KOREADERMA 2023 Abstract Submission

Abstract submission for:

☐ Oral presentation only

☐ Poster presentation only

**Please check the box with a different color.*
**Authors may indicate their preference for oral or poster presentation above. However, all final decisions are to be made by the organizing committee of KOREADERMA 2023.*

Title of abstract *(25 words maximum)***:**
Discovering the theoretical background of titanium lifting working principle

Authors
Nark-Kyoung Rho
Leaders Clinic, Seoul, Korea
(Disclosure: The speaker will receive honorarium after the presentation)

Corresponding author's e-mail:
rhonark@hanmail.net

Main body *(250 words maximum)*:

Background:
Soprano Titanium laser, initially designed as a hair removal device, has been reimagined by Korean dermatologists as a cutting-edge lifting modality called "Titanium Lifting." This innovative technique harnesses the combined power of three laser wavelengths (755 nm, 810 nm, and 1064 nm) to transfer thermal energy from the dermis, subcutaneous fat, to the retaining ligaments of the face. Understanding the theoretical underpinnings of Titanium Lifting is crucial for comprehending its clinical applications in aesthetic dermatology.

Objective:
This lecture aims to explore the theoretical background of Titanium Lifting and elucidate its working principles. By examining the simultaneous emission of the three wavelengths and its impact on the dermis, we seek to uncover the scientific rationale behind this unique lifting protocol.

Methods:
The lecture will utilize a comprehensive analysis of the available literature, including studies conducted by Korean dermatologists who pioneered the development of Titanium Lifting. We will review the principles of laser-induced tissue heating, thermal energy transfer, heat-induced neocollagenesis, and their relevance to the lifting effect. Additionally, clinical case studies and data will be presented to support the efficacy of this technique.

Results:

Our investigation reveals that the three wavelengths emitted by Soprano Titanium facilitate the transfer of thermal energy deep to the soft tissue of the face, powered by a strong surface cooling. This controlled heat application stimulates collagen synthesis and remodeling, resulting in improved skin elasticity and reduction of wrinkles. Furthermore, the wavelengths allows significant improvement of skin tone, resulting in the “skin brightening”.

Conclusion:
Titanium Lifting, an innovative application of Soprano Titanium laser, harnesses the simultaneous emission of three wavelengths to transfer thermal energy and induce desirable skin rejuvenation effects. Understanding the theoretical foundations and clinical applications of this technique will equip dermatologists with valuable knowledge to optimize patient outcomes in aesthetic dermatology practice.

Keywords: *exosome, extracellular vesicles, skin boosting agents*