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Smart Therapeutic Device for Knee Osteoarthritis

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PROJECT QUICK FACTS

Principal Investigator

Prof. QIN Ling

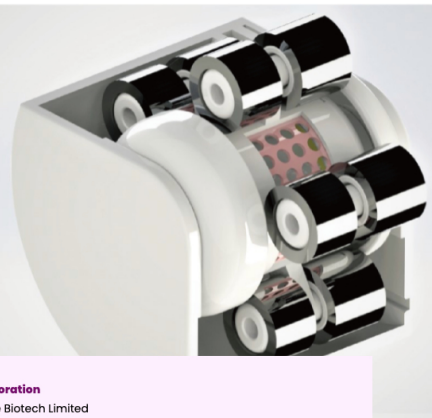
DEPARTMENT OF ORTHOPAEDICS AND TRAUMATOLOGY

• Collaboration

MTcure Biotech Limited

• Award

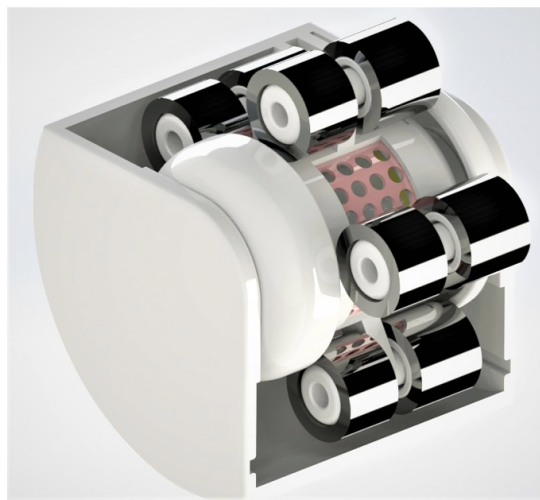
Gold Medal, 46th International Exhibition of Inventions Geneva



Many elderly suffer from knee osteoarthritis and related degenerative diseases. However, due to limited medical resources and population ageing, patients have to wait for months for physiotherapy treatment in hospital. To provide elderly a safe, reliable and effective personalized physiotherapy, our team has developed an easy-to-use smart therapeutic device for prevention and treatment of knee joint degeneration diseases. By combining low-level laser therapy, heat therapy, massage and AI technology, the device is a promising solution to relieve pain, stimulate musculoskeletal and promote joint tissue regeneration.

Uniqueness and Competitive Advantages

- World's first patented home medical therapeutic device to provide treatments on the popliteal fossa
- 3-in-1 rechargeable device with medical grade low-level laser therapy (LLLT), FDA approved thermotherapy, and deep tissue stimulation (compression roller) to promote tissue repairing, blood and lymphatic circulation, and reduce inflammation
- Equipped with AI technology offering auto-adjustment, such as speed, pressure, temperature, energy output of laser therapy and treatment duration
- Tested on 43 elderly participants in a 2-month clinical trial and achieved comparable results with clinical instruments in hospitals



Core components of the device





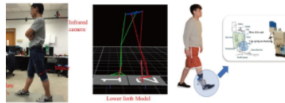
First generation of smart therapeutic device for knee osteoarthritis

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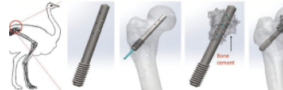
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