

Remo One Page Pitch

“We need a stepchange in the provision of rehabilitation and long-term support for stroke survivors and their families. All stroke survivors should get an early assessment for rehabilitation in hospital and receive appropriate levels of therapy both in hospital and following discharge.” [Stroke Alliance for Europe](#).

The rehabilitation process and the stroke victims' experience need a revolution and Morecognition developed Remo®: a novel platform based on a neuromuscular sensor and a brand-new motivational environment, in which an advanced artificial intelligence learns day by day both from patients and health professionals to maximize the quality and efficiency of rehabilitation treatments. The Remo® platform was validated during three clinical trials on 148 post stroke patients demonstrating that: 86% are Remo® ready, an effective motor recovery of hemiparetic upper limb, a significant improvement in balance and a significant improvement in autonomy in activities of daily living. Health professionals will be supported by a virtual therapist able to create a bespoke workout program and to objectively verify the ongoing progress while patient's engagement increase their autonomy and quality of life. Morecognition primarily targets post-stroke patients meanwhile a clinical trial on knee cruciate injury rehabilitation is running with preliminary enthusiastic results. The combination of Remo advantages could open up the physiotherapy market to many different possible applications: the virtual personal trainer for sport injury prevention (trial on elite professional athletes done), wellness and fitness for the Factory of the Future (first test on assembly line workers done) and finally the silver age segment. Remo is powered by a single device technology and a data fusion from sensors (muscle + inertial) algorithm AI based.

MORECOGNITION, a spin-off of the Istituto Italiano di Tecnologia (IIT), designed Remo, the most effective artificial intelligence- based home rehabilitation assistant. Remo is meant to be for physical therapists what the stethoscope is now for doctors: essential.

FUTURE FIT, a product design and engineering studio experienced in medical device development, starting from the initial specification, engineered the concept that fulfills the functional requirement. Thanks to the Future Fit design the device is small, ergonomic and has all the electronics integrated with an easy-to-use interface. Prepared to plug and play, its ergonomic form has been studied to wear comfortably on the forearm, with one hand's help only if this is the case.

The expected outcome of the Cross 4 Health project is to accomplish and merge the cross-sectional elements in a full working prototype (patient app, dialogue system and wearable sensor), with the final aim to test the solution with end-users (health professionals and patients). In conclusion, Morecognition is rethinking the rehabilitation process developing new technological solutions and pushing it to become Digital Therapeutics through the implementation of real-time data and analytics, delivering useful feedback to correct bad habits. Not just helping in rehabilitation but preventing having to go to it.