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### Title

Ablative fractional resurfacing for the treatment of photodamage and laxity

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# CUTANEOUS LASER SURGERY

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## **ABLATIVE FRACTIONAL RESURFACING FOR THE TREATMENT OF PHOTODAMAGE AND LAXITY**

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### **Purpose or Rationale for Presenting at this Meeting:**

Ablative resurfacing remains the gold standard for the treatment of photodamage. We postulated that ablative fractional resurfacing with the 10,600 nm CO<sub>2</sub> laser could deliver controlled deep micro-ablation, while reducing the downtime associated with traditional ablative modalities. We report the first study of the treatment of photodamage and laxity of the face and neck using ablative fractional resurfacing.

**Methods:** 30 subjects were treated in an FDA IDE and IRB approved study at 3 investigational sites. All patients were Fitzpatrick skin types I–IV ranging from 30–75 years of age. Subjects with moderate to severe photodamage and laxity of the face and neck were enrolled for one or two treatments at one to 6 month intervals. Treatment settings ranged from 10–20 mJ and 400–1600 MTZ/cm<sup>2</sup>. Subjects and investigators evaluated improvement of rhytides, pigmentation and skin laxity at 48 hours, 1 week, 1 month and 3 months following treatments.

**Results:** Greater than 75% of subjects sustained moderate to significant improvement in the appearance of rhytides, pigmentation and laxity of the face and neck through the final follow-up visit. Serosanguinous oozing resolved within 48 hours post-treatment, representing a significantly shorter downtime compared to traditional ablative resurfacing. All subjects had significant but transient erythema and edema that resolved by three months post-treatment. No serious complications were reported.

**Conclusions:** Ablative fractional resurfacing significantly improved moderate to severe photodamage and laxity on the face and neck. This modality may offer considerable reduction in post-operative downtime and risk for complications when compared to traditional ablative resurfacing.