•

ANIMAL HISTOLOGY STUDY EVALUATING HYALURONIC ACID PRODUCTION

INCREASED LEVELS OF HYALURONIC ACID IN SKIN AFTER MONOPOLAR RADIOFREQUENCY AND TUS TREATMENT: PORCINE ANIMAL STUDY

Diane Duncan, M.D., FACS¹, MvDr. Jan Bernardy PhD², MVDr. Nikola Hodkovicova PhD², PharmDr. Josef Masek PhD²

1. Plastic Surgery Associates, Fort Collins, CO, USA, 2. Veterinary Research Institute, Brno, CZ

Presented at the American Society for Laser Medicine and Surgery (ASLMS). San Diego, California, 27 April 2022

Highlights

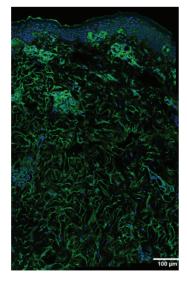
- 12 swines had four treatments of 30 minutes on each side of the abdomen
 - 6 treated by RF + Targeted Ultrasound (TUS)
 - 6 treated by RF + Non-Targeted Ultrasound
- 252 samples collected and analyzed using three different evaluation methods (PCR, MALDI-TOF, and Confocal Microscopy)
- Study shows that the use of **Targeted Ultrasound is essential** for stimulating the **HA production**, whereas the **RF+US** had **no significant effect**

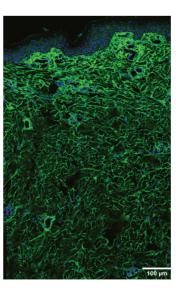
RF+TUS Group

224% MORE HYALURONIC ACID

RF+Non-Targeted Ultrasound







Confocal microscopy images show that at the 2-month follow-up, the network in the dermis of the RF+TUS group appears denser with more green fibers compared to its baseline on the left.

