Low-Intensity Pulsed Ultrasound (LIPUS) for Enhanced Testosterone Production and Treatment of Low Testosterone

Tech ID: 32724 / UC Case 2020-223-0

TECHNOLOGY DESCRIPTION

The invention is a non-invasive method for the prevention and treatment of diseases related to low testosterone in men, including late onset hypogonadism (LOH), which is a decline in testosterone levels with age, as well as other conditions caused by testosterone deficiency.

The technology leverages low-intensity pulsed ultrasound (LIPUS) to stimulate cells within the testicle to achieve increased testosterone production, thus enabling elevation of blood testosterone levels to normal physiologic ranges.

Increased testosterone production can lead to improvements in erectile and male reproductive function, as well as enhanced energy, concentration, mood, and stamina.

ADVANTAGES

- Relies on physical stimulation (via application of low energy ultrasound) to increase blood testosterone levels by inducing proliferation of the body's natural testosterone-producing cells
- Cell proliferation is achieved without the need for biopsy, isolation, culture, or other invasive procedures
- Achieves increased blood testosterone levels without the use of chemicals, drugs, or hormones
- Potentially safer than Testosterone Replacement Therapy (TRT) which may stop sperm production and cause atrophy of testicles
- Non-invasive and localized therapy

APPLICATION

- Potential to effectively treat and mitigate symptoms of low testosterone due to aging
- Potential to serve as a standalone alternative therapy to TRT
- Primary hypogonadism (congenital or acquired)
- Hypogonadotropic hypogonadism (congenital or acquired)

LOOKING FOR PARTNERS

To commercialize the technology

STAGE OF DEVELOPMENT

CONTACT

Lindsay N. Sanford

Lindsay.Sanford@ucsf.edu

tel: .

OTHER INFORMATION

CATEGORIZED AS

- Medical
  - Devices
  - Therapeutics

RELATED CASES

2020-223-0

Pre-clinical – in vitro and in vivo (rat model) testing

DATA AVAILABILITY

Available under CDA

RELATED MATERIALS

- PCT application WO2022026607A1

PATENT STATUS

Patent Pending

ADDRESS

UCSF

Innovation Ventures

600 16th St, Genentech Hall, S-272,

San Francisco,CA 94158

CONTACT

Tel:

innovation@ucsf.edu

https://innovation.ucsf.edu

Fax: