Daily Mobility profile in Age-Related Sarcopenia: Actimetry baseline data from SARA-OBS, a six-month observational multicenter clinical study in EU and US

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SARA-OBS is a multicentre six-month observational clinical study conducted in the EU and in the US. Patients taking part to SARA-Obs have been asked to wear a connected device over the entire duration of the study to continuously record data on daily physical activity.

The interest of collected data is to analyse the pattern of physical activity, e.g. a sedentary life style and its relationship with the patient reported difficulty in physical function, assessed by auto-evaluation questionnaires and with established functional tests, e.g. 400-meter walking test.

THE USE OF A CONNECTED DEVICE LIKE THE ADAMO WATCH IS AIMED TO EASILY COLLECT INFORMATION ON THE PHYSICAL ACTIVITY OF ELDERLY PATIENTS IN A CONTINUOUS AND NON-INVASIVE WAY, EVALUATING THEIR HEALTH WITH SPECIFIC REFERENCE TO THE EVOLUTION OF FRAILTY AND SARCOPENIA.

THE WATCH RECORDS ANONYMOUS RAW DATA FROM ITS SENSORS AND PROCESS THEM, UPDATING INSIDE RECORDED MONITORING PARAMETERS.

EVERY 10 MINUTES, IT TRANSMITS THE PROCESSED INFORMATION TO ITS COUPLED BASE-STATION LOCATED IN THE PATIENT HOUSE VIA A SHORT-RANGE RADIO PROTOCOL.

DATA TRANSFER BETWEEN WATCH AND BASE-STATION IS ENCRYPTED AND ENCODED USING THE “IDEA” ALGORITHM AND TRANSFERRED OVER A RADIO LINK, RESPECTING PERSONAL DATA PRIVACY.

The baseline profile of included patients (see also poster P114) is presented and discussed versus functional tests and auto-evaluation questionnaires.

Connected actimetry implemented in SARA-OBS allows to gather relevant information about mobility patterns of the older participants throughout the trial period without interfering with everyday activity: – an innovative application of the Internet of Things (IOT) to clinical trials.