shares are registered or bearer shares, at the choice of their holders, subject to certain legal provisions relating to the form of the shares held by certain natural persons or legal entities. They may only be bearer shares after their full release.

The Company may at any time request, for consideration at its expense, under the legal conditions and regulations in force, the central depository, the name or denomination, nationality, year of birth or year of incorporation, the address of the holders of securities conferring immediate or future voting rights in its own meetings of shareholders, as well as the quantity of securities held by each of them and, if applicable, the restrictions to which such securities may be subject.

Article 12 - The assignment of shares – Rights and obligations attached to the shares - The crossing of thresholds

12.1. The assignment of shares

Shares are freely assignable as they are released according to the conditions stipulated by law.

They may remain negotiable after the dissolution of the Company and until the closure of the liquidation.

They must be registered in an account and are assigned by wire transfer from account to account, under the conditions and according to the methods stipulated by law and the regulations in force.

The provisions of this article shall apply, generally, to all assignable securities issued by the Company.

12.2. Rights and obligations attached to the shares

Each share entitles, in the profits and corporate assets, to an amount proportional to the portion of the share capital it represents. It gives the right to participate, under the conditions set by law and these Articles of Association, in the general meetings and to vote on the resolutions.

The ownership of a share automatically entails the acceptance of these articles of association and the decisions of the General Meeting of the Company.

Shareholders are only liable for the company's debt up to the limit of their contributions.

The rights and obligations attached to the shares follow the title regardless of the holder.

Whenever it is necessary to own several shares to exercise a particular right, in the event of exchange, grouping, share allocation, increase or reduction of capital, merger or any other corporate transaction, the holders of isolated securities, or of a number less than that required, may exercise this right only on the condition of being personally responsible for the grouping and, possibly, of the buying or selling of a number of the shares required.

12.3. - The crossing of thresholds

Any natural person or legal entity, acting alone or in a group, within the meaning of Article L. 233-10 of the Commercial Code, that comes to hold or ceases to hold a number of shares representing a fraction equal to 5%, 10%, 15%, 20%, 25%, 30%, 33.33%, 50%, 66.66%, 90% or 95% of the share capital or voting rights, is obligated to notify the Company at the latest before the close of trading on the fourth trading day following the day on which the aforementioned participation threshold is crossed, specifying the number of shares and voting rights held. The person liable for the information provided for above specifies the number of securities that it holds giving access to the capital in the future and the voting rights attached thereto, as well as any other information required by the texts.

In addition, any natural person or legal entity, acting alone or in a group, that comes to hold or ceases to hold a number of shares representing a fraction equal to 50% or 95% of the share capital or voting rights, is required to inform the Autorité des Marchés Financiers [Authority of the Financial Markets] at the latest before the close of trading on the fourth trading day following the day on which the aforementioned participation threshold is crossed, under the conditions laid down in the General Regulation of the Autorité des Marchés Financiers.

If they have not been reported in the above-mentioned conditions, the shares exceeding the fraction that should have been declared are deprived of the right to vote in accordance with the provisions of the French Commercial Code.

12.4. -Mandatory Public Offer

As long as the securities issued by the Company are admitted for trading on Altemext, any natural person or legal entity, acting alone or in group within the meaning of Article L. 233-10 of the Commercial Code, that comes to hold, directly or indirectly, more than 50% of the share capital or voting rights of the Company, is required to file a public offer project under the legal conditions and regulations in force.

Article 13 – The indivisibility of shares - Bare Ownership - Usufruct

1 - The shares are indivisible as regards the Company.

The co-holders of undivided shares are represented at the general meetings by one of them, or by a single proxy. In case of disagreement, the agent is appointed by the court at the request of the most diligent co-holder.

2 - The right to vote is vested in the usufructuary for ordinary general meetings and in the bare holder for extraordinary general meetings. However, shareholders may agree on any other allocation of the right to vote at general meetings. The agreement is notified by registered letter to the Company, which shall be held to enforce this agreement for any meeting held after the expiry of a one-month period following the sending of the letter.

The right to vote shall be exercised by the holder of the securities pledged as collateral.

Article 14 - Voting rights attached to the shares

14.1. Subject to the provisions of article 14.2 below, the voting rights attached to the capital or dividend shares are proportional to the capital they represent. Each share gives the right to one vote.

14.2. However, a voting right is assigned to all fully paid-up shares and justifying a nominal registration for at least two years in the name of the same beneficiary.

In the event of an increase of capital through the incorporation of reserves, profits or issue premiums, the double right to

vote shall be granted, as they are released, to new shares allocated to a shareholder by reason of old shares by virtue of which he was already benefiting from this right.

Legal entities that are shareholders benefiting from this double right to vote will keep it if they are the subject of a merger or demerger involving the transfer of their shares.

TITLE III COMPANY MANAGEMENT

Article 15 - Board of Directors

The Company is managed by a Board of Directors comprising at least three (3) members and which cannot exceed eighteen (18) members or more, subject to the exemption provided by law in the event of a merger.

Article 16 – The appointment and removal of directors

I. The appointment and removal of directors

During the life of the Company, directors shall be appointed by the Ordinary General Meeting. However, in the event of a merger or demerger, the appointment may be made by the Extraordinary General Meeting. Their term of office is three (3) years. The term ends at the close of the Ordinary Meeting of Shareholders having voted on the accounts for the previous financial year, held in the year in which the office of such director ends.

All outgoing directors are eligible for reappointment indefinitely, subject to the fulfilment of all terms and conditions of this article.

Directors can be removed and replaced at any time by the Ordinary General Meeting.

No person may be appointed as a director if, having exceeded the age of seventy five (75) years, his appointment results in more than one-third of the members of the Board being over this age. If the proportion of one-third is exceeded, the oldest director shall be deemed to have resigned of his own account at the end of the next Ordinary General Meeting.

Any natural person who is a director must, both during his appointment and for the entire term of their office, comply with the legal provisions regarding the accumulation of mandates that the same natural person may hold within limited corporations having their registered offices in continental France, except as provided for by the law.

A Company employee may not be appointed director, unless his employment agreement corresponds to an actual position. The number of directors bound to the Company by an employment agreement may not exceed one-third of the directors in office.

II. A legal entity that is a director

Directors may be legal entities or natural persons. In the latter case, during his appointment, the legal entity must designate a permanent representative who is subject to the same conditions and obligations and who incurs the same civil and criminal liabilities as if he were a director in his own name, without prejudice to the joint liability of the legal entity that he represents. The permanent representative of a director which is a legal entity is subject to the age conditions concerning directors who are natural persons.

The mandate of the permanent representative appointed by the legal entity appointed as director shall be the term of the office of the latter.

If the legal entity revokes the authority granted to its permanent representative, it is required to immediately inform the Company, by registered letter, of this revocation and the identity of its new permanent representative. This same rule applies in case of the death or resignation of a permanent representative.

The appointment of a permanent representative as well as the termination of his office are subject to the same publication formalities as if he were a director in his own name.

III. Vacancy, death, resignation

In the event of a vacancy by the death or resignation of one or more directorships, the Board of Directors may, between two general meetings, make temporary appointments.

When the number of directors has fallen below the legal minimum, the remaining directors must immediately convene an Ordinary Meeting to fill the vacancies on the Board.

Temporary appointments made by the Board are subject to ratification at the next Ordinary General Meeting. Failing ratification, the deliberations and actions that have already been carried out by the Board are, nonetheless, valid.

Article 17 – The organisation and deliberations of the Board

I. President

The Board of Directors shall elect, from among its members, a Chairman, who must be, on pain of the nullity of the appointment, a natural person. The Board of Directors decide the amount of his remuneration.

The Chairman of the Board of Directors organises and directs the work of the Board, reporting on it at the meeting. The Chairman oversees the proper operation of the Company's bodies, and ensures, in particular, that the directors are able to fulfil their duties.

A director may not be appointed to be Chairman if he is seventy-five (75) years old or older. If the Chairman exceeds this age, he shall be deemed to have resigned of his own account at the end of the next meeting of the Board of Directors.

The Chairman is appointed for a term that cannot exceed that of his term as director. He can be re-elected.

The Board of Directors may remove him at any time.

In case of the temporary unavailability or death of the Chairman, the Board of Directors may delegate a director to carry out the duties of Chairman.

In case of temporary unavailability, this delegation is granted for a limited period; it is renewable. In the event of death, this delegation is valid until the election of a new Chairman.

II. Meetings of the Board

The Board of Directors shall meet as often as required by the interests of the Company, when convened by its chairman.

The call for a meeting shall be given in writing (fax, simple letter, email) and sent to reach the members of the Board of Directors no later than eight days before the meeting of the Board, and such a call for a meeting must to be accompanied by the necessary documents to assess the decisions or information which will be submitted to the Board. This period for the meeting may be reduced to two (2) days if necessary, it being specified that such call for a meeting shall be considered void if more than 1/4 of Directors are not present or represented.

If the Board has not met for more than three (3) months, at least one-third of the members of the Board of Directors may request that the Chairman convene it to discuss a particular agenda.

The Chief Executive Officer may also ask the Chairman to convene the Board of Directors to discuss a particular agenda.

The Chairman is bound by the requests sent to him under the two preceding paragraphs.

Meetings may be convened by any means, even verbally.

The Board meets at the registered office or at any other location (in France or abroad) appointed in the call for a meeting, it shall be chaired by the Chairman or, in case of incapacity, by the member appointed by the Board to chair it.

Board meetings are chaired by the Chairman of the Board of Directors or the managing director carrying out the duties of Chairman of the Board of Directors or, in their absence, by the oldest of the directors attending the meeting or by a director selected by the Board at the beginning of the meeting.

The Board may appoint, at each meeting, a secretary, even from outside its members.

A register is kept which is signed by the directors participating in the meeting of the Board.

The directors and any other persons asked to attend meetings of the Board of Directors are required to apply discretion with regard to information of a confidential nature described as such by the Chairman.

III. . Quorum, majority

The Board may deliberate validly only if at least half of the directors are present or deemed to be present, subject to the adjustments made by the internal rules in the event of using a videoconference or any other telecommunications means.

Unless otherwise stated in the Articles of Association, and subject to the adjustments made by the internal rules in the event of using a videoconference or any other telecommunications means, decisions are taken by a majority vote of the members present or represented or deemed to be present. In the event of a split vote, the Chairman of the meeting will have the casting vote.

There are considered to be present, for the purposes of calculating the quorum and majority, any directors attending the meeting of the Board via videoconference or other telecommunications means under the conditions defined in the internal regulations of the Board of Directors. However, actual attendance or representation shall be necessary for all deliberations of the Board relating to the approval of the annual financial statements and consolidated accounts, as well as the establishment of the management report and the report on the management of the group, as well as for decisions relating to the dismissal of the Chairman of the Board of Directors, the Chief Executive Officer and the Deputy Chief Executive Officer.

IV. Representation

Any director may, in writing, request another director to represent him at a meeting of the Board.

Each director may have, during the same meeting, only one of the proxy mandates received pursuant to the preceding paragraph.

These provisions are applicable to the permanent representatives of directors who are a legal entity.

V. Minutes of the deliberations

The deliberations of the Board of Directors are recorded in minutes prepared in a special register, each with a page numbered and initialled, and kept at the registered office in accordance with the statutory provisions. Minutes are signed by the chairman of the meeting and by at least one director. In the event of an impediment for the chairman of the meeting, the minutes are signed by at the least two directors.

Copies or extracts of the minutes are certified by the Chairman of the Board of Directors, or by the Chief Executive Officer in the event that the general management is not assumed by the Chairman of the Board of Directors, as the option is provided for in Article 19 of these Articles of Association, or by a Chief Executive Officer, either by the managing director temporarily serving as the Chairman of the Board of Directors, or by a person duly empowered to this effect.

VI. Observers

During the life of the Company, the Ordinary General Meeting may appoint Observers chosen from among the shareholders or otherwise.

The number of Observers may not exceed three (3).

Observers are nominated for a period of three (3) years. Their functions shall terminate at the end of the Ordinary General Meeting of Shareholders called to approve the financial statements for the previous financial year, held in the year during which their duties expire.

All outgoing Observers are eligible for reappointment, subject to the fulfilment of all the terms and conditions of this article.

Observers may be removed and replaced at any time by the Ordinary General Meeting, and no compensation will be due, even if their removal is not on the agenda. The duties of Observers also take effect by the death or incapacity of the observer who is a natural person, [or the] dissolution or winding up for the observer that is a legal entity or resignation.

Observers may be natural persons or legal entities. Where a legal entity is appointed as an observer, it must appoint a permanent representative, a natural person, tasked with representing it at the meetings of the Board of Directors, of which he must notify the Company by any written means. This same rule applies in the event of a change in the permanent representative of a legal entity.

Observers are tasked with ensuring the strict application of the Articles of Association and submitting their comments to the meetings of the Board of Directors.

Observers conduct a general and permanent mission of advice and supervision in the Company. They review the questions that the Board of Directors or its Chairman may submit, for an opinion, to their review.

Observers must be convened at each meeting of the Board of Directors in the same way as the directors, however, their absence may be damaging to the validity of the deliberations of the Board of Directors.

Observers will not have individual or collective powers, only advisory powers, and will not have the right to vote on the Board.

Failure to convene the observer or to transmit documents prior to the meeting of the Board of Directors to the observer(s) may not in any case constitute a cause of nullity of decisions taken by the Board of Directors.

Observers are subject to the same confidentiality obligations as those to which the members of the Board of Directors are subjected.

The functions of the Observers are carried out free of charge: they cannot be given attendance fees. However, on express decision of the Board of Directors, Observers may receive the reimbursement of expenses which they have incurred in the context of their mission. If the Board entrusts the Observers or one of them with a particular mission, they may allocate, in addition to a budget for implementation, a compensation in relation to the importance of the task entrusted.

Article 18 – Powers of the Board of Directors

The Board of Directors determines the strategies of the Company's business and ensures their implementation.

Subject to the powers expressly granted to general meetings and within the limits of corporate purpose, the Board of Directors handles all issues concerning the proper operation of the Company and resolves the matters that concern it through its deliberations.

In relations with third parties, the Company is bound even for the actions of the Board of Directors which do not fall within the corporate purpose, unless it can prove that the third party knew that the action exceeded this purpose or could not ignore it considering the circumstances, it being excluded that the mere publication of the articles of association suffices to constitute this proof.

The Board of Directors shall carry out whatever checks and inspections it considers necessary.

Every director must receive the necessary information to accomplish his duties and may obtain from the general management all documents that he deems useful.

The Board of Directors may decide to create study committees responsible to study any issues that the Board or the Chairman shall submit.

Article 19 – General management - The delegation of powers

I. . Organisational principles

In accordance with the legal provisions, the general management of the Company is carried out under his responsibility, either by the Chairman of the Board of Directors, or by another natural person appointed by the Board of Directors and bearing the title of Chief Executive Officer.

The choice between these two terms and conditions for exercising the general management is made by the Board of Directors, which must inform the shareholders and third parties in accordance with the regulatory conditions.

The deliberations of the Board regarding the choice of the general management of the Company are taken by a majority of the directors present or represented or deemed to be present subject to the specific provisions provided for in article 17-III in the event of the participation of the directors in the meeting of the Board via video conferencing or by other telecommunications means.

The choice thus made by the Board of Directors shall be valid until the expiry of the term of office of the appointed Chief Executive Officer, regardless of the cause of such expiry, including, in particular, removal.

Where the general management of the Company is carried out by the Chairman of the Board of Directors, the following provisions relating to the Chief Executive Officer shall be applicable to him.

II. . General Management

Chief Executive Officer

Depending on the choice made by the Board of Directors in accordance with the provisions of the paragraph above, the general management of the Company is carried out either by the Chairman of the Board of Directors, or by a natural person, director or not, shareholder or not, appointed by the Board of Directors, and bearing the title of Chief Executive Officer.

If the Board of Directors chooses to separate the functions of Chairman and Chief Executive Officer, it shall appoint the Chief Executive Officer, set the term of his office, decide the amount of his remuneration and, if applicable, the extent of his powers.

The duties of the Chief Executive Officer are terminated automatically on the last day of the civil quarter during which he has reached his sixty-fifth birthday. Where, during his office, this age limit has been reached, the Chief Executive Officer shall be deemed to have resigned ex officio and a new Chief Executive Officer will be appointed.

The Chief Executive Officer may be removed at any time by the Board of Directors. When the Chief Executive Officer does not assume the functions of Chair of the Board of Directors, his removal may give rise to damages, if it is decided, without cause.

The Chief Executive Officer is vested with the broadest powers to act in all circumstances in the name of the Company. He exercises these powers within the limit of the corporate purpose and subject to those powers that the Law expressly grants to the meetings of shareholder and the Board of Directors.

The Chief Executive Officer represents the Company in its dealings with third parties. The Company is bound even for the actions of the Board of Directors which do not fall within corporate purpose, unless it can prove that the third party knew that the action exceeded this purpose or could not ignore it considering the circumstances, it being excluded that the mere publication of the articles of association suffices to constitute this proof.

Deputy Chief Executive Officers

Upon the proposal of the Chief Executive Officer, whether this function is assumed by the Chairman of the Board of Directors or by another person, the Board of Directors may appoint one or more natural persons, appointed as Deputy Chief Executive Officers, who are chosen or not among the directors and shareholders, to assist the Chief Executive Officer. The number of Deputy Chief Executive Officers may not exceed five. If the Deputy Chief Executive Officer is a director, the term of his duties may not exceed that of his office as director.

The duties of the Deputy Chief Executive Officers are terminated automatically on the last day of the civil quarter during which he has reached his sixty-fifth birthday. Where, during office, this age limit has been reached, the Deputy Chief Executive Officers in question shall be deemed to have resigned on his own.

The Deputy Chief Executive Officers may be removed at any time by the Board of Directors on the recommendation of the Chief Executive Officer. Their removal without just cause may give rise to damages.

In agreement with the Chief Executive Officer, the Board of Directors determines the scope and term of powers delegated to Deputy Chief Executive Officers. Deputy Chief Executive Officers have, vis-à-vis third parties, the same powers as the Chief Executive Officer.

When the Chief Executive Officer ceases to or is unable to perform its functions, the Deputy Chief Executive Officers, unless otherwise decided by the Board, keep their positions and their responsibilities until the new Chief Executive Officer is appointed.

The Board of Directors determines the compensation of the Deputy Chief Executive Officers.

III. . The delegation of powers

The Board of Directors may entrust to agents, directors or otherwise, the permanent or temporary missions that it determines, delegate powers to them and fix the remuneration that it deems appropriate.

Article 20 – The compensation of directors

The General Meeting of Shareholders may grant these directors, as remuneration for their activity, as attendance fees, a fixed annual sum that the Meeting will determine, without being bound by the previous decisions made. The amount thereof is allocated to operating expenses.

The Board of Directors freely distributes among its members the total sums allocated to the directors in the form of directors' fees; it may allocate to the directors who are members of the study committees, an amount greater than that of other directors.

The Board of Directors may allocate exceptional compensation for duties or assignments given to directors.

The Board of Directors may authorise the reimbursement of travel expenses incurred by the directors in the interests of the Company.

Article 21 – Agreements between the Company and a director, the Chief Executive Officer or a Deputy Chief Executive Officer

I. Agreements submitted to authorisation.

Except for those concerning current operations concluded under normal conditions, any agreement c, directly or through an intermediary, between the Company and one of its directors, the Chief Executive Officers and the Deputy Chief Executive Officers or shareholders holding more than 10% of the voting rights of the Company, or if there is a shareholder company, the company controlling it within the meaning of Article L.233-3 of the Commercial Code, must be subject to the prior authorisation of the Board of Directors.

The same applies to agreements in which one of the persons cited in the previous paragraph is indirectly interested.

There are also submitted for prior authorisation the agreements between the Company and an enterprise, if the Chief Executive Officer, one of the Deputy Chief Executive Officers or one of the directors of the Company is an owner, a partner with unlimited liability, a manager, a director, a member of the supervisory board or, generally, a director of the enterprise.

These agreements must be authorised and approved under the legal conditions.

II. Prohibited agreements

Under penalty of nullity of the agreement, it is forbidden for directors other than legal entities to contract, in any form whatsoever, loans with the Company, to cover an overdraft, in a current account or otherwise, as well as to use it to secure or endorse their commitments vis-à-vis third parties.

The same prohibition applies to the Chief Executive Officer, the Deputy Chief Executive Officers and the permanent representatives of directors who are legal entities. It also applies to spouses, ascendants and descendants of the persons referred to in this article, as well as any an intermediary.

III. .Current conventions

The agreements concerning current operations concluded under normal conditions are not subject to the legal procedure for approval and authorisation.

TITLE IV THE AUDITING OF THE ACCOUNTS OF THE COMPANY

Article 22 - The appointment of auditors. Incompatibilities

During the life of the Company, statutory auditors are appointed by the Ordinary General Meeting.

Article 23 - The functions of the statutory auditors

Statutory auditors are invested with functions and the powers conferred upon them by the legal and regulatory provisions.

Statutory auditors are convened to any Meeting of Shareholders no later than when the shareholders themselves are convened.

They are convened at the meeting of the Board of Directors that approves the financial statements for the previous financial year, as well as the intermediary accounts and, if applicable, any other meeting of the Board of Directors no later than when the shareholders themselves are convened.

Statutory auditors are convened by registered letter with acknowledgement of receipt.

When several statutory auditors have been appointed, they can carry out their investigations, checks and controls separately, but they must produce a joint report. In case of disagreement between them, the report must indicate the different opinions expressed.

TITLE V THE GENERAL MEETINGS OF SHAREHOLDERS

Article 24 - Quorum and majority

General Meetings will be held under the conditions set by law.

The Ordinary General Meeting makes all decisions other than those that are reserved for the competence of the Extraordinary General Meeting by law and by these Articles of Association. It shall validly deliberate on first call only if the shareholders present or represented own at least one fifth of the shares with voting rights. On second call, no quorum is required. It is decided by a majority of the votes held by shareholders present or represented.

The Extraordinary General Meeting is the only qualified to modify the Articles of Association in all their provisions. It may deliberate validly only if the shareholders present or represented have at least, on first call, a quarter and, on a second call for a meeting, one fifth of the shares having voting rights. In the absence of this last quorum, the second meeting may be extended to a later date, a maximum of two (2) months later than the date for which it had been called. It is decided by a majority of two thirds of the votes held by shareholders present or represented.

In the event of the use of video conference or other telecommunications means permitted by law in accordance with the terms set forth in Article 25 hereunder, the shareholders who attend the Board meetings via video-conference or by telecommunications means shall be deemed to be present when calculating the quorum and majority.

Article 25 – Call for general meetings

The meetings of Shareholders are called either by the Board of Directors, by the Auditors, or by an agent appointed by a court of law under the conditions and according to the forms stipulated by law, either by the majority shareholders in capital or voting rights after a takeover bid or the assignment of a control block.

They shall be held either at the registered office or at any other place indicated in the call for a meeting.

When the shares of the Company are listed for trading on a regulated market or if all of its shares are not nominative, it is required, at least thirty-five (35) days before the holding of any meeting, to publish in the Bulletin of Mandatory Legal Announcements (BALO [Bulletin des Annonces Légales Obligatoires]) a call for a meeting containing the information required by the texts in force.

Calls for general meetings are carried out by insertion in a newspaper suitable to receive the legal notices at the location of the registered office and, in addition, in the Bulletin of Mandatory Legal Announcements (BALO).

However, if all of the Company's shares are nominative, the insertions provided for in the preceding paragraph may be replaced by a call for a meeting sent by a simple or registered letter sent to each shareholder, at the expense of the Company. This call for a meeting may also be sent by electronic telecommunications means implemented in accordance with the regulations.

Any shareholder may also, if the Board so decides at the time the meeting is convened, participate and vote at Board meetings via video conference or by any telecommunications means allowing for their identification, under the conditions and following the conditions stipulated by law and orders.

Any Meeting that is irregularly convened can be cancelled. However, action for nullity is not admissible when all shareholders were present or represented.

Article 26 – The agenda for the Meeting

The agenda for meetings is adopted by the person calling the meeting.

However, one or more shareholders fulfilling the legal conditions have the right to require, under the conditions provided by law, the registration on the agenda of points or proposed resolutions. The registration of proposed resolutions is accompanied by the text of the proposed resolution that can be given a brief statement of reasons.

These points or proposed resolutions are placed on the agenda of the meeting and are brought to the attention of shareholders.

The Meeting may not deliberate on a matter that is not on the agenda.

Nevertheless, it may, in all circumstances, remove one or more directors and replace them.

The agenda for a meeting may only be modified on a second call for a meeting.

When the meeting is called to deliberate on changes to the economic or legal organisation of the company in which the business committee has been consulted in application of article L.2323-6 of the French Labour Code, the notice of the latter must be communicated.

Article 27 – Admission to the meetings

Any shareholder may participate personally, by proxy or by correspondence, at general meetings, of any kind.

The right to participate in general meetings is justified:

- for nominative shares, by their registration in the nominative share accounts held by the Company, on the third business day preceding the meeting, at midnight, Paris time;

- for bearer shares, by their registration in the bearer shares accounts kept by the authorised intermediary, on the third business day preceding the meeting, at midnight, Paris time.

The registration or the entry of securities in the accounts as bearer securities held by the authorised intermediary is recorded by a holding certificate issued by the latter.

However, the Board of Directors may shorten or delete these time limits, provided that it is for the benefit of all shareholders.

Shareholders who have not paid up their shares after the due date shall not have access to the meeting.

Article 28 – The representation of shareholders and voting by correspondence

I. *The representation of shareholders*

A shareholder may be represented by another shareholder, by their spouse or by the partner with whom he has entered into a civil solidarity agreement or by any natural person or legal entity of his choice.

Any shareholder may receive the powers issued by other shareholders in order to be represented at a General Meeting, without other limits than those resulting from legal provisions laying down the maximum number of votes that may be available to the same person, both in his name and as a proxy.

II. *Voting by correspondence*

From the call for a meeting, a voting by correspondence form and its appendices are given or sent, at the expense of the Company, to any shareholder who so requests in writing.

The Company must grant any request deposited or received at the registered office no later than six days before the date of the meeting.

Article 29 - The bureau of the meeting

The meetings of Shareholders are chaired by the Chairman of the Board of Directors or, in the absence of the Chairman, by a director appointed for this purpose by the Board. Failing this, the meeting shall elect its own chairman.

In case of a call for a meeting by the statutory auditors, by an agent of justice or by the liquidators, the meeting is chaired by the person or by one of the persons who convened the meeting.

The two members of the meeting with the greatest number of votes and accepting this function will be the scrutineers of the meeting.

The bureau of the meeting appoints the secretary, who may be chosen from non-shareholders.

Article 30 - The minutes of the deliberations

The deliberations of the meetings of shareholders are recorded in the minutes prepared by the members of the bureau and signed by them.

They shall indicate the date and place of meeting, the method of the call for a meeting, the agenda, the composition of the bureau, the number of shares participating in the vote, and the quorum reached, the documents and reports submitted to the meeting, a summary of the deliberations, the text of the resolutions subjected to vote and the results of the vote.

Minutes are recorded in a special register which is kept at the registered office in the manner required by law.

If, in the absence of the required quorum, a meeting cannot deliberate regularly, a report by the bureau of said meeting is prepared.

Article 31 - The rights to information and monitoring of shareholders

Before each meeting, The Board of Directors must provide the shareholders with the documents necessary to enable them to vote in an informed manner and to make an informed judgement on the management and functioning of the Company's business.

From the communication provided for above, every shareholder has the right to ask questions in writing, and the Board of Directors will be responsible for responding to them during the meeting.

At any time, every shareholder will have the right to receive copies of the documents that the Board of Directors has an obligation, depending on the case, to keep available at the registered office, or to send them in accordance with the legislative and regulatory provisions in force.

TITLE VI FINANCIAL YEAR - ANNUAL STATEMENTS - FINANCIAL OR ACCOUNTING INFORMATION - THE ALLOCATION OF INCOME

Article 32 – Financial year

The financial year lasts twelve (12) months. It begins on 1st January and ends on 31 December.

Article 33 - Annual financial statements

At the end of each financial year, the Board of Directors draws up an inventory of the various elements of the assets and liabilities existing as of such date. It also prepares the annual statements.

It prepares a management report on the situation of the Company and its activity during the financial year that just ended, the results of this activity, the progress made and the difficulties encountered, the foreseeable development of this situation and its forecast, the important events occurring between the date of the closing of the financial year and the date on which

the report was completed, and finally the activities in research and development.

The annual statements, the management report, and, if applicable, the consolidated financial statements and the report on the group's management are made available at the registered office, to the statutory auditors at least one (1) month before convening the General Meeting of Shareholders called to approve the Company's annual statements.

Article 34 – The assignment and distribution of income

If the financial statements for the financial year approved by the General Meeting show a distributable profit as it is defined by law, the General Meeting decides to allocate it to one or several reserves, which it will decide to assign or use, postpone or distribute.

The General Meeting may grant shareholders, for all or part of the dividend distributed or interim dividends, an option to receive the dividend either in cash or in shares, subject to the legal conditions.

Losses, if any, after the approval of the financial statements by the General Meeting, are carried forward to be applied against the profits of subsequent financial years until their extinction.

The portion that each shareholder will have in the profits and his contribution to losses is proportional to its participation in the share capital.

Article 35 - Own equity less than half of the share capital

If, as a result of the losses noted in the accounting documents, the own equity of the Company becomes less than half of the share capital, the Board of Directors shall, within four months of the approval of the accounts showing such losses, convene the Extraordinary General Meeting of Shareholders in order to decide whether the early dissolution of the Company is applicable.

Where dissolution is not pronounced, the Company is required, no later than at the closing of the second year following the year during which the losses were observed, and subject to the provisions of Article L.224-2 of the Commercial Code, to reduce its capital by an amount at least equal to that of the losses that could not be charged on reserves if, within this period, its own equity has not been reconstituted up to the value at least equal to half of the share capital. In the event that these requirements are not complied with, any interested party may legally request the dissolution of the Company. However, the Court may not pronounce the dissolution if, on the day when it rules on the merits, the situation has been rectified.

TITLE VII DISSOLUTION - LIQUIDATION - DISPUTES

Article 36 - Dissolution - Liquidation

At the end of the term set by the Company or in the event of early dissolution, the General Meeting will decide on the method of liquidation and will appoint one or more liquidators and define their powers. These liquidators will exercise their duties in accordance with the law.

In the event of a meeting where all the shares are held by one person, the expiration of the Company or its dissolution for any reason whatsoever entails the universal transfer of the corporate assets to the sole shareholder, a legal entity, without there being a liquidation, subject to the right of objection of the creditors, in accordance with the provisions of Article 1844-5 of the Civil Code.

Article 37 - Disputes

All disputes that may arise during the term of the Company or during its liquidation, whether between the Company and shareholders or directors, or between the shareholders themselves, concerning company affairs, will be judged in accordance with the law and are subject to the jurisdiction of the competent courts.

Exhibit 4.39

Amendment Agreement n°2

to the Issuance and Subscription Agreement for bonds with an option for exchange in cash and/or conversion into new or existing shares (ORNANEs), dated 5 April 2020

Between

Biophytis SA

and

Atlas Special Opportunities LLC

In the presence of

Atlas Capital Markets

ReedSmith

Reed Smith LLP
112, avenue Kléber 75782 Paris Cedex 16 – France
Téléphone : +33 (0)1 76 70 40 00 Fax: +33 (0)1 76 70 41 19
www.reedsmith.com

THIS AGREEMENT IS DATED 26 MAY 2021 AND MADE:

BETWEEN

(1) Biophytis S.A., a company incorporated in France, registered with the register of commerce and companies of Paris under number 492 002 225, whose registered office is at 14, avenue de l'Opéra, 75001 Paris, France, duly represented for the purpose hereof by Mr. Stanislas Veillet, acting as Chairman and Chief Executive Officer (*Président Directeur Général*),

(the "**Issuer**" or the "**Company**"),

AND

(2) Atlas Special Opportunities LLC, an exempted company, having its registered office at Maples Corporate Services LTD, P.O.BOX 309, Ugland House, Grand Cayman, KY1 – 1104, Cayman Islands, duly represented for the purpose hereof, by Mr. Lawrence Cutler,

("**ASO**" or the "**Subscriber**"),

ASO and the Issuer are hereinafter referred to as collectively the "**Parties**" and individually a "**Party**".

IN THE PRESENCE OF

(3) Atlas Capital Markets, a exempted company, having its registered office at 3rd Floor Queens gate House, 113 South Church Street Grand Cayman, KY1-1002 Cayman Islands, acting as a member of the Subscriber, duly represented for the purpose hereof,

("**ACM**"),

WHEREAS

(A) On 5 April 2020, the Parties entered into an agreement entitled "Issuance and Subscription Agreement for bonds with an option for exchange in cash and/or conversion into new or existing shares (ORNANEs)" (the "**Agreement**"). Capitalized terms shall have the meaning ascribed to them in the Agreement.

(B) On 15 April 2020, the Issuer sent a Notification of Exercise regarding the issuance of the first Tranche, in accordance with the terms of the Agreement.

(C) Article 3.1 of the Agreement provides that the Subscriber undertakes not to request conversion of the Bonds issued in relation to the first Tranche until the passing of the 2020 Shareholders' Meeting Resolutions. In consideration for such undertaking, the Issuer shall pay interest on the first Tranche of the Bonds at an annual interest rate of ten percent (10%) until the passing of the 2020 Shareholders' Meeting Resolutions.

(D) Pursuant to an agreement letter dated 15 April 2020 (the "**Letter Agreement**"), the Parties acknowledged and agreed that, as at the date of the Notification of Exercise regarding the issuance of the first Tranche, the number of Shares that may be issued under the 2019 Shareholders' Meeting Resolutions was not sufficient to serve the conversion of the first Tranche.

(E) Therefore, the Parties expressly, irrevocably and unconditionally agreed in the Letter Agreement that the principal amount of the first Tranche issued pursuant to the Notification of Exercise dated 15 April 2020 shall be repaid by way of set-off against the subscription by the Subscriber to an additional Tranche which the Subscriber undertakes to subscribe within ten (10) Business Days of the passing of the 2020 Shareholders' Meeting Resolutions. On 18 June 2020, the Parties entered into an amendment agreement (the "**First Amendment Agreement**") by which they agreed that the subscription to the Bonds shall be reserved for the benefit of the Subscriber as regards any other Tranche than the first Tranche in compliance with the 2020 Shareholders' Meeting Resolutions.

(F) On 18 June 2020, the Issuer sent a Notification of Exercise regarding the issuance of the Replacement Tranche, in accordance with the terms of the Agreement. On 19 June 2020 and 28 August 2020, the Issuer sent a Notification of Exercise regarding the issuance of the second Tranche and the third Tranche, in accordance with the terms of the Agreement. On the date hereof, all Bonds issued as part of the Replacement Tranche, the second Tranche and the third Tranche were either converted into Shares or repaid in cash by the Issuer.

(G) As at the date hereof, the number of new securities that may be issued pursuant to the 2020 Shareholders' Meeting Resolutions is not sufficient to serve the conversion into Shares of any new Tranche under the Agreement.

(H) On 10 May 2021, the shareholders of the Issuer passed shareholder resolutions authorizing the Board and granting it a delegation of powers under articles L. 225-129 et seq. of the French Commercial Code for the purpose of issuing securities such as the Bonds (the "**2021 Shareholders' Meeting Resolutions**").

(I) Therefore, the Parties have agreed to amend the Agreement in order to expressly provide that any new Tranche issued under the Agreement shall be issued pursuant to and in accordance with the 2021 Shareholders' Meeting Resolutions, subject to and in accordance with the terms set out in this second amendment agreement (the "**Second Amendment Agreement**").

THE PARTIES AGREE THAT:

1 DEFINITIONS AND INTERPRETATION

Unless otherwise provided in this Second Amendment Agreement, capitalized terms used in this Second Amendment Agreement shall have the meaning ascribed to them in the Agreement as amended by the First Amendment Agreement.

2 SECOND AMENDMENT TO THE AGREEMENT

2.1 In consideration of the mutual agreements set out in this Second Amendment Agreement, and of the mutual benefits to be gained by the performance of this Second Amendment Agreement, the Parties agree to amend the Agreement (as already amended by the First Amendment Agreement) as set out in Schedule 1 to this Second Amendment Agreement.

2.2 The Parties agree that this Second Amendment Agreement enters into force as from the date hereof.

3 MISCELLANEOUS

3.1 The Agreement continues in full force and effect. All provisions of the Agreement which are not expressly modified pursuant to this Second Amendment Agreement remain unchanged and shall not be construed as novated or varied in any way by this Second Amendment Agreement.

3.2 The provisions of Article 15 of the Agreement shall apply *mutatis mutandis* to this Second Amendment Agreement.

3.3 This Second Amendment Agreement shall be governed by, construed and enforced in accordance with French law. Any dispute arising out of or in connection with this Second Amendment Agreement shall be finally settled in accordance with Article 17 of the Agreement.

4 ELECTRONIC SIGNATURE

4.1 The Parties agreed to electronically sign this Second Amendment Agreement through a dematerialized signature service provider in accordance with the provisions of articles 1366 et seq. of the Civil Code.

4.2 Each of the Parties acknowledge that this signature process (i) allow to duly identify the signatories and to guarantee the integrity and conservation of the Second Amendment Agreement pursuant to article 1366 of the Civil Code and (ii) constitutes a reliable identification process within the meaning of article 1367 of the Civil Code, in accordance with the provisions of the eIDAS Regulation.

4.3 The Parties expressly agree that the Second Amendment Agreement signed using this signing process:

- constitutes the original of the Second Amendment Agreement,
- is established in accordance with Article 1375 paragraph 4 of the Civil Code in a single original digital copy, a copy of which will be issued to each Parties directly by the service provider,
- has the same probative value as a handwritten executed document in accordance with Article 1366 of the Civil Code.

ON 26 MAY 2021

SIGNATURES

/s/ Stanislas Veillet
Biophytis SA
Represented by: Stanislas Veillet

/s/ Lawrence Cutler
Atlas Special Opportunities LLC
Represented by: Lawrence Cutler

/s/ Mustapha Raddi
Atlas Capital Markets
Represented by: Mustapha Raddi

Exhibit 4.40

ISSUANCE AND SUBSCRIPTION AGREEMENT FOR BONDS WITH AN OPTION FOR EXCHANGE IN CASH AND/OR CONVERSION INTO NEW OR EXISTING SHARES (ORNANEs)

DATED
14 JUNE 2021

BETWEEN

BIOPHYTIS SA

AND

ATLAS SPECIAL OPPORTUNITIES LLC

AND

ATLAS CAPITAL MARKETS

THIS ISSUANCE AND SUBSCRIPTION AGREEMENT IS ENTERED INTO BETWEEN:

1. **Biophytis S.A.**, a company incorporated in France, registered with the register of commerce and companies of Paris under number 492 002 225, whose registered office is at 14, avenue de l'Opéra, 75001 Paris, France, duly represented for the purpose hereof by Mr. Stanislas Veillet, acting as Chairman and Chief Executive Officer (*Président Directeur Général*),

(the "**Issuer**" or the "**Company**"),

AND

2. **Atlas Special Opportunities LLC**, an exempted company, having its registered office at Maples Corporate Services LTD, P.O.BOX 309, Ugland House, Grand Cayman, KY1 – 1104, Cayman Islands, duly represented for the purpose hereof, by Mr. Lawrence Cutler,

(the "**ASO**" or the "**Subscriber**".),

ASO and the Issuer are hereinafter referred to as collectively the "**Parties**" and individually a "**Party**".

AND IN THE PRESENCE OF

3. **Atlas Capital Markets**, a exempted company, having its registered office at 3rd Floor Queens gate House, 113 South Church Street Grand Cayman, KY1-1002 Cayman Islands, acting as a member of the Subscriber, duly represented for the purpose hereof,

("**ACM**").

WHEREAS:

(A) The Company, which is Listed on the Principal Market under the ISIN Code "FR0012816825 – ALBPS", wishes to finance its working capital and certain clinical trials by increasing its working capital (the "**Purpose**").

(B) On April 5, 2020, the Parties entered into an issuance and subscription agreement (the "**2020 Agreement**") which provides for a facility structured as bonds with an option for exchange in cash and/or conversion into new or existing shares (*obligations remboursables en numéraire et/ou en actions nouvelles ou existantes*, the "**2020 Bonds**"), to be issued in eight (8) tranches of up to EUR 3,000,000 each (each, a "**2020 Tranche**"), for up to EUR 24,000,000 in aggregate principal amount of up to EUR 3,000,000. The 2020 Agreement was amended on June 18, 2020 and May 26, 2021.

(C) As at the date hereof, five 2020 Tranches have been issued by the Issuer under the 2020 Agreement.

(D) The Parties entered into discussions regarding the conclusion of a new agreement in order to provide for a new facility structured as bonds with an option for exchange in cash and/or conversion into new or existing shares (*obligations remboursables en numéraire et/ou en actions nouvelles ou existantes*, the "**Bonds**"), to be issued in eight (8) tranches of up to EUR 4,000,000 each (each, a "**Tranche**"), for up to EUR 32,000,000 in aggregate principal amount of up to EUR 4,000,000.Upon exercise by the Subscriber of its right to convert/exchange the Bonds, the Company will have the option to deliver (i) existing or newly issued ordinary shares of the Company (the "**Shares**") only, or (ii) a combination of cash and Shares.

(E) On May 10, 2021, the shareholders of the Issuer passed shareholder resolutions authorizing

the board of directors of the Company (the "**Board**") and granting it a delegation of powers under articles L. 225-129 *et seq.* of the French Commercial Code for the purpose of issuing securities such as the Bonds, subject to the terms, conditions and limits set forth in such shareholder resolutions (the "**2021 Shareholders' Meeting Resolutions**").

(F) Pursuant to such delegation of powers contained in the 2021 Shareholders' Meeting Resolution and subject to the condition of this Agreement, the Board has resolved on the execution of this Agreement and issuance of the Tranches of the Bonds to the benefit of ASO or any Affiliate (the "**Board Resolution**"). An extract of the Board Resolution is attached as **Schedule (F)** hereto.

(G) It is specified that the share capital of the Issuer has been fully paid-up pursuant to article L. 228-39 of the French Commercial Code.

(H) The Parties now wish to record the arrangements agreed between them in relation to the issuance and conversion of the Bonds and the Listing of the Shares pursuant to the terms and conditions of this agreement and its Schedules (the "**Agreement**").

NOW IT IS AGREED AS FOLLOWS:

1. DEFINITIONS

The following terms used in this Agreement and the Schedules thereto shall, unless the context otherwise requires or otherwise stated, bear the following meanings:

"**2020 Agreement**"	has the meaning ascribed thereto under paragraph (H) of the preamble;
"**2020 Bonds**"	has the meaning ascribed thereto under paragraph (H) of the preamble;
"**2020 Tranche**"	has the meaning ascribed thereto under paragraph (H) of the preamble;
"**2021 Shareholders' Meeting Resolutions**"	has the meaning ascribed thereto in paragraph (E) of the preamble;
"**Account Holder**"	means Caceis Corporate Trust which is entitled to hold, directly or indirectly, accounts on behalf of its customers with Euroclear France;
"**Affiliate**"	means a person or entity that directly or indirectly controls, is controlled by, or is under common control, with another person or entity (within the meaning of article L.233-3 of the French commercial code), including but limited to include executive officers, directors, large stockholders, subsidiaries, parent entities and sister companies;
"**Agreement**"	has the meaning ascribed thereto under paragraph (H) of the preamble;
"**AMF**"	means the French *Autorité des marchés financiers*;

"**Anti-Money Laundering Laws**"	has the meaning ascribed thereto under Article 14 (*Anti-money laundering provisions*);
"**Article**"	means any article of the Agreement;
"**Bloomberg**"	means Bloomberg LP, or should Bloomberg LP cease to exist, any other financial news and data service provider of reference publishing reliable data on the Issuer ;
"**Board**"	has the meaning ascribed thereto under paragraph (E) of the preamble;
"**Board Resolution**"	has the meaning ascribed thereto under paragraph (F) of the preamble;
"**Bonds**"	has the meaning ascribed thereto under paragraph (D) of the preamble;
"**Business Day**"	means any day (except any Saturday or Sunday) on which banks in both the City of London and Paris are open for business;
"**Change in Ownership**"	means the acquisition of the control of the Issuer within the meaning of article L.233-3 of the French commercial code, by one or several individual(s) or legal entity(ies) acting alone or in concert;
"**Closing VWAP**"	means the previous Pricing Period VWAP;
"**Commitment Period**"	means the period starting on the Signature Date and ending on the third anniversary date of the Signature Date;
"**Company**"	has the meaning ascribed thereto at the beginning of this Agreement;
"**Conversion Amount**"	has the meaning ascribed to it under Article 3.1.2;
"**Conversion Cash Payment**"	has the meaning ascribed to it under means the Article 3.1.2;
"**Conversion Date**"	has the meaning ascribed to it under Article 3.1.2 (*Bonds conversion period and notice*);
"**Conversion Notice**"	means the form of Bonds conversion/exercise notice set out in **Schedule 1.A** to be issued from time to time by the Subscriber;
"**Conversion Period**"	has the meaning ascribed to it under Article 3.1.2;
"**Conversion Price**"	means 100% of the Pricing Period VWAP (as published by Bloomberg) during the applicable Pricing Period preceding the Conversion Date. In order to determine the Conversion Price, the result will be rounded down to the nearest 100th.;

"**Conversion Shares**"	means the Shares issued upon conversion of the Bonds pursuant to Article 3.1.2;
"**Cool Down Period**"	has the meaning ascribed thereto under Article 2.1 (*Issuance of the Bonds*);
"**Event of Default**"	means any event of default as set forth under Article 11 (*Event of Default*);
"**Indemnified Person**"	has the meaning ascribed thereto under Article 10 (*Indemnification*);
"**Issue Date**"	has the meaning ascribed to it under Article 2.1 (*Issuance of the Bonds*) and means any date on which a Tranche is issued by the Issuer pursuant to the Agreement;
"**Listing**"	means admission to listing and trading on the Principal Market, and the terms "**List**" and "**Listed**" shall be construed; accordingly,
"**Material Adverse Effect**"	means any effect on the business, operations, properties, financial condition, or prospects of the Company that is material and adverse to the Company, its Affiliates or subsidiaries, taken as a whole and/or any condition, circumstance or situation that would prohibit or otherwise interfere with the ability of the Company to perform its obligations under the Agreement in any material respect;
"Maturity Date"	has the meaning ascribed to it under Article 3.1.5 (*Maturity date*)
"**Notification of Exercise**"	has the meaning ascribed to it under Article 2.3.1 (*Subscription period and notice*)
"**Parties**"	has the meaning ascribed thereto at the beginning of this Agreement;
"**Person**"	means an individual or a corporation, a general or limited partnership, a trust, an incorporated or unincorporated association, a joint venture, a limited liability company, a limited liability partnership, a joint stock company, a government (or an agency or political subdivision thereof) or any other entity of any kind;
"**Pricing Period**"	means ten (10) consecutive Trading Days (day 1 and day 10 included) prior to the reception by the Issuer of a Conversion Notice;
"**Pricing Period VWAP**"	means a one-day VWAP selected by the Subscriber, in its discretion, over the Pricing Period prior the reception by the Issuer of a Conversion Notice;
"**Principal Market**"	means Euronext Growth Paris of Euronext Paris;
"**Promissory Bond**"	has the meaning ascribed thereto under Article 7.3 (*Promissory Bond*);
"**Purpose**"	has the meaning ascribed thereto under paragraph (A) of the preamble;

"**Registers**"	means the registers kept by Caceis Corporate Trust for the Bonds evidencing any holders' rights in the concerned securities;
"**Sanction**"	means any laws or regulations or restrictive measures relating to economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by a Sanctions Authority;
"**Sanctions Authority**"	means (i) the United Nations Security Council; (ii) the United States government; (iii) the European Union; (iv) the United Kingdom government; (v) the respective governmental institutions and agencies of any of the foregoing, including without limitation, the Office of Foreign Assets Control of the U.S. Department of Treasury ("**OFAC**"), the United States Department of State and Department of Commerce, and Her Majesty's Treasury; and (vi) any other governmental institution or agency with responsibility for imposing, administering or enforcing Sanctions with jurisdiction over the Issuer or any of its subsidiaries
"**Sanctions List**"	means the Specially Designated Nationals and Blocked Persons List maintained by OFAC, the Denied Persons List maintained by the U.S. Department of Commerce, the Consolidated List of Financial Sanctions Targets maintained by Her Majesty's Treasury, or any other list issued or maintained by any Sanctions Authority of persons subject to Sanctions (including investment or related restrictions), each as amended, supplemented or substituted from time to time;
"**Security Interest**"	means any mortgage, charge, pledge, lien, trust by way of security, transfer of ownership as collateral and any other collateral guaranteeing the obligations of a person, as well as any other agreement or accord having a similar effect;
"**Schedule**"	means any schedule to the Agreement;
"**Shares**"	has the meaning ascribed thereto under paragraph (A) of the preamble;
"**Signature Date**"	means the date of signature of the Agreement;
"**Subscriber**"	has the meaning ascribed thereto at the beginning of this Agreement;
"**Subscription Notice**"	means the form of Bonds subscription notice set out in **Schedule 1.C**;

"**Subscription Price**"	has the meaning ascribed thereto under Article 2.3.3 (*Subscription Price*) and means the amount in principal to be paid for the subscription of the Bonds;
"**Tax Deduction**"	has the meaning ascribed thereto under Article 7.1 (*Undertakings of the Issuer*);
"**Trading Day**"	means any day on which the Principal Market is open and remains open for not less than five (5) hours for the general trading of securities;
"**Tranche**"	has the meaning ascribed thereto under paragraph (D) of the preamble;
"**Transaction Fee**"	has the meaning ascribed thereto under Article 7.1 (*Transaction Fee*);
"**Undertakings**"	has the meaning ascribed thereto under Article 9 (*Undertaking of the Parties*);
"**VWAP**"	is a trading benchmark calculated by dividing the total value traded (sum of price times trade size) by the total volume (sum of trade sizes), taking into account every qualifying transaction (as published by Bloomberg). Depending on the condition codes of the transaction and the condition codes included in the Bloomberg defined VWAP calculation, a transaction may or may not be deemed qualifying. Historical values may also be adjusted on receipt of qualifying delayed trades.
"**Warranties**"	has the meaning ascribed thereto under Article 8 (*Representation and Warranties of the Issuer*).

In this Agreement, references to specific provisions of laws and regulation should be intended as references to the corresponding provisions as in force from time to time unless the context suggests otherwise.

2. RULES GOVERNING THE ISSUANCE OF AND SUBSCRIPTION TO THE BONDS

2.1 Issuance of Bonds

The nominal value of each Bond will be EUR 25,000.00. Each Tranche shall consist in the issuance of 160 Bonds.

Subject to (i) the issue of the eighth and last 2020 Tranche under the 2020 Agreement and (ii) a cool down period of 30 Trading Days between any two Tranches (the "**Cool Down Period**") which the Subscriber may, at its discretion, waive, the Issuer may issue the Bonds in the fixed aggregate principal amount of EUR 32,000,000.00, in up to 8 equal Tranches.

Subject to (i) the issue of the eighth and last 2020 Tranche under the 2020 Agreement and (ii) the Cool Down Period and other conditions set out in the Agreement; the Parties agree that the Issuer may issue a Tranche at any time (the "**Issue Date**") during the Commitment Period by delivery of a notice to the Subscriber at least 10 Trading Days prior an Issue Date.

The issue of each Tranche shall be:

- without any public offering (*offre au public de titres financiers*) within the meaning of the provisions of article L. 411-2 of the French Monetary and Financial Code;

- reserved to the Subscriber in compliance with article 225-138 of the French Commercial Code (*suppression du droit préférentiel de souscription*).

The Bonds shall:

(a) be issued in administered registered form only (*nominatif administré*);

(b) upon issue, each be recorded in the books of the Issuer;

(c) be fully vested with their rights as from the date of their subscription pursuant to Article 2.3 (*Subscription to the Bonds*) below;

(d) be issued pursuant to articles L.228-91 *et seq.* of the French Commercial Code and the Subscriber shall automatically, in connection with the Bonds, be part of a single body (*masse*) having a legal personality and protecting its interests as holder of Bonds.

2.2 Representative of the body of Bonds holders

(a) In accordance with article L.228-47 of the French Commercial Code, the representative of the *masse* will be ASO.

(b) The representative of the body of Bonds holders will not be remunerated.

2.3 Subscription to the Bonds

2.3.1 Subscription period and notice

At least ten (10) Trading Days prior to an Issue Date, the Issuer shall send to the Subscriber a notice of its intention to issue a Tranche substantially in the form as set out in **Schedule 2.3** (the "**Notification of Exercise**").

Subject to the Cool Down Period and satisfaction (or waiver) of the conditions set forth in Article 4 (*Conditions Precedent*) below, the Subscriber agrees to, on each Issue Date, fully subscribe and pay for, or procure to be subscribed and paid for, the relevant number of Bonds issued in accordance with the provisions of the Agreement.

2.3.2 Subscription specific conditions

The subscription to the Bonds, as described above, shall be reserved for the benefit of the Subscriber in compliance with article L. 225-138 of the French Commercial Code and the 2021 Shareholders' Meeting Resolutions.

2.3.3 Subscription price

Subject to Article 2.3.1 above, the Subscriber agrees to subscribe to the Bonds at a price per Bond equal to ninety six (96) percent of the nominal value of the Bond (*i.e* EUR 24,000) multiplied by the number of Bonds subscribed (the "**Subscription Price**").

The Subscription Price will be fully paid up by way of payment in cash.

3. RULES GOVERNING THE CONVERSION/EXERCISE OF THE BONDS

3.1 Bonds rate and conversion/exercise conditions

The Bonds shall be freely transferrable but shall not be Listed. They may be converted/repaid subject to the conditions set forth hereafter.

3.1.1 Bonds interest rate

The Bonds shall not bear any interest rate.

3.1.2 Bonds conversion/repayment period and Conversion Notice

The Subscriber shall have the right at any time as of any Issue Date up to and including the Maturity Date (the "**Conversion Period**"), to convert or request the redemption by way of conversion of all or any of the Bonds and to determine the number of Bonds to be redeemed by way of conversion, and the corresponding aggregate principal amount so redeemed by way of conversion (the "**Conversion Amount**").

At the Issuer's option, the Issuer shall have the right following receipt of a Conversion Notice from the Subscriber, to:

(i) deliver Conversion Shares to the Subscriber in a number determined by applying the following formula:

$$\left(\frac{CA}{CP}\right)$$

or

(ii) pay to the Subscriber an amount in cash calculated as per the following formula (the "**Conversion Cash Payment**"):

$$\left(\frac{CA}{CP}\right) \text{ x } CPr$$

where:

CA = the aggregate nominal amount of Bonds so converted;

CP = the Conversion Price.

*CPr=Revised conversion price. CPr is to be the lowest between (i) the Closing VWAP on the Conversion Date, and (ii) an amount equal to CP*1,10*

Subject to minimum period between Conversion Notices as provided in the following paragraph, the Subscriber may convert all or any of its Bonds on any Trading Day of its choice during the Conversion Period, effective at the date of receipt by the Issuer of a Conversion Notice in accordance with this Article 3.1.2 (the "**Conversion Date**").

On each chosen Conversion Date, the Subscriber shall convert all or any of its Bonds by giving Notice to the Issuer (the "**Conversion Notice**"), using the form attached in **Schedule 1 A** and specifying a number of Bonds to be converted and the corresponding Conversion Amount in accordance with this Article 3.1.2.

Following conversion, the Subscriber will do his best efforts to trade the Conversion Shares precautiously. The Subscriber undertakes to provide the Issuer, within five (5) Trading Days as from trading the Conversion Shares, with a detailed reporting of the sale transaction.

If the Issuer has not elected for the Conversion Cash Payment, the Issuer, after updating the securities account where the Bonds are registered, shall in turn send a notice to the Account Holder for the issuance of Conversion Shares to the Subscriber.

The Conversion Shares shall be issued in bearer form and shall be transferred by the Account Holder to the Subscriber's custodian CREST account within three (3) Trading Days following the Conversion Date. The Account Holder shall liaise with the custodian of the Subscriber to ensure prompt delivery. The Issuer shall be liable for, and shall indemnify the Subscriber against, any losses resulting from a delay over the aforementioned three (3) Trading Days.

If the Issuer has elected for a Conversion Cash Payment, the Issuer should send a written notice to the Subscriber specifying this election within 24 hours from the receipt of the Conversion Notice, and payment shall be made to the Subscriber's designated account within seven (7) Trading Days as from this notification.

If the Issuer has not elected for the Conversion Cash Payment, the number of Conversion Shares issued by the Issuer to the Subscriber upon conversion of one or several Bonds in accordance with this Article 3.1.2 will be calculated as the Conversion Amount divided by the Conversion Price.

If the issuance of Conversion Shares would result in the issuance of a fraction of a Share, the Issuer shall round such fraction of a Share down to the nearest whole Share.

It is specified that, whether for the purposes of calculating the number of Conversion Shares or the Conversion Cash Payment, the Conversion Price may not fall below nominal value of the Shares (which is today EUR 0.20). Therefore, in the event the Conversion Price pursuant to the above formula falls below the nominal value of the Shares, the Subscriber may agree that the Conversion Price be set at nominal value, provided that the Subscriber is paid a contractual penalty payment in cash or, at the Issuer's discretion, in Shares, compensating for the difference between the Conversion Price pursuant to the above formula and nominal value of the Shares.

Any payment to the Subscriber made by the Issuer in accordance with this Article 3.1.2 shall be made by the Issuer to the Subscriber in cash, by wire transfer to a bank account notified by the Subscriber to the Issuer, in immediately available, freely transferable funds in Euros.

The Subscriber undertakes, unless otherwise agreed in writing with the Issuer not to sell per day a number of Conversion Shares greater than 20% of the transaction volume of such day.

3.1.3 The Subscriber acknowledges that from time to time, based on specific circumstances linked to the Issuer's fund raising and subject to a maximum of four (4) requests per year, the Issuer shall be entitled to request the suspension of some conversions for up to a maximum of 40 Trading Days. In such case, the Issuer is to pay an equivalent financial rate of 10% per annum over the period starting on the date of the Issuer's request until the date conversions can resume (as indicated in the Issuer's request).

3.1.4 Maturity date

The Bonds' maturity date (the "**Maturity Date**") shall be the date at the end of the 24th month following an Issue Date, subject to early redemption as set forth in Article 3.1.5 below.

3.1.5 Bonds redemption

The Bonds may not be redeemed otherwise than following an Event of Default.

4. CONDITIONS PRECEDENT

4.1 The undertaking by the Subscriber to subscribe to any Tranche of Bonds and pay the corresponding Subscription Price on the relevant Issue Date is subject to the following conditions precedent:

(a) the absence of any event or change rendering any one of the Undertakings made under Article 9 (*Undertakings of the Parties*) or Representations and Warranties set forth in Article 8 (*Representations and Warranties of the Issuer*) untrue or incorrect, in the same terms as if they had been formulated, given or made on the Issue Date except where such Representation or Undertaking only relates to one Tranche;

(b) the Issuer complies with the Undertakings set forth in Article 9.1 (*Undertakings of the Issuer*);

(c) the absence of any event having or likely to have a Material Adverse Effect or a Change in Ownership;

(d) no Event of Default has occurred or is likely to occur;

(e) the Shares (i) shall be Listed on the Principal Market and (ii) shall not have been suspended, as of such Issue Date, by the AMF or the Principal Market from trading on the Principal Market nor shall suspension by the AMF or the Principal Market have been threatened, as of such Issue Date, either (a) in writing by the AMF or the Principal Market or (b) by falling below the minimum Listing maintenance requirements of the Principal Market;

(f) no action has been taken and no statute, rule, regulation or order having been enacted, adopted or issued by any governmental or regulatory authority (including the AMF) that would prevent the issuance and sale of the Bonds; and no preliminary injunction or order of any court shall have been applied for or served on the Issuer prohibiting or substantially restricting the Issuer from consummating the transactions contemplated in this Agreement;

(g) the performance by the Issuer of its obligations under this Agreement, in particular Article 5 (*Completion Deliverables*) below, up to and including the Issue Date; and

(h) the submission to the Subscriber, at the latest by the Issue Date, of the following documents:

(i) two (2) copies certified by a duly authorized representative of the Issuer, of the authorizations of the Board and Shareholders' Meeting Resolutions of the Issuer regarding the relevant issue of the Bonds,

(ii) two (2) copies certified by a duly authorized representative of the Issuer, and up-to-date on the Issue Date of the articles of association of the Issuer,

(iii) one (1) incorporation certificate (*extrait K-bis*) issued less than five (5) calendar days preceding the Issue Date,

(iv) one (1) insolvency certificate (*certificate de non-faillite*) issued less

than five (5) calendar days preceding the Issue Date.

If any one of the above-mentioned conditions is not satisfied on or before the Issue Date, the Subscriber shall be entitled, at its sole discretion, to terminate this Agreement, in which case the Parties shall be under no further liability arising out of the Agreement (except as otherwise specifically provided and except for any liability arising before or in relation to such termination); it is understood that the Subscriber shall have the discretionary right to waive the total or partial satisfaction of any one of the above-mentioned conditions.

5. COMPLETION DELIVERABLES

Subject to compliance with Articles 2 to 4 above (as applicable), the Parties shall have the following obligations:

5.1 Obligations of the Issuer

The Issuer shall, as the case may be:

(a) at least ten (10) Trading Days prior to an Issue Date, execute and deliver the Notification of Exercise; and

(b) on the Issue Date, duly issue the Bonds to the Subscriber and procure entry in the Register of the Subscriber name as holder of the Bonds;

or

(c) on each Conversion Date, duly issue the Conversion Shares.

5.2 Obligations of the Subscriber

On each Issue Date, the Subscriber shall:

(a) against compliance with Article 5.1(a) and 5.1(b) above by the Issuer, pay (or procure to be paid) the Subscription Price by electronic wire transfer to the bank account designated by the Issuer by notice in writing delivered to the Subscriber at least five (5) Business Days prior to the Issue Date. Evidence of such payment shall be satisfied by the delivery to the Issuer of an irrevocable wiring instruction giving effect to the above,

and

(b) execute and deliver to the Issuer a Subscription Notice;

or

(c) on each Conversion Date execute and deliver to the Issuer a Conversion Notice.

6. LISTING

Following the delivery of the Conversion Notice, the Issuer shall promptly secure the Listing of all of the Conversion Shares upon the Principal Market or such other securities exchange and automated quotation system, if any, upon which the Shares are Listed within the second Trading Day following the delivery of the Conversion Notice.

In connection with the Listing of the Conversion Shares, the Issuer shall maintain such Listing of all Conversion Shares from time to time issuable under the terms of the Agreement. The

Issuer shall maintain the Shares' authorization for quotation on the Principal Market or such other securities exchange and automated quotation system, if any, upon which the Shares are then Listed. The Issuer shall pay all fees and expenses in connection with the performance of its obligations under this Article 6 (*Listing*).

7. COMMISSION AND EXPENSES

7.1 Transaction Fee

The Issuer shall pay to ASO a transaction fee equal to EUR 500,000 (the "**Transaction Fee**").

The Issuer shall pay to ASO, 12% of the Transaction Fee (*i.e:* EUR 60,000, each a "**Transaction Fee Instalment**") at the drawing of each Tranche.

It is agreed that the Transaction Fee will be due in full on the earlier of (i) the date on which the last Tranche is drawn under the Agreement and (ii) the second anniversary of the Issue Date of the first Tranche. In the event that all eight (8) Tranches have not been drawn on the second anniversary of the Issue Date of the first Tranche, the Issuer will pay to ASO the balance of the Transaction Fee, i.e. an amount equal to (i) the amount of the Transaction Fee minus (ii) the aggregate amount of all Transaction Fee Instalments already paid to ASO pursuant to the above provision.

7.2 Expenses

The Issuer shall be responsible for its own expenses, including legal fees and fees of other advisers incurred in connection with this Agreement and the issue of the Bonds and the Listing of the Conversion Shares.

The Issuer shall reimburse the Subscriber for its legal expenses incurred in connection with the negotiation and execution of this Agreement within a limit of EUR 20,000.00 excluding VAT. Such amount shall be paid by the Issuer in accordance with the instructions of ASO immediately upon the execution of this Agreement provided that the Issuer shall have received prior to such time copies of the relevant invoices from ASO's counsels. It is specified that, as of the date hereof, Issuer has paid a deposit in an amount of EUR 15,000.

The Issuer shall pay all and any stamp duty or share transfer or similar duties arising under the laws of any jurisdiction in connection with the subscription by the Subscriber (or its nominee(s) subject to prior notification by the Subscriber to the Issuer regarding the identity of such nominee) for the Bonds or the Conversion Shares pursuant to this Agreement. Other than as expressly set out in this Agreement, the Issuer, the Subscriber and ASO shall pay its own costs, fees and expenses in connection with the negotiation and execution of this Agreement and the completion of the transactions contemplated by this Agreement including the conversion of the Bonds.

7.3 Promissory Bond

To secure the payment of the above Transaction Fee and any amount otherwise due to ASO and not already paid on the Signature Date, the Issuer agrees to execute, on each Issue Date, a promissory note substantially in the form as attached hereto as **Schedule 7.3** (the "**Promissory Bond**").

8. REPRESENTATIONS AND WARRANTIES OF THE ISSUER

The Issuer hereby represents and warrants to the Subscriber that the representations and warranties given in this Article 8 (*Representations and Warranties of the Issuer*) (the

"**Warranties**") are true and accurate in all respects as at the Signature Date. The Warranties shall be deemed to have been repeated on each Issue Date with reference to the facts and circumstances existing on that date. In the event that the Issuer is aware that on any date on which the Warranties at Articles 8.7 (*Consents and Approvals*) and 8.9 (*Absence of court-ordered insolvency procedures*) are to be deemed to be repeated any of them are not true and accurate, it shall as soon as reasonably practicable in advance of the relevant date on which such Warranties are to be repeated, promptly notify the Subscriber with details of the matters which are inconsistent with such Warranties, and the Subscriber shall (acting reasonably and as soon as reasonably practicable after such notification) consider the materiality of the relevant matter in deciding whether to accept that the relevant Warranties should be subject to matters so disclosed.

8.1 Organization and Qualification

The Issuer hereby represents, warrants to the Subscriber that the Warranties are true and accurate in all respects as at the Signature Date.

The Company and each of its subsidiaries are duly incorporated and validly existing under the laws of its country of incorporation with the requisite corporate power and authority to own, lease and operate its properties and assets and conduct its business in accordance with any applicable laws; its respective board of directors, management board or supervisory board and its chairman, general manager or person exercising a similar function have been duly appointed and after having made all reasonable inquiries, exercise their respective functions in compliance with all applicable laws and regulations in all material respects; and the statutory auditors of the Issuer have been duly appointed in accordance with any applicable laws.

8.2 Organization of Share Capital

(a) The issued and outstanding share capital of the Issuer has been duly and validly authorised, issued and fully paid and is not subject to any call for the payment of further capital; none of the issued and outstanding share capital of the Issuer was issued in violation of any pre-emptive or other similar rights of any security holder of the Issuer.

(b) The Shares are the only class of shares in the equity share capital of the Company and the Company will not, for so long as this Agreement remains in force, issue any shares which have rights differing from those attaching to the equity share capital in issue as at the Signature Date.

(c) The Shares currently in issue are fully tradable and admitted to trading on the Principal Market in compliance with all applicable Listing rules and at the Signature Date and at the Issue Date and at each Conversion Date on which the Conversion Shares become issued, the Issuer is, and will be, in compliance with all applicable Listing rules relating to the Shares, and it has made all applicable regulatory filings in respect of the Listing and admission to trading of the Shares with the Principal Market.

8.3 Authorization - Enforcement

(a) Subject to the 2021 Shareholders' Meeting Resolutions and the Board, the Company has the requisite corporate power and authority to enter into this Agreement and on each Issue Date, to consummate the transactions contemplated by this Agreement that are to be consummated on that Issue Date and otherwise to carry out its obligations under this Agreement.

(b) The execution and delivery of this Agreement by the Company and the completion by it of the transactions required hereby have been (or, in the case of obligations to be

performed after the date of this Agreement, will be before the due time for performance) duly authorized by all necessary action on the part of the Company, its directors and its shareholders (as the case may be) and a press release will be duly published.

(c) This Agreement has been duly executed and delivered by the Company or on its behalf and the obligations assumed by the Company under this Agreement constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

(d) As at the date of their issue, the Bonds have been duly issued and registered by the Company and constitute valid and binding obligations of the Company to issue the Conversion Shares, enforceable in accordance with the Agreement.

8.4 Pre-emptive rights

Neither the issue of the Bonds nor the Conversion Shares will be subject to any pre-emptive (*droit préférentiel de souscription*) or any contractual pre-emptive right.

8.5 Conversion Shares

The Conversion Shares, when allotted, issued and delivered in the manner contemplated by this Agreement:

(a) will be duly and validly allotted and issued, fully-paid up;

(b) will carry the same rights and privileges in all respects as the Shares and shall be entitled to all dividends and other distributions declared, paid or made thereon; and

(c) subject to any restriction under French law, will be freely transferable, free and clear of all Security Interests or claims of third parties.

8.6 No-conflicts

The execution, delivery and performance of this Agreement and the issuance of Bonds or Conversion Shares by the Company pursuant to this Agreement, and the completion by the Company, as applicable, of the transactions contemplated hereby, do not and will not conflict with or violate any provision of the articles of association of the Company, nor any applicable law or regulation.

8.7 Consents and Approvals

Except for any necessary approvals from the Principal Market for the Listing of Conversion Shares, neither the Company nor any of its subsidiary is required to obtain any consent, waiver, authorization or order of, or make any filing or registration with, any court or other governmental or regulatory authority or other Person in connection with the execution, delivery and performance by the Company of this Agreement, the issue of any Bonds or Conversion Shares. As of each Issue Date and Conversion Date any necessary consents and approvals (including, for the avoidance of doubt, any necessary approvals as referred to above from the Principal Market and shareholders of the Company) have been obtained in respect of any Bonds and Conversion Shares and shall be in full force and effect.

8.8 Authorized nominal amount

The issue of the Bonds on the Issue Date shall not exceed the limit of the nominal amount authorized by the 2021 Shareholders' General Meeting or the Board of the Issuer.

8.9 Absence of court-ordered insolvency procedures

There is no court-ordered insolvency procedures, including any action, suit, notice of violation, proceeding or investigation pending or, to the best knowledge of the Issuer and its representatives, threatened against the Company or any of its subsidiaries or any of their respective properties or assets before or by any court, governmental or administrative agency which (i) relates to or challenges the legality, validity or enforceability of this Agreement or (ii) could, individually or in the aggregate, be reasonably expected to impair materially the ability of the Company to perform fully on a timely basis its obligations under this Agreement.

8.10 Working capital

The Company will have sufficient working capital to cover its budgeted working capital requirements for the 12 months following the Signature Date.

8.11 Registration and stamp fees

Except ordinary formalities with the Company's commercial clerk's registrar and press releases for Listing in the Principal Market, French law does not require the filing, registration or publicity of this Agreement with any jurisdiction or authority nor the collection of a stamp or registration fee or similar tax concerning said agreements or for the transactions referred to in said documents.

8.12 Accuracy of the information and documents

(a) All of the information provided to the Subscriber by the Issuer and its subsidiaries prior to the date of this Agreement was accurate, complete and up-to-date in all material respects on the date on which it was provided or, if applicable, on the date to which it relates and does not mislead the Subscriber on any significant point, due to an omission, the occurrence of new facts or as a result of information communicated or not disclosed.

(b) The documents (other than the information communicated to the Subscriber by the Issuer in accordance with this Agreement) are accurate, complete and up-to-date on the date on which they were submitted.

8.13 *Pari passu*

The Bonds constitute direct, unconditional, unsubordinated and unsecured obligations of the Issuer, ranking equally between themselves and (with the exception of the mandatory provisions of French law) equally with all other present or future unsubordinated and unsecured obligations (with the exception of those benefiting from a preference in accordance with the law) of the Issuer.

8.14 Disputes

There are no actions, suits or proceedings against or affecting the Issuer or any of the properties of the Issuer which, if determined adversely to the Issuer, could individually or in the aggregate have a Material Adverse Effect on the Issuer.

8.15 Taxes and contributions

(a) The Issuer is up-to-date with all requisite tax filings and have each paid all taxes and contributions (social security or those of any other type) due, by them.

(b) No claim by the competent tax authority is continuing against the Issuer.

8.16 Sanctions

Neither the Issuer nor any of its subsidiaries, or any of their respective legal representatives or Affiliates has, in the past 5 years, or is currently subject to any Sanction or been in violation of applicable anti-corruption laws, including but not limited to the Foreign Corrupt Practices Act of 1977 ("**FCPA**"); and the Issuer shall not allocate in any manner the proceeds of the issue of the Bonds, as applicable, nor will it lend, contribute or otherwise make available these proceeds, to a joint venture or to any other Person, for the purpose of financing the activities of any Person currently subject to Sanctions as may appear on any Sanctions List (including, but not limited to, pursuant to the FCPA.

8.17 Selling restrictions

The issue of the Bonds and of the Conversion Shares will not constitute a public offer on the French territory subject to any AMF's approval.

8.18 Non-public price sensitive information

(a) Neither the Issuer nor any of its directors or officers is aware of any non-public price sensitive information that relates, directly or indirectly, to the Issuer or its securities and which, if made public, may have a significant influence on the market price of the Bonds, the Shares and/or the business of the Company.

(b) The Issuer hereby expressly declares and warrants that neither it nor any of its representatives, agents or employees has provided the Subscriber with non-public price sensitive information in the possession of the Issuer (or any of its representatives, agents or employee) which, if made public, could be expected to have an effect upon the market price of the Bonds, the Shares and/or the business of the Company.

9. UNDERTAKINGS OF THE PARTIES

9.1 Undertakings of the Issuer

The Issuer undertakes and guarantees to the Subscriber that:

(a) it will bear and pay (i) any stamp or other duties or taxes, including interest and penalties, payable on or in connection with the issue of the Bonds and the execution of this Agreement and (ii) any value added, turnover or similar tax payable in connection with any amount payable by it under this Agreement or otherwise in connection with the transactions envisaged by this Agreement;

(b) subject to prior approval by the Subscriber, it shall not, and shall procure that none of its subsidiaries shall, take any action which would be reasonably expected to result in the de-Listing or suspension of the Shares on the Principal Market or any other securities exchange and automated quotation system, and it shall comply at all times with the regulations of any such system;

(c) it will cause CACEIS Corporate Trust, acting as registrar (*établissement financier en charge du suivi des titres*) of the Company, to List all Shares issued from time to time at the latest with effect from the opening of business on the second (2) following Trading Day and that all Conversion Shares, subject to the Listing of the Shares already in issue remaining effective as of the issue date of such new Shares, be Listed at the latest with effect from opening of business on the second (2) Trading Day immediately following their exercise date;

(d) The share capital increase maximum thresholds authorized by the 2021 Shareholders' Meeting Resolutions will not be crossed;

(e) save with the prior written consent of the Subscriber, it will use the Subscription Price for the Purpose only;

(f) Except where directly caused by the Subscriber (including the change of tax residence, absence of delivery of the tax residence statement referred to in Article 7.2), in the event that it is required that payments of principal or interest in respect of the Bonds be subject to withholding or deduction in respect of any taxes or duties whatsoever (a "**Tax Deduction**"), the Issuer will pay such additional amounts as may be necessary so that the Subscriber, after such withholding or deduction, receive the full amount due to the Subscriber. For that purpose, the amount of interest due to the Subscriber shall be increased in order that the net amount received by the Subscriber after the required withholding or deduction shall equal the amount that would have been received, had such withholding or deduction not been made, it being specified that no additional payment shall be made should the Subscriber benefit from a reimbursement of such Tax Deduction. The provisions of this Article 9.1 shall not apply if (i) any regulation applicable in the country of residence of the Issuer prohibits the Issuer from assuming the charge of the Tax Deduction, and/or (ii) the Tax Deductions which represent a tax credit, or can be used as a deduction or offset against the Subscribers' tax;

(g) it shall, as soon as reasonably practicable, provide the Subscriber with any information and documents as may be reasonably requested by the Subscriber in order to verify the performance by the Issuer of this Agreement, in particular as regards compliance with the Issuer's obligations under Articles 8 and 9.1.

9.2 Undertakings of the Subscriber

The Subscriber undertakes and guarantees to the Issuer

(a) not to sell or otherwise transfer the Bonds directly to the public in France or in any other EU or EEA territory;

(b) to carry out any sale, offer, solicitation relating to the Bonds addressed solely to persons acting as (i) a management company, (ii) qualified investors and/or (iii) a restricted circle of investors, all these terms being defined by the EU Prospectus Directive n° 2010/73/UE and Articles L.411-1, L.411-2, D.411-1 and D.411-4 of the French Monetary and Financial Code;

(c) not to offer or register the Bonds on the territory of the United States of America or for the account (or benefit) of a US person.

10. INDEMNIFICATION

The undertaking by the Subscriber to subscribe or exercise and pay for the Bonds on any Issue Date having been made on the basis of the aforementioned Warranties and Undertakings and with the certainty that the latter shall remain true and accurate up to and including such Issue Date, the Issuer undertakes to hold harmless the Subscriber (the "**Indemnified Person**") against any direct loss, liability, damages and any expenses and costs (excluding legal costs) - justified by a document evidencing the harm suffered by this Indemnified Person - that the Indemnified Person may incur or sustain as a result of or due to any false representation or any violation or any breach of any one of the Undertakings made, representations made or

Warranties given, or any inaccuracy or omission, actual or alleged, of this Agreement, except in the case of gross negligence, bad faith, or wilful misconduct of such Indemnified Person. In the event that a claim or a court action shall be brought against an Indemnified Person in respect of which indemnification may be sought from the Issuer, pursuant to the terms of this Agreement, the Subscriber shall promptly inform the Issuer of the progress of such claim or court action and shall consult it to the full extent possible concerning the manner in which to manage said situation.

The aforementioned Warranties and Undertakings on the part of the Issuer, shall remain in full force as long as the Subscriber holds the Bonds.

11. EVENTS OF DEFAULT

Any Subscriber may, upon written notice sent to the Issuer by registered mail with return receipt, given before all continuing event of defaults shall have been cured, (i) cause all, but not some only, of the Bonds held by such Subscriber to become immediately due and payable at their nominal amount and (ii) if any of the following events (each an "**Event of Default**") shall have occurred:

11.1 Non-Payment

The Issuer defaults in any payment of any amount under the Agreement when the same shall become due and payable, unless the non-payment results from an administrative or technical error and the payment is made within thirty (30) calendar days following its due date.

11.2 Breach of other obligations under this Agreement

Default by the Issuer in the due performance of any of its obligations under the Agreement if, to the extent that such breach can be cured, it has not been cured within thirty (30) calendar days from the first of the following dates: (i) the date on which the Issuer becomes aware of this breach and (ii) the date on which any Subscriber notifies such breach to the Issuer, requesting that it be cured.

11.3 Insolvency and court-ordered insolvency procedures

(a) The Issuer or one of its subsidiaries is unable or recognizes its inability to pay its debt *(état de cessation de payment)*;

(b) a decision by a management body of the Issuer or one of its subsidiaries is taken or judicial proceedings or other measure is initiated with a view to dissolution, initiate a safeguard proceedings (*procédure de sauvegarde*), accelerated safeguard proceedings (*procédure de sauvegarde accélérée*), accelerated financial safeguard proceedings (procédure de sauvegarde financière accélérée), judicial reorganisation (*redressement judiciaire*), judicial liquidation (liquidation judiciaire); or

(c) the Issuer or one of its subsidiaries is insolvent (*état de cessation de paiement*) as defined by French law ;

11.4 Cessation or suspension of activity

Any suspension or cessation by the Issuer or one of its subsidiaries of its business or substantial part of it.

11.5 Issuance of the Bonds

Any refusal of the shareholders of the Company to grant a power of attorney (*délégation de compétence*) to the Board in order to issue the Bonds.

12. TERMINATION

Notwithstanding anything to the contrary contained in this Agreement, any Subscriber may by simple notice to the Issuer, terminate this Agreement at any time prior to the payment of the net proceeds of the subscription of the Bonds, (i) in the event that a condition precedent mentioned in Article 4 (*Condition Precedent*) of this Agreement has not been satisfied on or before the Issue Date and notwithstanding the fact that the non-satisfaction of a condition precedent is, or is not, under the control of the Issuer or which could be under the control of the Issuer or (ii) in the event a Material Adverse Effect has occurred or (iii) in the event of a failure of the Issuer to perform any of its obligations pursuant to this Agreement, in particular under Article 11 (*Event of Default*), or (iv) any force majeure event significantly impacting the Bonds.

As soon as such notification has been given, the parties to this Agreement shall be discharged from all of the obligations they respectively owe pursuant to this Agreement (except as otherwise specifically provided and except for any liability arising before or in relation to such termination).

13. NOTIFICATIONS

All required notifications can be delivered in person or sent by email with acknowledgment of receipt, registered letter with acknowledgment of receipt (or any equivalent for any notice sent outside France), by overnight courier or hand delivery. It is specified that any notification hereunder will be taken into account by the receiving party only after close of the Principal Market.

(a) <u>For the Issuer:</u>

Name:	Biophytis
Address:	14, avenue de l'Opéra, 75001 Paris
Telephone:	+33 1 44 27 23 00
E-mail address:	stanislas.veillet@biophytis.com and evelyne.nguyen@biophytis.com
Attn.:	Mr. Stanislas Veillet - Président Directeur Général and Mme Evelyne Nguyen - Directeur Administratif et Financier

(b) <u>For the Subscriber:</u>

Name:	Atlas Capital Markets acting as investment manager of ASO
Address:	3rd Floor Queens gate House, 113 South Church Street Grand Cayman, KY1-1002 Cayman Islands
Telephone:	+44 2 03 05 65 936
E-mail address:	Mraddi@atlascapitalm.com and Charles@atlascapitalm.com
Attn:	Mr. Mustapha Raddi

or to any other address, fax number, or to the attention of another person, if any, indicated by one of the parties to the other parties for such purpose.

All notifications will be deemed to have been received:

a. when sent by email with acknowledgment of receipt, on the date of this acknowledgment;

b. when sent by registered letter with acknowledgment of receipt, on the date of first presentation;

c. when personally received by hand delivery or overnight courier; and

d. when sent by facsimile, on the date of receipt set forth on the facsimile transmission.

A notification received on a non-Business Day or after 6 p.m. in the place of receipt will be deemed to have been given on the next Business Day.

14. ANTI-MONEY LAUNDERING PROVISION

Each of the Parties to this Agreement states that, according to the relevant anti-money laundering regulations:

(a) the source of the money to be invested pursuant to this Agreement is (so far as the relevant party is aware, having undertaken all due and careful enquiry) legal and does not result from any activity contrary to the applicable legislation;

(a) this Agreement does not constitute a dissimulation or direct or indirect transformation of the product of a crime or offence;

(b) more generally, its operations and those of its subsidiaries are carried out in accordance with the requirements governing financial record keeping and monitoring and with money laundering prevention regulations applicable in France and in all jurisdictions in which such Party and its subsidiaries have an activity, with the associated rules and regulations, and with all of the resulting rules, regulations or recommendations, issued, managed or imposed by any governmental authority (collectively, the "**Anti-Money Laundering Laws**") and such Party and its subsidiaries are not parties to any court action, suit or proceedings open and continuing before any court or entity, government authority or agency or before any arbitrator concerning Anti-Money Laundering Laws and, to their knowledge, no such court action or proceedings are threatened.

15. SUBSTITUTION AND TRANSFER

The Subscriber shall have the right to substitute for itself or assign or transfer this Agreement to any Affiliate. The Issuer shall be notified of such substitution at least five (5) Business Days prior to such substitution or assignment.

The Issuer shall not have any right to substitute for itself or assign or transfer this Agreement to any Affiliate.

16. NO HARDSHIP

Each Party hereby acknowledges that the provisions of article 1195 of the French Code civil shall not apply to it with respect to its obligations under the Agreement or in connection thereto and that it shall not be entitled to make any claim under article 1195 of the French Code civil.

17. GOVERNING LAW AND JURISDICTION

The Bonds are issued under French law and are governed by French law.

This Agreement and its interpretation are governed by French law.

Any dispute arising out of this Agreement (including any dispute regarding the existence, validity or termination of this Agreement) shall be submitted to the competent Court in the district of the registered office Company

Signed in Paris, in three (3) originals

The Issuer

/s/ Stanislas Veillet
Issuer
By: Stanislas Veillet

ASO

/s/ Lawrence Cutler

ASO
By: Lawrence Cutler

/s/ Mustapha Raddi
By: Mustapha Raddi

SCHEDULE (F): BOARD RESOLUTION

SCHEDULE 1. (A): FORM OF CONVERSION NOTICE

BIOPHYTIS SA
Attention to**: Stanislas Veillet** and **Evelyne Nguyen**
E-mail addresses: stanislas.veillet@biophytis.com / evelyne.nguyen@biophytis
Phone number: +33 (0)1 44 27 23 00

Copy:

CACEIS Corporate Trust - CACEIS
Attention to: Carine Alexandre / Jerôme Besse
Email addresses: LD-F-CT-Registre-OST@caceis.com / carine.alexandre@caceis.com / jerome.besse@caceis.com

Please find below the Investor's notification with respect to the Conversion Notice issued on [·] pursuant to the issuance and subscription agreement for bonds with an option for exchange in cash and/or conversion into new or existing shares (ORNANEs) dated June 14, 2021 (the "**Agreement**").

All terms written with a capital initial letter shall have the definition ascribed to them in the Agreement.

1	Number of Bonds converted	[·]
2	Conversion Amount (equal to the global par value of the converted Notes)	EUR [·]
3	Pricing Period VWAP	EUR [·]
4	100%x(3)	EUR [·]
5	The minimum Share issuance price under the 12th resolution of the 2021 Shareholders' Meeting, being the lower of: • 75% of the 15, 10 or 5 day VWAP (at the discretion of the board of directors) prior to the day the price is determined; or • 75% of the 15, 10 or 5 day VWAP (at the discretion of the board of directors) prior to the Conversion Date; or • 75% of the lowest closing price over the 15 Trading Days preceding the Conversion Date.	EUR [·]

6	CP, ie Conversion Price (rounded down to the nearest 100th), being: • (4); or • (5) if (4)<(5)	EUR [·]
7	Nominal value of the Share	EUR [0.20]
8	Provided that (6)>(7), number of Shares (rounded down) due to the Investor: ((2)÷(6))	[·]
9	Closing VWAP on the Conversion Date	EUR [·]
10	Conversion Cash Payment, equal to: ((2)÷(6)) x (9) if (9) < CP x 1,10 (2) x 1,10 if (9)>=CP x 1,10	EUR [·]

Sincerely,

Subscriber

*CPr=Revised conversion price. CPr is to be the lowest between (i) the closing VWAP on the conversion date, and (ii) an amount equal to CP*1,10*

SCHEDULE 1. (C): FORM OF SUBSCRIPTION NOTICE

Purpose:	**Subscription Notice to one hundred and twenty (160) Bonds**
To:	[Issuer]
Securities:	Bonds
Subscription Price:	EUR 24,000 per Bonds
From:	Atlas Special Opportunities
Dated:	[●]

Reference is hereby made to the **Issuance and Subscription Agreement for Bonds ("Bonds") (**the "**Agreement**") dated June 14, 2021 entered into between Atlas Special Opportunities, and [Issuer]. Terms defined in the Agreement have the same meaning herein, and to the Notification of Exercise dated [__].

To this extent, with respect to the provisions of Article 2.1 of the Agreement, the Issuer shall issue [__] Bonds. The Subscription Price shall be fully paid up by way of payment in cash.

The Subscriber hereby irrevocably declares subscribing to [__] Bonds and fully paying such Subscription Price by way of payment in cash.

In [Paris] on [●],

The Subscriber: Atlas Special Opportunities

Represented by ACM: Mr. Mustapha Raddi acting
in his capacity as Managing Director

SCHEDULE 2.3: EXAMPLE OF NOTIFICATION OF EXERCISE

NOTIFICATION OF EXERCISE

From:

Biophytis SA
14, avenue de l'Opéra
75001 Paris

To:

Atlas Special Opportunities
Maples Corporate Services LTD
P.0.BOX 309, Ugland House Grand Cayman,
K.YL - 1104 Çayman Islands

Dated: [●]

RE: 160 Bonds issued by Biophytis SA

Gentlemen,

This notice is being rendered pursuant Article 2.3.1 of the Subscription Agreement dated June 14, 2021, by and among Biophytis SA (the "**Company**"), on one side, and Atlas Special Opportunities, on the other side, in connection with the issue by the Company of bonds with an option for exchange in cash and/or conversion into new or existing shares (*obligations remboursables en numéraire et/ou en actions nouvelles ou existantes*) (the "**Subscription Agreement**"). Capitalized terms used without definition have the respective meanings assigned to them in the Subscription Agreement.

Pursuant to, and in compliance with, the provisions of the Subscription Agreement, we hereby request you to subscribe and pay for the Tranche N°[•] of the Bonds consisting in 160 Bonds with a principal amount equal to EUR 25,000 to be entered and held in book-entry form by the Company.

The Issue Date of the Bonds shall be [•].

Yours sincerely,

_____

Represented by

SCHEDULE 7.3: PROMISSORY BOND

PROMISSORY BOND

(BILLET À ORDRE)

of

BIOPHYTIS S.A.

Paris

Date: _____

In consideration for entry by Atlas Special Opportunities (the "**Beneficiary**"), into the Subscription Agreement entered into between Biophytis, a French *société anonyme* with a share capital of __ Euro, having its registered office at __and registered with the commerce and trade register of __ under number __ (the "**Company**"), Atlas Special Opportunities and the Beneficiary on or about the date of this Promissory Bond (the "**Subscription Agreement**"), the Company, pursuant to article 7.3 of the Subscription Agreement, hereby **PROMISES TO PAY TO THE ORDER OF THE BENEFICIARY** the principal sum of **__ Euro** (the "**Transaction Fee**") in compliance with the following terms and conditions.

Capitalized terms used herein and not otherwise defined shall have the meaning ascribed to them in the Subscription Agreement.

THE COMPANY SHALL ON DEMAND OF THE BENEFICIARY, pay [_____] € as Transaction Fee at any time on or after the Issue Date.

(i) [_____] € as Transaction Fee at any time on or after the Issue Date.

This note and any dispute or claim arising out of or in connection with it or its subject matter (including non-contractual disputes or claims) is governed by and shall be construed and take effect in accordance with the laws of France. The Company hereby irrevocably submits to the exclusive jurisdiction of the Paris Courts for the purposes of any suit, action or proceeding arising out of or in connection with this note.

This Promissory Bond shall remain valid until the earlier of (i) date of payment of the total amount of the Transaction Fee and (ii) the second anniversary date of the Issue Date of the first Tranche.

MADE IN ONE (1) ORIGINAL IN PARIS, ON THE DATE FIRST ABOVE WRITTEN.

_____

Represented by

Exhibit 4.41

Certain identified information has been excluded from this exhibit because it is both not material and is the type that the registrant treats as private or confidential. Information that was omitted has been noted in this document with a placeholder identified by the mark "[***]".

SUBSCRIPTION AGREEMENT

By and between

Biophytis S.A.

as Issuer

and

Kreos Capital VI (UK) Ltd.

As Subscriber

Kreos Capital VI (Expert Fund) L.P.

19 November 2021

reinhartmarvilletorre
SOCIÉTÉ D'AVOCATS
58, avenue Kléber - 75116 Paris T. +33 1 53 53 44 44 F. +33 1 53 96 04 20
Toque K30 . SELARL au capital de 480 000 euros . RCS Paris B 393 584 347

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Subscription agreement

This subscription agreement (hereinafter referred to as the "**Subscription Agreement**") is entered into on 19 November 2021, by and between:

1. **Biophytis S.A.**, a limited company *(société anonyme)* incorporated under the laws of France, with a share capital of EUR 25,814,647 having its registered office at 14, avenue de l'Opéra – 75001 Paris, France, registered under single identification number 492 002 225 RCS Paris, listed on the Euronext Growth organized multilateral trading facility under ISIN code FR0012816825, represented by Mr. Stanislas Veillet, in his capacity of chief executive officer (*Président Directeur Général*),

(hereinafter referred to as the "**Issuer**" or the "**Company**")

ON THE FIRST PART

AND

2. **Kreos Capital VI (UK) Limited**, a private limited company incorporated under the laws of England, having its registered office at 5th Floor, 25-28 Old Burlington Street, London W1S 3AN, United Kingdom, registered under identification number 11535385, represented by Mr. Maurizio Petitbon, in his capacity of Director, duly authorised for the purposes hereof;

(hereinafter referred to as the "**Subscriber**" or "**Kreos**")

ON THE SECOND PART

3. **Kreos Capital VI (Expert Fund) L.P.** a limited partnership incorporated under the laws of Jersey, having its registered office at 47 Esplanade, St Helier, JE1 0BD, Jersey, registered with the JFSC Companies Registry under identification number 2770, represented by Mr. Michael Johnson, duly authorised for the purposes hereof.

(hereinafter referred to as "**Subscriber's Affiliate**")

ON THE THIRD PART

Issuer, Subscriber and Subscriber's Affiliate being hereinafter referred to individually as a "**Party**" and collectively as the "**Parties**".

Whereas

(A) The Subscriber is a growth debt provider, the business of which consists in making investments in high technology and life science companies throughout Europe.

(B) The Issuer is a French *société anonyme*, created in 2006, specializing in creating drugs to treat degenerative illnesses associated with aging for which no treatment is available to date. Its most advances programmes

relate to sarcopenia (loss of muscle functionality) and age-related macular degeneration (armd).

(C) In order to finance the development of the Issuer's business, the Subscriber and the Subscriber's Affiliate have agreed to subscribe to a Bonds Issue by the Issuer for a nominal amount of up to ten million euros (EUR 10,000,000.00) as per a term sheet dated August 9th, 2021 and signed on August 17th and 19th, 2021 (the "**Term Sheet**").

(D) On 10 May 2021, the Issuer's general meeting empowered, through its 12th resolution, the Issuer's board of directors (*conseil d'administration*) to issue warrants giving access to the Issuer's capital.

(E) On 19 October 2021, the Issuer's board of directors (*conseil d'administration*) empowered the chief executive officer (*directeur general*) of the Company to negotiate and enter into this Subscription Agreement and the related Issue Documents.

(F) The Parties have met to determine the terms and conditions of the transaction contemplated by the Term Sheet, which is the subject hereof.

NOW, THEREFORE, IT HAS BEEN AGREED AS FOLLOWS:

1. Definitions and interpretation

1.1 In this Subscription Agreement, unless the context otherwise specifically provides, the following expressions shall have the following meanings:

Atlas Financing	shall have the meaning set forth under section 3 (v);
Bank Account Pledge Agreement	means the bank account pledge agreement entered into by the Issuer and Subscriber as of the date hereof;
Bonds	means the Straight Bonds and the Convertible Bonds to be issued by the Issuer under the Bonds Issue;
Bonds Issue	means the issue of up to 10,000,000 Bonds carried out pursuant to this Subscription Agreement in accordance with the Bonds Issue Agreement and the Convertible Bonds Issue Agreement;
Bonds Issue Agreements	means the Straight Bonds Issue Agreement and the Convertible Bonds Issue Agreement;
Business Day	means a day (excepting Saturdays and Sundays) on which banks operate in Paris;
Business Pledge Agreement	means the pledge agreement entered into by the Issuer and Subscriber as of the date hereof;
Completion Date	shall have the meaning set forth under section 3;
Convertible Bonds	means the two millions two hundred and fifty thousand (2,250,000) convertible bonds (*obligations convertibles)* within the meaning assigned in article L. 213-5 of the French Monetary and Financial Code) to be issued by the Issuer under the Convertible Bonds Issue Agreement;

Convertible Bonds Issue Agreement	shall have the meaning set forth under section 2.3;
COVA Trial	means a multinational Phase 2/3 clinical trial with Sarconeos (BIO101) for the treatment of COVID-19 related respiratory failure;
Debt to Market Capitalisation Ratio	means, with respect to Issuer, as of any date of determination, the ratio of (a) the total amounts due in principal under this Agreement, including the relevant requested drawdown, and the Kreos V Financing, as of such date to (b) the Market Capitalization for the Issuer as of such date;
DMC	means the Data Monitoring Committee, group of clinicians and biostatisticians appointed by study sponsors who provide independent assessment of the safety, scientific validity and integrity of clinical trials;
Drawdown Notice	shall have the meaning set forth in the Bonds Issue Agreements;
Equivalent Issuance	means the issuance of shares and/or securities exercisable into shares (excluding debt securities) for an amount at least equal to the amount of repayments under the Atlas Financing in accordance with article 5.1.8;
Event of Default	shall have the meaning set forth in the Bonds Issue Agreements;
Existing Indebtedness	shall have the meaning set forth under section 3(v);
Final Redemption Date	means the date on which all amounts due under the Issue Documents have been unconditionally and irrevocably paid and discharged in full;
Group	means the Issuer and any Subsidiary of the Issuer from time to time;
Indebtedness	means (i) any outstanding amount to be repaid pursuant to one or more credit facility agreements or the issue of bonds, notes, debentures, loan stock or any similar instrument, and (ii) the amount of any outstanding liability in respect of any guarantee for any of the items referred to in paragraph (i), it being understood that any amount calculated under this definition may only be counted once, even if an item may qualify under various paragraphs; for the avoidance of doubt, any debt instruments issued as part of a variable rate equity financing, including redeemable (or convertible) bonds with share subscription warrants attached shall not be considered as Indebtedness;
Intellectual Property	means all subsisting intellectual property rights owned by the Issuer (or Subsidiary) in any part of the world including patents and rights of a similar nature, applications for patents and such rights, divisions, prolongations, renewals, extensions, supplementary protection certificates and continuations of such applications for patents, registered and unregistered trademarks or trade names, registered and unregistered service marks, registered and unregistered designs, utility models (in each case for their full period and all extensions and renewals of them), applications for any of them and the right to apply for any of them in any part of the world, inventions, processes, software, formulae, technology (whether patentable or not) data, specifications, business or trade secrets, technical information, confidential information, know-how, business names, brand names, domain names, database rights, copyright and rights in the nature of database rights and copyright, design rights;

IP Pledge Agreement	means the pledge agreement entered into by the Issuer and Subscriber as of the date hereof in relation to the Issuer's Intellectual Property;
Issue	means the Bonds Issue and the issue of Warrants;
Issue Documents	means this Subscription Agreement, the Straight Bonds Issue Agreement, the Convertible Bonds Issue Agreement, the Terms and Conditions of the Warrants, each of the Security Documents, any document executed pursuant to any such document and any other document designated as such in writing by the Issuer and the Subscriber;
Issuer	means Biopthytis S.A., a limited company *(société anonyme)* incorporated under the laws of France, with a share capital of EUR 23,439,091.00 having its registered office at 14, avenue de l'Opéra – 75001 Paris, France, registered under single identification number 492 002 225 RCS Paris, listed on the Euronext Growth organized multilateral trading facility under ISIN code FR0012816825;
Market Capitalisation	means, as of any date of determination, an amount equal to (i) the total number of issued shares of the Issuer multiplied by (ii) the volume weighted average price per share of all shares of the Issuer traded on the Euronext Paris, as evidenced by the Euronext Paris market price data, on the day prior to such date;
Newly Generated IP	means any Intellectual Property rights of the same nature as those referred to in the IP Pledge Agreement, which the Issuer or any Subsidiary may become the owner of in any way whatsoever after the date of this Agreement;
Person	shall mean and include an individual, a partnership, a corporation, a business trust, a joint stock company, a limited liability company, an unincorporated association or other entity and any domestic or foreign national, state or local government, any political subdivision thereof, and any department, agency, authority or bureau of any of the foregoing;
Pledged Intellectual Property	means the Intellectual Property falling in the scope of the IP Pledge Agreement from time to time;
Security Documents	means the Business Pledge Agreement, the IP Pledge Agreement, and any document entered into by any person (including Subsidiaries) from time to time creating any Security Interest, directly or indirectly, for the obligations of the Issuer under this Subscription Agreement and ancillary documents at Subscriber's request;
Security Interest	means any mortgage, charge, assignment, pledge, lien, contractual right of set-off, hypothecation, encumbrance, priority or other security interest or any arrangement which has substantially the same commercial or substantive effect as the creation of security;
Straight Bonds	means the seven millions seven hundred fifty thousand (7,750,000) non-convertible bonds (*obligations* within the meaning assigned in article 213-5 of the French monetary and financial Code) to be issued by the Issuer under the Bonds Issue Agreement;
Straight Bonds Issue Agreement	shall have the meaning set forth under section 2.2;

Subscriber(s)	means Kreos Capital VI (UK) Limited any subsequent Person(s) entered in the securities register which the Issuer under this Agreement is required to maintain, as holder(s) of the Bonds;
Subsidiary	means, with respect to the Issuer, (i) Instituto Biophytis Do Brasil Serviços, Comercio, Importação E Exportação De Alimentos LTDA, a company registered under the laws of Brasil with a share capital of BRL 898.632, whose registered office is located at Av. Prof. Lineu Prestes N°2.242 Cidade Universitaria, na cidade de São Paulo, Estade de São Paulo, CEP 05508-000, Setor D, Bloco 4, CIETEC and registered under number CNPJ/MF 08.308.555/0001-07, (ii) Biophytis Inc., a company registered under the laws of the State of Delaware with a share capital of USD 1,000, whose registered office is located at Corpomax Inc, 2915 Ogletown Rd, NEWARK, DE 19713 and registered under number 5873213 and (iii) any other person which would come to be directly or indirectly controlled by or under direct or indirect control of the Issuer. For purpose of this definition, control shall have the meaning ascribed to "*contrôle*" under article L.233-3 of the French Commercial Code;
Tranche C Issuance	means the issuance by the Issuer of shares and/or securities convertible into shares (including debt securities) of a minimum amount of EUR 9,000,000, subscribed by cash payment;
Tranche D Issuance	means the issuance by the Issuer of shares and/or securities exercisable into shares (excluding debt securities) of a minimum amount of EUR 10,000,000, subscribed by cash payment;
Warrants	means the warrants *(bons de souscription d'action*) governed by the provisions of article 228-91 of the French commercial Code to be issued by Issuer and under the Warrants Issue Agreement.
Warrants Issue Agreement	means the warrants issue agreement entered into between the Issuer and Subscriber's Affiliate on the date hereof.

1.2 In this Subscription Agreement, except as otherwise provided or where clearly inconsistent in the light of the context:

(i) words importing the singular include the plural and *vice versa*;

(ii) words denoting gender include every gender;

(iii) words denoting persons include bodies corporate or unincorporate;

(iv) a section, clause, sub-clause or Schedule is to a section, clause, sub-clause or Schedule, as the case may be, of or to this Subscription Agreement;

(v) any provision of a statute shall be construed as a reference to that provision as amended, modified, re-enacted or extended from time to time;

(vi) words and expressions in the French language defined in the French Commercial Code (*Code de commerce*) or the French Monetary and Financial Code (*Code monétaire et financier*) as amended shall bear the same meanings herein, and

(vii) capitalised terms not defined herein shall have the meaning given to them in the Bonds Issue Agreement.

1.3 The headings in this Subscription Agreement are for ease of reference only and shall not affect the construction of this Agreement.

1.4 Should any conflicts occur between this Agreement and any of the Issue Documents, the Parties agree that this Subscription Agreement's provisions shall prevail.

2. Bonds Issue

2.1 Subject to the deliveries and the conditions precedent set forth in article 4 hereof, Issuer shall issue and Subscriber and Subscriber's Affiliate shall concurrently and respectively subscribe to (i) seven million seven hundred and fifty thousand (7,750,000) Straight Bonds and (ii) two million two hundred and fifty thousand (2,250,000) Convertible Bonds, for a total nominal amount of up to ten million Euros (EUR 10,000,000.00), with a par value of EUR 1.00 per Bond, in one single issue, covering several tranches as follows:

(i) A first tranche (the "**Tranche A**") for a total nominal amount of EUR 2,500,000.00 composed of (a) one million two hundred and fifty thousand (1,250,000) Straight Bonds and (b) one million two hundred and fifty thousand (1,250,000) Convertible Bonds, to be subscribed at Issuer's discretion subject to the conditions precedent set forth in article 3 below, in one or several drawdown(s) of no less than EUR 1,000,000.00 each at any time from and subject to the cumulative fulfilment or waiver by the Subscriber of such conditions prior to 31 December 2021.

(ii) A second tranche of Bonds ("**Tranche B**") for a total nominal amount of EUR 3,000,000.00, composed of (a) two million (2,000,000) Straight Bonds and (b) one million (1,000,000) Convertible Bonds, to be subscribed at Issuer's discretion, subject to the conditions precedent set forth in article 4 below, in one or several drawdown(s) of no less than EUR 1,000,000.00 each at any time from and subject to the cumulative fulfilment or waiver by the Subscriber of such conditions prior to 31 December 2021.

(iii) A third tranche of Bonds ("**Tranche C**") for a total nominal amount of EUR 2,500,000.00, composed of two million five hundred thousand (2,500,000) Straight Bonds to be subscribed at Issuer's discretion, subject to the conditions precedent set forth in article 4 below, in one or several drawdown(s) of no less than EUR 1,000,000.00 each, at any time from and subject to the cumulative fulfilment or waiver by the Subscriber of such conditions prior to 31 December 2021.

(iv) A fourth tranche of Bonds ("**Tranche D**") for a total nominal amount of EUR 2,000,000.00, composed of two million five hundred thousand (2,500,000) Straight Bonds to be subscribed at Issuer's discretion, subject to the conditions precedent set forth in article 4 below, in one or several drawdown(s) of no less than EUR 1,000,000.00 each, at any time from and subject to the cumulative fulfilment or waiver by the Subscriber of such conditions prior to 31 March 2022.

2.2 The issue of the Straight Bonds, their ranking, applicable interests and repayment schedules, and all relevant provisions shall be governed by a straight bonds issue agreement in the form of **Schedule 1** hereto (the "**Straight Bonds Issue Agreement**").

2.3 The issue of the Convertible Bonds, their ranking, applicable interests all relevant provisions shall be governed by a convertible bonds issue agreement in the form of **Schedule 2** hereto (the "**Convertible Bonds Issue Agreement**").

3. Completion of issuance of Tranche A

The effective subscription of Tranche A Bonds in accordance with the terms of the Bonds Issue Agreement will take place on the date of execution of this Subscription Agreement upon fulfilment of the last of the

following conditions and deliveries which are provided for to the sole benefit of the Subscriber (the "**Completion Date**"), who may waive them in writing, being specified that if such conditions and deliveries are not met and communicated, and not waived by the Subscriber, this Subscription Agreement will be terminated, without prejudice to any rights which have accrued to any Party prior to such termination and to the surviving provisions of this Subscription Agreement, and the Parties hereto will be released on this date from any commitment resulting herefrom except for those resulting from article 11 below:

(i) Approval by the Issuer's board of directors, in accordance with the provisions of article L.225-35 of the French commercial Code, of:

(a) the terms and conditions of the Bonds Issue Agreements in agreed form,

(b) the granting of the Security Interest created under the Security Documents in relation to the Bonds Issue and,

(c) the terms and conditions of the Security Documents in agreed form in accordance with the draft Security Documents in **Schedule 4** hereto, and

(d) the terms and conditions of the Warrants Issue Agreement in agreed form, in accordance with the draft Warrant Issue Agreement in **Schedule 3** hereto;

(ii) Execution by the Parties of the Bonds Issue Agreements, the Warrants Issue Agreement and the Security Documents;

(iii) Issuance of the Tranche A Bonds by the Issuer's chief executive officer (*directeur général*) in accordance with the terms and conditions of the Bonds Issue Agreements;

(iv) Issuance of Warrants by the Issuer's chief executive officer (*directeur général*) in accordance with the terms and conditions of the Warrants Issue Agreement,

(v) Confirmation by the Issuer that there is (and shall be on the funding date), no other external Indebtedness than the existing indebtedness (the "**Existing Indebtedness**") constituted of:

- Bond financing subscribed by Kreos Capital V (UK) Limited, a private limited company incorporated under the laws of England, having its registered office at 5th Floor, 25-28 Old Burlington Street, London W1S 3AN, United Kingdom, registered under identification number 09728300 ("**Kreos V (UK)**")under a venture loan agreement dated 10 September 2018 and the related Bonds Issue Agreement of 10 September 2018, being specified the amount outstanding in principal at the date hereof under such financing is EUR 1,360,015 (the "**Kreos V Financing**");

- Convertible bond financing subscribed by Atlas Special Opportunities LLC, an exempted company, having its registered office at Maples Corporate Services LTD, P.O.BOX 309, Ugland House, Grand Cayman, KY1 – 1104, Cayman Islands, under (a) an ORNANEs issuance and subscription agreement dated 5 April 2020 (as amended from time to time) and (b) an ORNANEs issuance and subscription agreement dated 14 June 2021 (the "**Atlas Financing**");

- Deeptech loan from BPIFrance Financement for an amount of EUR 980 000 for "*Etude clinique de phase 2A sur des patients sains vs patients atteints de DMLA pour prouver l'efficacité de la molécule BIO201*" dated June 28th 2019 ;

- Subsidy by BPIFrance Financement for an amount of EUR 228,782.82 for "*Développement Clinique d'un extrait de Quinoa actif sur le Syndrome Métabolique*";

- Subsidy by BPIFrance Financement for an amount of EUR 1,100,000 for "*Production des lots cliniques, phase préclinique réglementaire et Clinique de phase 1 de BIO101 pour le traitement de l'obésité sarcophénique*" dated November 30th 2016;

- Subsidy by BPIFrance Financement for an amount of EUR 260,000 for "Caractérisation in vitro, in vivo et pharmacocinétique d'un candidat medicament" dated December 4th 2015; and

- Seed participating loan OSEO for an amount of EUR 150,000 dated November 4th 2008.

(vi) Confirmation by the Issuer that no Event of Default has occurred or is continuing (or will be continuing on the funding date);

(vii) The Issuer having served a first Drawdown Notice fifteen (15) days before the requested subscription and funding date;

(viii) As at the date of such Drawdown notice the Debt to Market Capitalisation Ratio not being higher than twelve point five percent (12.5%), and

(ix) Such Drawdown Notice requesting the subscription of 50% of the drawn amount in Straight Bonds and 50% of the drawn amount in Convertible Bonds.

4. Conditions Precedent to the issuance of Tranche B, Tranche C and Tranche D

The Subscriber's commitment to subscribe to the Bonds under Tranche B, Tranche C or Tranche D (at Issuer's discretion) shall be subject to the following conditions, all of which are provided for to the sole benefit of the Subscriber who may waive them in writing before the end of the relevant availability period:

(i) The actual full drawdown by the Issuer of Tranche A;

(ii) The absence on the date of the Drawdown Notice in accordance with the Bonds Issue Agreement of a continuing Event of Default (within the meaning assigned in the Bonds Issue Agreement) under any already drawn Tranche,

(iii) Unless otherwise agreed between the Parties in order to shorten such notice period, the Issuer having served a Drawdown Notice thirty (30) days before the requested subscription and funding date, which will not be later than the expiry date of the availability of such Tranche as set forth in the relevant paragraph of clause 2.1,

(iv) As at the date of such Drawdown notice the Debt to Market Capitalisation Ratio not being higher than twelve point five percent (12.5%)

(v) Such drawdown notice requesting the subscription, of:

- As regards Tranche B: two thirds of the drawn amount in Straight Bonds and one third of the drawn amount in Convertible Bonds, and

- As regards Tranche C and D: Straight Bonds only.

(vi) Additional specific conditions

- Tranche B: Issuer getting positive Part 2 interim analysis results on COVA Trial as defined by recommendation from DMC to continue the COVA Trial;

- Tranche C: Issuer completing a Tranche C Issuance;

- Tranche D: Issuer completing a Tranche D Issuance,

It being specified that the Issuer can draw each Tranche (B, C or D) when the conditions necessary for drawing such Tranche are met, independently of the drawing of the other Tranches (B, C or D as the case may be).

5. Commitments

5.1 The Issuer undertakes with the Subscriber that, from the date of this Subscription Agreement and for so long as any amount is or may be outstanding under this Subscription Agreement, and except with the prior written consent of the Subscriber, it shall:

5.1.1 Authorisations

obtain, maintain in force and effect and comply in all material respects with the terms of all authorisations, approvals, licences, exemptions, notarisations and consents required in or by any applicable laws and regulations in connection with its business;

5.1.2 Litigation

promptly upon becoming aware of them, deliver to the Subscriber details of any material litigation, arbitration or administrative proceedings which are current or pending, and which can reasonably be considered as likely to, if adversely determined, have a Material Adverse Effect (as defined in the Bonds Issue Agreement); or result in a cost or liability for the Issuer of more than EUR 200,000;

5.1.3 Events of Default

promptly inform the Subscriber of the occurrence of any Event of Default (within the meaning assigned in the Bonds Issue Agreement) and, upon receipt of a written request to that effect from the Subscriber, confirm to the Subscriber that, save as previously notified to the Subscriber or as notified in that confirmation, no such event has occurred;

5.1.4 Negative pledge

without prejudice to the Security Documents and save as otherwise authorized in such Security Documents, not:

(i) create, purport to create or allow to subsist, any Security Interest over the whole or any part of the Pledged Intellectual Property Rights (or any other charged asset) other than in the ordinary course of business; or

(ii) permit or agree to any variation of the rights attaching to the whole or any part of any asset affected by a Security Interest other than the Business Pledge Agreement; or

(iii) convey, assign, transfer, or agree to convey, assign or transfer the whole or any part of the any asset affected by a Security Interest other than the Business Pledge Agreement; or

(iv) while any amount is outstanding in relation to this Subscription Agreement, pledge or dispose in any other way, without Subscriber's prior written consent or as authorised in the Security Documents, of all or part of the Intellectual Property rights other than the Pledged Intellectual Property rights. It being specified that a breach of such commitment shall be an Event of Default (within the meaning assigned in the Bonds Issue Agreement) and shall entitle Subscriber to recover all outstanding amounts under this Subscription Agreement and ancillary documents.

In the event the conditions to the release of the Security Interest as set forth in clause 13.4 of the Business Pledge Agreement would not be met, the Subscriber and Issuer will negotiate in good faith alternative solutions to preserve both the Subscriber's global level of Security Interest and the Issuer's commercial attractivity.

5.1.5 Distribution of dividends

So long as any amount is or may be outstanding under this Subscription Agreement and ancillary documents, Issuer shall refrain from distributing any dividends or any other amounts eligible under French corporate law without the prior formal consent of Kreos in writing.

5.1.6 Insurance

So long as any amount is or may be outstanding under this Subscription Agreement, the Issuer shall obtain and maintain at its own expense insurance cover in relation to its business and assets of a type and in an amount as is usual for prudent companies its size carrying on a business such as that carried on by it.

5.1.7 Indebtedness

Unless otherwise expressly authorised by Subscriber and other than the Existing Indebtedness, not to incur any new Indebtedness, with the exception of the following:

(i) Indebtedness up to EUR 100,000 incurred in the normal course of business (or with the prior written approval of the Borrower) provided it is unsecured and subordinated to the Bonds in all respects,

(ii) Any unsecured Indebtedness granted by public agencies (BPI France and alike) incurred for the purposes of financing research and development which shall be considered as incurred in the normal course of business, provided they are unsecured and expressly subordinated to the Bonds and Warrants in all respects, and, more generally, that relevant agreements contain usual provisions in such matters and do not adversely affect the position of the Subscriber as a creditor, and

(iii) Indebtedness resulting from a sale and lease back arrangement on real estate property, or on labs and offices equipment.

5.1.8 Subordination

Unless otherwise expressly authorised by Subscriber, not to enter into any Indebtedness senior to any rights and interests created by (i) this Agreement, and (ii) the Bonds Issue Agreements.

Notwithstanding the foregoing, the Parties expressly agree that the Issuer shall be permitted to make repayments under any agreement forming part of the Atlas Financing, subject to :

(i) the Issuer notifying the Subscriber of its intent to make a repayment to Atlas prior to such repayment ;

(ii) any repayment shall be capped at € 4,000,000.00;

(iii) following the proposed repayment, the Issuer has a cash and cash equivalents balance equal to minimum the aggregate amounts due under the Subscription Agreement and the Bonds Issue Agreements and the Kreos V Financing, and

(iv) if the Issuer does not complete an Equivalent Issuance within three (3) months following the repayment, then it shall be required to call another tranche of the equivalent amount under the Atlas Financing within fifteen (15) days.

5.2 The Issuer further undertakes that, from the date of this Subscription Agreement and for so long as any amount is or may be outstanding under this Subscription Agreement, the Subscriber will have the right to:

(i) receive all information sent to the board and board members of the Issuer at the same time as the board members;

(ii) monthly financial information, cash flow projections and creditor and debtor balances;

(iii) meet with the chief executive officer and/or the chief financial officer on a quarterly basis, at dates to be mutually and reasonably agreed, to discuss business performance, clinical progress, financing and wider strategy;

(iv) receive annual audited consolidated financial statements within 180 days of year-end or, if sooner, at the same time they are provided to any investor in the Issuer;

(v) receive annual operating, budgets and rolling cash projections (and revisions thereto) within 10 days of board approval;

(vi) in the event of occurrence of an Event of Default, have a representative to attend as an observer at the Issuer's board meetings.

Subscriber acknowledges that, as a consequence, from the date of this Subscription Agreement, it will be listed as a permanent insider with respect to Issuer.

5.3 Until the Final Redemption Date, and for the first time on 30 June 2022, the Issuer and the Subscriber shall conduct a yearly review, between 1 July and 31 July, of the Newly Generated IP based on the Issuer's activity and financial position. To the extent that, upon completion of such yearly review, the Subscriber, acting reasonably and in good faith, determines that the value of the Pledged Intellectual Property is inferior to the Issuer's then outstanding debt to the Subscriber under the Bonds Issue, the Issuer and the Subscriber shall jointly determine in good faith which Newly Generated IP rights to include in the scope of the IP Pledge Agreement in accordance with the provisions of section 4(c) of such agreement in order to compensate for such decrease.

In the event of a dispute between the Issuer and the Subscriber in connection with the outcome of such review and/or grant of a pledge over Newly Generated IP, it will be resolved in accordance with the expertise process set forth in the provisions of section 17 of the IP Pledge agreement.

6. Representations and warranties

The Issuer makes the representations and warranties in clause 6.1 to clause 6.14 on the date of this Agreement, and, where applicable, on each Interest Payment Date (as defined in the Bonds Issue Agreement), by reference to the facts and circumstances existing on each such date. The Issuer acknowledges that the Subscriber has subscribed the Bonds and Warrants in reliance to those representations and warranties.

6.1 Due incorporation

(i) It is a duly incorporated limited liability company validly existing under the law of its jurisdiction of incorporation; and

(ii) It has the power to own its assets and carry on its business as it is being conducted.

6.2 Powers

It has the power and authority to execute, deliver and perform its obligations under the Issue Document and the transactions contemplated by them.

6.3 Non-contravention

The execution, delivery and performance of the obligations in, and transactions contemplated by, the Issue Document to which it is a party do not and will not contravene or conflict with:

(i) its constitutional documents;

(ii) any agreement or instrument binding on it or constitute a default or termination event (however described) under any such agreement or instrument; or

(iii) to the knowledge of the Issuer, any law or regulation or judicial or official order, applicable to it.

6.4 Authorisations

It has taken all necessary action and obtained all required or desirable authorisations to enable it to execute, deliver and perform its obligations under the Issue Documents and the transactions contemplated by them and to make them admissible in evidence in its jurisdiction of incorporation. Any such authorisations are in full force and effect.

6.5 Binding obligations

(i) its obligations under the Issue Document to which it is a party are legal, valid, binding and enforceable; and

(ii) the Security Documents create (or, once entered into, will create) valid, legally binding and enforceable Security Interests for the obligations expressed to be secured by them.

6.6 Choice of law

The choice of governing law of the Issue Documents will be recognised and enforced in its relevant jurisdictions.

Any judgement obtained in relation to an Issue Document in the jurisdiction of the governing law of that Issue Document will be recognised and enforced in its relevant jurisdictions.

6.7 No default

No Event of Default has occurred or is continuing.

6.8 Information

The information, in written or electronic format, supplied to the Subscriber by the Issuer or on its behalf in connection with the Issue and the Issue Document was, at the time it was supplied or at the date it was stated to be given (as the case may be):

(i) if it was factual information true and accurate in all material respects; and

(ii) not misleading in any material respect, nor rendered misleading by a failure to disclose other information,

except to the extent that it was amended, superseded or updated by more recent information supplied to the Subscriber by the Issuer or on its behalf.

6.9 Financial statements

Each set of financial statements delivered to the Subscriber in respect of the Issuer was prepared in accordance with standards and practices generally accepted in its jurisdiction of incorporation and gives a true and fair view of (if audited) or fairly represents (if unaudited) its financial condition and operations during the relevant accounting period and was approved by its directors in compliance with applicable laws.

6.10 No material adverse change

There has been no material adverse change in the business, assets, financial condition or trading position of the Issuer since the date of this agreement.

6.11 No litigation

No litigation, arbitration or administrative proceedings are taking place, pending or, to the Issuer knowledge, threatened against the Issuer, any of its directors or any of its assets, which, is likely to be adversely determined and if adversely determined, might reasonably be expected to have a Material Adverse Effect (as defined in the Bonds Issue Agreement).

6.12 Pari passu

Its payment obligations under the Issue Documents rank at least *pari passu* with all existing and future unsecured and unsubordinated obligations (including contingent obligations), except for those mandatorily preferred by law applying to companies generally.

6.13 Ownership of material assets

It is the legal and beneficial owner of, and has valid a title to, all its material assets and no Security Interest exists over its assets except for the security created by the Security Documents.

6.14 Centre of main interests and establishments

For the purposes of Council Regulation 1346/2000 on insolvency proceedings (Insolvency Regulation), its "centre of main interests" (as that term is used in article 3(1) of the Insolvency Regulation) is its jurisdiction of incorporation.

7. Remedies and waivers

7.1 No failure, delay or other relaxation or indulgence on the part of the Subscriber to exercise any power, right or remedy shall operate as a waiver thereof nor shall any single or partial exercise or waiver of any power, right or remedy preclude its further exercise or the exercise of any other power, right or remedy.

7.2 All rights of the Subscriber contained in this Subscription Agreement are in addition to all rights vested or to be vested in it pursuant to the other Issue Documents, common law or statute.

7.3 Each Party hereby acknowledges that the provisions of article 1195 of the French Code civil shall not apply to it with respect to its obligations under the Issue Documents and that it shall not be entitled to make any claim under article 1195 of the French Code civil.

8. Severability

Each of the provisions of this Subscription Agreement is severable and distinct from the others and if at any time one or more of such provisions is or becomes invalid, illegal or unenforceable the validity, legality and enforceability of the remaining provisions hereof shall not in any way be affected or impaired thereby.

9. Notices

9.1 All notices, demands or other communications under or in connection with this Subscription Agreement may be given by letter, facsimile or other comparable means of communication addressed to the person at the address identified with its signature below.

To Issuer:

Biophytis S.A.
A l'attention de Monsieur Stanislas Veillet
Président Directeur Général
and Madame Evelyne Nguyen
Directeur administratif et financier
14, avenue de l'Opera
75001 Paris

E-mail: stanislas.veillet@biophytis.com and
evelyne.nguyen@biophytis.com
With copy (for information purposes) to:

Monsieur Marc Fredj
Avocat associé
Reed Smith LLP
112, avenue Kléber
75116 Paris

E-mail: mfredj@reedsmith.com
Fax: 01.76.70.41.19

To Subscriber:

Kreos Capital V (UK) Ltd.
To the attention of Mr. Maurizio Petitbon
5th Floor, 25-28 Old Burlington Street
London W1S 3AN
United Kingdom

Email: maurizio@kreoscapital.com
Fax: +44 20 7409 1034

With copy (for information purposes) to:

Monsieur Laurent Cavallier
Avocat associé
Reinhart Marville Torre
58, avenue Kleber
75116 Paris

E-mail: cavallier@rmt.fr

Fax: +33 (0)1 53 96 04 20

To Subscriber's Affiliate:

Kreos Capital VI (Expert Fund) L.P.
To the attention of Mr. Michael Johnson
47 Esplanade
St Helier, JE1 0BD
Jersey

Email: michael.johnson@crestbridge.com
Fax: +44 20 7409 1034

With copy (for information purposes) to:

Monsieur Laurent Cavallier
Avocat associé
Reinhart Marville Torre
58, avenue Kleber
75116 Paris

E-mail: cavallier@rmt.fr
Fax: +33 (0)1 53 96 04 20

9.2 Any such communication will be deemed to be given as follows:

(i) if personally delivered, at the time of delivery, as documented by a receipt;

(ii) if by letter, on the date entered by the addressee on the receipt in the case of delivery by hand or on the date when delivery is first attempted in the case of a recorded delivery letter with acknowledgement of receipt; and

(iii) if by email transmission or comparable means of communication during the business hours of the addressee then on the day of transmission, otherwise on the next following Business Day.

9.3 In proving such service it shall be sufficient to prove that personal delivery was made or that such letter was properly stamped first class, addressed and delivered to the postal authorities or in the case of email transmission or other comparable means of communication that a confirming hard copy was provided promptly after transmission.

10. Fees and expenses

10.1 On Completion Date, Issuer shall pay a transaction fee equal to [****] per cent ([****] %) of the global amount of the Bonds Issue, i.e. EUR [****] to be paid respectively to Subscriber up to an amount equal to EUR [****] and Subscriber's Affiliate up to EUR [****] Subscriber and Subscriber's Affiliate may set off such fee against the subscription price of Tranche A.

10.2 The Issuer will cover its own legal costs and all Subscriber's reasonable legal costs relating to the negotiation, preparation and execution of the Subscription Agreement, Issue Documents and ancillary documents and the completion of the transactions in connection therewith, up to an amount of EUR [****] (excluding VAT and costs). The Issuer will be responsible for all expenses in connection with the security including taxes assessments, insurance premiums, all costs of operation, repair and maintenance of equipment and other assets used as security and any fees and taxes relating to security filings.

10.3 The Issuer shall pay all stamp, documentary, registration and other like duties or taxes to which this Subscription Agreement, or any judgment given in connection with this Subscription Agreement is or at any time may be subject and shall, from time to time on demand of the Subscriber, forthwith indemnify the

Subscriber against any liabilities, costs, claims and expenses reasonably incurred as a result of any failure to pay or any delay in paying any such amounts

10.4 At each Discharge Date (within the meaning of the Bonds Issue Agreement) and at the Repayment Date (within the meaning of the Convertible Bonds Issue Agreement), or at the effective date of termination or expiry of the Issue Documents, the Issuer shall pay an additional sum equal to [****] per cent ([****] %) of an amount equal to (i) the amounts drawn down under the relevant Tranche (or the cumulated drawn Tranches in case of a termination or expiry of the Issue Documents) less (ii) the amount of any Convertible Bonds converted by the Subscriber's Affiliate prior to such date, to be allocated between Subscriber and Subscriber's Affiliate in proportion to their respective share of each drawdown.

10.5 All fees and expenses payable pursuant to this article are excluding VAT and shall be paid together with VAT (if any) properly chargeable thereon.

10.6 From the Final Redemption Date, the Subscriber shall promptly release all its Security Interest.

11. Law and jurisdiction

11.1 This Subscription Agreement is governed by and shall be construed in accordance with French law.

11.2 Any dispute concerning the validity, interpretation or performance of this Subscription Agreement will be submitted to the *Tribunal de commerce* (commercial court) of Paris.

/s/ Stanislas Veillet
Biophytis S.A.
Mr. Stanislas Veillet

/s/ Maurizio Petibon
Kreos Capital VI (UK) Limited
Mr. Maurizio Petitbon

/s/ Michael Johnson
Kreos Capital VI (Expert Fund) L.P.
Mr. Michael Johnson

Schedule 1

Straight Bonds Issue Agreement

Schedule 2

Convertible Bonds Issue Agreement

Schedule 3

Warrants Issue Agreement

Schedule 4

Security Documents

Exhibit 4.42

BONDS ISSUE AGREEMENT

By and between

Biophytis S.A.
as Issuer

and

Kreos Capital VI (UK) LTD.

as Subscriber

19 November 2021

reinhartmarvilletorre
SOCIÉTÉ D'AVOCATS
58, avenue Kléber - 75116 Paris T. +33 1 53 53 44 44 F. +33 1 53 96 04 20
Toque K30 . SELARL au capital de 480 000 euros . RCS Paris B 393 584 347

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Bonds Issue Agreement

This agreement (hereinafter referred to as the "**Agreement**") is entered into on 19 November 2021, by and between:

1. **Biopthytis S.A.**, a limited company *(société anonyme)* incorporated under the laws of France, with a share capital of EUR 25,814,647 having its registered office at 14, avenue de l'Opéra – 75001 Paris, France, registered under single identification number 492 002 225 RCS Paris, listed on the Euronext Growth organized multilateral trading facility under ISIN code FR0012816825, represented by Mr. Stanislas Veillet, in his capacity of chief executive officer (*Président Directeur Général*);

(hereinafter referred to as the "**Issuer**")

ON THE FIRST PART

AND

2. **Kreos Capital VI (UK) Limited**, a private limited company incorporated under the laws of England, having its registered office at 5th Floor, 25-28 Old Burlington Street, London W1S 3AN, United Kingdom, registered under identification number 11535385, represented by Mr. Maurizio Petitbon, duly authorised for the purposes hereof;

(hereinafter referred to as the "**Subscriber**" or "**Kreos**")

ON THE SECOND PART

Issuer and Subscriber being hereinafter referred to individually as a "**Party**" and collectively as the "**Parties**".

Whereas

(A) The Subscriber is a growth debt provider, the business of which consists in making investments in high technology and life science companies throughout Europe.

(B) The Issuer is a French *société anonyme*, created in 2006, specializing in creating drugs to treat degenerative illnesses associated with aging for which no treatment is available to date. Its most advances programmes relate to sarcopenia (loss of muscle functionality) and age-related macular degeneration (armd).

(C) In order to provide the Issuer with additional financial resources to fund its activities and pursue the development of its technology, the Subscriber and Kreos Capital VI (Expert Fund) L.P., a limited partnership incorporated under the laws of Jersey, having its registered office at 47 Esplanade, St Helier, JE1 0BD, Jersey, registered with the JFSC Companies Registry under identification number 2770, have respectively agreed to subscribe to straight bonds (*obligations simples*) (the "**Bonds**") and convertible bonds (*obligations convertibles*) to be issued by the Issuer for a cumulated nominal amount of up to ten million euros (EUR 10,000,000.00) (the "**Issue**") subject to and upon the terms and conditions of the subscription agreement entered into between the Subscriber, Kreos Capital VI (Expert Fund) L.P. and the Issuer on the date hereof (hereinafter referred to as the "**Subscription Agreement**").

(D) The Parties have agreed upon the terms and conditions of the issue of Bonds as set forth herein, being specified that on 19 October, 2021 the Issuer's board of directors (*Conseil d'administration*) (hereinafter referred to as the "**Board of Directors**") approved the terms of this Agreement and delegated its authority to the chief executive officer (*Directeur Général*) to execute this Agreement.

NOW, THEREFORE, IT HAS BEEN AGREED AS FOLLOWS:

1. Definitions and interpretation

1.1 In this Agreement, unless the context otherwise specifically provides, the following expressions shall have the following meanings:

Affiliate	means: (i) when used with reference to a specified entity, any other entity controlling, that is controlled by, or is under common control with, such specified entity; for the purpose of this definition, control has the meaning set forth in article L. 233-3 of the French Commercial Code (Code de commerce); or (ii) any investment entity (Fund or other) which is controlled or managed by the same management company (or a subsidiary, a parent company or a subsidiary of the parent company) as the management company that manages or advises the relevant Investor (if such Investor is also an investment entity);
Agreement	shall have the meaning set forth in the preamble;
Board of Directors	has the meaning assigned in section (D) of the preamble hereof;
Bondholder	means the Subscriber, any transferee and any subsequent Person(s) entered in the securities register which the Issuer under this Agreement is required to maintain, as holder(s) of the Bonds and as may be represented by the Bondholders' Representative;
Bondholders' Representative	means (i) if all outstanding Bonds are held by a single Bondholder, regardless of whether a person or a company, that relevant Bondholder which shall personally exercise all the rights of the Bondholders' Representative that may be attributed to the Bondholders' Representative (*représentant de la masse*) by applicable statutory provisions and this Agreement or (ii) if all outstanding Bonds are held by more than one (1) Bondholder, any entity appointed by a general meeting of the Bondholders forming a single "*masse*", held for that purpose or otherwise in accordance with the provisions of the French *Code de commerce* (it being specified that such decision shall be notified by the Bondholders' Representative to the Issuer and the Bondholders by registered mail without any requirement to publish the decision with a *journal d'annonces légales* or the *Bulletin d'annonces légales Obligatoires*).

Bonds	means the non-convertible bonds (*obligations* within the meaning assigned in article L. 213-5 of the French Monetary and Financial Code) issued in Euros by the chief executive officer (*Directeur Général*) of the Issuer in accordance with this Agreement, being specified, for the sake of clarity, that "Bonds" under this Agreement shall have the same meaning as "Straight Bonds" under the Subscription Agreement;
Business Day	means a day (excepting Saturdays and Sundays) on which banks operate in Paris;
Change of Control	means the de-listing of the Issuer;
Discharge Date	means with respect to any drawdown under any Tranche, the 36th Repayment Date (or such date of actual early payment in case of a Prepayment or acceleration of the Bonds or more generally such earlier date or dates as the same shall become repayable in accordance with this Agreement and/or the Subscription Agreement);
Drawdown Date	means with respect to any Tranche, the day on which the Bonds are subscribed and paid up by the Subscriber;
Drawdown Notice	means a notice issued in the form of the Appendix 1 from Issuer requesting Subscriber to subscribe to Bonds in accordance with this Agreement;
Event of Default	means any of those events set out in Article 9 (Events of Default);
Final Redemption Date	means the date on which all amounts due under the Issue Documents have been unconditionally and irrevocably paid and discharged in full;
First Interest Payment Date	means with respect to any Tranche, the first Business Day of a calendar month being or following Drawdown Date;
Fund	means any regulated fund, investment firm or company, the management of which is taken care of by professional managers (including but not limited to FCPR, FCPI, FPCI, FPS, FIP, SCR, SLP and partnerships);
Group	means the Issuer and any Subsidiary of the Issuer from time to time;
Interest Payment	means interest payments due by the Issuer to the Subscriber pursuant to this Agreement;
Interest Payment Date	means with respect to any drawdown under any Tranche, the First Interest Payment Date, and then the first Business Day of each subsequent calendar month;
Issue	has the meaning ascribed to it in section (C) of the preamble hereof;
Issue Documents	has the meaning ascribed to this term in the Subscription Agreement;
Majority Bondholders	means, at any time, one or several Bondholders (whether present or represented) that hold at least 66⅔ per cent of the voting rights capable of being cast in Bondholders' general meetings.

Material Adverse Effect	means a material adverse effect on either the business / or the operations of the Issuer, and its ability to comply with any of its payment obligations under the Agreement;
M&A Process	means any contemplated transaction for the sale of substantially all of the assets, the sale or exchange of the majority of the share capital of the Issuer or the merger of the Issuer into another company;
Paying Agent	means, (i) if all outstanding Bonds are held by a single Bondholder, regardless of whether a person or a company, that relevant Bondholder or (ii) if all outstanding Bonds are held by more than one (1) Bondholder, any entity appointed by a general meeting of the Bondholders forming a single "*masse*", held for that purpose;
Person	shall mean and include an individual, a partnership, a corporation, a business trust, a joint stock company, a limited liability company, an unincorporated association or other entity and any domestic or foreign national, state or local government, any political subdivision thereof, and any department, agency, authority or bureau of any of the foregoing;
Prepayment	has the meaning ascribed to it in Article 6.3;
Register	has the meaning ascribed to it in Article 10.2;
Repayment Date	means with respect to any drawdown under any Tranche, for the first time, 1 April 2022 and then the 35 subsequent Interest Payment Dates (or the date of any Prepayment or acceleration of the Bonds or more generally such earlier date or dates as the same shall become repayable in accordance with this Agreement and/or the Subscription Agreement);
Security Documents	means any document entered into by any Person (including subsidiaries, if any) from time to time creating any Security Interest, directly or indirectly, for the obligations of the Issuer under the Subscription Agreement;
Security Interest	means any mortgage, charge, assignment, pledge, lien, hypothecation, encumbrance, priority or other security interest or any arrangement which has substantially the same commercial or substantive effect as the creation of security (except financial lease, "*location financière*" and capital lease "*crédit-bail*" unless as part of a lease-back agreement);
Subscriber(s)	means Kreos Capital VI (UK) Limited;
Subsidiary	means any person which would come to be directly or indirectly controlled by or under direct or indirect control of the Issuer. For purpose of this definition, control shall have the meaning ascribed to "*contrôle*" under article L.233-3 of the French Commercial Code*);*
Tax Deduction	has the meaning ascribed to it in Article 7.3;
Tranche(s)	means (i) individually Tranche A, B, C or D and (ii) collectively Tranches A and/or B; C, or D;

Tranche A	has the meaning ascribed to it in Article 2.2;
Tranche B	has the meaning ascribed to it in Article 2.3;
Tranche C	has the meaning ascribed to it in Article 2.4;
Tranche D	has the meaning ascribed to it in Article 2.5;

1.2 In this Agreement, except as otherwise provided or where clearly inconsistent in the light of the context:

(i) words importing the singular include the plural and *vice versa*;

(ii) words denoting gender include every gender;

(iii) words denoting persons include bodies corporate or unincorporate;

(iv) a section, clause, sub-clause or Appendix is to a section, clause, sub-clause or Appendix, as the case may be, of or to this Bonds Issue Agreement;

(v) any provision of a statute shall be construed as a reference to that provision as amended, modified, re-enacted or extended from time to time;

(vi) words and expressions in the French language defined in the French Commercial Code (*Code de commerce*) or the French Monetary and Financial Code (*Code monétaire et financier*) as amended shall bear the same meanings herein, and

(vii) capitalised terms not defined herein shall have the meaning given to them in the Subscription Agreement.

1.3 The headings in this Agreement are for ease of reference only and shall not affect the construction of this Agreement.

1.4 Should any conflicts occur between this Agreement and the Subscription Agreement or any of the Issue Documents entered into between the parties, the Parties agree that the Subscription Agreement's provisions shall prevail.

2. Issue of the Bonds and subscription

2.1 On or prior to the date of this Agreement, in accordance with the provisions of article L. 228-40 of the French Commercial Code (*Code de commerce*), the Board of Directors authorized the issuance by the Issuer of up to seven million seven hundred and fifty thousand (7.750,000) Bonds of a nominal value of EUR 1.00 each in registered form, exclusively reserved to the Subscriber, to be subscribed in four Tranches. The Bonds which will be issued by the Company constitute securities that confer certain rights within the meaning of article L. 213-5 of the French Monetary and Financial Code (*Code monétaire et financier*) to the Subscriber (and to any subsequent Bondholder) as from their subscription.

2.2 Tranche A

Subscriber will subscribe to a first tranche ("**Tranche A**") of a maximum of one million two hundred and fifty thousand (1,250,000,000) Bonds in one or several drawdown(s) of no less than EUR 500,000.00, subject to the conditions precedent set forth in Article 3 of the Subscription Agreement, pursuant to a Drawdown Notice in accordance with the template attached as **Appendix 1** hereto.

2.3 Tranche B

Subscriber (or any of its Affiliates) will subscribe to a second tranche ("**Tranche B**") of a maximum of two million (2,000,000,000) Bonds in one in one or several drawdown(s) of no less than EUR 666,667.00 subject to the conditions precedent set forth in Article 4 of the Subscription Agreement, pursuant to a Drawdown Notice in accordance with the template attached as **Appendix 1** hereto.

2.4 Tranche C

Subscriber will subscribe to a third tranche ("**Tranche C**") of a maximum of two million five hundred thousand (2,500,000,000) Bonds in one or several drawdown(s) of no less than EUR 1,000,000.00, subject to the conditions precedent set forth in Article 4 of the Subscription Agreement, pursuant to a Drawdown Notice in accordance with the template attached as **Appendix 1** hereto.

2.5 Tranche D

Subscriber will subscribe to a fourth tranche ("**Tranche D**") of a maximum of two million (2,000,000,000) Bonds in one or several drawdown(s) of no less than EUR 1,000,000.00, subject to the conditions precedent set forth in Article 4 of the Subscription Agreement, pursuant to a Drawdown Notice in accordance with the template attached as **Appendix 1** hereto.

2.6 Subscription of the Bonds will be wholly paid up by the Subscriber (or any of its Affiliates), by bank transfer, to the following Issuer's account (or any other bank account as notified to the Subscriber in a Drawdown Notice):

Bank Name:	Banque Neuflize OBC - 3, avenue Hoche, 75008 Paris, France
Account Name:	Biophytis SA
IBAN:	FR76 3078 8001 0008 7421 1000 162
SWIFT:	NSMBFRPPXXX

Concurrently with such transfer, the Subscriber shall send to the Issuer a subscription form substantially in accordance with the template attached as **Appendix 2** hereto.

3. Purpose of the Issue

3.1 The Issuer shall use the proceeds of Tranche A and Tranche B to provide the Issuer with additional financial resources to fund its activities and pursue the development of its technology, and agrees that it will not use the whole or any part of the proceeds of the Issue in contravention of any applicable law.

3.2 Without prejudice to the above, the Subscriber shall not be under any obligation to monitor the use of the proceeds of the Issue.

4. Ranking

Each of the Bonds shall rank *pari passu* equally and rateably *inter se* and with the Convertible Bonds without any discrimination or preference and as direct, unconditional (subject to condition 3(i) of the Subscription Agreement), unsubordinated obligations (subject to such exceptions as are mandatory from time to time under French law), secured as set out in the Security Documents, being expressly specified that any obligations and liabilities of the Issuer under this Agreement shall fall in the scope of secured obligations (*obligations garanties*) as defined in the Security Documents, and that any existing loans between the Issuer and any Subsidiary (as defined in the Subscription Agreement) will be subordinated to and rank after the rights and interests created by the Issuer in favour of the Bondholder(s) under the Issue Documents.

5. Interest

5.1 Interest on each drawdown under each Tranche shall accrue on the principal moneys outstanding on the relevant Bonds at a fixed interest rate of ten per cent (10.00 %) per annum, payable in cash, in a number of instalments equal to thirty six, increased by the number of Interest Payment Dates elapsed between the First Interest Payment Date and 31 March 2022, as set out in the payment schedule attached as **Appendix 5.1**, commencing with fixed interest payments until 31 March 2022, and followed by thirty six (36) decreasing interest payments based on a 3.2001 % repayment rate on the outstanding nominal and interest, as set out in column 8 (Interest) of the payment schedule attached as **Appendix 5.1**.

5.2 In the event any amount is drawn prior to the first day of any month, interest shall accrue on moneys outstanding as of their effective transfer date to Issuer until the First Interest Payment Date (on the basis of a daily 1/30th of the monthly fixed interest payment set out in Article 5.1). The Issuer expressly acknowledges that, on the relevant date of effective transfer of the funds, such amount shall constitute a due and payable receivable of the Subscriber toward the Issuer, and shall be paid by set-off with the funds to be transferred by Subscriber to Issuer.

5.3 To the extent interest is not paid for at least one (1) year on any Interest Payment Date, further interest shall accrue on any such interest not so paid in accordance with article 1343-2 of the French Civil Code (*Code civil*) at the rate specified in Article 5.6 hereunder. Interest shall be calculated on the basis of a three hundred and sixty-five (365) day year and shall be deemed to accrue on the Bonds from day to day.

5.4 Each interest payment shall be made to the Paying Agent (for the account of the Bondholders), on each Interest Payment Date before 11:00 AM CET, and the Bondholder(s) shall be deemed, for the purposes of this Agreement, to be the holder(s), on such date for payment of interest, of the Bonds held by it (them) on such preceding date notwithstanding any intermediate transfer or transmission of any such Bonds.

5.5 Interest on the principal moneys outstanding on any Bonds becoming repayable pursuant to any provision hereof shall cease to accrue as from the due date for repayment of such principal moneys unless repayment of any such principal moneys and/or payment of any such interest is not effected in which event interest shall continue to accrue at the rate specified in Article 5.6 on the amount which remains unpaid until actual payment in full of such principal moneys and interest is made.

5.6 Should the Issuer fail to pay any outstanding nominal amount (including the amount payable by Issuer under article 10.4 of the Subscription Agreement) on its due date for payment under this Agreement, the Issuer shall pay interest on such sum from the due date up to the date of actual payment (as well after as before judgment) at a rate which shall be the aggregate of (a) 300 basis points per annum (3.00 percent per annum), and (b) the interest rate set out under Article 5.1 above.

6. Repayment, purchase and cancellation

6.1 The Issuer shall repay the Bonds drawn pursuant to a Drawdown Notice at their principal amount on a monthly basis, in thirty-six (36) increasing repayments commencing on 1 April 2022, being specified that each instalment is due in advance, on each Repayment Date in accordance with the payment schedule attached as **Appendix 5.1**, the last actual repayment from the Issuer having to occur on the 35th Repayment Date as an effect of Article 6.5.

6.2 The repayments shall be made net to the Paying Agent (for the account of the Bondholders) pursuant to Article 7.

6.3 The Issuer shall have the right, at any time subject to a thirty (30) days prior notice to Subscriber, to prepay or purchase the Bonds, exclusively in whole and concurrently with the Convertible Bonds (a "**Prepayment**"). The Prepayment shall be equal to the aggregate undiscounted principal outstanding amount with respect to

the Convertible Bonds and the Bonds, plus any fees payable under the Subscription Agreement, plus the sum of future interest repayments discounted by ten percent (10.00%).

The Prepayment notice may be served any time but at the latest on 30 November 2024 and may not be served as long as any M&A Process relating to the Issuer and involving a formal letter of intent is ongoing.

6.4 Any Bonds repaid or purchased by the Issuer shall be cancelled and the Issuer shall not be entitled to use such issued Bonds for the purposes of re-issue or to re-issue the same.

6.5 Notwithstanding any contrary provision in this Agreement, the amount of the last instalment (including principal and interest) under each Tranche shall be paid in advance by the Issuer which acknowledges that such amount constitutes a due and payable receivable on the Subscriber, by set-off with the funds to be transferred by Subscriber to Issuer on each Drawdown Date. As a result of such payment, the Subscriber acknowledges that the Issuer holds a due and payable receivable on the Subscriber which shall be set-off with the payment of the last instalment.

7. Taxation

7.1 The Parties agree that no withholding tax shall be levied on interest and other revenues in respect of the Bonds subscribed by the Subscriber since (i) the Subscriber is located outside France and (ii) no payment will be made in a non-cooperative jurisdiction within the meaning of article 238-0 A of the French tax code, other than those mentioned in article 238-0 A, 2°. 2 bis of the same code ("**NCJ**").

7.2 The Subscriber shall provide the Issuer with the tax residence statement as the case may be required by the laws of France.

7.3 Except where directly caused by the Subscriber (including the change of tax residence, absence of delivery of the tax residence statement referred to in Article 7.2), in the event that it is required that payments of principal or interest in respect of the Bonds be subject to withholding or deduction in respect of any taxes or duties whatsoever (a "**Tax Deduction**"), the Issuer will pay such additional amounts as may be necessary so that the Subscriber, after such withholding or deduction, receive the full amount due to the Subscriber. For that purpose, the amount of interest due to the Subscriber shall be increased in order that the net amount received by the Subscriber after the required withholding or deduction shall equal the amount that would have been received, had such withholding or deduction not been made, it being specified that no additional payment shall be made should the Subscriber benefit from a reimbursement of such Tax Deduction. The provisions of this Article 7.3 shall not apply if (i) any regulation applicable in the country of residence of the Issuer prohibits the Issuer from assuming the charge of the Tax Deduction, and/or (ii) the Tax Deductions which represent a tax credit, or can be used as a deduction or offset against the Subscribers' tax.

7.4 However, the Issuer will not be required to pay any such additional amounts with respect to any Bond to the Subscriber (or to a third party on behalf of the Subscriber) who is liable to such taxes or duties in respect of such Bond by reason (A) of his having some connection with France other than merely being the holder of the Bond, (B) of his being a shareholder of the Issuer or (C) in respect of any withholding or deduction that is levied solely on account of the relevant payments being made to a person domiciled, or acting through an office located, in a NCJ, or to an account held in a financial institution located in a NCJ (as such list is amended from time to time).

8. Undertakings

The Issuer undertakes, as from the date of this Agreement and until any amount is or may be outstanding under this Agreement, to comply with the commitments set forth in of the Subscription Agreement, including but not limited to those contained in Article 5 (Commitments).

9. Events of default

Each of the following events, facts or circumstances constitutes an Event of Default, unless otherwise agreed and/or waived by the Majority Bondholders and the Issuer:

9.1 Non-payment

The Issuer fails, after being notified by the Subscriber, to pay in full on the due date any sum due from it under this Agreement in the currency and in the manner specified in this Agreement save where such payment is made within five (5) Business Days of the due date and such failure is solely due to an administrative or systems error in the transmission of funds;

9.2 Breach of financial information obligations

The Issuer fails to duly perform or comply with any of the financial information obligations expressed to be assumed by it in Article 5.2 of the Subscription Agreement and where such non-performance or non-compliance is capable of remedy, has not been remedied within ten (10) Business Days of the notice of that breach by the Subscriber to the Issuer;

9.3 Breach of other obligations

The Issuer fails to duly perform or comply with any other material obligation expressed to be assumed by it in any of the Issue Documents to which it is a party and where such non-performance or non-compliance, is capable of remedy, has not been remedied within ten (10) Business Days of the notice of that breach by the Subscriber to the Issuer;

9.4 Breach of ranking obligations

The Issuer is in breach of the ranking obligations under Article 5.1.8 (Commitments) of the Subscription Agreement and/or Article 4 (ranking) of this Agreement.

9.5 Cross-default

Any indebtedness of the Issuer exceeding two hundred and fifty thousand euros (€250,000), including, but not exclusively, as a result of any loan taken out, any bond agreement entered into, or any lease agreement entered into as the lessee, is not paid when due or within any applicable grace period, any indebtedness of the Issuer is declared to be or otherwise becomes due and payable before its specified maturity as a result of an event of default, or any creditor of the Issuer become entitled to declare indebtedness of the Issuer, due and payable before its specified maturity as a result of an event of default, except where (i) such event of default results from a breach of its obligations by a business counterparty or (ii) a business counterpart is a provider of the Issuer, and the absence of payment is made in the ordinary course of business and does not exceed ten (10) Business Days;

9.6 Insolvency

If and when applicable, the Issuer is unable to pay its debts as they fall due, with its available assets ("*état de cessation des paiements*") or otherwise admits its inability to pay its debts as they fall due, or commences negotiations with any one or more of its creditors with a view to the general readjustment or rescheduling of its Indebtedness, or makes a general assignment for the benefit of, or a composition with, its creditors, whether or not through the appointment of an administrator ("*administrateur judiciaire"* ou *"liquidateur judiciaire*"), in the framework of a conciliation or safeguard procedure.

9.7 Cessation of business

If the Issuer ceases to carry on the business it carries on at the date hereof as mentioned in section (B) of the preamble hereof, or enters into any new business that is not directly related to such business;

9.8 Change of control

Unless otherwise agreed by the Subscriber, which opinion shall be delivered within ten (10) Business Days from the receipt by the Subscriber of a notification informing him of the potential Change of Control and the circumstances thereof, there is a Change of Control of the Issuer;

9.9 Validity of agreement

At any time any act, condition or thing required to be done, fulfilled or performed by it in order:

(i) to enable the Issuer lawfully to enter into, exercise its rights under or perform the obligations expressed to be assumed by it in the Issue Documents to which it is a party;

(ii) to ensure that the obligations expressed to be assumed by the Issuer in the Issue Documents to which it is a party are and remain legal, valid and binding;

(iii) to make the Issue Documents to which it is a party admissible in evidence in France;

is not done, fulfilled or performed within any time available to ensure compliance with the same;

9.10 Unlawfulness

If, at any time it is or becomes unlawful for the Issuer to perform or comply with any or all of its material obligations under the Issue Documents or if any of the material obligations of the Issuer under the Issue Documents are not, or cease to be, legal, valid and binding;

9.11 Material adverse change

The occurrence of any facts, circumstances event which have or which can reasonably be considered as likely to have a Material Adverse Effect (including (i) any payment default or event or circumstance occurs which, with the giving of notice, lapse of time, determination of materiality, the fulfillment of any other applicable condition or any combination of the foregoing constitutes a default (howsoever described) under any contract (including, without limitation, any leasing contracts) to an extent or in a manner which will have or which can reasonably be considered as likely to have a Material Adverse Effect, or (ii) any litigation, arbitration or administrative proceedings are commenced which give grounds in the reasonable opinion of an independent lawyer appointed by both parties for belief that a Material Adverse Effect will result there from); it being understood that as from the day the notice of that circumstance is given by the Subscriber to the Issuer, a ten (10) Business Day period of grace during which the Subscriber does not seek the repayment of the sums owed by the Issuer under the Issue Documents nor enforce any of its Security Interest is then granted to the Issuer in order for him, or as the case may be, its shareholders, either (i) to organize the repayment of these sums or (ii) to take all necessary actions which in the sole reasonable opinion of the Subscriber are of nature to enable the Issuer to continue to perform the Agreement in all its material provisions until the Final Redemption Date;

9.14 Occurrence of an Event of Default

In case an Event of Default has occurred, or, in the event remedial periods are provided herein, is continuing after such remedial periods has elapsed, the Bondholders' Representative (acting on the instructions of the Majority Bondholders) may notify such Event of Default to the Issuer and at its discretion, decide that all moneys outstanding under the Bonds shall become immediately repayable and all interest accrued but

unpaid shall become immediately payable, together with any other sums then owed by the Issuer under any Issue Documents, subject to Subscriber (or in case of a "*masse*", the Bondholders' Representative (acting on the instructions of the Majority Bondholders)) giving written notice to the Issuer to that effect (an "**Acceleration Notice**") no sooner than five (5) Business Days from notification of the Event of Default, provided, where such Event of Default may be remedied, that has not been remedied to the reasonable satisfaction of the Subscriber.

10. Register and certificates

10.1 In accordance with article L. 211-3 of French Monetary and Financial Code (*Code monétaire et financier*), the Bonds shall be held in registered form (*forme nominative*) and will be compulsorily recorded in securities accounts and records held by the Issuer or the authorized intermediary, as the case may be.

10.2 Consequently, the Subscriber and any subsequent Bondholder rights will be represented in book entry form (*inscription en compte*) opened in their name on the corporate register (the "**Register**") which will be held by an authorized agent.

10.3 No physical document evidencing title to the Bonds (including representative certificates pursuant to article R. 211-7 of the French Monetary and Financial Code (*Code monétaire et financier*) will be issued to represent the Bonds.

10.4 In accordance with articles L. 211-15 and L. 211-17 of the French Monetary and Financial Code (*Code monétaire et financier*), and subject to Article 11 of this Agreement, transfer of the Bonds will be made by transfer from one account to another, and the transfer of ownership of the Bonds will occur upon their book entry in the acquirer's securities account, and pursuant to the terms and conditions provided herein.

11. Transmission and transfer

11.1 The Bonds shall not be transferrable by the Subscriber, except (i) with the prior written consent of the Issuer or (ii), without the prior consent of the Issuer, (a) to an Affiliate of the Subscriber or (b) as part of a transfer of the Bondholder's global asset portfolio of securities or of the healthcare branch of such portfolio of securities. Transfers of the Bonds shall be effected by an instrument in writing in the usual common form signed by the transferor and shall be notified to the Issuer at the latest thirty (30) Business Days prior to the transmission or transfer. Such notice shall include the specific identity of the transmittee(s) or transferee(s) and, the identity of the controlling shareholder(s), and a confirmation from the transmittee(s) or transferee(s) of its adhesion to the terms of this Agreement.

11.2 Every instrument of transfer must be left at the Issuer's registered office accompanied by the transfer form of the Bonds to be transferred to prove the title of the transferor or his right to transfer the Bonds and, if the instrument shall be executed by some other person on behalf of the transferor, the authority of that person so to do.

11.3 To be effective vis-à-vis the Issuer and third parties, any transfer of Bonds shall be registered in the Register kept by the Issuer and the transferor of any Bonds shall be deemed to be the holder of such Bonds until the name of the transferee is entered into the securities accounts in respect thereof. The Issuer shall, within ten (10) Business Days of receipt of documents reasonably necessary to effect a transfer of the Bonds, enter the name of the transferee in the Register.

11.4 No fee may be charged to the Subscriber upon subscription of the Bonds and in connection with the initial registration of the Bonds or other document relating to or affecting the original title to any Bonds.

11.5 Any transferee that becomes a Bondholder, by whatever means and for whatever reason, shall have the benefit of, and be subject to, all of the rights and obligations arising under this Agreement as regards Bonds.

11.6 The Bonds shall not be offered to the public for subscription or purchase and shall not be capable of being dealt in on any stock exchange and no application shall be made to any stock exchange for permission to deal in or for an official or other quotation for the Bonds.

12. Procedures for payment

Any principal, interest or other moneys repayable or payable hereunder on or in respect of any Bonds may be paid by transfer to the bank account designated in writing by the Subscriber.

At the time of Issue, this account shall be:

Bank Name:	SVB
Account Name:	Kreos Capital VI (UK) Ltd
IBAN:	GB62SVBK62100020187092
SWIFT:	SVBKGB2L

13. Rights of single or multiple Bondholders

13.1 In accordance with the provisions of article L. 228-46 of the French Commercial Code (*Code de commerce*), when the Bonds are held by several holders, the holders of Bonds shall automatically form, for the defence of their common interests, a collective body of holders with a legal personality. For the avoidance of doubt, it is specified that regardless of their date of issuance (i.e. as part of Tranche A, B, C or D), any Bonds issued pursuant to this Agreement shall be part of the same collective body (*Masse*) for the purpose of article L. 228-46 of the French Commercial Code (*Code de commerce*).

13.2 Where applicable, the rights of several Bondholders will be governed, in addition to this Agreement, by the provisions of the French Commercial Code (*Code de commerce*), applicable to the *Masse*, in particular as to representation and voting procedures.

13.3 All decisions made by the Bondholder(s) in accordance with this Article 13 of this Agreement shall be recorded in a register of the holders' decisions held by the Bondholders' Representative.

14. Remedies and waivers

14.1 No failure, delay or other relaxation or indulgence on the part of any of the Parties to exercise any power, right or remedy shall operate as a waiver thereof nor shall any single or partial exercise or waiver of any power, right or remedy preclude its further exercise or the exercise of any other power, right or remedy.

14.2 All rights of the Subscriber contained in this Agreement are in addition to all rights vested or to be vested in it pursuant to the other Issue Documents, common law or statute.

14.3 Each Party hereby acknowledges that the provisions of article 1195 of the French Civil Code (*Code civil*) shall not apply to it with respect to its obligations under the Issue Documents and that it shall not be entitled to make any claim under article 1195 of the French Civil Code (*Code civil*).

15. Severability

15.1 Each of the provisions of this Agreement and any Issue Document is severable and distinct from the others and if at any time one or more of such provisions is or becomes invalid, illegal or unenforceable the validity, legality and enforceability of the remaining provisions hereof shall not in any way be affected or impaired thereby.

15.2 In such case, the Issuer shall do its best effort take appropriate actions to replace such provision with an economically equivalent provision which is valid, legal and enforceable, such commitment being, for the avoidance of doubt, a material commitment.

16. Notices

16.1 All notices, demands or other communications under or in connection with this Agreement may be given by letter, facsimile, or e-mail addressed to the person at the address identified with its signature below.

To Issuer:

Biophytis S.A.
To the attention of Mr. Stanislas Veillet
Président Directeur Général
and Madame Evelyne Nguyen
Directeur administratif et financier
14, avenue de l'Opera
75001 Paris

E-mail: stanislas.veillet@biophytis.com and
evelyne.nguyen@biophytis.com

With copy (for information purposes) to:

Monsieur Marc Fredj
Avocat associé
Reed Smith LLP
112, avenue Kléber
75116 Paris

E-mail: mfredj@reedsmith.com
Fax: 01.76.70.41.19

To Subscriber:

Kreos Capital VI (UK) Ltd.
To the attention of Mr. Maurizio Petitbon
5th Floor, 25-28 Old Burlington Street
London W1S 3AN
United Kingdom

Email: maurizio@kreoscapital.com
Fax: +44 20 7409 1034

With copy (for information purposes) to:

Monsieur Laurent Cavallier
Avocat associé
Reinhart Marville Torre

58, avenue Kleber
75116 Paris

E-mail: cavallier@rmt.fr
Fax: +33 (0)1 53 96 04 20

16.2 Any such communication will be deemed to be given as follows:

(i) if personally delivered, at the time of delivery, as documented by a receipt;

(ii) if by letter, on the date entered by the addressee on the receipt in the case of delivery by hand or on the date when delivery is first attempted in the case of a recorded delivery letter with acknowledgement of receipt; and

(iii) if by facsimile transmission or e-mail during the business hours of the addressee then on the day of transmission, otherwise on the next following Business Day.

16.3 In proving such service it shall be sufficient to prove that personal delivery was made or that such letter was properly stamped first class, addressed and delivered to the postal authorities or in the case of facsimile transmission or other comparable means of communication that a confirming hard copy was provided promptly after transmission.

17. Governing law - Jurisdiction

17.1 This Agreement is governed by and shall be construed in accordance with French law.

17.2 Any dispute concerning the validity, interpretation or performance of this Agreement will be submitted to the *Tribunal de commerce* (commercial court) of Paris.

/s/ Stanislas Veillet	/s/ Maurizio Petibon
Biophytis S.A.	**Kreos Capital VI (UK) Limited**
Mr. Stanislas Veillet	Mr. Maurizio Petitbon

List of Appendixes

Appendix 1	Agreed form Drawdown Notice
Appendix 2	Agreed form subscription form
Appendix 5.1	Amortization and repayment schedule – Tranche A

Appendix 1

Agreed form Drawdown Notice

DRAWDOWN NOTICE

Drawdown No. 1

Dated [●]

between

Kreos Capital VI (UK) Limited	**Biophytis S.A.**
the ("Subscriber")	**the ("Issuer")**

This Drawdown Notice forms a Schedule to the Bonds Issue Agreement entered into between the Subscriber and the Issuer dated 19 November (the "**Bonds Issue Agreement**")

The Subscriber has granted the Issuer a facility of a maximum amount of EUR 7,750,000 (the "**Facility**") pursuant to the terms and conditions set out in the Bonds Issue Agreement and attached Schedules.

Words and expressions in this Drawdown Notice shall have the same meanings as in the Bonds Issue Agreement.

PART 1

Details

Total Facility	EUR	7,750,000.00
Amount of Facility utilised under previous Drawdown Notice(s)	EUR	0.00
Amount of Facility to be drawn down pursuant to this Drawdown Notice	EUR	[●]
Balance available for drawdown under future Drawdown Notices	EUR	0.00
Tranche		
Term		[●] months
Bank Account Details for remittance of funds Bank Name: [●] Bank Address: [●] Beneficiary Name: Biophytis S.A. IBAN: [●] SWIFT/BIC: [●]		
Anticipated Drawdown Date *(a Business Day no later than the Date of Expiry of the Facility)*		[●] 2021

The principal of the Bonds will be repaid and interest shall be paid monthly in accordance with the Repayment Schedule included in the Bonds Issue Agreement.

We confirm that:

(a) the representations and warranties made by us in the Subscription Agreement entered into between the Issuer and Subscriber dated 19 November 2021 are true and accurate on the date of this Drawdown Notice as if made on such date; and

(b) no Event of Default has occurred and is continuing or would result from the delivery of this Drawdown Notice.

for and on behalf of
Biophytis S.A.

Authorised Signatory.....

Name .....

Dated [●]

PART 2

Repayment Schedule (all amounts are in EUR)

Payment Due	Fees	Advance Payment	Capital	Interest	Total

Instalments Payable to:

Bank Name: [●]
Bank Address: [●]
Account Name: [●]
IBAN: [●]
SWIFT: [●]

Appendix 2

Agreed form subscription form

Appendix 5.1

Amortization and repayment schedule example

Exhibit 4.43

CONVERTIBLE BONDS ISSUE AGREEMENT

By and between

Biophytis S.A.

as Issuer

and

Kreos Capital VI (Expert Fund) L.P.

as Subscriber's Affiliate

19 November 2021

reinhartmarvilletorre
SOCIÉTÉ D'AVOCATS

58, avenue Kléber - 75116 Paris T. +33 1 53 53 44 44 F. +33 1 53 96 04 20
Toque K30 . SELARL au capital de 480 000 euros . RCS Paris B 393 584 347

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Convertible Bonds Issue Agreement

This agreement (hereinafter referred to as the "**Agreement**") is entered into on 19 November 2021, by and between:

1. **Biopthytis S.A.**, a limited company *(société anonyme)* incorporated under the laws of France, with a share capital of EUR 25,814,647 having its registered office at 14, avenue de l'Opéra – 75001 Paris, France, registered under single identification number 492 002 225 RCS Paris, listed on the Euronext Growth organized multilateral trading facility under ISIN code FR0012816825, represented by Mr. Stanislas Veillet, in his capacity of chief executive officer (*Président Directeur Général*);

(hereinafter referred to as the "**Issuer**")

ON THE FIRST PART

AND

2. **Kreos Capital VI (Expert Fund) L.P.** a limited partnership incorporated under the laws of Jersey, having its registered office at 47 Esplanade, St Helier, JE1 0BD, Jersey, registered with the JFSC Companies Registry under identification number 2770, represented by Mr. Michael Johnson, duly authorised for the purposes hereof,

(hereinafter referred to as the "**Subscribers'Affiliate**" or "**Kreos**")

ON THE SECOND PART

Issuer and Subscriber being hereinafter referred to individually as a "**Party**" and collectively as the "**Parties**".

Whereas

(A) The Subscriber's Affiliate is a growth debt provider, the business of which consists in making investments in high technology and life science companies throughout Europe.

(B) The Issuer is a French *société anonyme*, created in 2006, specializing in creating drugs to treat degenerative illnesses associated with aging for which no treatment is available to date. Its most advances programmes relate to sarcopenia (loss of muscle functionality) and age-related macular degeneration (armd).

(C) In order to provide the Issuer with additional financial resources to fund its activities and pursue the development of its technology, Kreos Capital VI (UK) Limited, a private limited company incorporated under the laws of England, having its registered office at 5th Floor, 25-28 Old Burlington Street, London W1S 3AN, United Kingdom, registered under identification number 11535385, and Kreos have respectively agreed to subscribe to straight bonds (*obligations simples*) (the "**Straight Bonds**") and convertible bonds (*obligations convertibles*) (the "**Convertible Bonds**") to be issued by the Issuer for a cumulated nominal amount of up to ten million euros (EUR 10,000,000.00) (the "**Issue**") subject to and upon the terms and conditions of the subscription agreement entered into between Kreos, Kreos Capital VI (UK) Limited, and the Issuer on the date hereof (hereinafter referred to as the "**Subscription Agreement**").

(D) On May 10th, 2021, the Issuers' combined general meeting (the "**General Meeting**") has delegated to the board of directors of the Issuer in its twelfth (12th) resolution, the authority to issue securities giving a right to ordinary shares of the Issuer, without preferential subscription rights in favor of categories of persons satisfying determined characteristics.

(E) On 19 October, 2021, based on the delegation of authority referred to above, the Issuer's board of directors (the "**Board of Directors**") (i) decided the issue of bonds convertible into new shares (*obligations convertibles en actions nouvelles*) (OCA A) up to a maximum aggregate amount of EUR 1,250,000 by the Issuer, (ii) decided to delegate its authority to the Issuer's chief executive officer (*Directeur Général*) to issue, under identical conditions, bonds convertibles into new shares (*obligations convertibles en actions nouvelles*) (OCA B) up to a maximum amount of EUR 1,000,000 by the Issuer subject to the meeting of certain conditions, (iii) fixed the financial conditions applicable thereto, (iv) approved the terms of this Agreement and (v) delegated to the Issuer's chief executive officer (*Directeur Général*) the power to execute this Agreement.

NOW, THEREFORE, IT HAS BEEN AGREED AS FOLLOWS:

1. Definitions and interpretation

1.1 In this Agreement, unless the context otherwise specifically provides, the following expressions shall have the following meanings:

Affiliate	means: (i) when used with reference to a specified entity, any other entity controlling, that is controlled by, or is under common control with, such specified entity; for the purpose of this definition, control has the meaning set forth in article L. 233-3 of the French Commercial Code (Code de commerce); or (ii) any investment entity (Fund or other) which is controlled or managed by the same management company (or a subsidiary, a parent company or a subsidiary of the parent company) as the management company that manages or advises the relevant Investor (if such Investor is also an investment entity);
Agreement	shall have the meaning set forth in the preamble;
Board of Directors	has the meaning assigned in section (E) of the preamble hereof;
Business Day	means a day (excepting Saturdays and Sundays) on which banks operate in Paris;
Change of Control	means the de-listing of the Issuer;
Conversion Date	means the date the Conversion Shares are to be delivered under a Conversion Notice, as set forth in section 6.3 of this Agreement;
Conversion Notice	shall have the meaning set forth in clause 6.3.1 of this Agreement;

Conversion Ratio	means as the ratio calculated under the provisions of clause 6.3.2 of this Agreement;
Conversion Shares	means, ordinary shares to be issued on the conversion of Convertible Bonds;
Convertible Bondholder	means Kreos, any transferee and any subsequent Person(s) entered in the securities register which the Issuer under this Agreement is required to maintain, as holder(s) of the Convertible Bonds and as may be represented by the Convertible Bondholders' Representative;
Convertible Bondholders' Representative	means (i) if all outstanding Convertible Bonds are held by a single Convertible Bondholder, regardless of whether a person or a company, that relevant Convertible Bondholder which shall personally exercise all the rights of the Convertible Bondholders' Representative that may be attributed to the Convertible Bondholders' Representative (*représentant de la masse*) by applicable statutory provisions and this Agreement or (ii) if all outstanding Convertible Bonds are held by more than one (1) Convertible Bondholder, any entity appointed by a general meeting of the Convertible Bondholders forming a single "*masse*", held for that purpose or otherwise in accordance with the provisions of the French *Code de commerce* (it being specified that such decision shall be notified by the Bondholders' Representative to the Issuer and the Bondholders by registered mail without any requirement to publish the decision with a *journal d'annonces légales* or the *Bulletin d'annonces légales Obligatoires*).
Convertible Bonds	means the convertible bonds (*obligations* within the meaning assigned in article L. 213-5 of the French Monetary and Financial Code) issued in Euros by the chief executive officer (*Directeur Général*) of the Issuer in accordance with this Agreement, being specified, for the sake of clarity, that "Bonds" under this Agreement shall have the same meaning as "Straight Bonds" under the Subscription Agreement;
Discharge Date	means: (i) with respect to any drawdown under the Tranche A, the 42nd Interest Payment Date (or such date of actual early payment in case of a Prepayment or acceleration of the Convertible Bonds or more generally such earlier date or dates as the same shall become repayable in accordance with this Agreement and/or the Subscription Agreement); (ii) with respect to any drawdown under the Tranche B, the 42nd Interest Payment Date (or such date of actual early payment in case of a Prepayment or acceleration of the Convertible Bonds or more generally such earlier date or dates as the same shall become repayable in accordance with this Agreement and/or the Subscription Agreement);
Drawdown Date	means with respect to any Tranche, the day on which the Convertible Bonds are subscribed and paid up by the Subscriber's Affiliate;

Drawdown Notice	means a notice issued in the form of the Appendix 1 from Issuer requesting Kreos to subscribe to Convertible Bonds in accordance with this Agreement;
Event of Default	means any of those events set out in Article 9 (Events of Default);
Final Redemption Date	means the date on which all amounts due under the Issue Documents have been unconditionally and irrevocably paid and discharged in full;
First Interest Payment Date	means with respect to any Tranche, the first Business Day of a calendar month being or following Drawdown Date;
Fund	means any regulated fund, investment firm or company, the management of which is taken care of by professional managers (including but not limited to FCPR, FCPI, FPCI, FPS, FIP, SCR, SLP and partnerships);
General Meeting	has the meaning assigned in section (D) of the preamble hereof;
Group	means the Issuer and any Subsidiary of the Issuer from time to time;
Interest Payment	means interest payments due by the Issuer to Kreos pursuant to this Agreement;
Interest Payment Date	means with respect to any drawdown under any Tranche, the First Interest Payment Date, and then the first Business Day of each subsequent calendar month;
Issue	has the meaning ascribed to it in section (C) of the preamble hereof;
Issue Documents	has the meaning ascribed to this term in the Subscription Agreement;
Majority Bondholders	means, at any time, one or several Convertible Bondholders (whether present or represented) that hold at least 66⅔ per cent of the voting rights capable of being cast in Bondholders' general meetings.
Material Adverse Effect	means a material adverse effect on either the business / or the operations of the Issuer, and its ability to comply with any of its payment obligations under the Agreement
M&A Process	means any contemplated transaction for the sale of substantially all of the assets, the sale or exchange of the majority of the share capital of the Issuer or the merger of the Issuer into another company;
Paying Agent	means, (i) if all outstanding Convertible Bonds are held by a single Convertible Bondholder, regardless of whether a person or a company, that relevant Convertible Bondholder or (ii) if all outstanding Convertible Bonds are held by more than one (1) Convertible Bondholder, any entity appointed by a general meeting of the Convertible Bondholders forming a single "*masse*", held for that purpose;

Person	shall mean and include an individual, a partnership, a corporation, a business trust, a joint stock company, a limited liability company, an unincorporated association or other entity and any domestic or foreign national, state or local government, any political subdivision thereof, and any department, agency, authority or bureau of any of the foregoing;
Prepayment	has the meaning ascribed to it in Article 6.3;
Register	has the meaning ascribed to it in Article 10.2;
Repayment Date	means: (i) with respect to Tranche A and B, and unless Kreos elects to convert the Convertible Bonds, 31 March 2025, or (ii) with respect to any Tranche, the date of any Prepayment or acceleration of the Convertible Bonds or more generally, if earlier, the date or dates on which the Bonds shall become repayable in accordance with this Agreement and/or the Subscription Agreement;
Security Documents	means any document entered into by any Person (including subsidiaries, if any) from time to time creating any Security Interest, directly or indirectly, for the obligations of the Issuer under the Subscription Agreement;
Security Interest	means any mortgage, charge, assignment, pledge, lien, hypothecation, encumbrance, priority or other security interest or any arrangement which has substantially the same commercial or substantive effect as the creation of security (except financial lease, "*location financière*" and capital lease "*crédit-bail*" unless as part of a lease-back agreement);
Subscriber's Affiliate	means Kreos Capital VI (Expert Fund) L.P.;
Subsidiary	means any person which would come to be directly or indirectly controlled by or under direct or indirect control of the Issuer. For purpose of this definition, control shall have the meaning ascribed to "*contrôle*" under article L.233-3 of the French Commercial Code*);*
Tax Deduction	has the meaning ascribed to it in Article 7.3;
Tranche(s)	means (i) individually Tranche A or Tranche B and (ii) collectively Tranches A and/or Tranche B;
Tranche A	has the meaning ascribed to it in Article 2.2;
Tranche A Completion Date	has the meaning ascribed to it in the Subscription Agreement;
Tranche B	has the meaning ascribed to it in Article 2.3;
Tranche B Completion Date	has the meaning ascribed to it in the Subscription Agreement.

1.2 In this Agreement, except as otherwise provided or where clearly inconsistent in the light of the context:

(i) words importing the singular include the plural and *vice versa*;

(ii) words denoting gender include every gender;

(iii) words denoting persons include bodies corporate or unincorporate;

(iv) a section, clause, sub-clause or Appendix is to a section, clause, sub-clause or Appendix, as the case may be, of or to this Bonds Issue Agreement;

(v) any provision of a statute shall be construed as a reference to that provision as amended, modified, re-enacted or extended from time to time;

(vi) words and expressions in the French language defined in the French Commercial Code (*Code de commerce*) or the French Monetary and Financial Code (*Code monétaire et financier*) as amended shall bear the same meanings herein, and

(vii) capitalised terms not defined herein shall have the meaning given to them in the Subscription Agreement.

1.3 The headings in this Agreement are for ease of reference only and shall not affect the construction of this Agreement.

1.4 Should any conflicts occur between this Agreement and the Subscription Agreement or any of the Issue Documents entered into between the parties, the Parties agree that the Subscription Agreement's provisions shall prevail.

2. Issue of the Convertible Bonds and subscription

2.1 On or prior to the date of this Agreement, in accordance with the provisions of article L. 228-40 of the French Commercial Code (*Code de commerce*), the Board of Directors authorized the issuance by the Issuer of up to two million two hundred and fifty thousand (2,250,000) Convertible Bonds of a nominal value of EUR 1 each in registered form, exclusively reserved to the Subscriber's Affiliate, to be subscribed in two Tranches. The Bonds will be issued by the Company constitute securities that confer certain rights within the meaning of article L. 213-5 of the French Monetary and Financial Code (*Code monétaire et financier*) to the Subscriber's Affiliate (and to any subsequent Convertible Bondholder) as from their subscription.

2.2 Tranche A

Kreos will subscribe to a first tranche ("**Tranche A**") of a maximum of one million two hundred and fifty thousand (1,250,000) Convertible Bonds in one or several drawdown(s) of no less than EUR 500,000.00, subject to the conditions precedent set forth in Article 3 of the Subscription Agreement, pursuant to a Drawdown Notice in accordance with the template attached as **Appendix 1** hereto.

2.3 Tranche B

Kreos will subscribe to a second tranche ("**Tranche B**") of a maximum of one million (1,000,000) Convertible Bonds in one in one or several drawdown(s) of no less than EUR 333,333.00 subject to the conditions precedent set forth in Article 4 of the Subscription Agreement, pursuant to a Drawdown Notice in accordance with the template attached as **Appendix 1** hereto.

2.4 Subscription of the Convertible Bonds will be wholly paid up by Kreos (or any of its Affiliates), by bank transfer, to the following Issuer's account (or any other bank account as notified to Kreos in a Drawdown Notice):

Bank Name:	Banque Neuflize OBC - 3, avenue Hoche, 75008 Paris, France
Account Name:	Biophytis SA
IBAN:	FR76 3078 8001 0008 7421 1000 162
SWIFT:	NSMBFRPPXXX

Concurrently with such transfer, Kreos shall send to the Issuer a subscription form substantially in accordance with the template attached as **Appendix 2** hereto.

3. Purpose of the Issue

3.1 The Issuer shall use the proceeds of Tranche A and Tranche B to provide the Issuer with additional financial resources to fund its activities and pursue the development of its technology, and agrees that it will not use the whole or any part of the proceeds of the Issue in contravention of any applicable law.

3.2 Without prejudice to the above, Kreos shall not be under any obligation to monitor the use of the proceeds of the Issue.

4. Ranking

Each of the Convertible Bonds shall rank *pari passu* equally and rateably *inter se* and with the Straight Bonds without any discrimination or preference and as direct, unconditional (subject to condition 3(i) of the Subscription Agreement), unsubordinated obligations (subject to such exceptions as are mandatory from time to time under French law), secured as set out in the Security Documents, being expressly specified that any obligations and liabilities of the Issuer under this Agreement shall fall in the scope of secured obligations (*obligations garanties*) as defined in the Security Documents, and that any existing loans between the Issuer and any Subsidiary (as defined in the Subscription Agreement) will be subordinated to and rank after the rights and interests created by the Issuer in favour of the Bondholder(s) under the Issue Documents.

5. Interest

5.1 Interest on the Convertible Bonds shall accrue on the principal moneys outstanding on the relevant Convertible Bonds at a fixed interest rate of nine point five per cent (9.50 %) per annum, payable in cash, until and including the Repayment Date. As an illustration, in the event 500,000 Convertible Bonds are issued, the amount due at each Interest payment Date shall be EUR 3,958.33. In the event 333,333 Convertible Bonds are issued, the amount due at each Interest payment Date shall be EUR 2,638.89.

5.2 In the event any amount is drawn prior to the first day of any month, interest shall accrue on moneys outstanding as of their effective transfer date to Issuer until the First Interest Payment Date (on the basis of a daily 1/30th of the monthly fixed interest payment set out in Article 5.1). The Issuer expressly acknowledges that, on the relevant date of effective transfer of the funds, such amount shall constitute a due and payable receivable of Kreos toward the Issuer, and shall be paid by set-off with the funds to be transferred by Kreos to Issuer.

5.3 To the extent interest is not paid for at least one (1) year on any Interest Payment Date, further interest shall accrue on any such interest not so paid in accordance with article 1343-2 of the French Civil Code (*Code civil*) at the rate specified in Article 5.6 hereunder. Interest shall be calculated on the basis of a three hundred and sixty-five (365) day year and shall be deemed to accrue on the Convertible Bonds from day to day.

5.4 Each interest payment shall be made to the Paying Agent (for the account of the Convertible Bondholders), on each Interest Payment Date before 11:00 AM Paris time, and the Bondholder(s) shall be deemed, for the purposes of this Agreement, to be the holder(s), on such date for payment of interest, of the Convertible Bonds held by it (them) on such preceding date notwithstanding any intermediate transfer or transmission of any such Convertible Bonds.

5.5 Interest on the principal moneys outstanding on any Convertible Bonds becoming repayable pursuant to any provision hereof shall cease to accrue as from the due date for repayment of such principal moneys unless repayment of any such principal moneys and/or payment of any such interest is not effected in which event interest shall continue to accrue at the rate specified in Article 5.6 on the amount which remains unpaid until actual payment in full of such principal moneys and interest is made.

5.6 Should the Issuer fail to pay any outstanding nominal amount (including the amount payable by Issuer under article 10.4 of the Subscription Agreement) on its due date for payment under this Agreement, the Issuer shall pay interest on such sum from the due date up to the date of actual payment (as well after as before judgment) at a rate which shall be the aggregate of (a) 300 basis points per annum (3.00 percent per annum), and (b) the interest rate set out under Article 5.1 above.

6. Repayment - Conversion

6.1 Repayment

The Issuer shall repay the Convertible Bonds at their principal amount at the Repayment Date. The repayments shall be made net to Kreos pursuant to Article 7.

6.2 Prepayment

The Issuer shall have the right, at any time but with no less than thirty (30) days prior notice to the Convertible Bondholder's Representative, to prepay or purchase the Convertible Bonds, exclusively in whole and concurrently with the Bonds (a "**Prepayment**"). The Prepayment notice may be served any time but at the latest on 30 November 2024 and may not be served as long as any M&A Process relating to the Issuer and involving a formal letter of intent is ongoing.

For the avoidance of doubt, in the twenty (20) days following the service of a Prepayment notice, Kreos may still elect to convert all or part of the Convertible Bonds and serve a Conversion Notice to that effect.

The Prepayment shall be equal to the aggregate undiscounted principal outstanding amount under the Convertible Bonds and the Bonds plus any fees payable under the Subscription Agreement, plus the sum of future interest repayments discounted by ten percent (10.00%).

6.3 Conversion

The Convertible Bondholder's Representative may discretionarily elect to convert all or part of the Convertible Bonds into Conversion Shares as follows at any time from the issuance of the Convertible Bonds, and at the latest on 31st December 2024.

6.3.1 Conversion Notice

In order to convert all or part of the Convertible Bonds into Conversion Shares, the Convertible Bondholder's Representative shall send a notice mentioning the Outstanding Amount, the number of Convertible Bonds to be converted, the applicable conversion ratio, and the resulting Conversion Shares (a "**Conversion Notice**"), in accordance with the template conversion notice attached as **Appendix 3** hereto.

6.3.2 Conversion ratio

The number of Conversion Shares to be issued to the Convertible Bondholders upon service of a Conversion Notice shall be equal to the result of following formula:

$$N_{CS} = CR * N_{CB}$$

Where:

N_{CS} means the number of Conversion Shares

CR means the Conversion Ratio, and

N_{CB} means the number of Convertible Bonds to be converted in accordance with the Conversion Notice.

In the event N_{CS} would not be a whole number, the number of Conversion Shares will be rounded as follows:

- if the first decimal is superior or equal to 5, N_{CS} shall be rounded up to the whole number that is immediately superior to it, and
- if the second decimal is inferior to 5, N_{CS} shall be rounded down to the whole number that is immediately superior to it.

The Conversion Ratio will be equal to the result of the following formula:

$$CR = 1 / ((1.15 * M_{SP}) - D)$$

Where:

D: means the cumulated amounts of dividends per share paid by the Issuer between the Tranche A Completion Date and the Conversion Date, and

M_{SP} means the 30 day VWAP of Issuer's shares on Euronext Growth on a period ending three days before the Tranche A Completion Date, being specified, accordingly, that $1.15 * M_{SP}$ = EUR 0.648

6.3.3 Limitation

In accordance with the delegation of authority granted to the Board of the Issuer under the 12th resolution adopted by the Issuer's General Meeting, in no event shall the number of Conversion Shares exceed 140.000.000 ordinary shares.

6.3.4 Conversion Shares

The capital increase arising from the issuance of Conversion shares shall be definitively completed as a mere consequence of and on the date of receipt by the Issuer of the Conversion Notice.

The Issuer shall promptly deliver freely tradable Conversion Shares to the relevant Convertible Bonds holder upon each conversion, it being specified that:

(i) if the Issuer receives a Conversion Notice before 9:30 am CET on a trading day, the Issuer shall send a notice to its agent for the issuance of the Conversion Shares prior to 6pm CET on such trading day;

(ii) if the Issuer receives a Conversion Notice after 9:30 am CET on a trading day, the Issuer shall send a notice to its agent for the issuance of the Conversion Shares prior to 6:00 pm CET on the next trading day.

In any case, the reception of the Conversion Shares by the relevant Convertible Bonds holder shall occur no later than three (3) trading day after the applicable Conversion Date.

The Issuer, after updating the Record where the Convertible Bonds are registered, shall in turn send a notice to the relevant Convertible Bond holder for the issuance of Conversion Shares.

The Conversion Shares shall be subject to all provisions of the by-laws and to decisions of the general meetings of the shareholders of the Issuer. The new shares shall be admitted to trading on Euronext Paris as from their issuance, will carry immediate and current dividend rights ("*jouissance courante*") and will be fully assimilated to and fungible with the existing shares.

6.3.4 Conversion repayment

In the event conversion occurs on the Repayment Date, Kreos shall repay to the Issuer, upon issuance of the Conversion Shares, an amount equal to ten percent (10%) of the total interest paid by the Issuer under this agreement. In case of a partial conversion upon that date, that amount shall be reduced accordingly.

7. Taxation

7.1 The Parties agree that no withholding tax shall be levied on interest and other revenues in respect of the Bonds subscribed by the Subscriber since (i) the Subscriber is located outside France and (ii) no payment will be made in a non-cooperative jurisdiction within the meaning of article 238-0 A of the French tax code, other than those mentioned in article 238-0 A, 2°, 2 bis of the same code ("**NCJ**").

7.2 The Subscriber shall provide the Issuer with the tax residence statement as the case may be required by the laws of France.

7.3 Except where directly caused by the Subscriber (including the change of tax residence, absence of delivery of the tax residence statement referred to in Article 7.2), in the event that it is required that payments of principal or interest in respect of the Bonds be subject to withholding or deduction in respect of any taxes or duties whatsoever (a "**Tax Deduction**"), the Issuer will pay such additional amounts as may be necessary so that the Subscriber, after such withholding or deduction, receive the full amount due to the Subscriber. For that purpose, the amount of interest due to the Subscriber shall be increased in order that the net amount received by the Subscriber after the required withholding or deduction shall equal the amount that would have been received, had such withholding or deduction not been made, it being specified that no additional payment shall be made should the Subscriber benefit from a reimbursement of such Tax Deduction. The provisions of this Article 7.3 shall not apply if (i) any regulation applicable in the country of residence of the Issuer prohibits the Issuer from assuming the charge of the Tax Deduction, and/or (ii) the Tax Deductions which represent a tax credit, or can be used as a deduction or offset against the Subscribers' tax.

7.4 However, the Issuer will not be required to pay any such additional amounts with respect to any Bond to the Subscriber (or to a third party on behalf of the Subscriber) who is liable to such taxes or duties in respect of such Bond by reason (A) of his having some connection with France other than merely being the holder of the Bond, (B) of his being a shareholder of the Issuer, or (C) in respect of any withholding or deduction that is levied solely on account of the relevant payments being made to a person domiciled, or acting through an office located, in a NCJ, or to an account held in a financial institution located in a NCJ (as such list is amended from time to time).

8. Undertakings

The Issuer undertakes, as from the date of this Agreement and until any amount is or may be outstanding under this Agreement, to comply with the commitments set forth in of the Subscription Agreement, including but not limited to those contained in Article 5 (Commitments).

9. Events of default

Each of the following events, facts or circumstances constitutes an Event of Default, unless otherwise agreed and/or waived by the Majority Bondholders and the Issuer:

9.1 Non-payment

The Issuer fails, after being notified by the Subscriber, to pay in full on the due date any sum due from it under this Agreement in the currency and in the manner specified in this Agreement save where such payment is made within five (5) Business Days of the due date and such failure is solely due to an administrative or systems error in the transmission of funds;

9.2 Breach of financial information obligations

The Issuer fails to duly perform or comply with any of the financial information obligations expressed to be assumed by it in Article 5.2 of the Subscription Agreement and where such non-performance or non-compliance is capable of remedy, has not been remedied within ten (10) Business Days of the notice of that breach by the Subscriber to the Issuer;

9.3 Breach of other obligations

The Issuer fails to duly perform or comply with any other material obligation expressed to be assumed by it in any of the Issue Documents to which it is a party and where such non-performance or non-compliance, is capable of remedy, has not been remedied within ten (10) Business Days of the notice of that breach by the Subscriber to the Issuer;

9.4 Breach of ranking obligations

The Issuer is in breach of the ranking obligations under Article 5.1.8 (Commitments) of the Subscription Agreement and/or Article 4 (ranking) of this Agreement.

9.5 Cross-default

Any indebtedness of the Issuer exceeding two hundred and fifty thousand euros (€250,000), including, but not exclusively, as a result of any loan taken out, any bond agreement entered into, or any lease agreement entered into as the lessee, is not paid when due or within any applicable grace period, any indebtedness of the Issuer is declared to be or otherwise becomes due and payable before its specified maturity as a result of an event of default, or any creditor or creditors of the Issuer become entitled to declare indebtedness of the Issuer, due and payable before its specified maturity as a result of an event of default, except where (i) such event of default results from a breach of its obligations by a business counterparty or (ii) a business counterpart is a provider of the Issuer, and the absence of payment is made in the ordinary course of business and does not exceed five (5) Business Days;

9.6 Insolvency

If and when applicable, the Issuer is unable to pay its debts as they fall due, with its available assets ("é*tat de cessation des paiements*") or otherwise admits its inability to pay its debts as they fall due, or commences negotiations with any one or more of its creditors with a view to the general readjustment or rescheduling of its Indebtedness, or makes a general assignment for the benefit of, or a composition with, its creditors, whether or not through the appointment of an administrator ("*administrateur judiciaire"* ou *"liquidateur judiciaire*"), in the framework of a conciliation or safeguard procedure.

9.7 Cessation of business

If the Issuer ceases to carry on the business it carries on at the date hereof as mentioned in section (B) of the preamble hereof, or enters into any new business that is not directly related to such business;

9.8 Change of control

Unless otherwise agreed by the Subscriber, which opinion shall be delivered within ten (10) Business Days from the receipt by the Subscriber of a notification informing him of the potential Change of Control and the circumstances thereof, there is a Change of Control of the Issuer;

9.9 Validity of agreement

At any time any act, condition or thing required to be done, fulfilled or performed by it in order:

(i) to enable the Issuer lawfully to enter into, exercise its rights under or perform the obligations expressed to be assumed by it in the Issue Documents to which it is a party;

(ii) to ensure that the obligations expressed to be assumed by the Issuer in the Issue Documents to which it is a party are and remain legal, valid and binding;

(iii) to make the Issue Documents to which it is a party admissible in evidence in France;

is not done, fulfilled or performed within any time available to ensure compliance with the same;

9.10 Unlawfulness

If, at any time it is or becomes unlawful for the Issuer to perform or comply with any or all of its material obligations under the Issue Documents or if any of the material obligations of the Issuer under the Issue Documents are not, or cease to be, legal, valid and binding;

9.11 Material adverse change

The occurrence of any facts, circumstances event which have or which can reasonably be considered as likely to have a Material Adverse Effect (including (i) any payment default or event or circumstance occurs which, with the giving of notice, lapse of time, determination of materiality, the fulfillment of any other applicable condition or any combination of the foregoing constitutes a default (howsoever described) under any contract (including, without limitation, any leasing contracts) to an extent or in a manner which will have or which can reasonably be considered as likely to have a Material Adverse Effect, or (ii) any litigation, arbitration or administrative proceedings are commenced which give grounds in the reasonable opinion of an independent lawyer appointed by both parties for belief that a Material Adverse Effect will result there from); it being understood that as from the day the notice of that circumstance is given by the Subscriber to the Issuer, a ten (10) Business Day period of grace during which the Subscriber does not seek the repayment of the sums owed by the Issuer under the Issue Documents nor enforce any of its Security Interest is then granted to the Issuer in order for him, or as the case may be, its shareholders, either (i) to organize the repayment of these sums or (ii) to take all necessary actions which in the sole reasonable opinion of the Subscriber are of nature to enable the Issuer to continue to perform the Agreement in all its material provisions until the Final Redemption Date;

9.14 Occurrence of an Event of Default

In case an Event of Default has occurred, or, in the event remedial periods are provided herein, is continuing after such remedial periods has elapsed, the Convertible Bondholders' Representative (acting on the instructions of the Majority Bondholders) may notify such Event of Default to the Issuer and at its discretion, decide that all moneys outstanding under the Bonds shall become immediately repayable and all interest

accrued but unpaid shall become immediately payable, together with any other sums then owed by the Issuer under any Issue Documents, subject to Subscriber (or in case of a "*masse*", the Convertible Bondholders' Representative (acting on the instructions of the Majority Bondholders) giving written notice to the Issuer to that effect (an "**Acceleration Notice**") no sooner than five (5) Business Days from notification of the Event of Default, provided, where such Event of Default may be remedied, that has not been remedied to the reasonable satisfaction of the Subscriber.

10. Register and certificates

10.1 In accordance with article L. 211-3 of French Monetary and Financial Code (*Code monétaire et financier*), the Bonds shall be held in registered form (*forme nominative*) and will be compulsorily recorded in securities accounts and records held by the Issuer or the authorized intermediary, as the case may be.

10.2 Consequently, Kreos and any subsequent Convertible Bondholder rights will be represented in book entry form (*inscription en compte*) opened in their name on the corporate register (the "**Register**") which will be held by an authorized agent.

10.3 No physical document evidencing title to the Convertible Bonds (including representative certificates pursuant to article R. 211-7 of the French Monetary and Financial Code (*Code monétaire et financier*)) will be issued to represent the Bonds.

10.4 In accordance with articles L. 211-15 and L. 211-17 of the French Monetary and Financial Code (*Code monétaire et financier*), and subject to Article 11 of this Agreement, transfer of the Convertible Bonds will be made by transfer from one account to another, and the transfer of ownership of the Bonds will occur upon their book entry in the acquirer's securities account, and pursuant to the terms and conditions provided herein.

11. Transmission and transfer

11.1 The Convertible Bonds shall not be transferrable by the Subscriber's Affiliate, except (i) with the prior written consent of the Issuer or (ii) to an entity controlled by the Subscriber's Affiliate (within the meaning of control as defined in article L. 233-3 of the French Commercial code) or (iii) as part of a transfer of the Convertible Bondholder's global asset portfolio of securities or of the healthcare branch of such portfolio of securities. Transfers of the Convertible Bonds shall be effected by an instrument in writing in the usual common form signed by the transferor and shall be notified to the Issuer at the latest thirty (30) Business Days prior to the transmission or transfer. Such notice shall include the specific identity of the transmittee(s) or transferee(s) and, the identity of the controlling shareholder(s), and a confirmation from the transmittee(s) or transferee(s) of its adhesion to the terms of this Agreement.

11.2 Every instrument of transfer must be left at the Issuer's registered office accompanied by the transfer form of the Convertible Bonds to be transferred to prove the title of the transferor or his right to transfer the Convertible Bonds and, if the instrument shall be executed by some other person on behalf of the transferor, the authority of that person so to do.

11.3 To be effective vis-à-vis the Issuer and third parties, any transfer of Convertible Bonds shall be registered in the Register kept by the Issuer and the transferor of any Convertible Bonds shall be deemed to be the holder of such Convertible Bonds until the name of the transferee is entered into the securities accounts in respect thereof. The Issuer shall, within ten (10) Business Days of receipt of documents reasonably necessary to effect a transfer of the Convertible Bonds, enter the name of the transferee in the Register.

11.4 No fee may be charged to the Convertible Bondholder(s) upon subscription of the Convertible Bonds and in connection with the initial registration of the Bonds or other document relating to or affecting the original title to any Convertible Bonds.

12. Procedures for payment

Any principal, interest or other moneys repayable or payable hereunder on or in respect of any Bonds may be paid by transfer to the bank account designated in writing by the Convertible Bondholders' Representative.

At the time of Issue, this account shall be:

Bank Name:	EQ
Account Name:	Kreos Capital VI (Expert) Limited.
IBAN:	58711842 / GB82RBOS1658805871 1842
SWIFT:	RBOSIMDX / 16-58-80

13. Rights of single or multiple Convertible Bondholders

13.1 In accordance with the provisions of article L. 228-103 of the French Commercial Code (*Code de commerce*), the holders of Convertible Bonds shall automatically form, for the defence of their common interests, a collective body of holders with a legal personality. For the avoidance of doubt, it is specified that regardless of their date of issuance (i.e. as part of Tranche A or Tranche B), any Bonds issued pursuant to this Agreement shall be part of the same collective body (*Masse*) for the purpose of article L. 228-46 of the French Commercial Code (*Code de commerce*).

13.2 Where applicable, the rights of several Convertible Bondholders will be governed, in addition to this Agreement, by the provisions of the French Commercial Code (*Code de commerce*), applicable to the *Masse*, in particular as to representation and voting procedures.

13.3 All decisions made by the Convertible Bondholder(s) in accordance with this Article 13 of this Agreement shall be recorded in a register of the holders' decisions held by the Convertible Bondholders' Representative.

14. Protection of holders

The protection of the Convertible Bondholder(s) will be as set forth in Article 6 of the Warrants Issue Agreement as if such provisions formed integral part of this Agreement.

15. Remedies and waivers

15.1 No failure, delay or other relaxation or indulgence on the part of any of the Parties to exercise any power, right or remedy shall operate as a waiver thereof nor shall any single or partial exercise or waiver of any power, right or remedy preclude its further exercise or the exercise of any other power, right or remedy.

15.2 All rights of Kreos contained in this Agreement are in addition to all rights vested or to be vested in it pursuant to the other Issue Documents, common law or statute.

15.3 Each Party hereby acknowledges that the provisions of article 1195 of the French Civil Code (*Code civil*) shall not apply to it with respect to its obligations under the Issue Documents and that it shall not be entitled to make any claim under article 1195 of the French Civil Code (*Code civil*).

16. Severability

16.1 Each of the provisions of this Agreement and any Issue Document is severable and distinct from the others and if at any time one or more of such provisions is or becomes invalid, illegal or unenforceable the validity, legality and enforceability of the remaining provisions hereof shall not in any way be affected or impaired thereby.

16.2 In such case, the Issuer shall do its best effort take appropriate actions to replace such provision with an economically equivalent provision which is valid, legal and enforceable, such commitment being, for the avoidance of doubt, a material commitment.

17. Notices

17.1 All notices, demands or other communications under or in connection with this Agreement may be given by letter, facsimile, or e-mail addressed to the person at the address identified with its signature below.

To Issuer:

Biophytis S.A.
To the attention of Mr. Stanislas Veillet
Président Directeur Général
and Madame Evelyne Nguyen
Directeur administratif et financier
14, avenue de l'Opera
75001 Paris

E-mail: stanislas.veillet@biophytis.com and
evelyne.nguyen@biophytis.com

With copy (for information purposes) to:

Monsieur Marc Fredj
Avocat associé
Reed Smith LLP
112, avenue Kléber
75116 Paris

E-mail: mfredj@reedsmith.com
Fax: 01.76.70.41.19

To Subscriber's Affiliate:

Kreos Capital VI (Expert Fund) L.P.
To the attention of Mr. Michael Johnson
47 Esplanade
St Helier, JE1 0BD
Jersey

Email: michael.johnson@crestbridge.com
Fax: +44 20 7409 1034

With copy (for information purposes) to:

Monsieur Laurent Cavallier
Avocat associé
Reinhart Marville Torre

58, avenue Kleber
75116 Paris

E-mail: cavallier@rmt.fr
Fax: +33 (0)1 53 96 04 20

17.2 Any such communication will be deemed to be given as follows:

(i) if personally delivered, at the time of delivery, as documented by a receipt;

(ii) if by letter, on the date entered by the addressee on the receipt in the case of delivery by hand or on the date when delivery is first attempted in the case of a recorded delivery letter with acknowledgement of receipt; and

(iii) if by facsimile transmission or e-mail during the business hours of the addressee then on the day of transmission, otherwise on the next following Business Day.

17.3 In proving such service it shall be sufficient to prove that personal delivery was made or that such letter was properly stamped first class, addressed and delivered to the postal authorities or in the case of facsimile transmission or other comparable means of communication that a confirming hard copy was provided promptly after transmission.

18. Governing law - Jurisdiction

18.1 This Agreement is governed by and shall be construed in accordance with French law.

18.2 Any dispute concerning the validity, interpretation or performance of this Agreement will be submitted to the *Tribunal de commerce* (commercial court) of Paris.

/s/ Stanislas Veillet	/s/ Michael Johnson
Biophytis S.A.	**Kreos Capital VI (Expert Fund) L.P.**
Mr. Stanislas Veillet	Mr. Michael Johnson

List of Appendixes

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Appendix 4	Conversion calculation example

Appendix 1

Agreed form Drawdown Notice

DRAWDOWN NOTICE

Drawdown No. 1

Dated [●]

between

Kreos Capital VI (Expert Fund) L.P.	**GByopthytis S.A.**
the ("Subscriber")	**the ("Issuer")**

This Drawdown Notice forms a Schedule to a Convertible Bonds Issue Agreement entered into between the Subscriber and the Issuer dated 19 November 2021 (the "**Convertible Bonds Issue Agreement**")

The Subscriber has granted the Issuer a facility of a maximum amount of EUR 2,250,000 (the "**Facility**") pursuant to the terms and conditions set out in the Convertible Bonds Issue Agreement and attached Schedules.

Words and expressions in this Drawdown Notice shall have the same meanings as in the Convertible Bonds Issue Agreement.

PART 1

Details

Total Facility	EUR	2,250,000.00
Amount of Facility utilised under previous Drawdown Notice(s)	EUR	0.00
Amount of Facility to be drawn down pursuant to this Drawdown Notice	EUR	[●]
Balance available for drawdown under future Drawdown Notices	EUR	0.00
Tranche		
Term		[●] months
Bank Account Details for remittance of funds Bank Name: [●] Bank Address: [●] Beneficiary Name: Biopthytis S.A. IBAN: [●] SWIFT/BIC: [●]		
Anticipated Drawdown Date *(a Business Day no later than the Date of Expiry of the Facility)*		[●] 2021

The principal of the Convertible Bonds will be repaid and interest shall be paid monthly in accordance with the attached schedule.

We confirm that:

(a) the representations and warranties made by us in the subscription agreement entered into between the Subscriber and the Issuer dated 19 November 2021 are true and accurate on the date of this Drawdown Notice as if made on such date; and

(b) no Event of Default has occurred and is continuing or would result from the delivery of this Drawdown Notice.

for and on behalf of
Biophytis S.A.

Authorised Signatory.....

Name .....

Dated [●]

PART 2

Repayment Schedule (all amounts are in EUR)

Payment Due	Fees	Advance Payment	Capital	Interest	Total

Instalments Payable to:

Bank Name: [●]
Bank Address: [●]
Account Name: [●]
IBAN: [●]
SWIFT: [●]

Appendix 2

Agreed form subscription form

Appendix 3

Agreed form conversion notice
Can we have an example of the conversion calculation please

Biopthytis S.A.
Société anonyme au capital de [●] euros
Siège social : 14, avenue de l'Opéra – 75001 Paris
492 002 225
(the "**Company**")

CONVERSION NOTICE

The undersigned

[**Kreos Capital VI (Expert Fund) L.P.** a limited partnership incorporated under the laws of Jersey, having its registered office at 47 Esplanade, St Helier, JE1 0BD, Jersey, registered with the JFSC Companies Registry under identification number 2770, represented by Mr. _____, in his capacity as _____, duly authorised for the purposes hereof][other holder]

Holding, at the date hereof _____ Convertible Bonds issued by the board of directors of Biopthytis S.A., a limited company *(société anonyme)* incorporated under the laws of France, with a share capital of EUR [•] having its registered office at 14, avenue de l'Opéra – 75001 Paris, France, registered under single identification number 492 002 225 RCS Paris, [and _____ convertible bonds issued by the chief executive officer of Biophytis S.A., on _____] in accordance with the terms and conditions of the convertible bonds issue agreement entered into on 19 November 2021 between Kreos Capital VI (Expert Fund) L.P. and Biophtytis S.A.,

Being specified that capitalised terms not defined herein shall have the meaning given to them in the convertible bonds issue agreement abovementioned, as amended from time to time

Knowledge take of the conversion conditions of the Convertible Bonds,

Hereby declares converting _____ Convertible Bonds, being specified that at the date hereof:

□ Tranche A Convertible Bonds	□ Tranche B Convertible Bonds
- the value of N_{CB} under this notice is _____ - the value of M_{SP} is _____ - the value of D is _____ - the Conversion Ratio CR is therefore _____ - N_{CS} i.e. the number of underlying shares is therefore equal to _____	- the value of N_{CB} under this notice is _____ - the value of M_{SP} is _____ - the value of D is _____ - the Conversion Ratio CR is therefore _____ - N_{CS} i.e. the number of underlying shares is therefore equal to _____

Such conversion being made by subscribing to _____ new shares in the Company, for a total subscription price for such shares (including the applicable issuance premium) of _____, by means of conversion of _____ Convertible Bonds.

Executed in _____, On _____, in two (2) originals

_____
[●]*

Appendix 4

Conversion calculation example

Example

Conversion of 2,250,000 Convertible Bonds

N_{CB} (i.e. number of Convertible Bonds to be converted in accordance with the Conversion Notice) = 2,250,000

M_{SP} (i.e. 30 day VWAP of Issuer's shares on Euronext Growth on a period ending three days before the Tranche A Completion Date) = EUR 0.6050

D (i.e. cumulated amounts of dividends per share paid by the Issuer between the Tranche A Completion Date and the Conversion Date) = EUR 0.00

The Conversion Ratio (CR) is therefore equal to:

$CR = 1 / ((1.15 * M_{SP}) - D) = 1,43729788$

The number of Conversion Shares (N_{CS}) is therefore equal to:

$N_{CS} = CR * N_{CB}) = 1,43729788 * (,250,000 + 45,000 = 3,233,920.23$

To be rounded to **3,223,920** Conversion Shares

Exhibit 4.44

GOODWILL
PLEDGE AGREEMENT

Between

Biophytis S.A.

as Pledgor

and

Kreos Capital VI (UK) Ltd.

as Beneficiary

19 November 2021

Table of contents

Goodwill pledge agreement

This pledge agreement (hereinafter referred to as the "**Agreement**") is concluded on 19 November 2021, between the undersigned:

1. **Biophytis S.A.**, a public limited company with capital of 25.814.647 EUR, whose registered office is located at 14, avenue de l'Opéra – 75001 Paris, France, identified under the unique number 492 002 225 of the RCS [Trade and Companies Register] of Paris, whose securities are listed on the organised multilateral trading facility Euronext Growth under ISIN number FR0012816825, represented by Mr Stanislas Veillet as Chief Executive Officer;

(Hereinafter referred to as the "**Pledgor**")

ON THE ONE HAND

AND

2. **Kreos Capital VI (UK) Limited**, private *limited company* under English law, whose registered office is located at 5th Floor, 25-28 Old Burlington Street, London W1S 3AN, United Kingdom, registered with the Company Register of England and Wales under number 11535385, .acting both in its own name and on its own behalf and on behalf of the Affiliate (as such term is defined below) as security agent pursuant to the provisions of Article 2488-6 of the French civil code, represented by Mr Maurizio Petitbon, in his capacity as *Director,* duly authorised for the purposes hereof;

(Hereinafter referred to as the "**Beneficiary**")

ON THE OTHER HAND

The Pledgor and the Beneficiary are hereinafter individually referred to as a **"Party"** and collectively as the **"Parties"**.

IN THE PRESENCE OF:

3. **Kreos Capital V (UK) Limited,** private *limited company* under English law, whose registered office is located at 5th Floor, 25-28 Old Burlington Street, London W1S 3AN, United Kingdom, registered with the Company Register of England and Wales under number 09728300, represented by Mr Maurizio Petitbon, in his capacity as *Director,* duly authorised for the purposes hereof;, intervening in this Agreement for the purposes of the article 2.3 ;

(Hereinafter referred to as "**Kreos Capital V**")

Recital

(A) The Pledgor is a public limited company under French law founded in 2006 in order to develop new classes of drugs for degenerative diseases associated with ageing, and in particular with sarcopenia (the loss of muscle functionality) and macular degeneration related to ageing.

(B) Kreos Capital V subscribed in full to a bond issued by the Pledgor in a maximum principal amount of ten million euros (EUR 10,000. 000) pursuant to an issue agreement concluded on 10 September 2018 between the Pledgor, as issuer (Issuer), and the Beneficiary, as subscriber (Subscriber), entitled Bonds Issue agreement (hereinafter referred to as the "**2018 Issue Agreement**"), itself entered into pursuant to a framework agreement entitled *Venture Loan Agreement* concluded on 10 September 2018 between the Parties (hereinafter referred to as the "**2018 Framework Agreement**"), all payment and repayment obligations, either present or future, in principal, interests, late interest, fees, commissions, accessories or any other sum whatsoever (including in respect of default, cancellation, the termination or resolution of any security document (Security Document, as such term is defined in the 2018 Issue Agreement), owed by the Pledgor to Kreos Capital V under such agreements and security documents concluded into pursuant thereto being hereinafter referred to as the "**2018 Secured Obligations**".

(C) In security for the payment of the 2018 Secured Obligations, the Parties concluded the 2018 Goodwill Pledge Agreement.

(D) The Beneficiary and the company Kreos Capital VI (Expert Fund) L.P, company (*limited partnership*) under Jersey law, whose registered office is located at 47 Esplanade, St Helier, JE1 0BD, Jersey, registered with the JFSC Companies Registry under number 2770 (hereinqfter referred to as the' "**Affiliate**"), agreed to subscribe to two bond issuances issued simultaneously by the Pledgor of an maximum cumulative amount in principal of ten million euros (10.000.000 €) pursuant to, on the one hand, a simple bonds issue agreement for a maximum amount of seven million seven hundred and fifty thousand euros (7.750.000 €) concluded on 19 November 2021 between the Pledgor, as issuer, and the Beneficiary, as subscriber entitled *Bonds Issue agreement* and, on the other hand, a convertible bonds issue agreement for a maximum amount of two million two hundred and fifty thousand euros (2.250.000 €) concluded on 19 November 2021 between the Pledgor, as issuer, and the Affiliate, as subscriber, entitled *Convertible Bonds Issue agreement* (hereinafter collectively referred to as the "**Issue Agreement**""), themselves concluded into pursuant to a framework agreement entitled *Subscription Agreement* concluded on 19 November 2021 between the Pledgor, the Beneficiary and the Affiliate (hereinafter referred to as the "**Framework Agreement**").

(E) In accordance with the provisions of the Issue Agreement and the Framework Agreement, as collateral for the proper performance of the Secured Obligations (as defined below), the Pledgor constituted a pledge over the Goodwill (as defined in Article 2.1 below), in accordance with the terms and conditions of this Agreement**.**

Agreements

1. Definitions and interpretation

1.1 The terms and expressions used in this Agreement shall have, unless the context does not permit it, the following meanings:

2018 Goodwill Pledge Agreement	means the goodwill pledge agreement concluded betwen the Pledgor and Kreos Capital V on 10 September 2018 ;

2018 Secured Obligations	has the meaning given to it in paragraph B of the preamble hereto;
Agreement	means this agreement and its Appendices, in their initial version and any version subsequently amended, if applicable;
Event of Default	refers to any of the events mentioned in Article 9 (*Events of Default*) of the Issue Agreement;
Event of Implementation	means (i) the occurrence of a failure to pay by the Pledgor under the Issue Agreement, under the conditions of paragraph 9.1 of the Issue Agreement or (ii) the sending of a notification of immediate repayment obligations to the Pledgor in the terms of paragraph 9.14 of the Issue Agreement;
Issue Documents	means the Issue Agreement, the Framework Agreement, the terms and conditions of the share subscription warrants *(Terms and Conditions of the Warrants),* all securities documents *(Security Documents),* and any other document referred to as such in writing by the Parties;
Maturity Date	refers to the date of full payment by the Pledgor of all of the Secured Obligations;
Pledge	refers to the pledge of the Pledged Goodwill, as defined in Article 2 below;
Secured Oligations	refers to the payment and repayment obligations, either present or future, in principal, interests, late interest, fees, commissions, accessories or any other sum whatsoever (including in respect of default, cancellation, the termination or resolution of any Security Document (*Security Document*), borne by the Debtor as regards the Beneficiary under the Issue Documents, ranking *pari passu* with the 2018 Secured Obligations as to right to payment and without any preference between them, for a maximum total amount in principal of ten million euros (10.000.000 EUR) ;
Warranty Period	refers to the period beginning on the date of this Agreement and ending on the Maturity Date (inclusive).

1.2 In this Agreement, except as expressly defined otherwise, capitalised terms not otherwise defined in this Agreement shall have the meaning specified in the Issue Agreement and the Framework Agreement.

2. Pledge

2.1 In guarantee of the payment and fulfilment of all of the Secured Obligations, and in accordance with the provisions of Articles L. 142-1 et seq. of the French commercial code and Articles 2355 et seq. of the French civil code (hereinafter, the "**Law**"), the Pledgor hereby constitutes in favour of the Beneficiary a pledge on its goodwill as designated in Article 3 (hereinafter, the "**Pledged Goodwill**") of which it is the owner.

2.2 The pledge constituted by this Agreement (hereinafter, the "**Pledge**") remains in effect until the expiry of the Warranty Period.

2.3 Kreos Capital V, in its capacity as (i) the sole holder of the bonds issued by the Pledgor under the 2018 Secured Obligations and (ii) the beneficiary of a pledge of pledged goodwill under the 2018 Goodwill Pledge Agreement, expressly authorizes, insofar as necessary, the conclusion of this Pledge by the Parties and its

execution by the Beneficiary.

3. Designation of the pledged goodwill

3.1 The Pledge relates to all the tangible and intangible assets forming part of the Pledged Goodwill of the Pledgor limited to the countries of the European Union and the United States of America, with the exception of the intellectual property rights which are the subject of a pledge by a separate agreement concluded concomitantly with the present Agreement for the benefit of the Beneficiary in accordance with Article 2355 of the French civil code and Articles L. 521-1 et seq. of the French commercial code, and articles L. 132-34 and R. 132-8, L. 613-8, L. 714-1 and R. 132-8 of the French intellectual property code.

3.2 In accordance with Article L. 142-2 paragraph 4 of the French commercial code, it is stipulated that the Pledged Goodwill is operated at the following premises: 14, avenue de l'Opéra - 75001 Paris, France (hereinafter "**the Main Establishment**"), it being specified that the Pledged Goodwill is more specifically operated on the premises of the Sorbonne University at building A4.4 place Jussieu, 75005 Paris**.**

3.3 The Pledged Goodwill includes the following assets and rights in the European Union and the United States of America:

(i) the sign, the commercial name, the clientele and the goodwill ;

(ii) the commercial furniture,, the equipment and the tool which, are, now or in the future, part of the Pledged Goodwill and which are used in the context of its operation and any subsequent extensions, increases, substitutions or changes to any of the items listed in **Appendix 1**;

(iii) the tenancy laws les droits au bail on the actually or futur premises in which the Pledged Goodwill is operated, as set out in the lease agreement attached as '**Annexe 2**, and

(iv) subject to law and this Agreement, once they have been obtained, each of the marketing authorizations in the jurisdictions covered by the patents entered into the scope of the Pledge, as well as, to the extent strictly necessary for the commercialization in such jurisdictions of the products covered by the patents entered into the scope of the Pledge, the know-how (including any information or material, whether or not patented and whether or not patentable, including, but not limited to, any documents required by the regulations of such jurisdictions, administrative records related to manufacturing up to the batch release phase, inventions, data, formulas, methodology, specifications, manufacturing procedures, experiments and tests, all information (including regulatory, administrative, medical, technical and commercial information), including any document required by the regulations of such jurisdictions allowing the use of the products covered by the said marketing authorizations, provided, however, that:

a) in the event that the Pledgor shall obtain a marketing authorization (conditional or others authorizations) from the EMA (*Europen Medicines Agencey*) for the product Sarconeos (BIO101) for the COVID-19 indication, the said authorization shall not be entered into the scope of the Pledge, and

b) similarly, in the event that the Pledgor shall obtain a marketing authorization (*emergency use authorization* or others authorizations) from the FDA (*U.S. Food and Drug Administration*) for the product Sarconeos (BIO101) for the COVID-19 indication, the said authorization shall not be entered into the scope of the Pledge.

(v) The rights of the Beneficiary extend to all insurance compensation and other compensation that would be due in respect of a requisition or a dispossession and all other damages or payments may be substituted for any part of the constituent elements of the Pledged Goodwill.

As an additional security, the Pledgor undertakes to inform the Beneficiary in order to allow it to carry out, at the expense of the Pledgor and provided that these fees are reasonable, all the formalities that may be reasonably necessary or useful to make the pledge from these indemnities and revenue enforceable against third parties.

(vi) In accordance with Article L.121-13 of the French insurance code, the Beneficiary may, upon notification by the latter to the Pledgor of an Event of Implementation, notify this Pledge to the insurance companies mandated to insure the Pledged Goodwill, at the expense of the Pledgor, provided that these fees are reasonable.

3.4 Furthermore, the Beneficiary shall have a right of access without restrictions, to any medical literature relative to products, communications, clinical and preclinical results, test procedures, medical information, data security and pharmacovigilance, documentation concerning the manufacture, batch records, stability data that may be necessary in connection with the exploitation of the patents falling within the scope of the Pledge.

4. Declarations, commitments and warranties of the Pledgor

4.1 Without prejudice to the declarations and warranties subscribed under the terms of the Framework Agreement, the Pledgor shall declare and warrant to the Beneficiary on the date of this Agreement that:

(a) no authorisation, approval, consent, licence, notification or other request of a public entity or corporate bodies of the Pledgor is required for the validity, performance or enforceability of this Agreement, with the exception of any authorisation which has been duly obtained beforehand and whose justification has been provided to the Beneficiary,

(b) the present Agreement and the commitments contained therein :

(i) constitute valid obligations, binding the Pledgor in accordance with their terms, enforceable against the Pledgor, and

(ii) create a second rank pledge on the Pledge Goodwill, provided that the Pledge shall become a first rank pledge on the Pledged Goodwill upon the occurrence of the term of the first rank pledge constituted under the 2018 Goodwill Pledge Agreement.

(c) Insofar as that could have a material adverse effect (Material Adverse Effect as defined in this Issue Agreement) as to the ability of the Debtor to perform its obligations under this Agreement, no failure to meet its obligations has occurred under any contract or agreement to which the Debtor is a party;

(d) there is, to the knowledge of the Debtor, no ongoing action, suit or jurisdictional proceeding or before any administrative authority whatsoever that may have a material adverse effect (Material Adverse Effect, as defined in this Issue Agreement) on the validity of the obligations, as stipulated in the Agreement or the ability of the Debtor to perform such obligations;

(e) the Pledged Goodwill is free of any guarantees or other sureties of any nature whatsoever, and none of the assets that are part of the Goodwill is encumbered, at the date of this Agreement, by a security, lien or other right of any nature whatsoever, in favour of a third party, with the exception of the first rank pledge constituted under the 2018 Goodwill Pledge Agreement. A statement of pledges and liens on the Pledged Goodwill as of the date of 18 November 2021 can be found in **Appendix 3** to this Agreement.

4.2 The Pledgor undertakes, for the entire Warranty Period, to:

(a) comply strictly with the provisions of Article 8 *(Undertakings)* of the Issue Agreement as well as article 5 *(Commitments)* of the Framework Agreement;

(b) communicate to the Beneficiary any significant information relating to the Pledged Goodwill and in particular any dispute relating thereto;

(c) not to sell, transfer or otherwise dispose of the Pledged Goodwill or any of its rights under the Pledged Goodwill without the prior written consent of the Beneficiary; except in the event of enforcement of the first rank pledge constituted under the 2018 Goodwill Pledge Agreement ;

(d) not to grant any security whatsoever on the Pledged Goodwill or any of its rights under the Pledged Goodwill without the prior written consent of the Beneficiary (except in the event of renewal of the first rank pledge constituted under the 2018 Goodwill Pledge Agreement) or any other related right, it being specified, however, that the Pledgor is expressly authorised to grant any licence on one of the components of the Pledged Goodwill, provided that they do not contain provisions that could prevent the implementation of the Pledge, as well as continue the performance of licences granted prior to the conclusion of this Agreement;

(e) not to grant or allow the continuation of any surety on all or part of the Pledged Goodwill or of any right of the Pledged Goodwill in favour of a third party without having expressly given the prior approval of the Beneficiary; with the exception of the first rank pledge constituted under the 2018 Goodwill Pledge Agreement;

(f) to sign any instrument or document and to carry out all other measures and formalities reasonably required by the Beneficiary to render enforceable and ensure the effectiveness of the Pledge or take the forced execution of the Pledge in accordance with this Agreement;

(g) to make its best efforts to preserve the current value of the Pledged Goodwill by continuing, to the extent possible:

(i) to pursue any commercially profitable activity;

(ii) to maintain the Pledged Goodwill well-stocked and maintain the equipment and tools, and

(iii) to take any necessary measures to obtain, protect, control, maintain, update and keep its marketing authorisations using patents falling within the scope of the Pledge;

(h) to establish a pledge that is compliant, essentially, under the terms of this Agreement, in favour of the Beneficiary to ensure the Secured Obligations, on the activity of any branch of the Pledged Goodwill that the Pledgor may operate after the date of this Agreement

(i) in the Event of a change in the location of the Goodwill by the Pledgor, anywhere and under any circumstances, the Pledgor undertakes to carry out, at its own expense, all formalities that the Beneficiary may reasonably require and which are necessary to enforce or protect all rights, powers, capacities and faculties of which the Beneficiary benefits under this Agreement. The Pledgor specifically undertakes to inform the Beneficiary, at least fifteen (15) days in advance, of its intention to move the Pledged Goodwill and the new location to where it intends to move it, in accordance with Article L, 143-1 of the French commercial code;

(j) not to grant a leasing-management on the Pledged Goodwill until the end of the Warranty Period.

4.3 The Debtor agrees to apply the commitments undertaken under Article 5 *(Commitments)* of the Framework Agreement, and undertakes to apply them, *mutatis mutandis* and to the extent possible, to the Pledged Goodwill.

4.4 The Pledgor agrees to refrain, in order to release its commitment, from invoking any change in the legal form of the Beneficiary even if it entails the creation of a new legal personality.

4.5 The Pledgor will not be released due to:

(i) modifications (occurring one or more time but provided they do not lead to novation);

(ii) the addition or removal of new securities, new creditors or new debtors;

(iii) the extension of maturity dates;

Or any other event affecting in any manner whatsoever the stipulations of the Issue Agreement and the Framework Agreement,

5. Execution

5.1 In the event of the occurrence of an Event of Implementation and failing the processing of an Event of Implementation under the conditions stipulated in the Issue Agreement, the Beneficiary may, at any time, exercise all rights, acts and privileges granted to the Beneficiary by the Law on the Pledged Goodwill.

5.2 The Pledgor hereby undertakes to make its best efforts to provide to the Beneficiary with all the necessary assistance to execute this Pledge, to sign and make enforceable any deed or document and to undertake any formality necessary for this purpose, and indemnify the Beneficiary for any losses, expenses and charges of this Agreement or the said execution, in accordance with Article 12 below. The Pledgor undertakes in particular to carry out, if applicable, all necessary formalities with the Agence Nationale de Sécurité du Médicament [French National Agency for Medicines Safety] and with any regulatory authority concerned in order to facilitate the transfer of the marketing authorisations obtained.

6. The allocation of income

Any amounts collected from the Pledgor by the Beneficiary under this Agreement are allocated by the Beneficiary to the payment of the Secured Obligations, in accordance with the terms of the Issue Agreement, *pari passu* with the payment of the secured obligations under the 2018 Goodwill Pledge Agreement. Any amount which may be received from the Beneficiary under the terms of this Agreement, beyond the Secured Obligations, shall be reimbursed without delay by the Beneficiary to the Pledgor, subject to any contrary provisions set out in this Agreement.

7. Miscellaneous provisions

7.1 The Beneficiary is liable for any loss due to the exercise or any failure or omission to exercise its rights under this Agreement. The Pledgor is solely responsible for its own contracts, commitments, acts, omissions, defaults and losses and liabilities incurred by it and the Beneficiary does not assume any liability in this regard (with respect to the Pledgor or any other person) for any reason whatsoever.

7.2 No failure to exercise or delay in exercising, by the Beneficiary, any right or remedy under this Agreement shall be construed as constituting a waiver to said right or remedy. No single or partial exercise of any right or remedy prevents any other exercise thereof or the exercise of any other right or remedy in the future. The Beneficiary does not assume any responsibility towards the Pledgor or its legal successors, individually or generally, due to the delay in exercising or failure to exercise of rights and prerogatives granted to the Beneficiary under this Agreement,

The rights and remedies provided for in this Agreement are cumulative and exclusive of any right or remedy provided by law and may only be waived in writing and in an express manner.

7.3 The Pledge is in addition to any security or any bond held, if applicable, by the Beneficiary under the terms of the Secured Obligations or any of them and is under no circumstances affected by any other security mentioned above and exists without prejudice to it.

7.4 In the event that one or more of the provisions of this Agreement will be deemed to be illegal, invalid or unenforceable, this Agreement shall be construed as if it does not contain such provision and the nullity of said provision shall not affect the validity or the execution of any other provision of this Agreement, which shall remain fully applicable.

7.5 The parties to the Agreement acknowledge that the sole purpose of this Agreement is to create this Pledge in favour of the Beneficiary and is not intended to change (i) the rights and obligations set out in the Issue Agreement and/or (ii) the rights and obligations of the Pledgor and of Kreos Capital V provided in the 2018 Issue Agreement or the 2018 Goodwill Pledge Agreement.

8. Powers

The Beneficiary or any person designated by the latter may confer any power with or without the right of substitution, to any person of its choice, to proceed with any registration or other formalities, as well as implementing any measures for the executions of the rights arising from this Pledge of the Pledged Goodwill.

9. Mandate

9.1 The Pledgor here by appoints, in order to ensure the full performance of its obligations under this deed, the Beneficiary and any person appointed by the Beneficiary under the terms of this deed, as representative acting jointly and severally and in its name and on its behalf, to sign and carry out all formalities and steps which the Pledgor is obliged to carry out under this Agreement, which it will do in accordance with the commitments and provisions contained in this Agreement.

9.2 It is specified that before carrying out such actions by virtue of the mandate provided for in this article 10, the Beneficiary must inform the Pledgor, which may oppose the performance of such actions for valid reasons.

10. Successors and beneficiaries

10.1 All rights, privileges, use and options granted to the Beneficiary under this Agreement will benefit its assignees, successors and/or beneficiaries and all terms, conditions, declarations, guarantees, promises and commitments contained in this Agreement bind the Pledgor and its assignees, successors and/or beneficiaries.

10.2 It is expressly agreed that the Pledgor may not assign or transfer to any third parties, through novation or in any manner whatsoever, its rights and obligations as arising out of this Agreement without the prior written consent of the Beneficiary, and that the Beneficiary is authorised to sell and delegate its rights and obligations arising from this Agreement to any third party.

10.3 The Parties agree that in the event of the assignment or transfer by the Beneficiary of all or some of its rights and obligations under the Issue Documents, to any person (hereinafter referred to as the **"Assignee")** through novation or in any other manner, the Pledgor and the Beneficiary agree that the benefit of the security created by the Agreement will be assigned and maintained for the benefit of the Assignee.

11. Charges

Subject to the stipulations of the Issue Agreement and the Framework Agreement on the cap on the assumption by the Pledgor of reasonable costs and expenses incurred (in accordance with the provisions of article 9 of the Framework Agreement) and on the exclusion of the indirect damage which they provide for, the Pledgor undertakes, if necessary, at the request of the Beneficiary, to indemnify the Beneficiary for all reasonable expenses and costs, including legal fees and expenses, and all charges, taxes, fees or registration fees, associated (i) with the performance of this Agreement, (ii) for the execution of the formalities related to the constitution, renewal and release of the Pledge, and (iii) with the protection, preservation or exercise of the rights of the Beneficiary in terms of the Pledge.

12. Declaration - Registration

12.1 In accordance with the provisions of French law currently in force, this Agreement must be registered with the Tax Revenue.

12.2 Pursuant to Article L. 142-3 of the French commercial code, within thirty (30) days of the signature of this Agreement, a first-rank entry of the Pledge of the Pledged Goodwill will be taken at the behest of the Beneficiary before the Clerk of the Commercial Court of Paris for a sum, in principal, of ten million euros (10.000.000 EUR).

12.3 The holder of an original of this Agreement is hereby granted all the powers necessary for completing the formalities of the registration and enrolment of the Pledge of the Pledged Goodwill.

13. Term and release

13.1 This Agreement shall come into force on the date of its signature by the Parties and will continue to produce all its effects throughout the Warranty Period, it being indicated that the Pledge is registered with the Clerk of the Commercial Court of Paris for the term provided for by the provisions of Article L. 143-19 of the French commercial code.

13.2 The Pledgor undertakes to renew the registration of this Pledge (for a redefined amount - deducting the repayments made) if, at the end of the registration provided for in the article 13.1 above, any one of the Secured Obligations remains unpaid, is not executed or paid and the Pledgor agrees, in the common interests of the parties, to renew this registration and give the Beneficiary an irrevocable mandate and power to sign any deeds and documents and carry out all the formalities required for this purpose.

13.3 At the end of the Warranty Period, and upon receipt of a written request by the Pledgor requesting a written confirmation that the Warranty Period has ended, the Beneficiary shall sign, at the expense of the Pledgor, an act of release thus releasing the Pledgor from all its obligations and liabilities arising out of this Agreement.

13.4 Notwithstanding the foregoing:

In the event that the Pledgor shall obtain a marketing authorization (conditional or other authorizations) from the EMA (Europen Medicines Agency) for the product Sarconeos (BIO101) for the indication COVID-19, the Beneficiary undertakes to grant a release of the Pledge with respect to the resulting marketing authorization and any other assets that may be required for the use of this authorization in the European Union from the date of issuance of said authorization.

Similarly, in the event that the Pledgor shall obtain emergency use authorization or other authorization from the FDA (U.S. Food and Drug Administration) for Sarconeos (BIO101) for the COVID-19 indication, the

Beneficiary undertakes to grant a release of the Pledge with respect to the resulting marketing authorization and any other assets that may be required for the use of such authorization in the United States of America from the date of issuance of said authorization.

In the event that the relevant marketing authorization shall expire or is revoked, the Pledgor undertakes to immediately take all necessary steps and execute all deeds necessary to the reinstatement of the Pledge in accordance with its terms prior to release. The Pledgor shall also refrain from granting any pledge or any other license on the industrial property rights or any other asset to any third party during this period.

In the event that the Pledgor shall conclude any other agreement with any third party involving development and/or research, whether joint or not, relating to intellectual property rights associated with the Sarconeos (BIO101) product or the Macuneos (BIO201) product, and whether or not involving an equity investment, immediately or in the future, the Beneficiary undertakes to discuss in good faith the possibility of a partial release of the Pledge, within the framework of a balanced consideration of the Pledgor's development needs and the protection of the Beneficiary's interests.

14. Notices

All communications to be made pursuant to this Agreement must be carried out in conformity with Article 9 *(Notices)* of the Framework Agreement, as if said article was included in this Agreement, *mutatis mutandis*.

15. The election of domicile

For the purposes of the registration of the pledge on the Pledged Goodwill in the Trade and Companies Register, the Beneficiary has elected domicile at the registered office of the Pledgor.

16. Applicable law and jurisdiction

17.1 This Agreement and each document attached thereto are governed by French law and interpreted in accordance with said law.

17.2 The Parties hereby and irrevocably acknowledge the exclusive jurisdiction of the competent courts of Paris, as regards any action or proceeding arising out of this Agreement or relating to it or to all corresponding documents or deeds concluded in accordance with this Agreement.

/s/ Stanislas Veillet

Biophytis S.A.
M. Stanislas Veillet
Chief Executive Officer

/s/ Maurizio Petibon

Kreos Capital VI (UK) Ltd.
M. Maurizio Petitbon
Director

In the presence of:

/s/ Maurizio Petibon

Kreos Capital V (UK) Ltd.
M. Maurizio Petitbon
Director

Appendix 1

Identification of commercial furniture, equipment and tool pledged at the date of this Agreement

None.

Appendix 2

Tenancy law

Appendix 3

The statement of pledges and liens

Exhibit 4.45

BANK ACCOUNK PLEDGE AGREEMENT

Between

Biophytis S.A.

as Pledgor

and

Kreos Capital VI (UK) Ltd.

As Beneficiary

19 November 2021

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Bank account pledge agreement

This pledge agreement (hereinafter referred to as the "**Pledge Agreement**") is concluded on 19 November 2021, between the undersigned:

1. **Biopthytis S.A.**, a public limited company with capital of 25,814,647 EUR, whose registered office is located at 14, avenue de l'Opéra – 75001 Paris, France, identified under the unique number 492 002 225 of the RCS [Trade and Companies Register] of Paris, whose securities are listed on the organised multilateral trading facility Euronext Growth under ISIN number FR0012816825, represented by Mr. Stanislas Veillet as Chief Executive Officer;

(Hereinafter referred to as the "**Pledgor**")

ON THE ONE HAND

AND

2. **Kreos Capital VI (UK) Limited**, private *limited company* under English law, whose registered office is located at 5th Floor, 25-28 Old Burlington Street, London W1S 3AN, United Kingdom, registered with the Company Register of England and Wales under number 11535385, represented by Mr. Maurizio Petitbon, as *Director*, duly authorised for the purposes hereof, acting both in its name and on its behalf and on behalf of the Affiliate (as defined below) as security agent in accordance with the provisions of Article 2488-6 of the French civil code;

(Hereinafter referred to as the "**Beneficiary**")

ON THE OTHER HAND

The Pledgor and the Beneficiary are hereinafter individually referred to as a "**Party**" and collectively as the "**Parties**".

Recitals

(A) The Pledgor is a public limited company under French law founded in 2006 in order to develop new classes of drugs for degenerative diseases associated with ageing, and in particular with sarcopenia (the loss of muscle functionality) and macular degeneration related to ageing.

(B) The Beneficiary and the company Kreos Capital VI (Expert Fund) L.P., *limited pertnership* under Jersey law, whose registered office is located at 47 Esplanade, St Helier, JE1 0BD, Jersey, registered with the *JFSC Companies Registry* under the number 2770 (hereinafter referred to as the "**Affiliate**"), agreed to subscribe to two bond issuances issued at the same time by the Pledgor of a maximum aggregate principal amount of ten million euros (10,000,000 €) by virtue, on the one hand, a contract for the issue of simple bonds for a maximum amount of seven million seven hundred and fifty thousand euros (7,750,000 €) concluded on 19 November 2021 between the Pledgor, as issuer (*Issuer*), and the Beneficiary, as subscriber (*Subscriber*), named *Bonds Issue Agreement* and, on the other hand, a contract for the issue of convertible bonds for a maximum amount of two million two hundred and fifty thousand euros (2,250,000 €) concluded on 19 November 2021 between the Pledgor, as issuer (*Issuer*), and the Affiliate, as subscriber (*Subscriber*), named *Convertible Bonds Issue agreement* (hereinafter collectively named the "**Issue Agreement**"), themselves concluded pursuant to a framework agreement named *Subscription Agreement* concluded on 19 November

2021 between the Pledgor, the Beneficiary and the Affiliate (hereinafter referred to as the "**Framework Agreement**").

(C) In accordance with the provisions of the Issue Agreement and the Framework Agreement, as collateral for the proper performance of the Secured Obligations (as defined in article 1 below), the Pledgor constituted by this Pledge Agreement, in favour of the Beneficiary, acting both on its own behalf and on behalf of the Affiliate as security agent in accordance with the provisions set out in article 2488-6 of the French civil code, a pledge on the Pledged Bank Claims (as defined in article 1 below), in accordance with the terms and conditions of this Pledge Agreement.

Agreements

1. Definitions and Interpretation

1.1 The terms and expressions used in this Pledge Agreement shall have, unless the context does not permit it, the following meanings:

Account Holder	means, at the date of this Pledge Agreement, the credit institution referred to in Annex 1, taken in their respective branches referred to in Annex 1, as well as any credit institution (as this term is defined by Article 4 of Regulation (EU) n°575/2013 of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) n°648/2012) and/or any payment institution and/or any banking institution with competences similar to those of the credit institutions or payment institutions in whose books the Pledgor holds or may hold an account during the Warranty Period, whether or not it is designated by the Pledgor in accordance with Article 7. 15 below;
Blocking	means the Beneficiary's request to the Account Holder to prohibit the Pledgor, by any means at his disposal, from debiting the Pledged Accounts, under the conditions set out in Article 4 below;
Blocking Notice	has the meaning set out in article 3.2 hereinafter;
Business Day	means a day (other than Saturday or Sunday) where credit institutions are open in Paris;
Completion Date	has the meaning set out in article 6.1 hereinafter;
Blocking Notice Date	means the first Business Day following the day on which the Account Holder receives the Blocking Notice;
End of Blocking Date	has the meaning set out in article 5.2 hereinafter;
Event of Default	refers to any of the events mentioned in Article 9 (*Events of Default*) of the Issue Agreement;
Event of Implementation	means (i) the occurrence of a failure to pay by the Pledgor under the Issue Agreement, under the conditions of paragraph 9.1 of the Issue Agreement or (ii) the sending of a notification of immediate repayment

	obligations to the Pledgor in the terms of paragraph 9.14 Issue Agreement;
Guarantee Account	has the meaning set out in article 4.2 hereinafter;
Issue Documents	means the Issue Agreement, the Framework Agreement all securities documents (*Security Documents*), and any other document referred to as such in writing by the Parties;
Majority Bondholders	means the "Majority Bondholders" as defined in the Framework Agreement;
Maturity Date	refers to the date of full payment by the Pledgor of all the Secured Obligations (*Final Redemption Date*, as defined in the Issue Agreement) ;
Pledge	refers to the pledge, in favour of the Beneficiary, of the Pledge Bank Claim, as defined in article 2 below ;
Pledge Accounts	means cumulatively : (i) at the date of this Pledge Agreement, the bank accounts opened in the name of the Pledgor in the books of the Account Holders whose bank references are set out in **Annex 1**, and (ii) any other bank account opened in the books of any Account Holder in the name of the Pledgor, including any sub-accounts, the credit balance of which shall be pledged in the manner provided for in this Pledge Agreement, it being specified that in the event of a treasury agreement between the Pledgor and its subsidiaries, the centralising account will be opened in the name of the Pledgor and will automatically fall within the scope of the Pledge;
Pledge Bank Claim	means collectively or individually the credit balance (as defined in Article 2360 of the French civil code) of each of the Pledged Accounts as at the Blocking Notice Date, less any amount owed by the Pledgor in respect of payments or instalments made by means of the Pledgor's payment instruments at a date prior to the Blocking Notice Date, in accordance with the provisions of Article 4 below;
Secured Obligations	refers to the payment and repayment obligations, either present or future, in principal, interests, late interest, fees, commissions, accessories or any other sum whatsoever, including in respect of default, cancellation, the termination or resolution of any Security Document (Security Document), borne by the Pledgor as regards the Beneficiary and the Affiliate under the Issue Documents;
Warranty Period	refers to the period beginning on the date of this Pledge Agreement and ending on the Maturity Date (inclusive);

1.2 Except as expressly defined otherwise in this Pledge Agreement, capitalised terms and defined in English in the Issue Agreement shall have the same meaning specified in this Pledge Agreement (including its preamble).

2. Non-recourse pledge

2.1 In accordance with the provisions of Articles 2355 and seq. of the French civil code (in particular Article 2360 of the French civil code) and Articles L. 521-1 and seq. of the Commercial Code, the Pledgor hereby constitutes in favour of the Beneficiary a pledge, the Pledge Bank Claim, as security for any amounts owed by the Pledgor to the Beneficiary and the Affiliate under the Secured Obligations (hereinafter referred to as the "**Pledge**").

2.2 Any right of the Pledgor relating to an amount credited to one of the Pledged Accounts shall immediately become subject to the Pledge.

2.3 The Parties agree that the Pledge shall, where applicable, be realised by the Beneficiary as security for any sums that the Pledgor may owe in respect of the Secured Obligations.

2.4 This Pledge Agreement shall be enforceable by operation of law against the Account Holder upon notification to the Account Holder of this Pledge Agreement under the conditions set out in Article 12 below.

3. Situation of the Parties before the Blocking Notice Date

3.1 As long as no Event of Implementation has occurred and is continuing, the Pledgor may freely dispose of the amounts credited to the Pledged Accounts.

3.2 In the event of an Event of Implementation, the Beneficiary shall be entitled to notify the Account Holder (with a copy to the Pledgor) of the Blocking of the Pledged Accounts, by sending a Blocking Notice in accordance with the model set out in **Annex 2** to this Pledge Agreement (hereinafter referred to as "**Blocking Notice**").

4. Situation of the Parties as from the Blocking Notice Date

4.1 As from the Date of the Blocking, the Pledgor undertakes not to dispose, within the limit of the sums due under the Secured Obligations, of any of the sums credited to one of the Pledged Accounts on the Blocking Notice Date as well as any other sum that may be credited to the said account after the Blocking Notice Date, until the Completion Date or the End of Blocking Date, it being specified that the issuance of a Blocking Notice shall not have the effect of closing the Pledged Accounts and that the provisions of Article 7. 1 below shall continue to apply.

4.2 The Account Holder will transfer to the bank account opened in the name of the Beneficiary, the bank references of which appear in the Blocking Notice (hereinafter the "**Guarantee Account**") :

(i) the credit balance of the Pledged Accounts up to the limit of the amounts due in respect of the Secured Obligations on the Blocking Notice Date, less the amounts due in respect of the payment instruments referred to below, as shown in the accounts of the Pledgor:

- cheques drawn on the relevant account and dated no later than the Business Day preceding the Blocking Notice Date;

- transfer orders received before the Blocking Notice Date and direct debits submitted before the Blocking Notice Date;

- outstanding amounts of payment cards issued in the Pledgor's name prior to the Blocking Notice Date, and

- all interest, fees and charges owed by the Pledgor to the Account Holder in respect of its current transactions on the Blocking Notice Date.

(ii) until the Completion Date or the End of Blocking Date, on each Business Day, any amount credited to one of the Pledged Accounts after the Blocking Notice Date up to the limit of the amounts due under the Secured Obligations.

5. End of Blocking

5.1 If the Event of Implementation is remedied under the conditions provided for in the Issue Agreement or if the Event of Implementation is waived by the Beneficiary, the Beneficiary shall promptly notify the Account Holder (with a copy to the Pledgor) of the end of the blocking of the Pledged Accounts.

5.2 Upon receipt of this written information (hereinafter referred to as the "**End of Blocking Date**"), the Pledgor shall once again be entitled to dispose of the amounts credited to the Pledged Accounts in accordance with the provisions of the Issue Agreement.

The Pledgor will then be entitled to:

(i) to obtain the return of the credit balance, if any, in the Guarantee Account;

(ii) to withdraw any amount credited to one of the Pledged Accounts;

5.3 Subject to the above stipulations, the Beneficiary shall return to the Pledgor, by transfer to the Pledged Accounts no later than three (3) Business Days following the aforementioned remediation, the amount appearing, as the case may be, to the credit of the Guarantee Account, less all sums allocated to the payment of any sum due and payable under the Issue Agreement.

6. Implementation of the Pledge

6.1 In the event of an Event of Implementation, the Beneficiary may, in accordance with the provisions of articles 2364 and 2365 of the French civil code, immediately (hereinafter referred to, for the purposes of this paragraph, as the "**Completion Date**"), by operation of law and without formality:

(i) in the event that the Beneficiary has not previously notified the Account Holder in accordance with the provisions of Section 3.2 above, the credit balance of the Pledged Accounts, as it shall then exist, to the payment of the Secured Obligations;

(ii) in the event that the Beneficiary has given prior notice to the Account Holder in accordance with the provisions of Article 3.2 above and the Guarantee Account has been credited in accordance with the terms of the Blocking Notice, the credit balance of the Guarantee Account, as it then exists, for payment of the Secured Obligations.

6.2 In accordance with the provisions of article 2366 of the French civil code, the Beneficiary undertakes to return to the Pledgor within five (5) Working Days any sum it may have received in excess of its rights under the foregoing.

6.3 After the Completion Date referred to in article 6.1 above and for the remainder of the Warranty Period, the Beneficiary may realize the Pledge with regard to any new provisional balance of the Pledged Accounts taking into account all sums credited to the Pledged Accounts after the realization of the Pledge in accordance with this article 6. To this end, the Beneficiary may request from the Pledgor or any Account Holder at any time the communication of any statement of account relating to the Pledged Accounts..

7. The declarations, commitments and warranties of the Pledgor

7.1 The Pledgor declares that the Pledge and the conclusion of the Pledge Agreement have been duly authorized under the conditions required by the legal and regulatory provisions applicable to it and the articles of association governing it and undertakes to comply strictly with the provisions of article 8 (*Undertakings*) of the Issuing Agreement and article 4 (*Commitments*) of the Framework Agreement.

7.2 The Pledgor hereby undertakes to communicate to the Beneficiary any information relating to the Pledged Accounts and in particular any dispute relating thereto..

7.3 The Pledgor agrees to refrain, in order to release its commitment, from invoking any change in the legal form of the Beneficiary even if it entails the creation of a new legal personality.

7.4 The Pledgor will not be released due to:

(i) modifications (occurring one or more times but provided they do not lead to novation);

(ii) the addition or removal of new securities, new creditors or new debtors;

(iii) the extension of maturity dates;

Or any other event affecting in any manner whatsoever the stipulations of the Issue Agreement and the Framework Agreement.

7.5 The Pledgor declares and warrants that it is the authorized holder of the Pledged Accounts and will remain so until all Secured Obligations are paid in full.

7.6 The Pledgor declares and warrants that it is and shall remain the owner of all sums already deposited and/or to be deposited at any time in the Pledged Accounts in which it has a claim, it being specified that said sums do not and shall not originate from fraudulent agreements.

7.7 The Pledgor represents and warrants that, as from the entry into force of this Pledge Agreement, the Pledged Accounts and the sums deposited therein shall be and remain free of any third party rights (other than those of the Account Holder) and of any security interests, except for those granted pursuant to this Pledge Agreement and subject to (i) the property rights and privileges granted by French law to certain natural persons or legal entities or other entities and (ii) the provisions of the Issue Agreement.

7.8 The Pledgor represents and warrants that the execution and performance of this Pledge Agreement does not and will not result in any breach, termination or modification of any of the terms or conditions of any contracts or agreements to which it is a party and that this Pledge Agreement is not in conflict with any provision of said contracts or agreements;

7.9 The Pledgor represents and warrants that any modification of the Secured Obligations shall be effective against it immediately, by operation of law and without formality. Novation shall not be presumed by the Pledger, who may invoke it only if the Beneficiary has expressly notified it of its intention to effect a novation.

7.10 The Pledgor represents and warrants that there shall be solidarity and indivisibility between all persons coming into the rights and obligations of the Pledgor.

7.11 The Pledgor represents and warrants that this Pledge Agreement does not and shall not in any way affect the nature and extent of any actual or personal guarantees and covenants which may have been or may be given by the Pledgor or any third party to which it is or will be added.

7.12 The Pledgor represents and warrants that it will not grant any further pledge over the Pledged Accounts or the Pledged Bank Claim in favour of any person except as authorised by the Majority Bondholders.

7.13 The Pledgor declares and warrants that on the date of entry into force of this Pledge Agreement, the Pledged Accounts and the sums deposited therein are not and are not likely, to its knowledge, on that date, to be the subject of a third party notice, seizure of claims or precautionary seizure of claims.

7.14 The Pledgor declares and guarantees to have indicated to the Beneficiary all the Pledged Accounts and Account Holders with which it has opened an account at the date of entry into force of this Pledge Agreement.

7.15 The Pledgor undertakes to provide the Beneficiary with the bank details of any new Pledged Account as well as any Account Holder holding or coming to hold in its books one or more Pledged Accounts under the conditions of Article 9 below, it being however specified that, by express agreement between the Parties the failure of the Pledgor to communicate any new Account Holder and Pledged Accounts or the incomplete or erroneous nature of any communication shall not be deemed to exclude the Pledged Bank Claims omitted from the scope of the Pledge and shall not prevent the Pledge from being enforced.

7.16 The Pledgor expressly authorises any Account Holder to communicate to the Beneficiary any balance and/or statement of account relating to the Pledged Accounts, as well as any information relating to the Pledged Accounts, in accordance with the provisions of Article L. 511-33 of the Monetary and Financial Code.

8. Term

8.1 The Pledge shall remain in force throughout the Warranty Period, notwithstanding any interim payment or partial settlement, in respect of and to the extent of the Secured Obligations.

8.2 After the Maturity Date, at the request and expense of the Pledgor, the Beneficiary shall, within five (5) Business Days, certify in writing to the Pledgor the release of the Pledge.

9. Notices

All communications to be made pursuant to this Pledge Agreement must be carried out in conformity with article 8 (*Notices*) of the Framework Contract, as if said article was included in this Pledge Agreement, *mutatis mutandis*.

10. Miscellaneous

10.1 This Pledge Agreement does not and shall not in any way exclude, limit or restrict the rights and remedies of the Beneficiary and does not and shall not affect the nature or extent of any liabilities or other security interests which have been or may be incurred between the Pledgor and the Beneficiary or granted by the Pledgor to the Beneficiary in addition to the Pledge constituted hereby.

10.2 No failure or delay by the Beneficiary to exercise any right, privilege, remedy or option under this Pledge Agreement shall constitute a waiver thereof. No single or partial exercise of any right, privilege, remedy or option under this Pledge Agreement shall constitute a waiver thereof or preclude the further exercise thereof or of any other right. A waiver by the Beneficiary shall only be considered valid if it is in writing and makes express reference to this Pledge Agreement.

10.3 In the event that any provision of this Pledge Agreement shall be or become illegal, void or unenforceable by reason of any law or the interpretation thereof by any court, this Pledge Agreement shall be construed as if it did not contain such provision and the invalidity of such provision shall not affect the validity of any other provision of this Pledge Agreement which shall remain in full force and effect.

10.4 The Beneficiary shall have no liability to the Pledgor or its legal successors and assigns by reason of any failure to exercise or delay in exercising any right or privilege under this Pledge Agreement.

10.5 The Beneficiary shall not be liable for any loss arising from the exercise by the Beneficiary of any rights or privileges under this Pledge Agreement, except in the case of gross negligence or wilful misconduct.

11. Successors and beneficiaries

11.1 All rights, privileges, use and options granted to the Beneficiary under this Pledge Agreement will benefit its assignees, successors and/or beneficiaries and all terms, conditions, declarations, guarantees, promises and commitments contained in this Pledge Agreement bind the Pledgor and its assignees, successors and/or beneficiaries.

11.2 It is expressly agreed that the Pledgor may not assign or transfer to any third parties, through novation or in any manner whatsoever, its rights and obligations as arising out of this Pledge Agreement without the prior written consent of the Beneficiary, and that the Beneficiary is authorised to sell and delegate its rights and obligations arising from this Pledge Agreement to any third party.

11.3 The Parties agree that in the event of the assignment or transfer by the Beneficiary of all or some of its rights and obligations under the Issue Agreement, in any other manner, the benefit of the security created by the Pledge Agreement will be assigned and maintained for the benefit of the Assignee, including by way of novation, in accordance with the provisions of the second paragraph of Article 1334 of the French civil code.

12. Notification to the Account Holder

In accordance with the provisions of Article 2362 of French civil code, the Pledge may be notified, for the purposes of enforceability, by the Beneficiairy, at the Pledgor's expenses, to the Account Holder, at any time after the conclusion of this Pledge Agreement, by sending a notification in accordance with the model in **Annex 3** of this Pledge Agreement.

13. Fees

13.1 The Pledgor undertakes, where applicable, at the request of the Beneficiary, to indemnify the Beneficiary against all reasonable costs and expenses, including legal fees and court costs and any applicable charges, taxes or registration fees, incurred by the Beneficiary and/or any agent, officer, servant or other person appointed by the Beneficiary in connection with the preparation, negotiation and execution of this Pledge Agreement in accordance with the terms and conditions and within the limits set out in the Framework Agreement.

13.2 The Pledgor undertakes, where applicable, at the request of the Beneficiary, to indemnify the Beneficiary against all reasonable costs and expenses, including lawyers' fees and court costs and any charges, taxes or registration fees, relating to (i) the execution of this Pledge Agreement, and (ii) the protection, preservation or exercise of the Beneficiary's rights under the Pledge under the conditions and within the limits provided for in the Contract.

14. Applicable law and jurisdiction

14.1 This Pledge Agreement and each document attached thereto are governed by French law and interpreted in accordance with said law.

14.2 Subject to the provisions of public policy, all disputes relating to this Pledge Agreement (including, but not limited to, the existence, the validity, the application, the termination and the interpretation of this Pledge Agreement and of all documents corresponding or acts concluded according to this Pledge Agreement) will be subject to the exclusive jurisdiction of the Commercial Court of Paris.

/s/ Stanislas Veillet	/s/ Maurizio Pettibon
Biophytis S.A. Mr. Stanislas Veillet	**Kreos Capital V (UK) Limited** Mr. Maurizio Pettibon

Annex 1

List of Pledged Accounts at the date of this Pledge Agreement

Annex 2

Blocking Notice Template

Annex 3

Notice to Account Holder Template

Exhibit 4.46

INTELLECTUAL PROPERTY RIGHTS PLEDGE

between

Biophytis S.A.

as Pledgor

and

Kreos Capital VI (UK) LTD.

as Beneficiary

in the presence of

Kreos Capital V (UK) Ltd.

19 November 2021

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Intellectual Property Rights Pledge Agreement

This pledge agreement (hereinafter referred to as the "**Agreement**") is concluded on 19 November 2021, between the undersigner:

1. **Biophytis S.A.**, a public limited company with capital of 25,814,647 EUR, whose registered office is located at 14, avenue de l'Opéra - 75001 Paris, identified under the unique number 492 002 225 of the RCS [Trade and Companies Register] of Paris, whose securities are listed on the organised multilateral trading facility Euronext Growth under ISIN number FR0012816825, represented by Mr Stanislas Veillet as Chief Executive Officer;

(Hereinafter referred to as the "**Company**" or the "**Pledgor**")

ON THE ONE HAND,

AND

2. **Kreos Capital VI (UK) Limited**, *private limited company* under English law, whose registered office is located at 5th Floor, 25-28 Old Burlington Street, London W1S 3AN, United Kingdom, registered with the Company Register of England and Wales under number 11535385, acting both in its own name and on its own behalf and on behalf of the Affiliate (as such term is defined below) as security agent in accordance with the provisions of Article 2488-6 of the French civil code, represented by Mr Maurizio Petitbon, in his capacity as Director, duly authorised for the purposes hereof;

(Hereinafter referred to as the "**Beneficiary**")

ON THE OTHER HAND

The Pledgor and the Beneficiary are hereinafter individually referred to as a "**Party**" and collectively as the "**Parties**".

IN THE PRESENCE OF:

3. **Kreos Capital V (UK) Limited**, *private limited company* under English law, whose registered office is located at 5th Floor, 25-28 Old Burlington Street, London W1S 3AN, United Kingdom, registered with the Company Register of England and Wales under number 09728300, represented by Mr Maurizio Petitbon, in his capacity as Director, duly authorised for the purposes hereof, intervening in this Agreement for the purposes of Section 2.5;

(Hereinafter referred to as "**Kreos Capital V**")

Recital

(A) The Pledgor is a public limited company under French law founded in 2006 in order to develop new classes of drugs for degenerative diseases associated with ageing, and in particular with sarcopenia (the loss of muscle functionality) and macular degeneration related to ageing.

(B) Kreos Capital V subscribed in full to a bond issued by the Pledgor in a maximum principal amount of ten million euros (EUR 10,000. 000) pursuant to an issue agreement concluded on 10 September 2018 between the Pledgor, as issuer (*Issuer*), and the Beneficiary, as subscriber (*Subscriber*), entitled *Bonds Issue agreement* (hereinafter referred to as the "**2018 Issue Agreement**"), itself entered into pursuant to a framework agreement entitled *Venture Loan Agreement* concluded on 10 September 2018 between the Parties (hereinafter referred to as the "**2018 Framework Agreement**"), all payment and repayment obligations, either present or future, in principal, interests, late interest, fees, commissions, accessories or any other sum whatsoever (including in respect of default, cancellation, the termination or resolution of any security document (*Security Document*, as such term is defined in the 2018 Issue Agreement), owed by the Pledgor to Kreos Capital V under such agreements and security documents concluded into pursuant thereto being hereinafter referred to as the "**2018 Secured Obligations**".

(C) In security for the payment of the 2018 Secured Obligations, the Parties concluded the 2018 Goodwill Pledge Agreement including the Pledged Intellectual Property Rights.

(D) The Beneficiary and the company Kreos Capital VI (Expert Fund) L.P., company (*limited partnership*) under Jersey law, whose registered office is located at 47 Esplanade, St Helier, JE1 0BD, Jersey, registered with the *JFSC Companies Registry* under number 2770 (hereinqfter referred to as the' "**Affiliate**"), agreed to subscribe to two bonds issued simultaneously by the Pledgor of an maximuml cumulative amount in principal of ten million euros (10.000.000 €) pursuant to, on the one hand, a simple bonds issue agreement for a maximum amount of seven million seven hundred and fifty thousand euros (7.750.000 €) concluded on 19 November 2021 between the Pledgor, as issuer, and the Beneficiary, as subscriber entitled *Bonds Issue agreement* and, on the other hand, a convertible bonds issue agreement for a maximum amount of two million two hundred and fifty thousand euros (2.250.000 €) concluded on 19 November 2021 between the Pledgor, as issuer, and the Affiliate, as subscriber, entitled *Convertible Bonds Issue agreement* (hereinafter collectively referred to as the "**Issue Agreement**""), themselves concluded into pursuant to a framework agreement entitled *Subscription Agreement* concluded on 19 November 2021 between the Pledgor, the Beneficiary and the Affiliate (hereinafter referred to as the "**Framework Agreement**").

(E) In accordance with the provisions of the Issue Agreement and the Framework Agreement, as collateral for the proper implementation of the Secured Obligations (as defined below), the Pledgor grants in favour of the Beneficiary,a pledge over the Pledged Intellectual Property Rights in accordance with the terms and conditions of this Agreement**.**

1. Definitions et interpretation

1.1 For the purposes of this Agreement (including the preamble), and unless the context otherwise requires, the following capitalized terms shall have the following meanings:

2018 Goodwill Pledge Agreement	means the goodwill pledge agreement concluded between the Pledgor and Kreos Capital V on 10 September 2018 ;
2018 Secured Obligations	has the meaning given to it in paragraph B of the preamble hereto;
Agreement	means this intellectual property rights pledge agreement and its Appendices, in their initial version and any version subsequently amended, if applicable;
Event of Implementation	means (i) the occurrence of a failure to pay by the Pledgor under the Issue Agreement, under the conditions of paragraph 9.1 of the Issue Agreement or (ii) the sending of a notice of immediate repayment obligations to the Pledgor in the terms of paragraph 9.14 Issue Agreement;
Pledged Intellectual Property Rights	means the intellectual property rights owned by the Pledgor and pledged to the Beneficiary under this Agreement, as described in paragraph 2.1 of this Agreement;
Issue Documents	means the Issue Agreement, the Framework Agreement, the terms and conditions of the share subscription warrants *(Terms and Conditions of the Warrants),* all Securities Documents *(Security Documents),* and any other document referred to as such in writing by the Parties;
Licence	means any licence agreement of all or part of the Pledged Intellectual Property Rights stipulating an initial payment to the Pledgor of a minimum amount of (i) six million euros (€6,000,000) if said licence covers a territory including the United States of America, and (ii) four million euros (€4,000,000) if said licence covers a territory including the European Union;
Maturity Date	shall have the meaning given to the term "*Final Redemption Date*" in the Framework Agreement and shall mean the date of full payment by the Pledgor of the Secured Obligations under the Issue Agreement and the Framework Agreement (*Final Redemption Date*);
Pledge	means the pledge constituted on the Pledged Intellectual Property Rights in accordance with the provisions of this Agreement;
Secured Obligations	refers to the payment and repayment obligations, either present or future, in principal, interests, late interest, fees, commissions, accessories or any other sum whatsoever (including in respect of default, cancellation, the termination or resolution of any Security Document (*Security Document*), borne by the Debtor as regards the Beneficiary under the Issue Documents, ranking *pari passu* with the 2018 Secured Obligations as to right to payment and without any preference between them, for a maximum total amount in principal of ten million euros (10.000.000 EUR) ;

Subsidiary	means any company over which the Pledgor has control within the meaning of Article L.233-3 of the French commercial code;
Warranty Period	refers to the period beginning on the date of this Agreement and ending on the Maturity Date (inclusive).

1.2 Unless otherwise expressly defined in this Agreement, capitalized terms defined in the English language in the Issue Agreement or the Framework Agreement shall have the same meaning when used in conjunction with the English language term in parentheses in this Agreement..

2. Pledge

2.1 In guarantee of the payment and fulfilment of all of the Secured Obligations the Pledgor hereby constitutes in favour of the Beneficiary a pledge on its Pledged Intellectual Property Rights limited to the countries of the European Union and the United States of America (or, as the case may be, the share of co-ownership it holds in said Pledged Intellectual Property Rights) as follows, in accordance with Article 2355 of the French civil code and Articles L.521-1 and seq. of the French commercial code, and Articles L.132-34 and R132-8, L.613-8, L.714-1, and R132-8 of the French intellectual property code:

(a) Exclusively insofar as they concern one or more countries of the European Union or the United States of America:

(i) national patents as registered with the French National Patents Register of the INPI (hereinafter, the "**RNB**") ; and

(ii) European patents (*European Patents*) at the European Patent Office (hereinafter, the "**EPO**"),

(iii) patents granted under the Patent Cooperation Treaty patents at the World Intellectual Property Organization (hereinafter, the "**PCT**"),

(iv) national trademarks as registered with the French National Register of Industrial Property (hereinafter, the "**INPI**") and community trademarks as registered in France with the European Union Intellectual Property Office (hereinafter, the "**EUIPO**"), provided that such trademarks are associated with a product the manufacture of which is based on a compound, patent or family of patents falling within the scope of the pledge;

(v) If applicable, domain names corresponding to said marks,

a list of which as of the date of this Agreement is attached as **Appendix 1**, and

(b) to the extent determined in the annual review set forth in Section 5.3 of the Framework Agreement, any industrial property rights of the same nature as those referred to in paragraph (a) above, of which the Pledgor or any Subsidiary shall become the owner in any manner whatsoever after the date of this Agreement, in accordance with and subject to the provisions of Article 2355 of the French civil code, including those rights that are currently being applied for and/or filed as of the date hereof.

2.2 The Pledgor undertakes to sign and/or to have signed any confirmation of pledge of new intellectual property rights referred to in 2.1 (b) above, as provided for in **Appendix 2**, (a "**Confirmation**") and which will be included after the date of this Agreement in the scope of the Pledge, as soon as possible after the date of publication (in the case of trademarks or patents) or reservation (in the case of domain names) of the said intellectual property right.

2.3 By express agreement between the Parties, in the event that industrial property rights, as defined above, are held, in France or in any other country, by any Subsidiary, the latter shall grant on these rights, for the benefit of the Beneficiary, a pledge of an equivalent scope to the Pledge constituted under the terms hereof, for which the Pledgor shall be liable.

2.4 The Pledgor undertakes to carry out the formalities relating to the Pledge of the Pledged Intellectual Property Rights in accordance with Article 8 below.

2.3 Kreos Capital V, in its capacity as (i) the sole holder of the bonds issued by the Pledgor under the 2018 Secured Obligations and (ii) the beneficiary of a pledge of goodwill pledged under the 2018 Goodwill Pledge Agreement, expressly authorizes, insofar as necessary, the conclusion of this Pledge by the Parties and its execution by the Beneficiary.

3. Declarations, commitments and warranties of the Pledgor

3.1 The Pledgor declares and warrants to Beneficiary as of the date of this Agreement that:

(a) the Pledgor is a company duly organized under the laws of France with the power to carry on its business as presently conducted and to own all assets shown on its balance sheet;

(b) the execution and implementation of this Agreement and any obligations of the Pledgor hereunder have been duly authorized and all necessary steps have been taken by the Pledgor to that effect;

(c) the obligations of the Pledge under this Agreement constitute and shall constitute legal, valid and binding obligations to the Pledgor in accordance with the terms and conditions of this Agreement, subject to applicable laws relating to insolvency proceedings, insolvency and all matters affecting creditors' rights generally;

(d) to the extent that it would have a material adverse effect on the ability of the Pledgor to perform its obligations under this Agreement, no material default in the implementation of its obligations has occurred under any contract or agreement to which the Pledgor is a party;

(e) there are, to the knowledge of the Pledgor, no pending actions, suits or proceedings in any court or before any administrative authority that would materially affect the validity of the obligations as set forth in this Agreement or the ability of the Pledgor to perform such obligations;

(f) no authorisation, approval, consent, licence, notification or other request of a public entity or corporate bodies of the Pledgor is required for the validity, implementation or enforceability of this Agreement, with the exception of:

(i) any authorization that has been duly obtained and proof of which has been provided to the Beneficiary, and

(ii) registration with all intellectual property registries referred to in Article 8 below;

(g) this Agreement and the commitments contained herein: :

(i) constitute valid obligations, binding on the Pledgor in accordance with their terms, enforceable against the Pledgor, and

(ii) upon completion of the formalities referred to in Article 8 below are effective against third parties.

3.2 The Pledgor agrees, for the entire Warranty Period, to:

(i) comply strictly with the provisions of Article 8 (*Undertakings*) of the Issue Agreement and of Article 5 (*Commitments*) of the Framework Agreement;

(ii) communicate to the Beneficiary, at the latter's first request, any substantial information relating to the Pledged Intellectual Property Rights and in particular any dispute relating thereto;

(iii) not to assign, transfer or otherwise dispose of the Pledged Intellectual Property Rights or any of its rights under the Pledged Intellectual Property Rights except with the prior written consent of the Beneficiary, except (i), in the event of the enforcement of the first-ranking pledge constituted under the terms of the 2018 Goodwill Pledge Agreement or (ii) for any licence granted to a third party who is not a partner of the Pledgor, provided that such licence shall not affect, or impede, the implementation hereof;

(iv) not to grant any security whatsoever on the Pledged Intellectual Property Rights or any of its rights under the Pledged Intellectual Property Rights (other than under the 2018 Intellectual Property Rights Pledge Agreement) without the prior written consent of the Beneficiary or any other related right.

3.3 The Pledgor agrees to refrain, in order to release its commitment, from invoking any change in the legal form of the Beneficiary even if it entails the creation of a new legal personality.

3.4 The Pledgor will not be released due to:

(i) modifications (occurring one or more times but provided they do not lead to novation);

(ii) the addition or removal of new securities, new creditors or new debtors;

(iii) the extension of maturity dates;

Or any other event affecting in any manner whatsoever the stipulations of the Issue Agreement and the Framework Agreement.

4. Execution

4.1 Recourse in the event of an Event of Implementation

In the event of an Event of Implementation, the Beneficiary shall be entitled to exercise all rights, remedies and actions of any kind conferred by French law on the pledgee in order to enforce its rights under the Pledge in accordance with the terms of this Agreement.

4.2 Attribution of ownership of the Pledged Intellectual Property Rights

(a) Without limiting the provisions of Article 4.1 above, in the event of an Event of Implementation, the Parties irrevocably agree that the Beneficiary may freely decide to enforce the Pledge by obtaining full ownership of the Pledged Intellectual Property Rights, in accordance with the provisions of Articles L. 521-3 of the French commercial code and 2348 of the French civil code, in accordance with the terms and conditions set forth in paragraph (c) below.

(b) In the event of the implementation of the commissory agreement stipulated in paragraph (a) above, the Beneficiary shall notify of the implementation of the Pledge, by sending a notification of implementation by bailiff's deed or by registered letter with acknowledgement of receipt or by hand-delivered letter, said notification mentioning the date of implementation of the Pledge as being the second business day from the date of said notification (the "**Completion Date**").

(c) In accordance with the provisions of Article 2348 of the French civil code, the value of the Pledged Intellectual Property Rights on the Completion Date (the "**Completion Value**") shall be determined by an expert appointed as provided below (the "**Expert**") as follows:

(i) the Expert's mission will be to proceed with the determination of the Completion Value (the "**Mission**");

(ii) the Expert shall be appointed in accordance with the following terms and conditions:

- the Expert shall be the first person named in the list in **Appendix 3**, unless the Pledgor and the Beneficiary reasonably consider that such person has a conflict of interest or that such person refuses the Mission, in which case the Expert shall be the first person subsequently named in the list in **Appendix 3**, and successively in the order of priority set out therein until an Expert is so selected; and

- if all the persons listed in Appendix 3 prove to have a conflict of interest or have refused the Mission as specified in the preceding subparagraph, the Expert shall be appointed by the President of the Paris Court of First Instance ruling in the form of summary proceedings and without appeal at the request of the most diligent party from among the leading financial auditing or intellectual property auditing firms operating in France;

(iii) the Expert shall act as the Parties' joint agent in accordance with the provisions of Article 2348 of the French civil code;

(iv) the Expert shall take all the steps he deems necessary to accomplish his Mission and may in particular obtain from the Pledgor and/or the Beneficiary any document and any information concerning the Pledged Intellectual Property Rights and consult together or separately with the Pledgor and/or the Beneficiary;

(v) the methods of evaluation retained within the framework of the Mission will have to be in conformity with the methods usually retained the evaluation of industrial property rights;

(vi) the Expert shall communicate to the Beneficiary and to the Pledgor, within thirty (30) working days (Business Days) from the date of acceptance of his Mission, a copy of his report presenting the determination of the Completion Value as well as the supporting documents and valuation methods retained within the framework of the Mission; the date on which the Expert shall communicate his report being hereafter defined as the "**Valuation Date**";

(vii) the Parties will be definitively bound by the determination of the Completion Value made by the Expert referred to in subparagraph (vi) above, except for a gross error (as defined in subparagraph (viii) below);

(viii) in case of a gross error in the determination of the Completion Value, the said error having been established by a final decision rendered by the competent court, in accordance with the provisions of Article 13.2, a new Expert shall be appointed according to the same modalities as those provided for in subparagraph (ii) above and shall carry out the Mission according to the modalities provided for in this paragraph (c);

(ix) the Beneficiary shall in no case be responsible for the Completion Value retained by the Expert; and

(vi) the costs and fees of the Expert in the exercise of his Mission to be paid by the Pledgor.

(d) Any amounts received by the Beneficiary, under this Agreement, shall be applied by the Beneficiary to the payment of the Secured Obligations, pari passu with the payment of the Secured Obligations under the 2018 Pledge Agreement. If the total amount of the Completion Value exceeds the amount of the Secured Obligations due and payable by the Pledgor, the Beneficiary shall pay to the Pledgor the difference between such two amounts within ten (10) Business Days from the Valuation Date.

5. Duration and release of the Pledge

5.1 This Agreement shall come into force on the date of its signature by the Parties and shall remain in force with full effect throughout the Warranty Period.

5.2 After the Maturity Date and upon receipt of a written request from the Pledgor requesting written confirmation that the Warranty Period has ended, the Beneficiary shall execute, at the Pledgor's expense within five (5) business days, a release agreement discharging the Pledgor from all obligations and liabilities under this Agreement.

5.3 Notwithstanding the foregoing:

5.3.1 In the event that the Pledgor obtains from the EMA (European Medicines Agency) a marketing authorization (conditional or other authorizations) for the product Sarconeos (BIO101) for the indication COVID-19, the Beneficiary undertakes to grant a release of the Pledge on the territory of the European Union for all of the Pledged Intellectual Property Rights associated with the product Sarconeos (BIO101) as of the date of issuance of the said authorization

Similarly, in the event that the Pledgor obtains from the U.S. Food and Drug Administration (FDA) an emergency use authorization or other authorization for the product Sarconeos (BIO101) for the COVID-19 indication, the Beneficiary undertakes to grant a release of the Pledge on the territory of the United States of America for all of the Pledged Intellectual Property Rights associated with the product Sarconeos (BIO101) as of the date of issuance of said authorization.

In the event that the relevant marketing authorization expires or is revoked, the Pledgor undertakes to immediately take the necessary steps and sign all agreements required to reinstate the Pledge in accordance with its terms prior to release. The Pledgor shall also refrain from granting any pledge or any other licence on the industrial property rights to the benefit of any third party during this period.

5.3.2 In the event that the Pledgor enters into a Licence for the product Sarconeos (BIO101) or the product Macuneos (BIO201), the Beneficiary undertakes, provided that no Event of Implementation has occurred, to immediately grant an early release of the Pledge on the pledged industrial property rights that are the subject of the Licence, for the entire territory covered by the Licence.

Such release shall occur immediately upon presentation of a binding term sheet on a Licence signed by both parties and providing for the payment to qualify the Licence for the purposes hereof. In the event that a definitive agreement between the parties pursuant to said binding term sheet is not entered into within 90 days of said release, the Pledgor agrees to immediately do all things and execute all agreements necessary to reinstate the Pledge to its pre-release terms. The Pledgor shall also refrain from granting any pledge or any other licence on the industrial property rights during this period. The same shall apply in the event of termination or cancellation of the Licence for any reason whatsoever.

5.3.3 To the exclusion of any agreement that would consist of a Licence and that would be covered by Article 5.3. 2 above, in the event that the Pledgor enters into any other agreement with any third party involving development and/or research, whether joint or not, relating to intellectual property rights associated with the Sarconeos (BIO101) product or the Macuneos (BIO201) product and whether or not involving an equity investment, immediately or in the future, the Beneficiary undertakes to discuss in good faith the possibility of a partial release of the Pledged Intellectual Property Rights, within the framework of a balanced consideration of the development needs of the Pledgor and the protection of the interests of the Beneficiary.

6. Priority agreement

6.1 This Agreement is entered into pursuant to the Framework Agreement.

6.2 If any of the provisions of this Agreement conflict with the provisions of the Framework Agreement, the provisions of the Framework Agreement shall take precedence.

6.3 Without prejudice to the generality of the provisions of this Article 6, the Beneficiary shall act under this Agreement (including following the occurrence of an Event of Implementation) in accordance with the provisions of the Framework Agreement.

7. Notices

All communications to be made pursuant to this Agreement must be carried out in conformity with Article 9 (*Notices*) of the Framework Agreement, as if said article was included in this Agreement, mutatis mutandis.

8. Opposability

8.1 The pledge of each of the patents and trademarks included in the Pledged Intellectual Property Rights shall be registered with any appropriate intellectual property rights registry in accordance with the legal and regulatory provisions applicable to such Pledged Intellectual Property Rights, up to a maximum principal amount of ten million euros (€10,000,000).

8.2 The Beneficiary shall carry out the formalities set forth in paragraph 8.1 above. The Pledgor grants all necessary powers and authorities to any person acting on its behalf and in possession of an original copy of this Agreement for the purpose of carrying out the formalities set out in paragraph (i) above.

8.3 The Pledgor undertakes, as necessary, to sign any confirmatory agreement that may be required for any foreign deposit, in forms substantially in accordance with the model set forth in **Appendix 4** to this Agreement.

9. Charges

Subject to the stipulations of the Issue Agreement and the Framework Agreement on the cap on the assumption by the Pledgor of reasonable costs and expenses incurred (in accordance with the provisions of Article 10 of the Framework Agreement) and on the exclusion of the indirect damage which they provide for, the Pledgor undertakes, if necessary, at the request of the Beneficiary, to indemnify the Beneficiary for all reasonable expenses and costs, including legal fees and expenses, and all charges, taxes, fees or registration fees, associated (i) with the performance of this Agreement, (ii) for the execution of the formalities related to the constitution, renewal and release of the Pledge, and (iii) with the protection, preservation or exercise of the rights of the Beneficiary in terms of the Pledge.

10. Transfert and assignment

10.1 All rights, privileges, powers and actions of the Beneficiary shall be transferable to its successors and permitted assigns in accordance with the Issue Agreement.

10.2 The Pledgor may not assign or convey, in any manner whatsoever, any of its rights and/or obligations under this Agreement.

10.3 The Beneficiary shall be entitled to assign or transfer all or part of its rights and/or obligations under this Agreement to a third party, in accordance with the provisions of Article 11 of the Issue Agreement.

10.4 In the event of assignment, transfer, novation or transmission of all or part of the rights and obligations by the Beneficiary, the latter expressly reserves the rights, powers, privileges and actions it has under this Agreement, in favor of its successors or, where applicable, its assigns, in accordance with the provisions of Article 1278 of the French civil code.

11. Copies - Language

This Agreement is drawn up in the French language for the purposes of enforceability, registration and filing with the French industrial property code, in accordance with the provisions of Articles L. 714-7 and R. 714-4 of the French intellectual property code.

12. Divers

12.1 The Beneficiary isn't liable for any loss due to the exercise or any failure or omission to exercise its rights under this Agreement. The Pledgor is solely responsible for its own contracts, commitments, acts, omissions, defaults and losses and liabilities incurred by it and the Beneficiary does not assume any liability in this regard (with respect to the Pledgor or any other person) for any reason whatsoever..

12.2 No failure to exercise or delay in exercising, by the Beneficiary, any right or remedy under this Agreement shall be construed as constituting a waiver to said right or remedy. No single or partial exercise of any right or remedy prevents any other exercise thereof or the exercise of any other right or remedy in the future. The Beneficiary does not assume any responsibility towards the Pledgor or its legal successors, individually or generally, due to the delay in exercising or failure to exercise of rights and prerogatives granted to the Beneficiary under this Agreement.

The rights and remedies provided for in this Agreement are cumulative and exclusive of any right or remedy provided by law and may only be waived in writing and in an express manner.

12.3 The Pledge is in addition to any security or any bond held, if applicable, by the Beneficiary under the terms of the Secured Obligations or any of them and is under no circumstances affected by any other security mentioned above and exists without prejudice to it.

12.4 In the event that one or more of the provisions of this Agreement will be deemed to be illegal, invalid or unenforceable, this Agreement shall be construed as if it does not contain such provision and the nullity of said provision shall not affect the validity or the execution of any other provision of this Agreement, which shall remain fully applicable.

12.5 The parties to the Agreement acknowledge that the sole purpose of this Agreement is to create this Pledge in favour of the Beneficiary and is not intended to change the rights and obligations set out in the Issue Agreement and/or (ii) the rights and obligations of the Pledgor and Kreos Capital V set forth in the 2018 Issue Agreement or the 2018 Goodwill Pledge Agreement.

13. Applicable law and jurisdiction

13.1 This Agreement and each document attached thereto are governed by French law and interpreted in accordance with said law.

13.2 The Parties hereby and irrevocably acknowledge the exclusive jurisdiction of the competent courts of Paris, as regards any action or proceeding arising out of this Agreement or relating to it or to all corresponding documents or deeds concluded in accordance with this Agreement

/s/ Stanislas Veillet

Biophytis S.A.
M. Stanislas Veillet
Chief Executive Officer

/s/ Maurizio Petibon

Kreos Capital VI (UK) Ltd.
M. Maurizio Petitbon
Director

In the presence of :

/s/ Maurizio Petibon

Kreos Capital V (UK) Ltd.
M. Maurizio Petitbon
Director

Appendix 1

The identification of the industrial property rights pledged at the date of this Agreement

Appendix 2

Notice template of New Intellectual Property Rights

Appendix 3

List of Experts for the determination of the Completion Value

Appendix 4

Confirmation Agreement Template

Exhibit 12.1

Certification by the Principal Executive Officer pursuant to
Securities Exchange Act Rules 13a-14(a) and 15d-14(a)
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Stanislas Veillet, certify that:

1. I have reviewed this annual report on Form 20-F of BIOPHYTIS S.A.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (c) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting;

   (d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 21, 2022

/s/ Stanislas Veillet
Name: Stanislas Veillet
Title: Chief Executive Officer and Chairman
(Principal Executive Officer)

Exhibit 12.2

Certification by the Principal Financial Officer pursuant to
Securities Exchange Act Rules 13a-14(a) and 15d-14(a)
as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Philippe Rousseau, certify that:

1. I have reviewed this annual report on Form 20-F of BIOPHYTIS S.A.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (c) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting;

   (d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and

5. The company's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditors and the audit committee of the company's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: April 21, 2022

/s/ Philippe Rousseau
Name: Philippe Rousseau
Title: Chief Financial Officer
(Principal Financial Officer)

Exhibit 13.1

Certification by the Principal Executive Officer pursuant to
18 U.S.C. Section 1350, as adopted pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of BIOPHYTIS S.A. (the "Company") on Form 20-F for the fiscal year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Stanislas Veillet, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 21, 2022

/s/ Stanislas Veillet
Name: Stanislas Veillet
Title: Chief Executive Officer and Chairman
(Principal Executive Officer)

Exhibit 13.2

Certification by the Principal Financial Officer pursuant to
18 U.S.C. Section 1350, as adopted pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report of BIOPHYTIS S.A. (the "Company") on Form 20-F for the fiscal year ended December 31, 2021 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Philippe Rousseau, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: April 21, 2022

/s/ Philippe Rousseau
Name: Philippe Rousseau
Title: Chief Financial Officer
(Principal Financial Officer)