

3D Skin Modeler

Dual Tech ©

AGING

“Stay young for ever”

Makes your dream a reality !



Patient Comfort

Specific protocols setup insures comfort patients treatments with no need to sedate or cooling skin area.



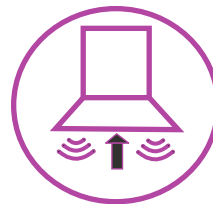
Fast

Millimetric Wave + Suction insures fast outcomes , by controlling , pH, moisture, sebum level , and skin elasticity, after the first session. HSP70 (Heat Shock Proteins) play a major role in anti aging and rejuvenation process.



Intuitive

Intuitive design of the equipment creates happy users. Reduce training time, lower frustration and increase efficiency. 3D Skin Modeler intuitively, seek to understand your users' mental models- the knowledge, beliefs, and interaction.



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Millimetric Wave + Suction. First equipment with ultra-miniature loaded cavity antenna for Biologic tissues treatment. US. Patent 2006.



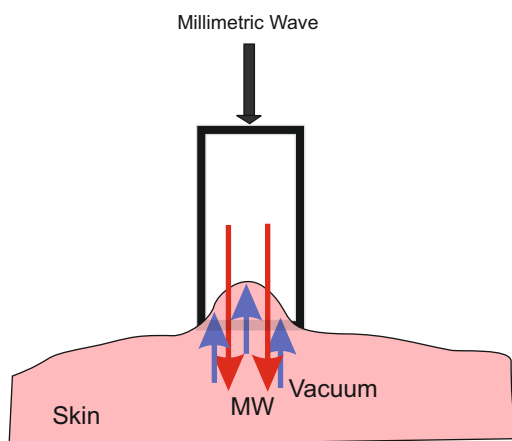
RF Match

Millimetric Wave + Suction insures matching between MW and Skin impedance SAR (specific Absorption Rate). Up to 2 inches deep penetration.



Multi-Program

8 setup program, for MW energy SAR (specific Absorption Rate), can be selected, and 8 setup program for suction, insures tailored treatments. For face wrinkles, neck, postpartum stretch marks .



Dual Tech Vacuum + ultra Hight Focused millimetric wave.



Comparative background technique

Needling

Needling is performed using devices equipped with microneedles, which creates micro-lesions on the skin, triggering the stimulation of the fibroblasts present in the dermis. Consequently, the fibroblasts produce collagen and elastin, in an induced process of natural skin regeneration. Needling side effects are generally limited to short-lasting erythema and edema. It rarely caused hyperpigmentation, localized superficial infections, allergic reactions. Topical antibiotic therapy may be prescribed based on skin reaction

The RFs used for anti-aging treatments are non-ablative. They can be monopolar or bipolar, depending on whether they are applied to the surface, or through intradermal needle-electrodes.⁴ They can also be resistive or capacitive, but the former is preferred because it allows better control of the temperature variation. The resistive RF (rRF) is supplied as high frequency alternating current through one or more conductors applied to the skin, called “poles”. This energy passes through the skin tissue, which is transformed into an electrical resistance, and tends to overheat quickly and intensely.

This phenomenon called “thermalization” leads to the denaturation of collagen and a consequent repair drive. The use of RFs generally leads to non-persistent episodes of erythema and edema. In addition, the treatment is perceived as painful by many patients. Out of 25 patients treated with superficial RF, Riuz-Esparda found painful sensations during treatments in 13.64%. In a study by de Felipe et al, of 290 patients treated with intradermal.

RF (radiofrequency)

RF, 9.3% experienced intense pain during treatment, and 6.22% reported second degree burns.⁵ Antibiotic prophylaxis is indicated for intradermal RF.^{7,8} In superficial RF, the use of antibiotics is necessary in case of burns from contact with the surface electrode.

Laser

Lasers are divided into non-ablative or ablative depending on whether their action involves only the lower layers of the skin or even the outer surface. The CO₂ laser (10 600 nm) and the erbium laser (Er:YAG; 2940 nm) are ablative lasers, and are used for deep treatments. Non-ablative lasers perform softer treatments than ablative lasers, but are widely used in rejuvenation treatments. Among them are the Q-switch lasers, which are the ruby laser (694 nm), the alexandrite laser (755 nm) and the Nd: YAG laser (aluminum garnet and neodymium yttrium; 1064 or 532 nm). Other non-ablative lasers are the pulse-dye laser (PDL; 585–595 nm), the diode laser (800–980 nm), the KTP laser (potassium-titanium-phosphate; 532 nm). Both ablative and non-ablative lasers can be fractionated and non-fractionated. The former during the treatment leave microscopic columns of untreated tissue in the treatment area, to help limit the temperature increase. The laser beam is collimated and acts on individual skin components, in particular hemoglobin and water.

Thermal micro-damage of the coagulation type is induced, and repaired through the production of new cells and, above all, collagen.

Although the use of fractional tools increases the safety margin of treatments, side effects ranging from mild to severe have been reported.

¹⁰ Among the mild complications, the most common are the appearance of milia (19%), acne (2%–10%) and erythema (1% non-ablative laser; 12.5% ablative laser with persistence of symptoms for up to 3 months). Among the moderate complications, the most common is infection (0.3%–2%). Other complications are rare. Especially following the onset of acne and infections, the use of antibiotics may be necessary and these should be used as prophylaxis if other treatment sessions are planned.

FU (Focused Ultrasound)

In **fU**, the thermal shock produced inside the tissue causes mini-coagulation points at the level of the middle and deep reticular layer of the dermis and hypodermis. Consequently, a reparative action is triggered. The main limitation of this technology is the pain felt by patients during treatment, which sometimes involves the use of anesthetics. Side effects associated with this method are mild and are mainly transient erythema, edema, and bruising. Less common effects are the appearance of skin streaks, wheals, post-inflammatory hyperpigmentation, muscle weakness, transient numbness. Trigeminal or mandibular motor nerve palsy is rare.

What binds all the procedures described above, except needling, is the thermal shock that is induced at the level of the middle and deep layers of the skin. The effects related to thermal shock can persist even up to 7 days after treatment, spreading beyond the directly targeted area.

This can be positive because it shows that the healing process continues after the acute phase of the treatment and covers a larger area than the target area. But the thermal effect on healthy tissues, if not controlled, can compromise their vitality. Some treatments are able to induce thermal rises that can liquefy the collagen beyond any possible contraction, preventing the beginning of the healing and tissue regeneration phase. These increases can also be linked to an incorrect duration of skin exposure, caused by the prolonged duration of treatments.

The aim of 3D Skin Modeler is efficacy and safety of a non-invasive technology that combines the application of vacuum and the irradiation of a millimetric wave, verifying its action through the detection of some skin parameters, and evaluating the presence of side effects

Dual-Tech

RF Match

Patient
Comfort

multi
Program

Fast
Outcome



Before		After
pH	7.36	6.54
Sebum (amount)	146.74	128.18
Mosture (level)	41.56	59.80
Elasticity	47.67%	55%

Note ; The table above its after the first session.This are the skin data , where photoshop cannot do any changes.

3D Skin Modeler by AEG Medical
8 The Green ste 4680,
Dover , DE , 19901 USA