

Miratone™ Fractional Radiofrequency System Bibliography

Manuscripts

Featured on the front cover of the January and February 2009 issues of *Lasers in Surgery and Medicine* are two peer-reviewed articles discussing the Miratone fractional radiofrequency system by Primaeva.

Hantash BM, Ubeid AA, Chang H, Kafi R, Renton B. Bipolar fractional radiofrequency treatment induces ne elastogenesis and neocollagenesis. *Lasers Surg Med.* 2009;41:1-9.

<http://www3.interscience.wiley.com/journal/121638003/abstract>

This study examined the wound healing response following treatment with Primaeva's fractional radiofrequency system. The study demonstrated that treatment with this system induced an active remodeling process and showed evidence of profound ne elastogenesis and neocollagenesis, which may provide a reliable treatment option for skin laxity and/or rhytids.

Hantash BM, Renton B, Berkowitz L, Stridde BC, Newman J. Pilot clinical study of a novel minimally invasive bipolar microneedle radiofrequency device. *Lasers Surg Med.* 2009;41:87-95.

<http://www3.interscience.wiley.com/journal/122208681/abstract>

This study introduced Primaeva's novel minimally invasive RF device employing a bipolar microneedle electrode delivery system and characterized its thermal effects on human skin. The study showed the device's capability to create controlled fractional radiofrequency thermal zones using real-time feedback of temperature and impedance in dermal tissue in 15 human subjects.

Abstracts

The following abstracts will be presented at the upcoming 29th ASLMS Annual Conference and will be published in the LSM Abstract Supplement in June 2009.

Zachary CB, Renton B, Newman J, Hantash BM. Fractional radiofrequency treatment spares skin structures vital to the wound healing process. Paper presented at: Annual Meeting of the American Society for Laser Medicine & Surgery, April 1-5, 2009; National Harbor, MD.

Willey A, Newman J, Renton B, Berube D, Krishna S, Kilmer S. Minimally-invasive fractional bipolar radiofrequency energy for the treatment of facial laxity and rhytids. Paper presented at: Annual Meeting of the American Society for Laser Medicine & Surgery, April 1-5, 2009; National Harbor, MD.

Ross EV, Renton B, Ubeid AA, Chang H, Hantash BM. Evaluation of the wound healing response post fractional radiofrequency treatment. Paper presented at: Annual Meeting of the American Society for Laser Medicine & Surgery, April 1-5, 2009; National Harbor, MD.

Berube D, Renton B, Hantash BM. Energy Deposition and thermal profile of a novel minimally invasive bipolar radiofrequency system for skin treatment. Paper presented at: Annual Meeting of the American Society for Laser Medicine & Surgery, April 1-5, 2009; National Harbor, MD.

Goldberg DJ, Hussain M, Renton B, Newman J, Hantash BM. Histological and clinical evaluation of fractional radiofrequency treatment of facial laxity and rhytids. Paper presented at: Annual Meeting of the American Society for Laser Medicine & Surgery, April 1-5, 2009; National Harbor, MD.

Alexiades-Armenakas M, Dover J, Arndt K, Renton B. Blinded grading comparison of minimally-invasive fractional radiofrequency treatments and surgical facelift results. Paper presented at: Annual Meeting of the American Society for Laser Medicine & Surgery, April 1-5, 2009; National Harbor, MD.