# A multi-center clinical evaluation of the performance of fractional

radiofrequency technology for improvement of skin texture



## Introduction & Objectives

The visible reduction in the appearance of the acne scars, skin texture irregularities and or rhytides.

42 centers in North America and one hospital in Israel, participated in an IRB approved, multi-center study using a fractional radio frequency device to treat skin textural irregularities.

Up to 15 subjects per center received 3 RF Scan treatments with a one and two month post treatment follow up was performed.



#### Materials & Methods

- RF Applicator with 160 total pins in a rectangular pattern. 150x20x700 micron footprint with a 30<sup>o</sup> angle.
- 4 pins are active while 156 pins reciprocating until all 160 pins complete the scanner delivery of RF energy.
- Enrolled both genders, ages 21-60 and all Fitzpatrick types
- Patients pre treated with a mild topical anesthetic
- Face received one pass of energy pulses for one treamtent every 2 weeks for a total of 3 tx over 6 weeks.
- One two days post treatment some reported events were limited to mild inflammation and erythema. All resolved without sequelae.

#### Results

Over 75% of patients have observed a visible improvement in their skin and more than 77% said the treatments were very tolerable.

Significant improvement has been observed in pigmentation abnormalities but further study is required to establish the device's efficacy for melasma, solar lentigo or lentigo senilis.

Biopsies reveal that the depth of the wound can be as deep as 500 microns and the recovery of the wound is less than 5 days, in most cases, with altered collagen visible at 200 microns.

#### Conclusions

Scanner delivered RF technology can be used with a high degree of confidence to improve the textural appearance of the skin with little downtime and helps to avoid complications, which can be associated with more aggressive or ablative laser treatments.

Treatments have proven safe for all skin types.



### Before and After



