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## CT to work on the development of the first robotic solution for hemiplegic stroke patients, owned by the start-up Robopedics.

**In the future, hemiplegic patients as a result of a stroke may have a more accessible solution enabling them to walk independently and without medical supervision.**

The Tarragona start-up Robopedics is looking to make the **world's first robotic orthopaedic solution for personal use a reality, as an alternative to exoskeletons**, which are known for their exorbitant prices. The company just successfully closed the first round of funding for this project, arranged by Capital Cell, Spain's top venture capital firm specializing in healthcare. In just 10 days, the round raised **more than 300,000 euros**, which will go towards the "manufacture of the first fully functional prototypes with which to start the corresponding clinical trials in both the European Union and in the United States", according to Iván Martínez, founder and CEO of Robopedics.

To do this, the start-up will be assisted by a team of engineers from the **company CT**, whose Barcelona office will be responsible for the **complete development** of this first product, called **Awake**, with the goal of bringing a disruptive technology that is currently found only in clinical settings, into the homes of patients who suffer problems of limited mobility, and who number in the millions worldwide.

### **A project that combines technology, determination and a clear purpose**

Conceived by its founder, an industrial engineer, to respond to the real needs of his father after he suffered a stroke that resulted in hemiplegia, "the system is not only designed for rehabilitation, but also to help these people stand up and walk, improving their quality of life and their health, and restoring hope and enthusiasm for both the patients and their families," he says.

CT has joined the project, making available all of the technological knowledge in the automotive industry and the fields of robotics and materials that it has developed over more than 30 years. The complete development of this system involves multiple fields of knowledge. "Our goal is to create a device with a design that combines ergonomics and aesthetics, made to be highly durable, lightweight and strong, all for the benefit of the patient. CT will also develop all of the functional aspects, such as the actuators in the knee that allow the person to walk, as well as the electronics to regulate and control



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the actuator. Handling is very important, because these are people whose mobility has been reduced after suffering the stroke," explains Xavier Vera, director of CT's Industry 4.0 business area in Barcelona.

The patient will also have an app that they can use to make different adjustments, such as regulating the actuator force, viewing usage time or the battery charge, among others.

The project is being carried out in close collaboration with prominent consultants and partners in the fields of medicine, clinical rehabilitation, health technology transfer or the regulation of medical devices, with first-hand knowledge of the needs and limitations of this type of patients. Other collaborators include the Barcelona Health Club, Fundació Ictus, Axial Biotech, Institut Guttmann, Hospital Clínic as well as the Catalan Society of Physical Medicine and Rehabilitation.

### **About CT**

CT is a leading technological company that provides innovation and engineering services in the aeronautical, space, naval, automotive, rail, energy and industrial plants sectors. CT pushes the boundaries of technology through innovation, raising performance to new levels throughout the entire life cycle of products, from design, manufacturing to post-sales support. With over 30 years of experience, today CT's success is driven by more than 1,800 talented employees based in seven countries, spanning three continents. [www.thectengineeringgroup.com](http://www.thectengineeringgroup.com)

### **About Robopedics**

Robopedics is a start-up that is designing and manufacturing the world's first robotic orthopedic solutions for people with limited mobility as a result of a stroke that offer an alternative to exoskeletons. Founded just one year ago in Tarragona by Iván Martínez, the start-up will invest this capital in the development of Awake, its first device that will allow people affected by a stroke to walk independently day-to-day in their individual environments. In addition to a senior team with extensive experience in launching and developing new businesses, Robopedics also has collaboration agreements with entities such as the Barcelona Health Club, Fundació Ictus, Axial Biotech, Institut Guttmann or Hospital Clínic. [www.robopedics.com](http://www.robopedics.com)

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