SPLIT-FACE SKIN REJUVENATION OF PHOTO-AGED SKIN COMPARING PALOMAR PULSED LIGHT SYSTEM AND SYNERON ELOS TECHNOLOGY <u>Chèrie M. Ditre ¹</u>and Albert M. Kligman ^{2, 3}

¹ Cosmetic Dermatology & Skin Enhancement Center, University of Pennsylvania, PA ² Department of Dermatology, University of Pennsylvania School Of Medicine Philadelphis, PA,

³S.K.I.N., Inc., Conshohocken, PA

Background and Objectives: IPL and radio frequency (RF) devices have been an effective way to rejuvenate photo-aged skin. This is a direct comparison of two leading technologies to quantify improvement (short and intermediate term) achieved in a single treatment.

Study Design/Materials and Methods: 16 female patients with moderate photoaging (rhytides, mottled dyschromia, lentigenes, ephelides, redness, telangieactasia, etc.) underwent a single split face treatment. One half of the face was treated with the StarLux (Palomar Medical Technologies, Burlington, MA) dual wave-band (500-670 nm & 870-1400, simultaneously) LuxG hand piece with 40-50 J/cm² @ 100ms followed by 30-40 J/cm² @ 20ms pass and the other half was treated with the Aurora (Syneron Medical, Israel) SR hand-piece (580-980 nm @ 28-30 J/cm² of pulsed light and 18-20 J/cm³ of RF). Evaluation performed at baseline and 3 month follow up included: clinical grading, patient self-assessment, photography (regular, parallel- & cross-polarized; UVA; Hiscope), confocal microscopy, OCT, hydration, skicon, corneometry, and biopsy. One month follow up consisted of photography only.

Results/Conclusion: The results of the clinical assessment from patients and physician as well as the clinical photographic evaluation showed that the IPL only treated site demonstrated significant improvement as compared to the IPL and RF. No clinical evidence of added benefit with the RF could be seen. Results of the confocal microscopy, OCT, hydration, skicon, corneometry, and biopsy are undergoing statistical analysis at this time and will be presented and discussed.

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