

Advanced Combination Therapy

REV 190516

# THE FIRST MULTI-APPLICATION

# FRA~~X~~IS<sup>DUO</sup><sup>TM</sup>

High Power CO<sub>2</sub> Laser plus Micro-needle RF



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# THE DEFINITION OF FRAXIS DUO

The **FRAXIS<sup>DUO</sup>**™ is a combining CO<sub>2</sub> laser and micro-needle fractional RF technology for optimal result of scars, photo-aging and Striae distensae. CO<sub>2</sub> fractional laser is enabling intense superficial heating stimulation and micro-needle fractional RF provides higher volumetric heating and deeper heat diffusion.

The dual modalities permit the treatment of **all skin types** and maximum treatment flexibility to treat **a larger range of applications** increasing the effectiveness of the treatment and **reducing side effects**.

The combining therapy could be an effective and better choice for striae distensae by both effective dermal remodeling and skin resurfacing at the same time.

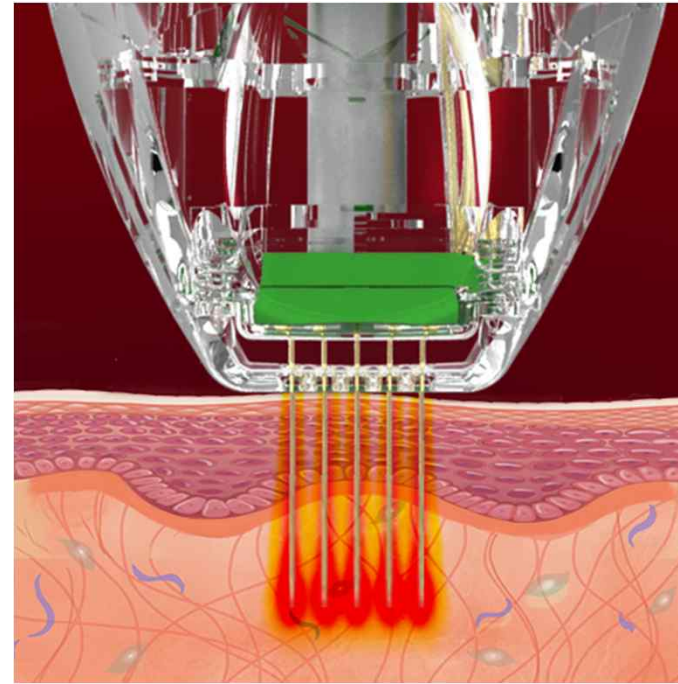
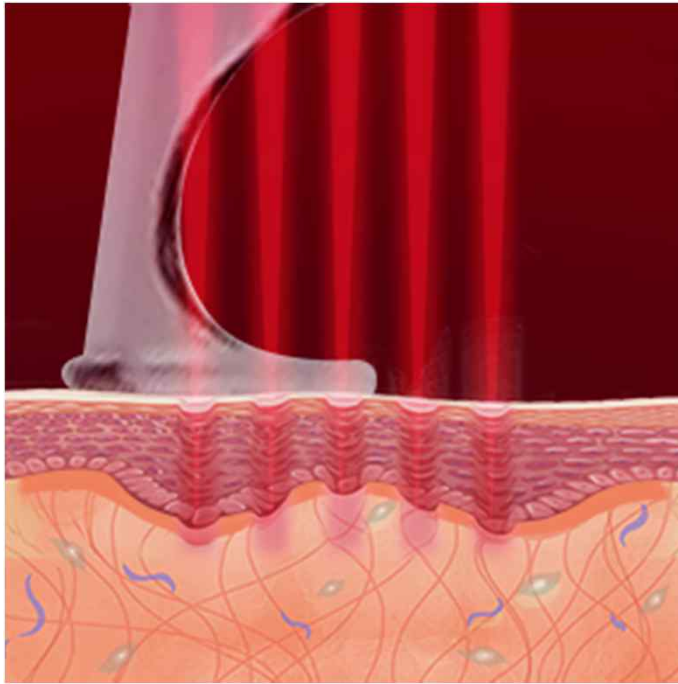
flexibility

efficiency

safety



# THE CONCEPT OF COMBINATION THERAPY



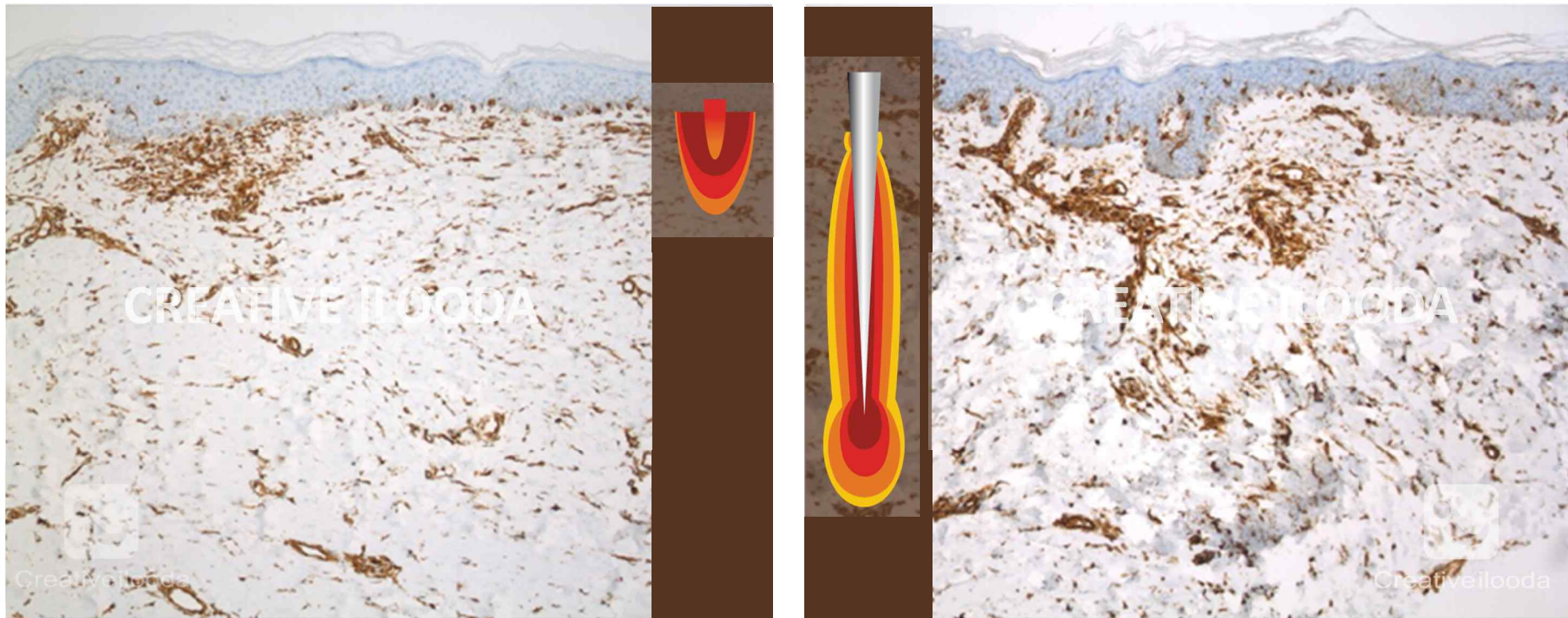
- CO<sub>2</sub> fractional is enabling intense superficial stimulation and micro-needle fractional RF provides higher volumetric heating and deeper heat diffusion to 3.5mm based on treatment target areas, depending on the skin's condition.
- Such complementary effects could encourage physicians to combine two technologies for an effective treatment for various indications.

# THE CLINICAL DIFFERENCE OF CO<sub>2</sub> vs MICRO-NEEDLE RF

Vimentin Immunohistochemical analyses at 15 days after application

**FRA<sub>XIS</sub>** vs **Secret<sup>RF</sup><sub>2.0</sub>**

Biopsies courtesy of Michael Naouri MD

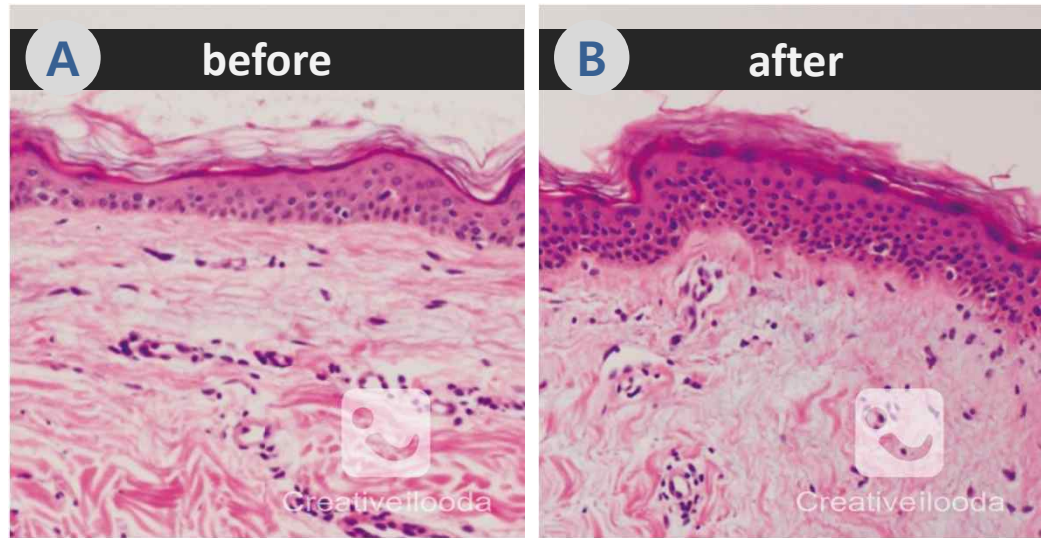


Post CO<sub>2</sub> FRAXIS™

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

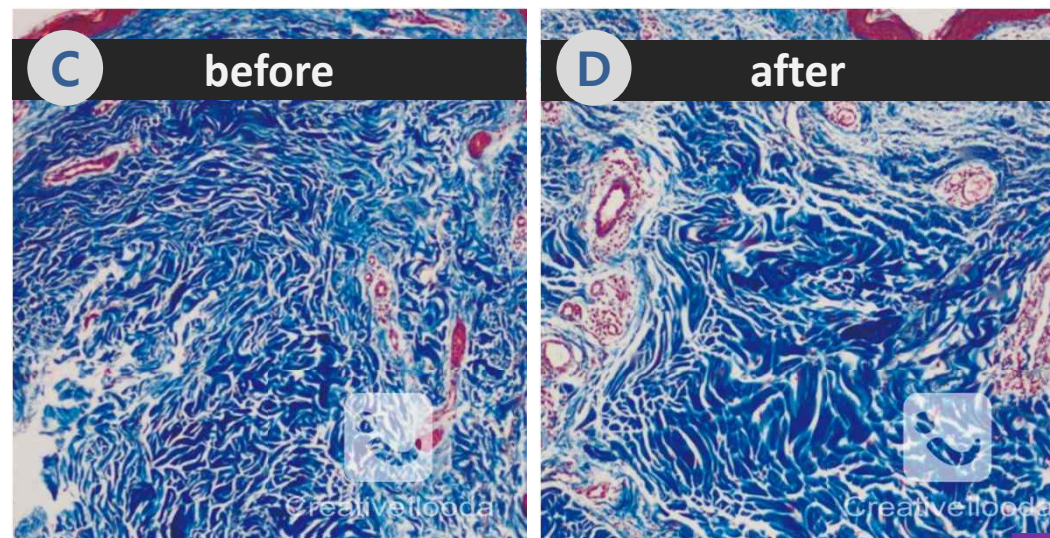


**Thickened epidermis and dermal remodeling post micro-needle RF with CO<sub>2</sub> laser treatment**

## 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
- Lentigines
- etc

## Micro-needle RF

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

**FRA<sup>3</sup>IS** <sup>DUO</sup>™

## Scanner

- Skin rejuvenation
- Scars
- Fine lines
- etc

## CW

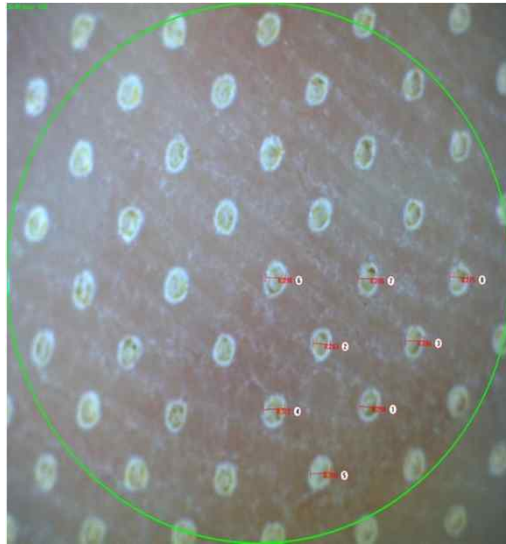
- Surgical Operation

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 skin burns and PIH.

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

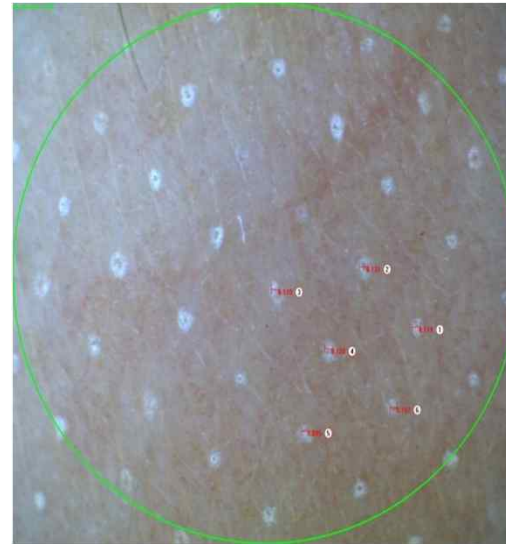
## SUPERIOR BEAM QUALITY

Conventional  
CO<sub>2</sub> Fractional Laser



- High risk of PIH
- Long downtime

FRAXIS CO<sub>2</sub> Fractional Laser



- Minimal invasive
- Less painful
- Minimal downtime
- Ideal spot size (**100 $\mu$ m**)



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



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



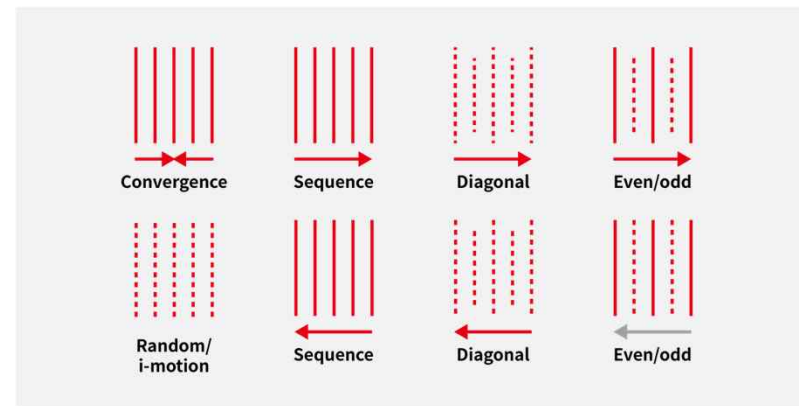
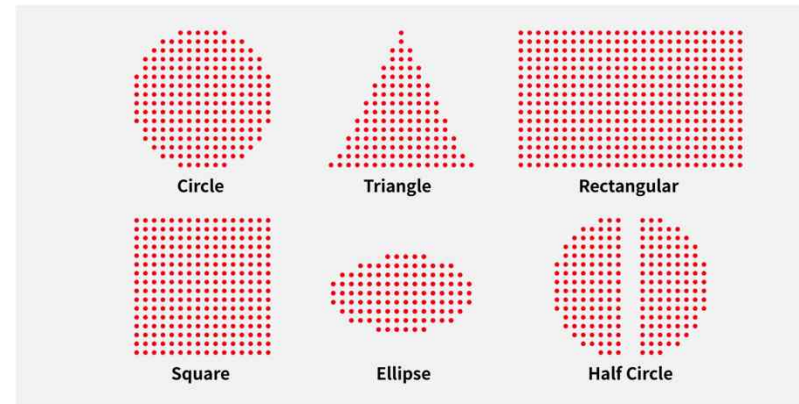
## “i-stack” function

- Deepest ablative effect
- Low energy based safe treatment
- Minimal damage to surrounding tissue
- Optimal effect especially for deep & depressed scars

## 6 different scan patterns for more treatment options


Scan size: 1x1 ~ 20x20mm

Dot distance: 0.1 ~ 2.0mm



## 9 various scan modes to control energy delivery patterns for comfort treatment

# ADVANTAGES OF Smart Surgi™



Mainly usage ;  
Lentigo, Large Mole,  
Condyloma, Wart & Corn

1.3

1.1

0.9

0.7

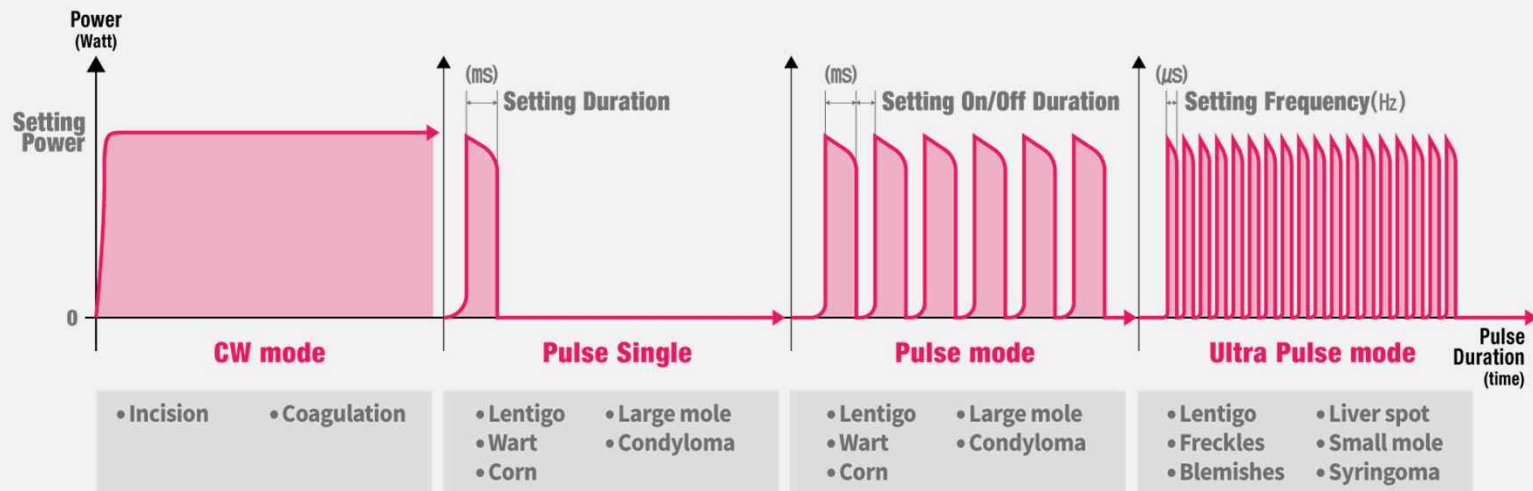
0.5

0.3

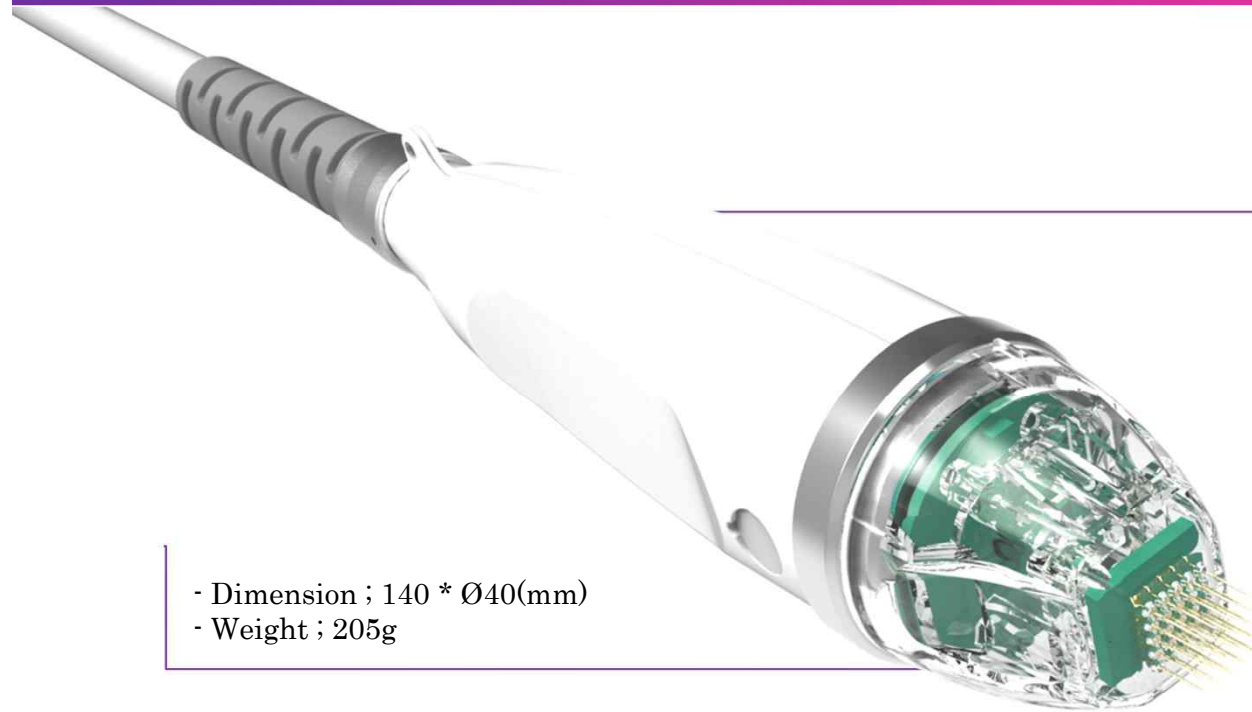
0.2

Mainly usage ;  
Small mole, Syringoma,  
Freckles, Blemishes & Lentigo

- 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 FRACTIONAL RF



- Dimension ; 140 \* Ø40(mm)
- Weight ; 205g

## MTR-AC-25

25pin non-insulated micro-needle cartridges

Treatment Area ; 10\*10(mm)

Max Output ; 25watt

Main Usage ;  
mostly main indication



## MTR-AC-C25

25pin semi-insulated micro-needle cartridges

Treatment Area ; 10\*10(mm)

Max Output ; 25watt

Main Usage ;  
Required for higher thermal effect at dermis/subcutaneous tissues



## MTR-AC-10

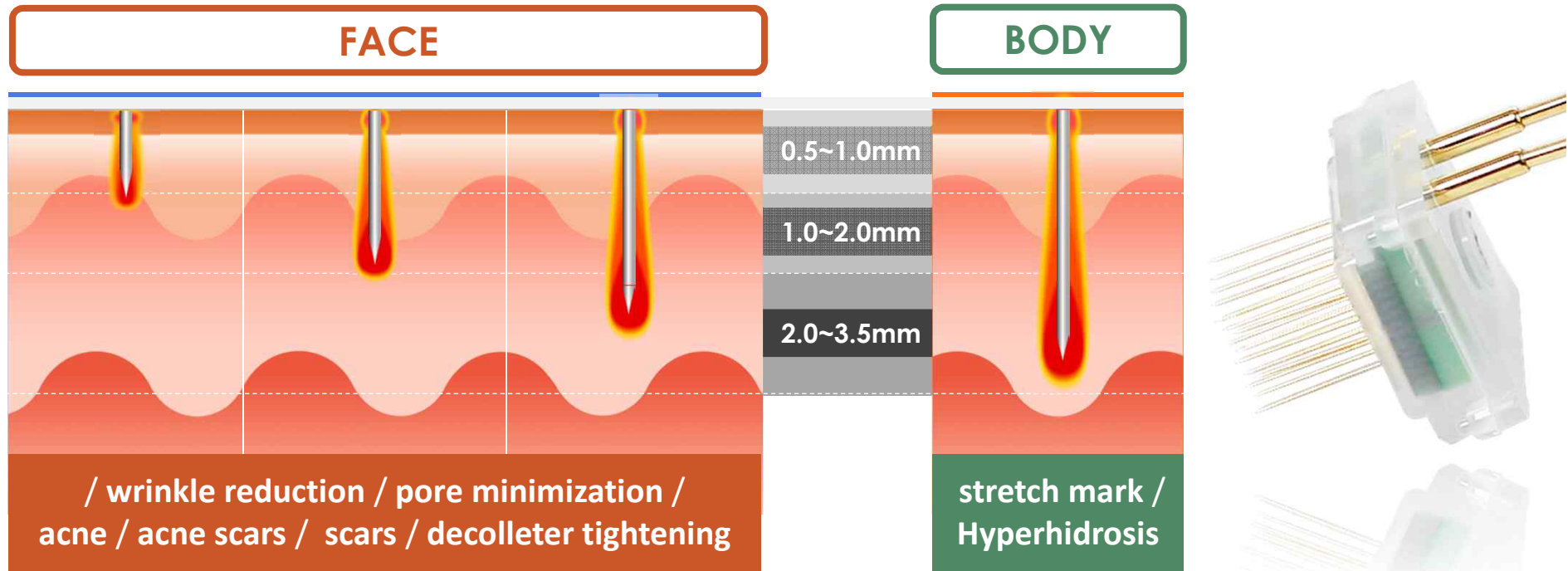
10pin non-insulated micro-needle cartridges

Treatment Area ; 0.25\*18(mm)

Max Output ; 25watt

Main Usage ;  
stretch mark, naso labial folds, crow's feet

# FEATURES OF MICRO-NEEDLE FRACTIONAL RF

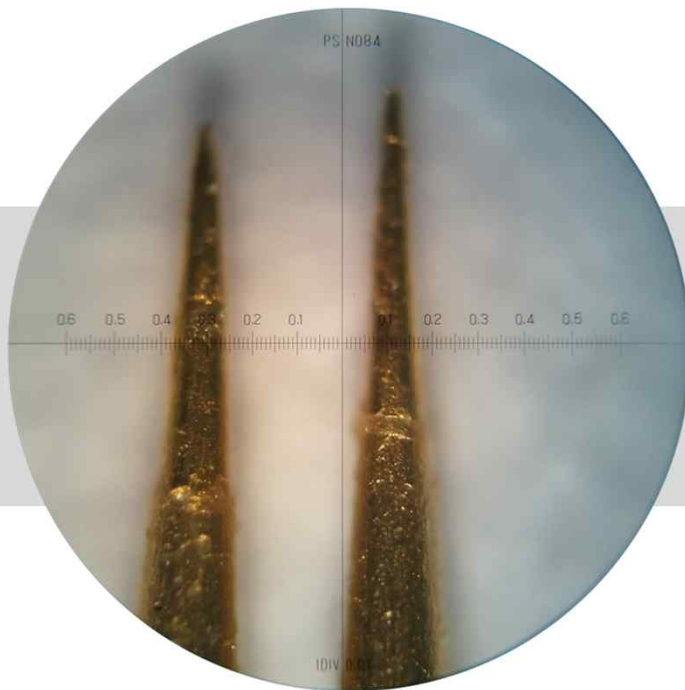


- Micro-needle penetration depth can be adjusted from 0.5 to 3.5mm based on treatment target areas for the treatment of skin lifting, tightening and rejuvenation e.g., hyperpigmentation, wrinkle, acne, acne scar and pore treatments.
- Delivered RF energy is tightly focused at the edge/tip of the Micro-Needles, leading to far less trauma to the surrounding epidermis. This leads to far less down time and pain for the patient as compared to a conventional CO<sub>2</sub> fractional laser.

# ADVANTAGES OF MICRO-NEEDLE RF

## What is the safest micro-needles for patients?

*OTHER COMPETITOR'S*



**VS**

**Secret<sup>RF</sup>**



**Superior  
Quality**

# SPECIFICATION OF FRAXIS DUO

## CO<sub>2</sub> Fractional Laser System

Wave length	10,600nm
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), 10 electrode needle (1x10)
Treatment area	25Pin (10 x 10mm), 10Pin (0.25 x 18mm)
Adjustable depth	0.5 ~ 3.5mm(0.1 step)
Repetition	0.2 / 0.5 / 0.8 / 1 / 2 Sec / Single
Electrical power	100 ~ 240VAC, 50/60Hz

# GYNOLASER™

VAGINAL REJUVENATION  
FOR ULTIMATE COMFORT AND  
CONFIDENCE



# What is GYNOLASER™

**GynoLaser CO<sub>2</sub> fractional laser** offers a fast, safe and highly effective minimal invasive procedure for the board variety of female disorders.

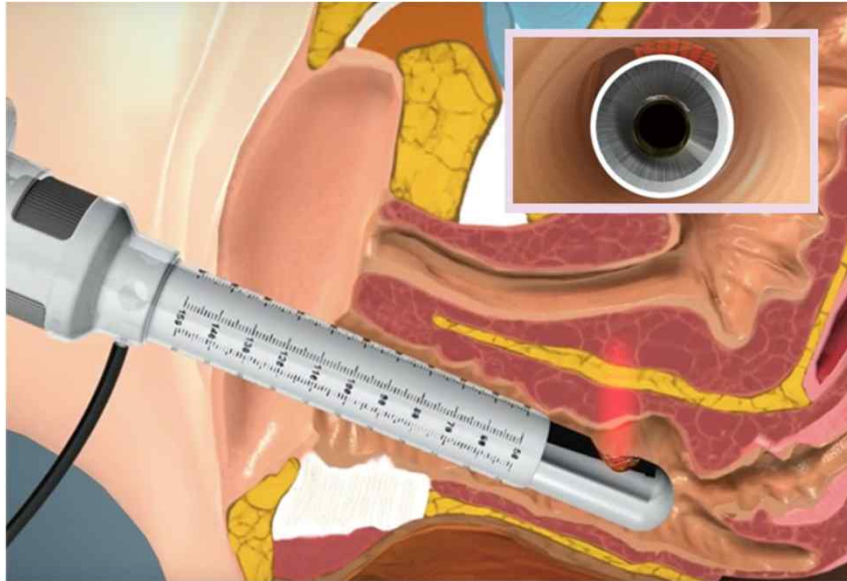
## INDICATIONS

- Vaginal laxity
- Stress incontinence
- Vaginal itchiness & burning
- Dryness and loss of lubrication
- Vaginal and vulvar pain or discomfort
- Diminished sensation during intercourse





## GynoLaser treatment procedure for vaginal rejuvenation/stress incontinence



**GynoLaser** has a 90° reflecting mirror, which provides vertical delivery of the CO<sub>2</sub> laser beam (8 x 8mm) onto the wall of the vagina for remodeling of vaginal connective tissue with neof ormation of collagen and elastic fibers, without causing any damage to surrounding tissue.

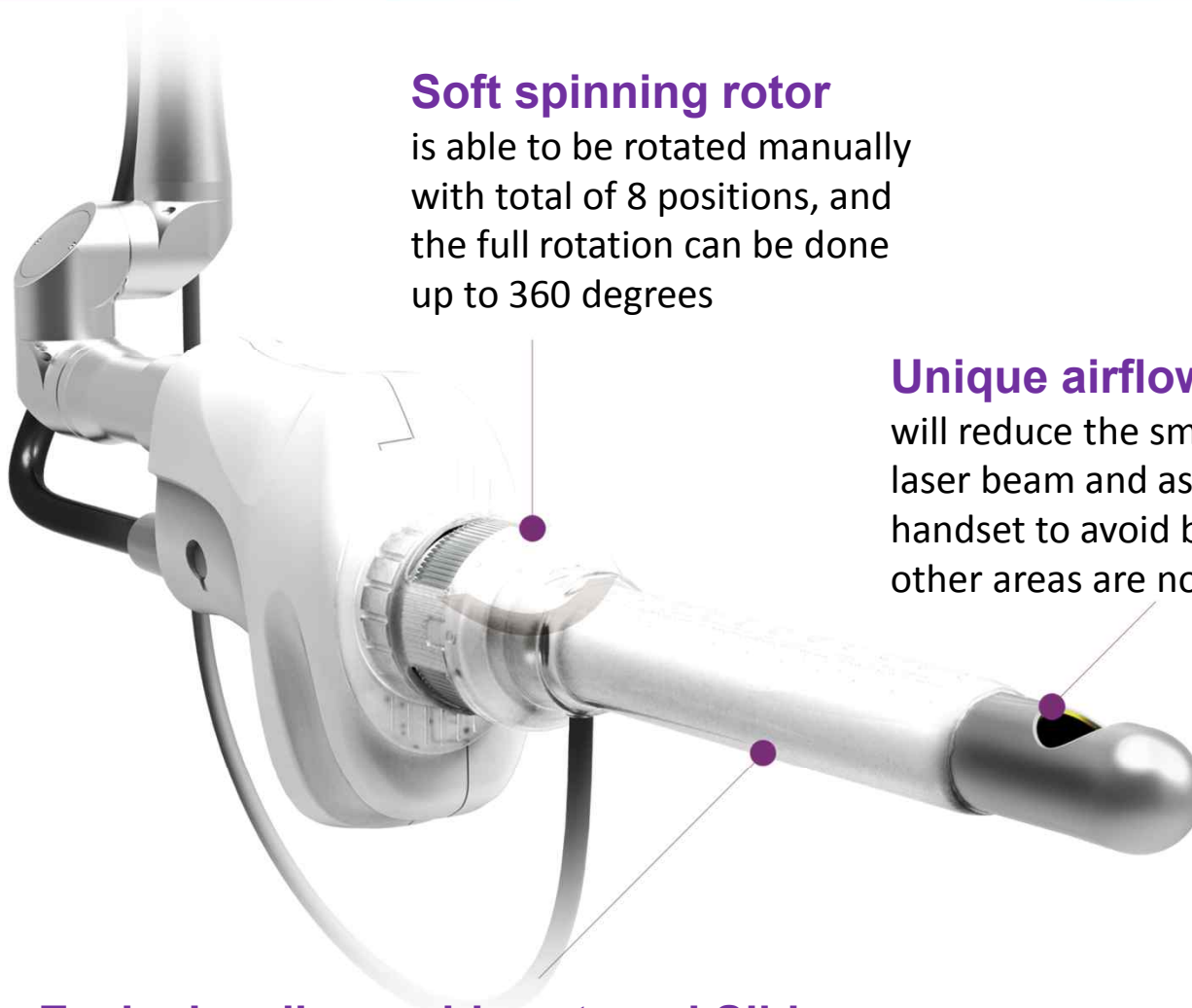


**Petr Pícha, M.D.**

Centre for Plastic gynecology  
GynCentrum Prague

“In terms of comfort and safety, the FRAXIS CO<sub>2</sub> laser is suited for treating various benign indications, as well as aesthetic indications. Fraxis CO<sub>2</sub> laser with the GynoLaser applicator is a versatile tool, which can be used in the pulse or fractional mode, and which is reliable and very useful tool for obstetrics and gynecology aesthetics.”

# Benefits of GYNOLASER™



## Soft spinning rotor

is able to be rotated manually with total of 8 positions, and the full rotation can be done up to 360 degrees

## Unique airflow function

will reduce the smoke interference to the laser beam and assist with turning the handset to avoid being over treated while other areas are not treated at all

## i-slide, Exclusive disposable external Slide

can prevent the entire probe from sticking to the internal tissues while the probe is spinning in 90 degrees of angle for the treatment

# APPLICATION OF FRAXIS DUO

## TREATMENT INDICATIONS



- Tone & Texture
- Pore Reduction
- Wrinkle reduction
- Skin lifting & tightening
- Acne & Scar
- Whitening
- Resurfacing
- Stretch mark
- Hyperhidrosis



- Lentigo
- Wart
- Freckles
- Small mole
- Blemishes



- Vaginal tightening
- Urinary Incontinence

## CASE STUDIDES

### ***Michaël NAOURI, M. D.***

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

- Using micro-needle fracitonal 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

- Using combination therapay
  - Striea Distensae

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



**Before**



**After 2 sessions**

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



**Before**



**After 1 session**

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

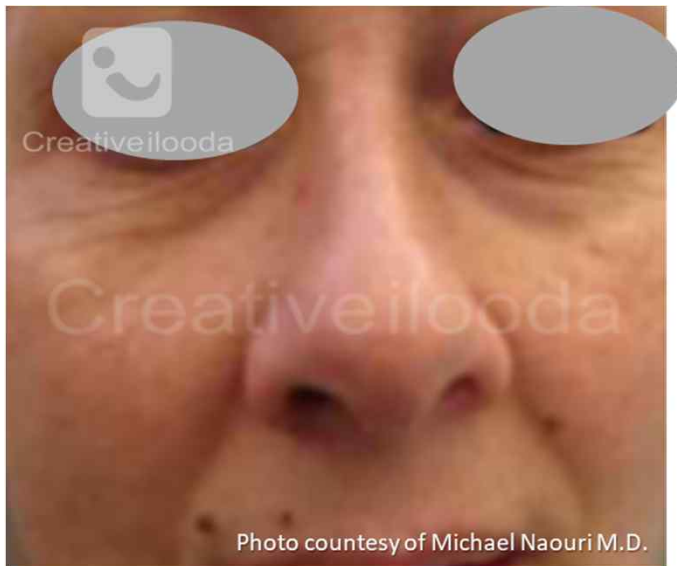


**Before**



**After 3 sessions**

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



**Before**



**After 3 sessions**



# I DR. M. NAOURI | ONYCHODYSTROPHY USING CO<sub>2</sub> LASER



**Before**



**After 4 sessions**

# I DR. M. NAOURI | WART USING CO<sub>2</sub> LASER



**Before**



**After treatment**

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



**Before**



**6 months after final treatment**

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



**Before**



**6months after final treatment**

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



**Before**



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

## GLOBAL KOL



**Jae-We Cho, M.D., Ph.D.**

Department of Dermatology  
Keimyung University School of Medicine  
Korea

“Fractional micro-needle radiofrequency, Secret RF could be an effective treatment for striae distensae and its combination treatment with fractional CO<sub>2</sub> laser, Fraxis could be a better choice without significant adverse effects.”



**Rulita Irawan M.D.**

Younger Looks Aesthetic and Antiaging Clinic  
Tangerang, Indonesia

“FRAXIS DUO is the multiplatform laser with short downtime. I usually use the combination treatment of RF fractional and CO<sub>2</sub> fractional for rejuvenation and acne scar suitable for skin type 4 or 5 and minimal erythema post laser.”