UCI Beall Applied Innovation

Research Translation Group

Research Translation Group

Available Technologies

Contact Us

Request Information

Permalink

Non-Pharmacological, Neurostimulation Treatment for Hypertension

Tech ID: 33993 / UC Case 2024-99V-0

BRIEF DESCRIPTION

A groundbreaking non-pharmacological approach to controlling resistant hypertension through personalized, closed-loop neurostimulation.

FULL DESCRIPTION

The Hypertension Elimination via Adaptive Loop Stimulation (HEALS) Patch represents a novel medical device aimed at reducing blood pressure non-pharmacologically by utilizing closed-loop neurostimulation that adjusts in real-time to individual patient responses. This technology monitors continuous blood pressure, heart rate, and nerve responses during electrical stimulation, using biofeedback to fine-tune stimulus parameters for optimized, personalized therapy.

SUGGESTED USES

- >> Non-pharmacological treatment options for hypertension, especially resistant hypertension.
- >> Personalized medical devices for cardiovascular disease prevention and management.
- >> Technologies for real-time monitoring and management of chronic health conditions.
- Innovative solutions for reducing global hypertension prevalence and associated healthcare disparities.

ADVANTAGES

- » Non-invasive alternative to current surgical interventions.
- » Personalized treatment through real-time, closed-loop control and monitoring.
- » Reduces blood pressure without affecting heart rate, avoiding negative chronotropic responses.
- » Addresses the unmet need for effective treatment in resistant hypertension (RHT) patients.
- >> Potential to prevent prehypertension from progressing to full-blown hypertension

PATENT STATUS

Patent Pending

CONTACT

Alvin Viray aviray@uci.edu tel: 949-824-3104.



OTHER INFORMATION

CATEGORIZED AS

- » Biotechnology
 - >> Health
- » Medical
 - » Devices
 - Disease:Cardiovascular andCirculatory System
 - » Rehabilitation
- » Sensors & Instrumentation
 - » Medical

RELATED CASES

2024-99V-0

UCI Beall Applied Innovation

5270 California Avenue / Irvine,CA 92697-7700 / Tel: 949.824.2683



© 2025, The Regents of the University of California Terms of use Privacy Notice