

## Multi Center Evaluation for the Treatment of Cellulite Using a Minimally Invasive Laser with Side Firing Subdermal Fiber

Barry E. DiBernardo, MD; Gordon H. Sasaki, MD; Christine A. Petti, MD; Joseph P. Hunstad, MD; A. Jay. Burns, MD; Bruce E. Katz, MD

### Abstract

**Background:** Historically, treatments for cellulite have either not been able to address all of its components, require multiple treatments or are temporary at best.

**Objective:** This study was conducted to evaluate the safety and efficacy of a single minimally invasive procedure, using a three step approach, to treat the underlying structure of cellulite using a 1440 nm Nd:YAG laser with a side firing fiber and temperature sensing cannula.

**Methods:** 57 subjects were consented and treated. Efficacy was measured by blinded evaluators based on a validated photographic scale comparing baseline photos to 2, 3 and 6 months post treatment as well as identifying baseline from post treatment photos at 3 and 6 months. Subject and physician satisfaction was assessed based on completion of a satisfaction survey at 2, 3 and 6 months post treatment. Adverse events were recorded throughout the study.

**Results:** At 6 months post treatment, blinded evaluators rated at least a 1 point level of improvement in 96% of treated sites for the appearance of cellulite (Figure 1). Blinded evaluators were also able to correctly identify baseline compared to post treatment photos in 95% of cases. At least 90% of subjects and physicians reported satisfaction with the results of treatment throughout 6 months. Events were mild in intensity and transient to treatment.



Figure 1. Pre and 6 months post treatment

**Conclusions:** A single, three step, minimally invasive laser treatment using a 1440-nm Nd:YAG laser, side firing fiber and temperature sensing cannula, to treat the underlying structure of cellulite, proves to be safe and maintains effectiveness at least 6 months post treatment.

### References

1. DiBernardo BE. Treatment of cellulite using a 1440-nm pulsed laser with one-year follow-up. *Aesth Surg J.* 31(3): 328-341, 2011.
2. Goldman, A., Gotkin, R., Sarnoff, D., Prati, C., Rossato, F. Cellulite: A New Treatment Approach Combining Subdermal Nd: YAG Laser Lipolysis and Autologous Fat Transplantation. *Aesth Surg J.* 28: 656-662, 2008.
3. Wanner, M. Avram, M. An Evidence-Based Assessment of Treatments For Cellulite. *J of Drugs In Dermatology.* 7 (4): 341-345, 2008.

### Disclosures/Financial Support

Supported by Cynosure, Inc.

All authors are paid consultants for bona fide services including clinical research, training, lectures, and workshops. None of the authors has a financial interest in the device mentioned in this manuscript.