

# What's the Secret of **FRA<sup>XIS</sup>** <sup>DUO</sup>™?

High-powered Fractional CO<sub>2</sub> Laser  
and Micro-needle RF System



# What is FRAXIS DUO?

**FRAXIS<sup>DUO</sup>**™ is a combined fractional CO<sub>2</sub> laser and micro-needle bipolar RF device that delivers optimal result for the reduction of scars, rejuvenation of photo-aged skin and striae distensae. The fractional CO<sub>2</sub> technology of the FRAXIS DUO enables superficial epidermal resurfacing and works in combination with a micro-needle bipolar RF system providing higher volumetric heating and deeper heat diffusion into the dermis. These dual modalities permit the treatment of all skin types and the flexibility to treat a larger range of applications, at the same time increasing the effectiveness of the treatment and reducing its side-effects. This combined therapy is an effective and better choice for the treatment of striae distensae through skin resurfacing and state-of-the-art dermal remodeling technology.

Flexibility

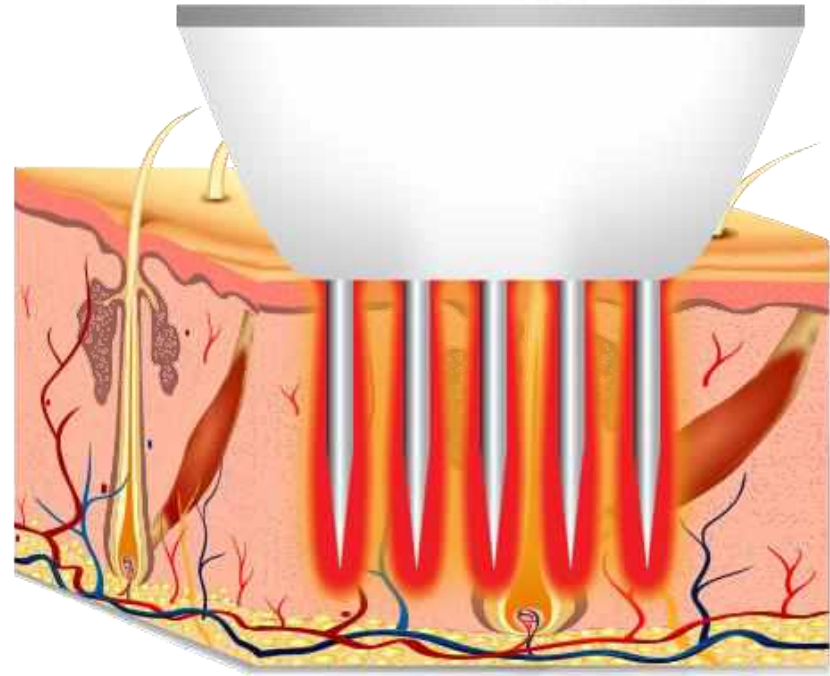
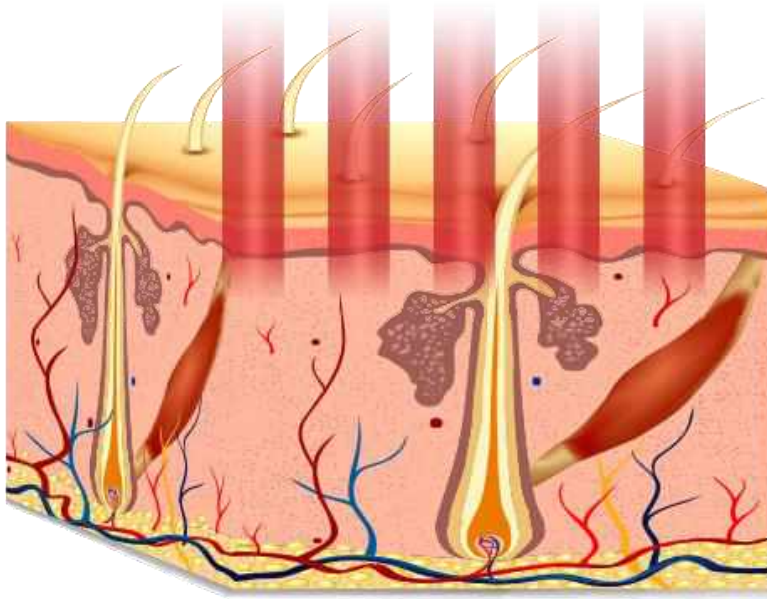
Efficiency

Safety

Optimal Combination



# Why Combination Therapy?



- Fractional CO<sub>2</sub> enables intense superficial resurfacing and micro-needle bipolar RF provides higher volumetric heating and deeper heat diffusion up to 3.5mm customisable to various treatment target areas
- The complementary effects will encourage physicians and therapists alike to utilise both technologies for a more effective treatment of various indications



# Clinical Differences

## Fractional CO<sub>2</sub> vs Micro-needle RF



Vimentin Immunohistochemical analyses at 15 days after application

**CO<sub>2</sub> FRAXIS™ vs SECRET RF™**

Biopsies courtesy of Michael Naouri MD



Post CO<sub>2</sub> FRAXIS™



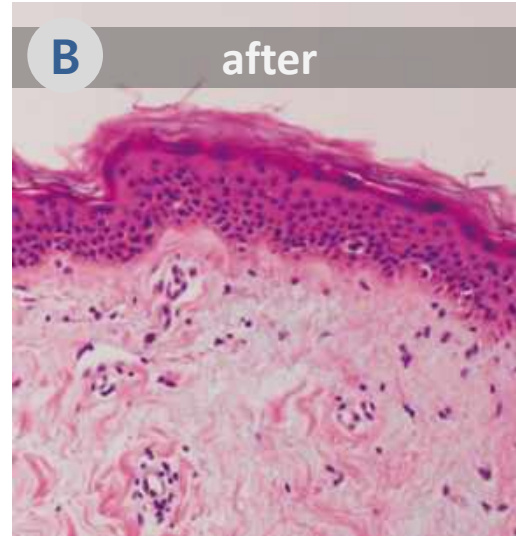
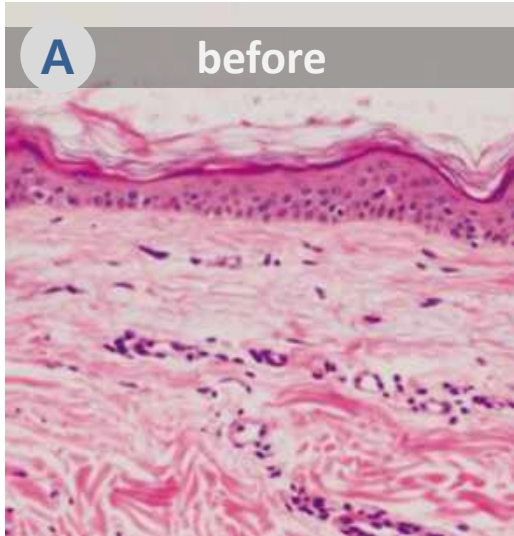
Post SECRET RF™

The histology analyses show an intense superficial fibroblast stimulation with CO<sub>2</sub> but a middle and deep fibroblast stimulation using micro-needle fractional RF





# THE CLINICAL EFFECTS OF COMBINATION THERAPY

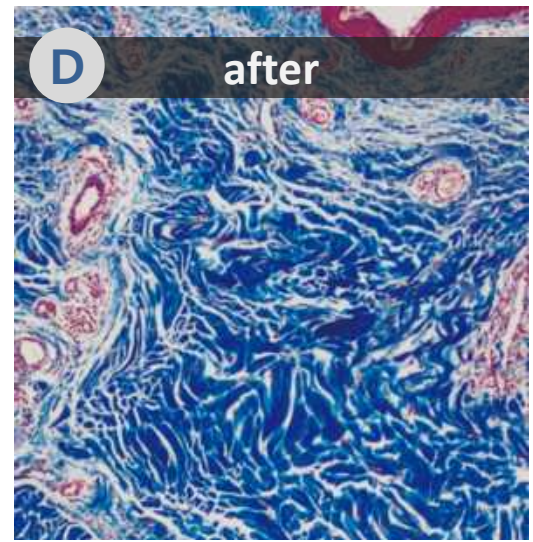


**Thickened epidermis and dermal remodeling post micro-needle RF with CO2 laser treatment**

## Biopsies courtesy of Jae-We Cho MD

Note the thickened epidermis (B) and increased and thickened collagen bundles in the dermis (D), compared to base line (A, C), respectively.

(A, B: hematoxylin and eosin, X 100;  
C, D: Masson trichrome stain, x 40).



# THE BENEFITS OF DUAL MODALITIES



## Ultra Pulse

Seborrheic Keratosis  
Freckle  
Wart  
Lentiginos  
etc

## Scanner

Skin rejuvenation  
Scars  
Fine lines  
etc

ULTRA  
PULSE

SCANNER

CW

MICRO  
NEEDLE  
RF

## Micro-needle RF

Non-surgical face lifting  
Photo-aging  
Scars  
Hyperhidrosis  
Striae distensae

## CW

Surgical Operation

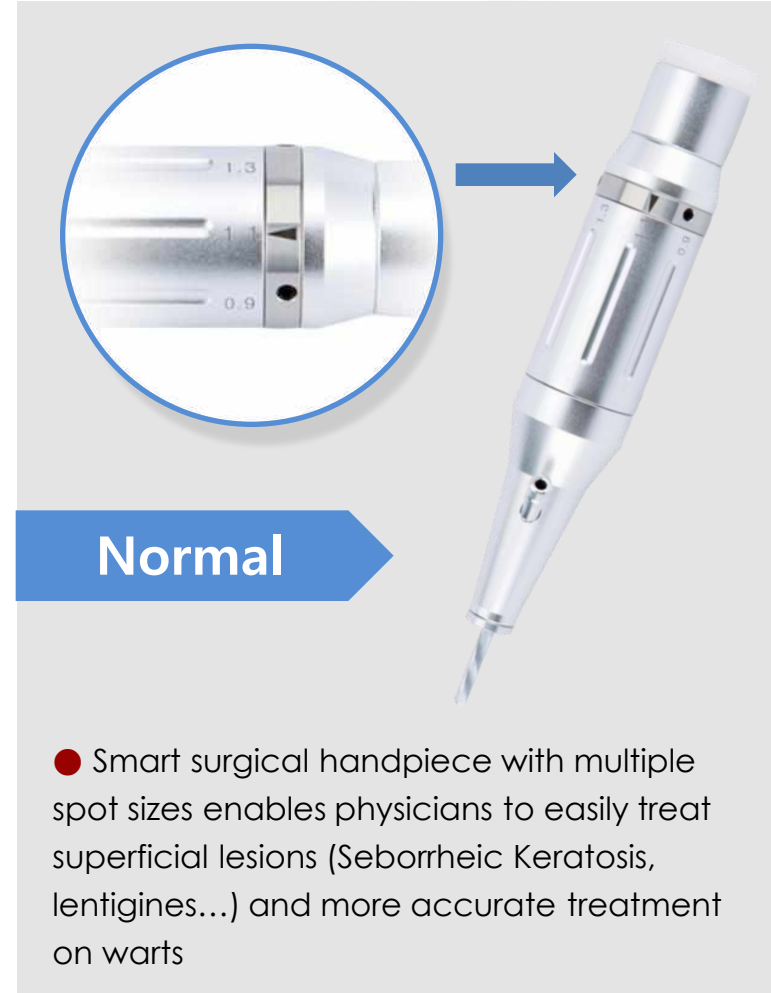
With dual energies and various modes it enables physicians to easily select the most effective mode and energy depending on a variety of conditions on all skin types with very low risk of burns and PIH

# FEATURES OF CO<sub>2</sub> LASER



Fractional

- With 30 watt high power RF tube, the uniform and stable laser beam with **100 ~ 120 $\mu$ m spot size** reduces thermal damage and any unpredictable side effect for an optimal treatment effect



Normal

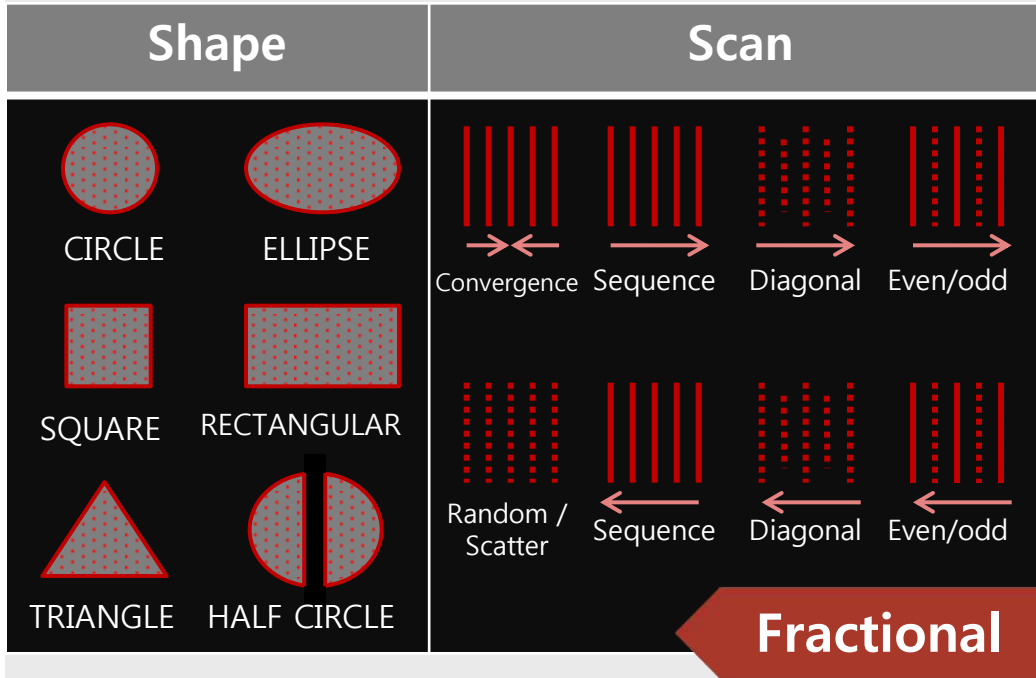
- Smart surgical handpiece with multiple spot sizes enables physicians to easily treat superficial lesions (Seborrheic Keratosis, lentigines...) and more accurate treatment on warts



# ADVANTAGES OF CO<sub>2</sub> LASER

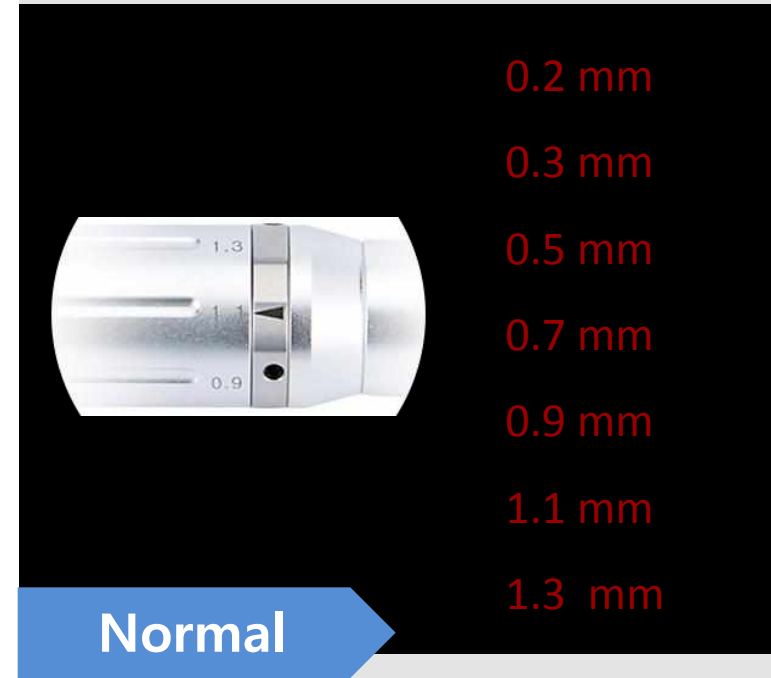


## Various Shape and scanning modes



- **Shape** : more than 6 types / **Scan Mode** : 9 types
- Provides customisable treatments
- Minimizes thermal damage and side effects
- Maximizing treatment effect

## Adjustable handpiece size



- Adjustable spot size : 7 spot sizes
- 4 types of surgical mode :  
CW, Pulse single, Pulse, Ultra pulse
- Easy to select spot size and pulse mode



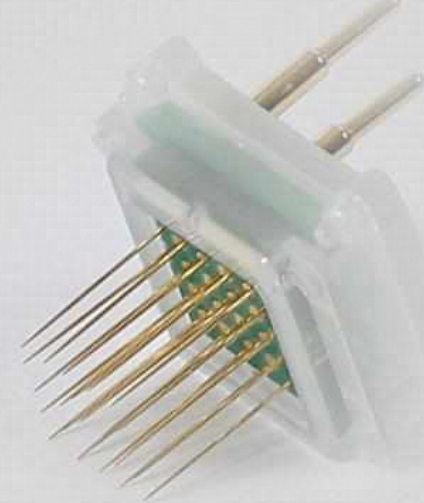
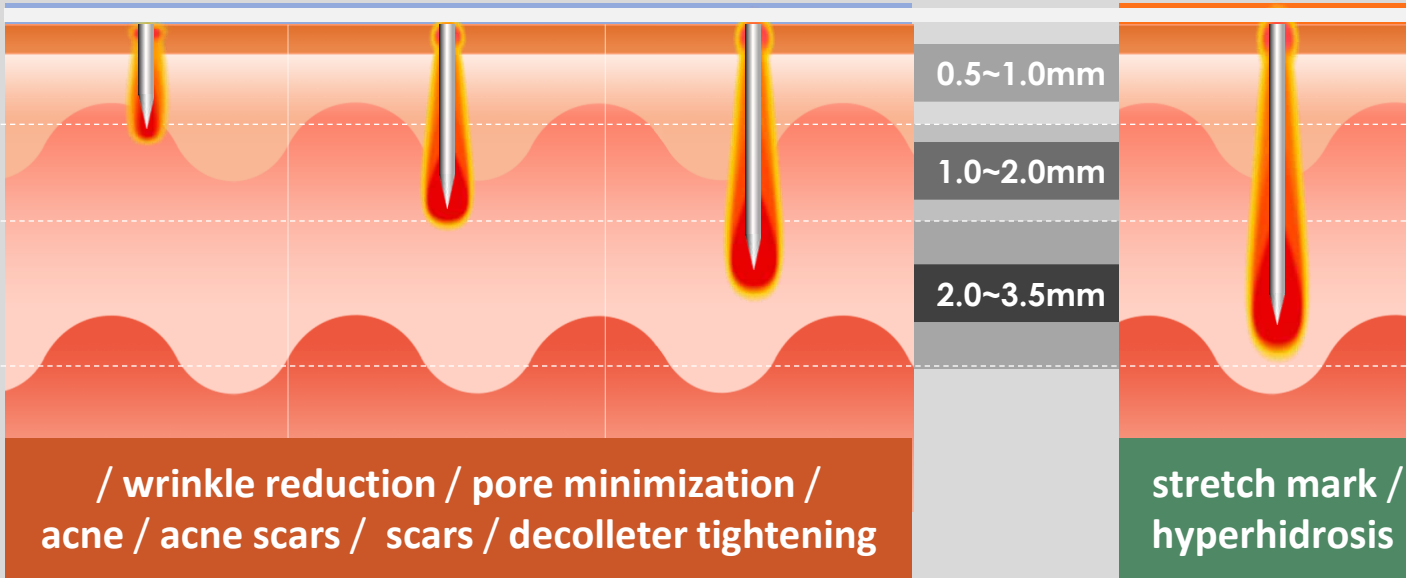


# FEATURES OF MICRO-NEEDLE RF



FACE

BODY



- Micro-needle penetration depth can be adjusted from 0.5 to 3.5mm based on treatment target areas for the treatment of skin lifting, tightening and rejuvenation e.g. hyperpigmentation, wrinkle, acne, acne scar and pore reduction treatments.
- Delivered RF energy is tightly focused at the edge/tip of the micro-needles, leading to far less trauma to the surrounding epidermis. This leads to far less downtime and pain for the patient as compared with a conventional CO2 fractional laser.



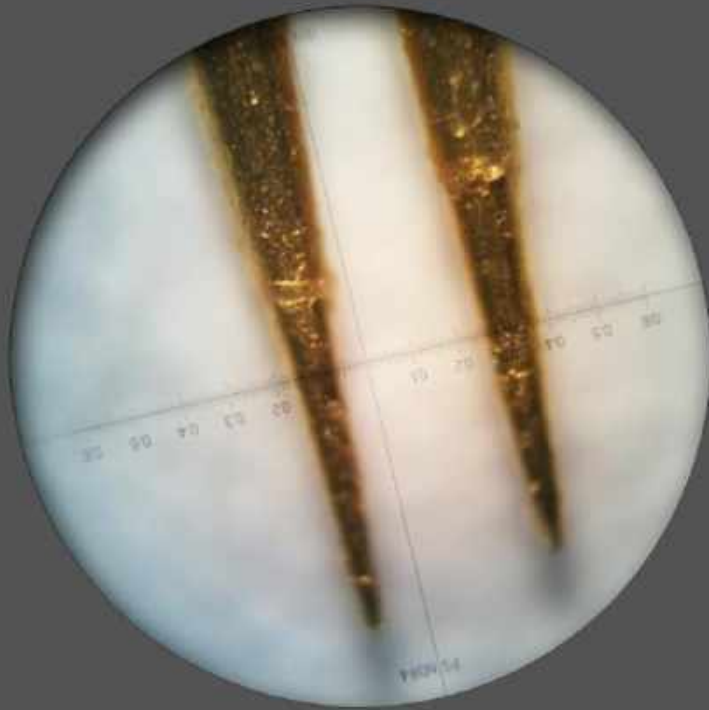
# ADVANTAGES OF MICRO-NEEDLE RF



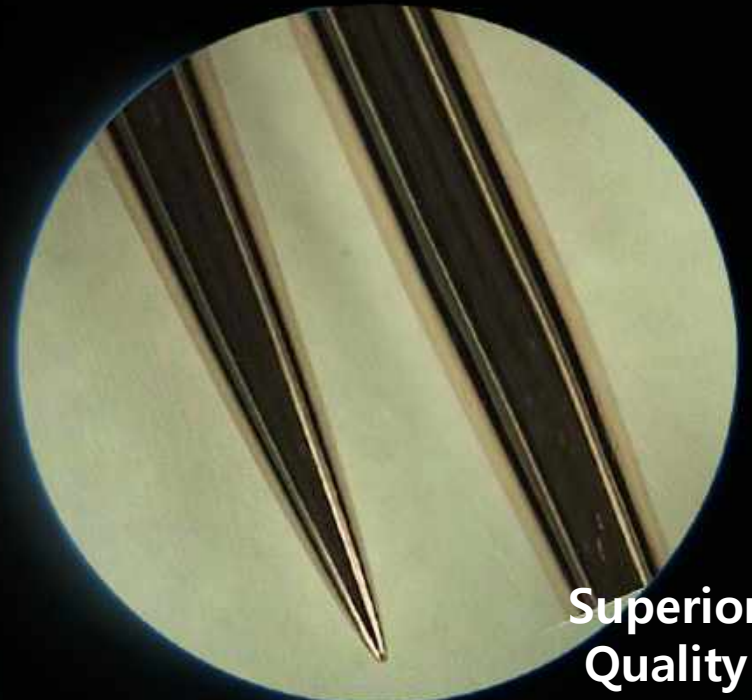
Gold-plated & Non-insulated for superior performance

COMPETITOR

Secret<sup>RF</sup><sup>TM</sup>



VS



Superior  
Quality



# SPECIFICATION OF FRAXIS DUO



## CO2 Fractional Laser System

Wave length	10,600nm (TEM00)
Laser power	Up to 30W (Up to 175mJ)
Pulse duration	20-5,000us
Overlap	1 - 10 <sup>th</sup>
Pixel size	≥100 micron
Distance	0.1 - 2.0mm
Treatment area	1x1 - 20x20mm
Pixel quantity	Up to 40,401
Repetition	0.2 - 2Sec / Single
Normal handpiece (option)	0.2, 0.3, 0.5, 0.7, 0.9, 1.1, 1.3mm

## Micro-needle Fractional RF System

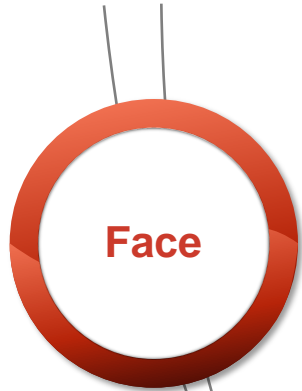
RF Frequency	2MHz ±10%
RF Power	Up to 25W ±10%
Treatment duration (RF Emission)	50ms ~ 950ms
Intensity	0 - 100 Level (2/5/10 Step)
Needle thickness	0.25mm
Needle figure	25 electrode needle (5x5),
Treatment area	25Pin (8.05 x 8.05mm),
Adjustable depth	0.5 ~ 3.5mm(0.1 step)
Repetition	0.2 / 0.5 / 1 / 2 Sec / Single
Electrical power	100 ~ 240VAC, 50/60Hz



# APPLICATION OF FRAXIS DUO



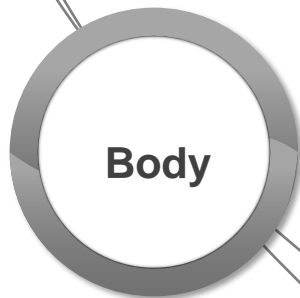
## √ TREATMENT AREAS



Face

### Face Treatment

- Non-surgical Face Lifting
- Photo-aging
- Scars
- Freckle
- Wart
- Lentigines



Body

### Body Treatment

- Scars
- Hyperhidrosis
- Stretch Marks







## *Michaël NAOURI, M. D.*

Centre Laser International de la Peau - Paris,  
Centre Laser - Nogent sur Marne, Nogent sur  
Marne, France

- Using micro-needle fractional RF
  - Atrophic Scars
  - Acne Scars
  - Photo-aging
- Using CO2 laser
  - Onychodystrophy
  - Wart

## *Jae-We Cho, M.D., PhD.*

Department of Dermatology, Laser and  
Esthetic Center, Keimyung University  
School of Medicine, Korea

- Using combination therapy
  - Striae Distensae



# I DR. M. NAOURI | HYPERTROPHIC SCARS USING MICRO-NEEDLE RF



Photo courtesy of Michael Naouri M.D.

**Before**



Photo courtesy of Michael Naouri M.D.

**After 2 sessions**



# I DR. M. NAOURI | ATROPHIC SCARS USING MICRO-NEEDLE RF



Photo courtesy of Michael Naouri M.D.

**Before**



Photo courtesy of Michael Naouri M.D.

**After 1 session**



# I DR. M. NAOURI | ACNE SCARS & ENLARGED PORES USING MICRO-NEEDLE RF



**Before**



**After 3 sessions**





# DR. M. NAOURI | PERIORBITAL & NASOLABIAL FOLD USING MICRO-NEEDLE RF



Photo courtesy of Michael Naouri M.D.

**Before**

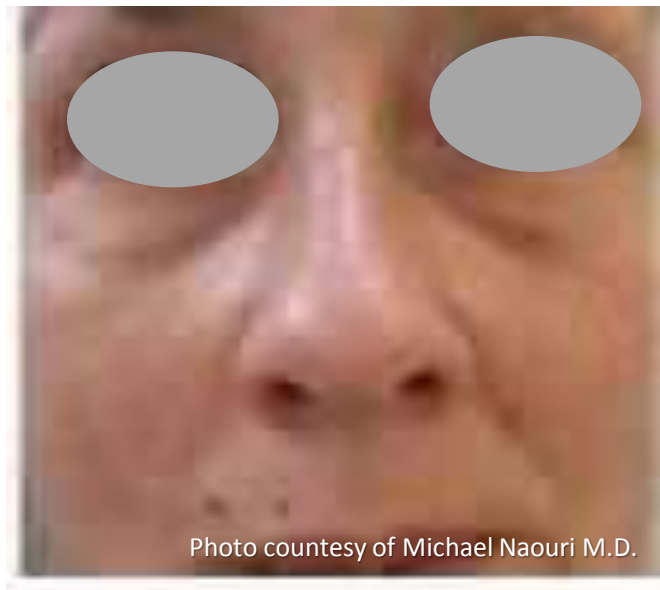


Photo courtesy of Michael Naouri M.D.

**After 3 sessions**



# I DR. M. NAOURI | ONYCHODYSTROPHY USING CO2 LASER



Photo courtesy of Michael Naouri M.D.

**Before**



Photo courtesy of Michael Naouri M.D.

**After 4 sessions**



# I DR. M. NAOURI | WARTS USING CO2 LASER



Photo courtesy of Michael Nauri M.D.

**Before**



Photo courtesy of Michael Nauri M.D.

**After treatment**



# DR. Jae-We Cho | STRIAE DISTENSAE ON THE BUTTOCK USING COMBINATION THERAPY



**Before**



**6months after final treatment**





# DR. Jae-We Cho | STRIAE DISTENSAE ON THE KNEE USING COMBINATION THERAPY



Photo courtesy of Jae-We Cho M.D.



Photo courtesy of Jae-We Cho M.D.

**Before**

**6months after final treatment**



# DR. Jae-We Cho | BURN SCARS USING COMBINATION THERAPY



Photo courtesy of Jae-We Cho M.D.



Photo courtesy of Jae-We Cho M.D.

**Before**

**After 3<sup>rd</sup> treatment**

