



The startup Remedee Labs announces positive results from its clinical trial on osteoarthritis.

Grenoble, May 31, 2023 — Remedee Labs, a French startup that specializes in non-pharmaceutical treatments for chronic pain, is announcing the highly anticipated results of its clinical study assessing the effectiveness of its millimeter waves neuromodulation device for osteoarthritis patients today. The initial results showed a significant decrease in pain and an improvement in sleep quality and overall quality of life among patients who used the device.

Remedee Labs' innovative non-invasive technology, which was tested in this clinical trial, is based on a unique millimeter waves neuromodulation technique that stimulates the release of endorphins, the body's natural painkillers, to improve users' quality of life.

This randomized crossover study was conducted by the Grenoble Alpes University Hospital on 60 volunteers with peripheral osteoarthritis (ankle, knee, hip, shoulder, elbow, finger).

"The study results showed that regular use of the wristband (1 to 3 times per day) for 3 months significantly reduced pain (VAS) in patients with peripheral osteoarthritis," says Dr. Laurent Grange, a Rheumatologist at Grenoble Alpes University Hospital. "This is the first set of clinical results to demonstrate the efficacy of millimeter waves neuromodulation in the management of patients with osteoarthritis."

The study authors also observed an overall improvement in quality of life (EQ5D-5L) and better sleep quality (VAS) in the patients in the study. No severe side effects were observed. These results will be presented at the European Congress of Rheumatology (EULAR) in Milan on June 2 and the full results of the trial will be published soon in a peer-reviewed journal.

"We are extremely excited to share the initial results of this clinical trial. We need new, non-pharmaceutical approaches. This non-pharmaceutical therapy is safe and easy to use, opening up new perspectives for osteoarthritis pain management thanks to its holistic impact on patients' quality of life." **Dr. Caroline Maindet, Pain Specialist at Grenoble Alpes University Hospital and principal investigator of the EPIKARTHROSE study.**

The study results confirm the effectiveness of millimeter waves neuromodulation in the management of patients with peripheral osteoarthritis and indicate that it has potential for other conditions that present central hypersensitization with no satisfactory solution, including fibromyalgia, for which a clinical trial is also under way, with results to be released soon.

Based on these results, Remedee Labs plans to continue the certification process to earn medical device approval for the indication osteoarthritis and aims to begin marketing the medical device version of its solution in 2024. In the meantime, it is marketing a "well-being" version, which is available directly on its website at www.remedee.com

“This study is a major turning point for Remedee Labs. These clinical results validate over a decade of research and clearly prove the effectiveness of millimeter waves in the management of patients with peripheral osteoarthritis and they are entirely consistent with our real-world data generated using our ‘well-being’ solution. They also indicate our technology’s potential for other conditions that present central hypersensitization with no satisfactory solution, such as fibromyalgia,” says Dr. David CROUZIER (PhD), cofounder and CEO of Remedee Labs.

Results:

Study population:

Age: 65.78 years \pm 7.2 | Sex: 54 women, 6 men | Body Mass Index (BMI): 26.045°

Average pain score (VAS) at the beginning of the study: **6.17 \pm 1.43.**

Average pain score 5vas° of the “Remedee” group: **4.57 \pm 2.0**

About Remedee's technology

Remedee Labs has developed an innovative, comprehensive non-pharmaceutical solution based on a biopsychosocial approach that takes patients’ biological, psychological, and social factors into account. The solution combines Remedee Labs’ millimeter waves neuromodulation technology (validated by the EPIKARTHROSE study) with a personalized support program for long-term improvement in quality of life.

“Millimeter waves, which are emitted at a frequency of 60 Ghz, penetrate the superficial layer of the skin (less than 0.5 mm) and stimulate the subcutaneous nerve endings, triggering an increase in the production of intracerebral endogenous opioids (endorphins) as well as other neuromediators (dopamine, serotonin). That reduces the sensation of pain and has a positive impact on overall quality of life (sleep, anxiety, mood, etc.),” explains Dr. David CROUZIER (PhD), co-founder and CEO of Remedee Labs.



1

Millimeter waves
neuromodulation



2

Support and
personalized advice



3

Progress monitoring

This new therapy is unique because it offers comprehensive care instead of relying on pharmaceuticals. Remedee's support program gives patients access to regular conversations with a coach, educational and activity modules designed by specialists, and tools to monitor changes in their quality of life.

ABOUT OSTEOARTHRITIS

Osteoarthritis is a joint disease characterized mainly by the destruction of cartilage. It is often associated with severe pain of mixed mechanical and nociplastic origin¹. Symptomatic osteoarthritis manifests as severe pain and/or restricted movement, which negatively affects patients' quality of life. Osteoarthritis, including all locations, affects approximately 15% of the population. In France, that means some 10 million people have osteoarthritis, 6 to 7 million of whom are symptomatic. There is currently no medication that can cure osteoarthritis or stop its progress. A combination of pharmaceutical and non-pharmaceutical treatments is recommended to manage patients' pain.

ABOUT REMEDEE LABS

Remedee Labs is a healthtech startup dedicated to chronic pain care. Founded in 2016 by three experts in medical micro and nanotechnology and biomedical research, Remedee Labs has developed an innovative comprehensive solution to change the lives of patients affected by chronic pain. Its solution combines its unique, non-invasive millimeter waves neuromodulation technology (endorphin stimulator wristband) with a digital services platform and personalized multidisciplinary support.

In October 2022, Remedee Labs announced that it raised €12.2 million from Generali France and other investors to accelerate the market launch of its solution in France and internationally while continuing to develop its neuromodulation technology and expand its service offer.

Its treatment solution for fibromyalgia patients has also garnered recognition in North America, where it has been granted "Breakthrough Device Designation" by the US Food and Drug Administration (FDA) and nominated for the prestigious Galien USA award.

Learn more about Remedee Labs: <https://remedeelabs.com>

Learn more about the Remedee solution: <https://remedee.com>

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¹ There are three types of chronic pain, which are classified by their causes:

- Nociceptive pain: a confirmed or presumed lesion on the joint tissue
- Neuropathic pain: a lesion or disease of the somatosensory system
- Nociplastic pain: an alteration of nociception that is not explained by nociceptive or neuropathic pain. Essentially due to central hypersensitization.