SYLFIRMX

EMERGING DUAL WAVE RF MICRONEEDLING SYSTEM

ULTIMATE EDITION

REGISTRATION NUMBER
FDA
CLEARED
K200185

THE WORLD'S

FIRST & ONLY

PULSED WAVE AND CONTINUOUS WAVE
RADIO FREQUENCY MICRONEEDLING DEVICE

NOW FEATURING NEW 300 MICRON DEPTH

- Improves Skin Complexion[1]
- Improves Skin Laxity
- Minimizes Appearance of Scars
- Improves Skin Texture & Tone
- Improves Skin Revitalization[2]

SYLFIRM X

EMERGING DUAL WAVE RF MICRONEEDLING SYSTEM

ULTIMATE EDITION

DUAL WAVE RF MICRONEEDLING SYSTEM

PULSED WAVE (PW) & CONTINUOUS WAVE (CW)

The world's first & only FDA registered Pulsed Wave (PW) and Continuous Wave (CW) Radio Frequency Microneedling device featuring 300 Micron depth for ultimate skin complexion[1] and skin revitalization[2]. Sylfirm X with its 8 different PW/CW modes has proven its effectiveness and safety through 25+ clinical studies and experiments.

- Minimally Invasive
- Short Treatment Time
- Minimal Downtime
- Safe & Comfortable
- Immediate Results

BIPOLAR NON-INSULATED ELECTRODE SYSTEM

SYLFIRM X adopted bipolar non-insulated micro needle electrodes to cover all dermal layers with uniform electric field and maximize the treatment result specifically for skin complexion[1] during the Pulsed Wave (PW) modes, and skin revitalization[2] during the Continuous Wave (CW) modes.

ROBOTIC PRODUCTION SYSTEM

The micro needles are precisely produced by the robotic system, which brings evenly-leveled electrodes to penetrate an accurate target depth during the treatment.

Victory of Life ViOL

As a specialist in researching and developing medical device technologies, Viol, the manufacturer of Sylfirm X, is committing their finest effort to deliver the new solutions in clinical treatment. With Viol's bio-electro technologies and products, we believe our customers can enjoy the beauty of the healthier and richer life.

[1] Skin complexion treatment targets the basement membrane and vessels to create a visibly more youthful, even toned and textured complexion.

[2] Skin revitalization treatment targets dermal layers of the skin to increase collagen and elastin fiber through hemostasis and electrocoagulation.

Disclaimer :

SYLFIRM X Ultimate Edition™ is intended for use in dermatology and general surgical procedures for electrocoagulation and hemostasis. (K200185)

SYLFIRM X IS

CLINICALLY PROVEN

Dr. JongJu Na

THE INVENTOR

DR. JONGJU NA, M.D PhD.

EDUCATION

- Yonsei University, Medical college, B.A., Medicine
- SoonChunHyang University, Medical college, PhD, Human Anatomy

CAREER

- Founder and President of Viol Co., Ltd and Scarlet RF Inc.
- Biomedical scientist of Cellum Biomedical Inc. in CA, US
- Chief Doctor of Clinic RA
- Chief Doctor of Ewha Dermatology Clinic

ACHIEVEMENT

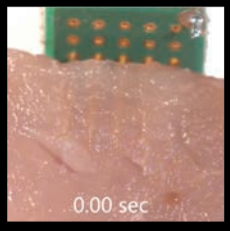
- Inventor of “Na Effect”
- Inventor of “SRF (Short Pulse RF)”
- Inventor & Patent holder of Bipolar Non insulated RF microneedling
- Inventor & Patent holder of DERMAStamp
- Inventor of Multiple Growth Factor (MGF) treatment using microneedling

MINIMAL DOWNTIME. LITTLE TO NO PAIN

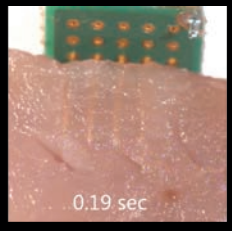
NON-INSULATED ELECTRODES

NA EFFECT

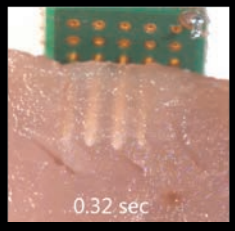
NA EFFECT is an independent electro thermal coagulation around each electrode of bipolar radio frequency. It is distinguished from other bipolar radio frequency tissue reactions which are electro thermal coagulation between both electrodes.



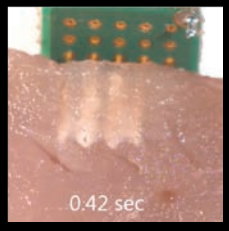
No coagulation



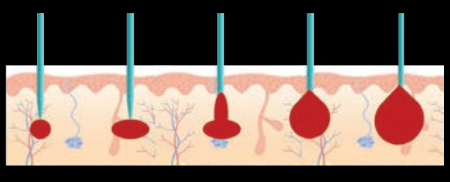
Coagulation starts at the end of electrodes



Independent coagulation around each electrode



Coagulation between bipolar electrodes



Complete coagulation in total dermal layer

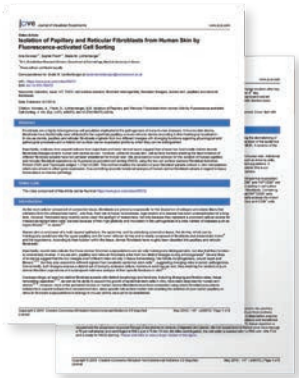
PROVEN BY

25 +

CLINICAL PAPERS

16 LEADING

UNIVERSITIES & HOSPITALS



To read and see more clinical papers go to www.BENEV.com

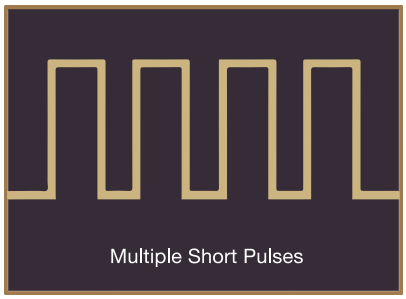
PW MODE

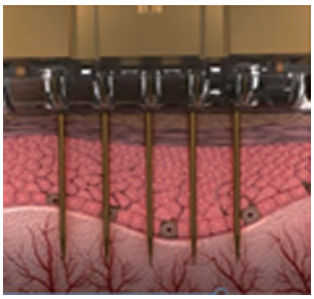
Pulsed Wave Mode

Skin Complexion[1]

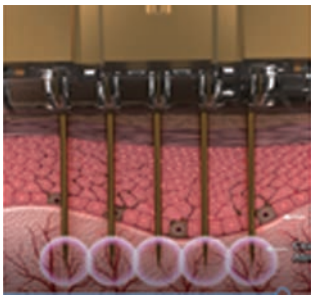
Proven by 10 Clinical Papers

- World's first Pulsed Wave RF microneedling mode.
- PW mode creates selective coagulation on the basement membrane and vessels located within the epidermal junction and upper dermis, with no noticeable effect on the surrounding tissue.
- Provides more stable radio frequency energy.

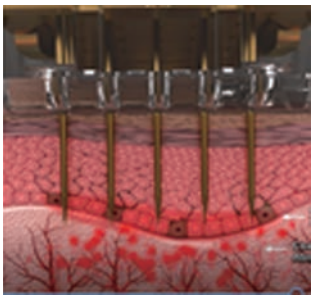




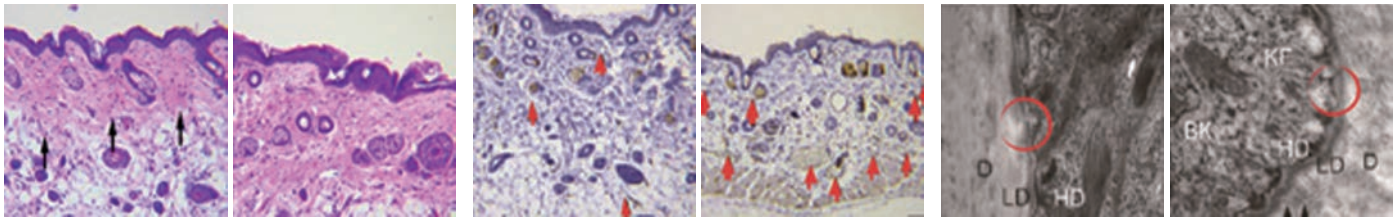
Electrodes inserted into the dermal tissue.



Repeated hyper pulsed RF energy shooting 50~55°.



Energy delivered to the basement membrane and abnormal small blood vessel.

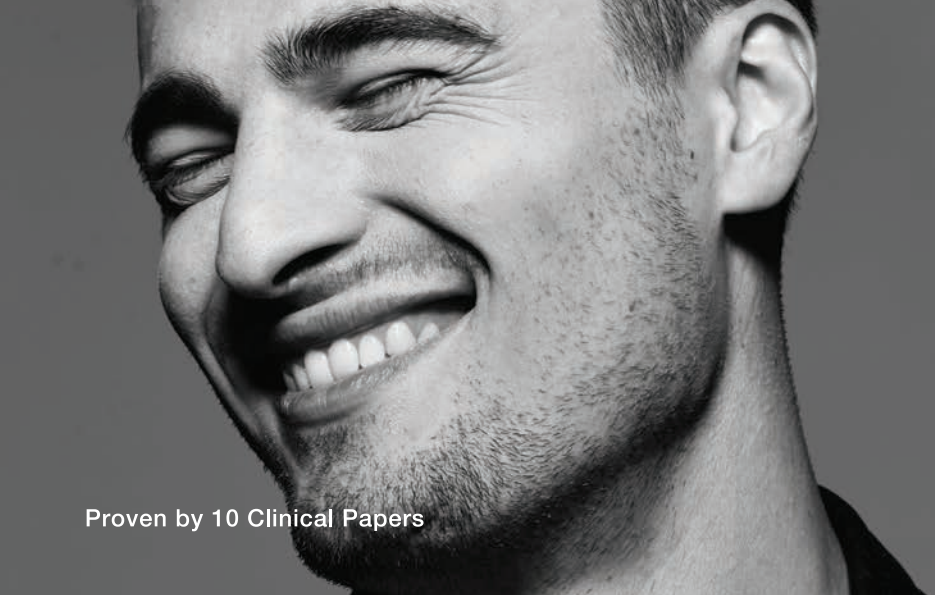


Efficacy of Pulsed Wave Needle RF on Skin

Fig. 4(a)(b)

WAVE FORM	PW1	PW2	PW3	PW4
PULSE DURATION	30 msec (75% Duty Cycle)	40 msec (80% Duty Cycle)	50 msec (83.3% Duty Cycle)	60 msec (85.7% Duty Cycle)

Reference :
Fig. 4(a) Senescent Fibroblasts Drive Aging Pigmentation: A Potential Therapeutic Target for Senile Lentigo. Theranostics 2018, Vol. 8, Issue 17.
Fig. 4(b) Senescent Fibroblasts in Melasma Pathophysiology. Experimental Dermatology. 2018;1-4.

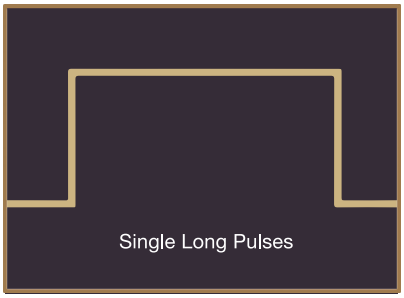


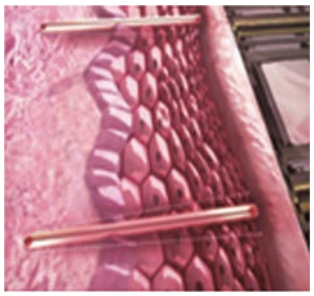
CW MODE

Continuous Wave Mode

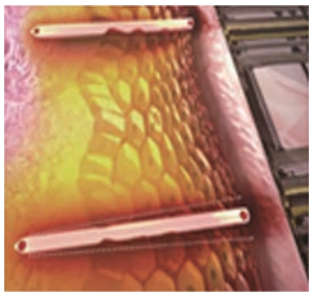
Skin Revitalization[2]

- CW mode creates wide, independent coagulation around each electrode.
- The coagulation area continues from deeper dermis to upper dermis with one penetration.
- Promising optimal skin revitalization[2], for a firmer, more youthful looking appearance.
- Provides more stable radio frequency energy.

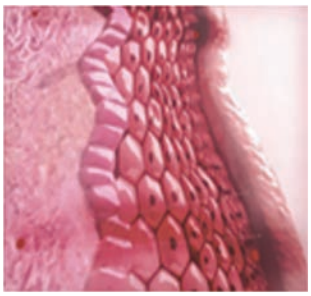




Electrodes inserted into the dermal tissue.



Short pulse RF shooting 55~60°



Thermal energy are delivered along electrodes in total dermal layer.

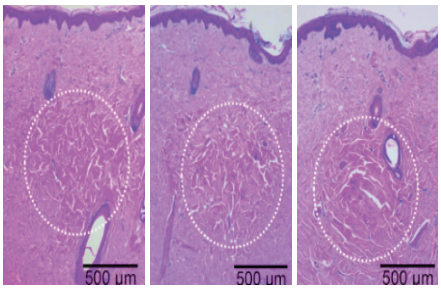


Fig. 5(a)

▶ Thermal coagulation at the target depth

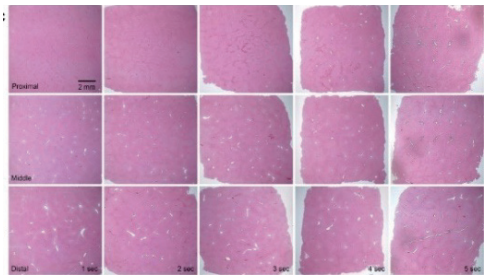


Fig. 5(b)(c)

▶ Safety of Non-insulated needle

WAVE FORM	CW1	CW2	CW3	CW4
PULSE DURATION	120 msec	160 msec	200 msec	300 msec

Reference :

Fig. 5[a] Electromagnetic Initiation and Propagation of Bipolar Radio frequency Tissue Reactions via Invasive Non-Insulated.

Fig. 5[b] Micro needle Electrodes. Sci Rep. 2015; 5; 16735.

Fig. 5[c] Clinical Study of Facial Wrinkle Treatment with Fractional Micro needle Radio Frequency System. Med Laser 2014;3(2):59-64.

LITTLE TO NO PAIN AND ANESTHESIA-FREE TREATMENT

300 MICRON

Optimal Skin Revitalizing[2] Depth

300 Micron Depth is the only treatment that is capable of treating three layers at the same time: - Epidermis
- Basement membrane
- Papillary dermis

	Target Depth
0.3~0.5 mm	Superficial Layer (Papillary Dermis)
0.8~1.2 mm	Upper Layer (Dermoepidermal junction)
1.5~2.5 mm	Middle Layer (Upper & Mid Dermis)
3.0~4.0 mm	Deeper Layer (Deeper Dermis & S.Q.)

ECM (Extracellular Matrix)

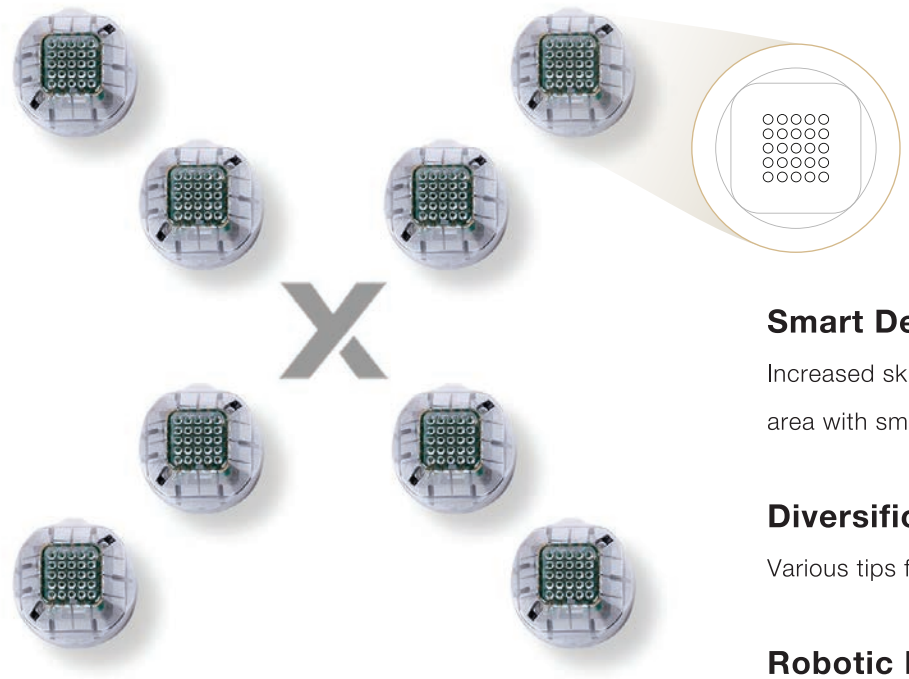
- Provides a physical environment for cells to grow
- Takes a role of connecting cells
- The role of sorting and supplying the necessary biochemical factors
- Composition: collagen, elastin, structural proteins, GAG (glycosaminoglycan), growth factors

BM (Basement Membrane)

- ECM's composition
- Collagen Type IV is located on lamina densa of the Basement Membrane
- Support of epidermal stem cells
- Connection of epidermis to dermis

ELECTRODES

CONSUMABLE TIPS



STANDARD TIP

5x5 (25pin)

Smart Design

Increased skin adhesion, non-slip, visibility of treatment area with smart indicator

Diversification of Tips

Various tips for specified treatment purposes

Robotic Production System

Even needle height and depth

BEFORE & AFTER

PW MODE

Pulsed Wave Mode

Skin Complexion[1]

Before After

Before After

Before After

Before After

CW MODE

Continuous Wave Mode

Skin Revitalization[2]

Before After

Before After

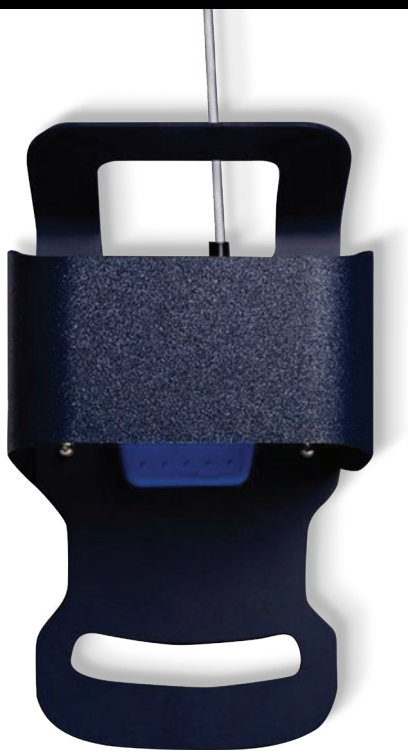
Before After

Before After

To see more before and afters go to www.BENEV.com

DESIGN SPECIFICATION

AESTHETIC AND INTELLIGENT DESIGN



- Extended stand length
  - » Increase ease of use
- Ergonomic handle
  - » Comfortable for treatment use
- Magnetic foot switch
- Signal controller

- Locking wheel mechanism
- Ease of mobility
- User-friendly interface
- Tip base designed to maximize treatment precision

[1] Skin complexion treatment targets the basement membrane and vessels to create a visibly more youthful, even toned and textured complexion.
[2] Skin revitalization treatment targets dermal layers of the skin to increase collagen and elastin fiber through hemostasis and electrocoagulation.

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SYLFIRMX TREATMENT

The world's first and only treatment of its kind featuring both scientifically advanced Sylfirm X Ultimate Edition dual wave radio frequency microneedling device and Exosome Technology, to supercharge and X-Cellerate treatment results.

HOW DOES IT FEEL?

The feeling is described by most patients as comfortable with no pain, only a slight tingling sensation with light pressure. Based on the depth and area treated this feeling can vary.

HOW MANY TREATMENTS ARE NEEDED?

Most physicians find that three to six treatments, spaced four to six weeks apart provide the optimal experience and outcome for patients.

HOW LONG DOES THE TREATMENT TAKE?

The actual treatment takes about 20 - 45 min depending on the area to be treated.

HOW LONG DO THE RESULT LAST?

Everyone is different, but the collagen you make is your own and continues accelerated production over three months.

WHAT IS THE BENEFIT OF APPLYING EXOSOMES REGENERATIVE COMPLEX / EXOSOMES REGENERATIVE COMPLEX+

Exosome Regenerative Complex (ERC) or Exosome Regenerative Complex + (ERC+) is an ideal solution to apply post Syflirm X Treatment. Post treatment application of ERC or ERC+ provides skin with Lyophilized Exosomes, Humectants, Growth Factors and Peptides, Amino Acids, Vitamins, and Coenzymes. Clinical Studies have shown that ERC and ERC + reduce inflammation and redness post treatment, increase fibroblast production by 180%, and increase elastin production by 300%. Adding this solution is a way to cut down on down time, ensure patient comfort, and optimize treatment results.

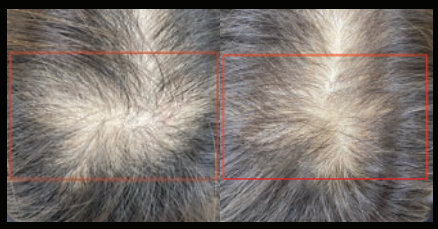
ADVANCED EXOSOME TECHNOLOGY

SYLFIRM**X** ***TREATMENT*** feature BENEV Exosome Regenerative Complex & Exosome Regenerative Complex +, the most cutting edge scientific biotech breakthrough for clinically proven skin revitalization[2] and complexion[1] available, harnessing the power of STEM CELL DERIVED LYOPHILIZED EXOSOMES potent GROWTH FACTORS, PEPTIDES, COENZYMES, MINERALS, AMINO ACIDS, and VITAMINS.

EXOSOME REGENERATIVE COMPLEX +

Before *After*
Photo provided by : Dr. Inigo De Felipe

Before *After*
Photo provided by : Pure Vanity MedSpa



Before *After*
Photo provided by : Dr. Chang Ro Lee, Leo Clinic

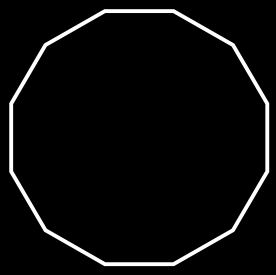
EXOSOME REGENERATIVE COMPLEX

Before *After*
Photo Provided by: Lauren Olson

Before *After*
Photo Provided by: Dr. Randy Miller, MD., F.A.C.S

Before *After*
Photo Provided by: Dr. Diane Duncan, MD.,F.A.C.S

*Exosome Regenerative Complex and Exosome Regenerative Complex+ are applied topically post treatment.



BENEV
Progressive Skin Science™

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ULTIMATE EDITION

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