

by tecnalia

THE NEW GENERATION

Cost-effective, comprehensive upper-limb robotic device for neurorehabilitation



ArmAssist by tecnalia





The second generation of **ArmAssist** allows passive, assisted and active training of the arm and hand, allowing the treatment of **most stroke patients**.

The improved software platform allows remote patient progress assessment and management of the therapy based on serious games, which motivate patients to actively participate in their rehabilitation and **maximize** the outcome.



ArmAssist by tecnalia

COST-EFFECTIVE

Low-cost device, 50% below the most economical solution on the market.

Optimized allocation of resources:

Designed to be used under **minimal supervision**. The active mode can be used without supervision and assisted modes only require setup by the therapist.

Allows the treatment of more patients with the same resources, at the **clinic or at home**.

Mobile and resizable working environment.

Quick setup and easy to use.



From mild to severe upper-limb impairment.

For the full process of upper-limb rehabilitation:

Multiple rehabilitation modes: passive, passive-mirrored, active-assistive, corrective, active.

Gradual training of different components of movement, isolated or combined: movement with and without support against gravity, pronosupination, grasp, pinch.

8 games for **full assessment** of the motor function.

10 games specifically designed for upper-limb training.

Usable as a joystick to play online or app games or to surf the Internet.



OUTCOME **MAXIMIZATION**

Intensive, specialized and safe training under minimal supervision.

Patient motivated to adhere to the treatment and train for longer.

Promotion of the active participation of the patient as soon as possible.

ONE TO ONE **THERAPY**

Therapy continuously adapted to each patient's needs.

Personalized content, Activities of Daily Living (ADL) related tasks and great variety of games available.

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PROGRESS OUANTIFICATION

Fast and clinically meaningful assessment for the therapist.

Motivating progress perception for the patient.

CLINICALLY **VALIDATED**

Considered useful, easy to use and to integrate in the clinical setting.

Assessment correlated with standard clinical scales.

Patients regain more function, faster with ArmAssist.

NEUROENGINEERING AT TECNALIA

We understand Neuroengineering as a discipline based on engineering to understand, repair, replace, improve or explore neuronal systems in a different way.

Under this premise, we are developing advanced medical **devices** to treat neurological diseases to enable the elderly and disabled as well as the chronically ill or injured patients to compensate or accelerate the recovery of their lost functions (such as mobility) and facilitate personal autonomy while improving their quality of life.

We strive to provide healthcare **professionals** with the best clinical instruments to enable them to improve the assessment and rehabilitation process; for **businesses** to improve competitiveness in the healthcare market or diversify their offer to include new health realms.









TECNALIA

IS AN APPLIED RESEARCH AND TECHNOLOGICAL DEVELOPMENT CENTRE.

We turn technology into wealth

to obtain beneficial visible results for companies, society, our environment and in sum, for people.



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