

A Spanish company developing a medical device consisting of a contactless/air pressure-driven collaborative robot for physiotherapy seeks partners for commercial agreements with technical assistance.

Summary

Profile type

Technology offer

Company's country

Spain

POD reference

TOES20250917014

Profile status

PUBLISHED

Type of partnership

**Commercial agreement with
technical assistance**

Targeted countries

• World

Contact Person

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Term of validity

18 Sep 2025**18 Sep 2026**

Last update

18 Sep 2025

General Information

Short summary

A Spanish startup has developed an innovative medical device based on a collaborative robot that automates physiotherapy massage treatments. Certified as a Class IIa EU Medical Device, it reduces recovery times, waiting lists, and treatment costs. The company seeks international distributors with experience in physiotherapy, rehabilitation, or medical devices. Potential end-users include hospitals, clinics, sports clubs, wellness centers, and elderly care facilities.

Full description

A Spanish startup has created an innovative robotic solution for the rehabilitation of musculoskeletal disorders (MSDs), developed by a physiotherapist after years of R&D. MSDs are one of the leading causes of disability worldwide, affecting over 1.3 billion people and representing a major burden for healthcare systems. This device offers a breakthrough approach to treatment, improving patient outcomes while reducing healthcare costs.

These are some of the musculoskeletal pathologies addressed:

- Myofascial trigger points (MTP) and latent muscle contractures.
- Back pain (dorsal, lumbar, cervical)
- Acute diseases in which the therapist cannot contact the patient's skin
- Fascial problems
- Sprains
- Fibromyalgia
- Bruises
- Tendinopathy
- Post-surgery treatment
- Joint inflammatory problems

The collaborative robot is 100% safe and capable of treating musculoskeletal disorders by applying compressed air with a correct temperature and without the need for direct contact with the patient. The continuous pressure applied by the air jet imitates manual therapy techniques used by physical therapists for connective tissue, such as myofascial trigger point treatment. It also allows improving the blood flow and oxygenation of the area.

This robot works in two different modes:

- Manual Mode: The therapist can safely guide and handle the robotic arm to treat any area of the body as needed.
- Automatic Mode: The therapist configures the treatment once, and the robot can then autonomously reproduce it across multiple sessions. Treatments can target one or several predefined points in a sustained manner, or be applied through linear or pendulum sweeps. These programmable movements enable non-contact massage therapies for muscle spasm relaxation, as well as draining and relaxing treatments in cases of inflammation or post-surgery recovery.

The robot performs a 3D scan to identify the patient's anatomy and adapt the treatment to their position in each session. Before starting, it also captures a high-resolution thermographic image, supporting diagnosis and providing objective data to track the patient's progress.

The physiotherapy robot was developed to support physiotherapists in the personalized, painless treatment of musculoskeletal disorders. It aids diagnosis of muscle injuries through infrared imaging and replicates pressure massage therapy using temperature-controlled pressurized air. Clinical results show it reduces patient recovery time from 7 to 3 weeks, while cutting waiting lists and treatment costs by 40%.

Its effectiveness and autonomy make it ideal for sports clubs and rehabilitation services. Currently at TRL 9, the robot is fully functional and already in use across hospitals (public and private), sports clubs, and wellness centres in Spain, France, Lithuania, India, the USA, and Ecuador.

This robot is officially certified as a European Union Class IIa Medical Device, ensuring full compliance with the highest safety and quality standards.

The company is seeking commercial agreements with technical assistance involving distributors and commercial partners. Preferred partners are international distribution companies with proven experience in high-end physiotherapy or medical rehabilitation devices.

Advantages and innovations

This device is a unique combination of Robotics, Artificial Intelligence, and Medical Science, designed to bring physiotherapy care to a new level. The company holds a competitive advantage as the only solution on the market capable of automating physiotherapy massages, improving efficiency and recovery times, while providing medical evidence of patients' progress.

Using this medical device makes it possible to automate tedious and repetitive tasks, increasing physiotherapists' productivity and enabling them to treat more patients in less time, while reducing waiting lists. Thanks to thermography, it also provides objective data on each patient's progress. Most importantly, it enhances patient well-being, with many reporting significant improvements after just a few sessions of painless treatment.

Main technological features:

- Individualized treatment thanks to a custom proprietary recognition software.
- Use of thermographic imaging for pre-diagnosis of MSDs and evolution measurement.
- Use of 3D cameras for patient and surface recognition.
- Jet of pressurized air at a controlled pressure of 6 bar.
- Treatment air temperature control.
- Air filtering for medical applications.
- Cloud-based multi-device access for users and therapists alike for a delocalized user experience.
- Clinical history registry system and thermographic imaging storage.
- Robotic arm safety system and continuous force control and feedback for a 100% safe experience for the user.

Main clinical advantages:

- Three different treatments: point-by-point, linear, and pendular.
- Treatment independent of location.
- Drainage enhancement for inflammatory pathologies.
- Post-surgery recovery and treatment.
- Pain relief for muscle problems throughout the treatment sessions.
- Shortens recovery times, boosting the overall treatment by the therapist.
- Complete customization of the treatment times, loops, temperature and velocity for an individualized and effective treatme

Technical specification or expertise sought

Stage of development

Already on the market

IPR Status

IPR granted

Sustainable Development goals

• Goal 3: Good Health and Well-being

IPR Notes

Partner Sought

Expected role of the partner

The company is looking for international distributors with experience in high-end physiotherapy, rehabilitation, or medical devices to establish commercial agreements with technical assistance. Ideal partners would have strong networks in the healthcare, sports, or wellness sectors and be capable of promoting and distributing innovative medical technologies.

- Potential end-users of the device include:
- Hospitals and private rehabilitation clinics.
- Physiotherapy and sports medicine centers.
- Professional sports clubs and high-performance training facilities.
- Wellness and medical spa centers.
- Elderly care institutions and occupational health providers.

The Spanish company will provide full technical training, support, and after-sales assistance to ensure smooth implementation and customer satisfaction.

Type of partnership

Commercial agreement with technical assistance

Type and size of the partner

- **SME <=10**
- **Big company**
- **SME 11-49**
- **Other**
- **SME 50 - 249**

Dissemination

Technology keywords

- **01003003 - Artificial Intelligence (AI)**
- **01004001 - Applications for Health**
- **06001020 - Physiotherapy, Orthopaedic Technology**

Targeted countries

- **World**

Market keywords

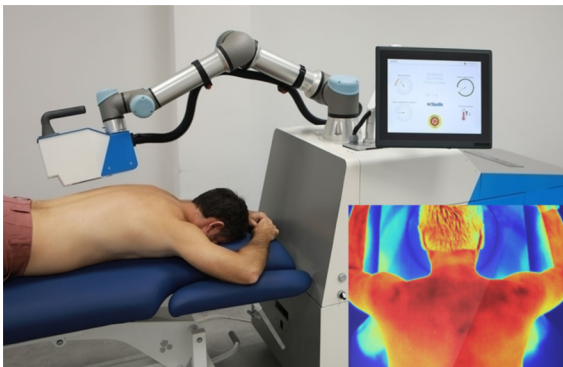
- **05007006 - Computer-aided diagnosis and therapy**
- **05004001 - Electromedical and medical equipment**

Sector groups involved

- **Health**

Media

Images



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Videos

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