

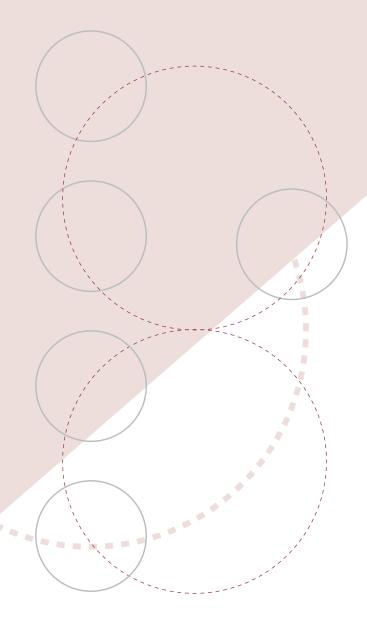


### icoone R

The fibers, extracellular matrix and cells observation under the action of the **Multi Micro Alveolar Stimulation** on normal and scarring tissues.



The skin is the most extensive organ of the human body. Although it is probably the organ that we take the least care of, it is of vital importance because of its sensitivity and protective action against all external agents. For this reason, **i-Tech Industries**® has always focused on the study of the skin structure and related changes, increasingly expanding its expertise in this area over time.



### Introduction

i-Tech Industries® has studied and disseminated an important scientific study with the aim of showing the impact of Multi Micro Alveolar Stimulation on normal and scarring tissues.

This study - conducted by i-Tech Industries® in collaboration with **Dr. Jean-Claude Guimberteau**. Dr. Elias Sawaya and the Saint Martin Hospital Pessac (Bordeaux) team - was carried out during a surgery, under regional anesthesia, on a patient who gave his consent to this demo. It was performed with an endoscope and a 3D camera to evaluate the skin structure, both internally and externally.

"What happens in the subcutaneous tissue under Multi Micro Alveolar Stimulation?"



Dr. Guimberteau, Dr. Sawaya and the Hospital team.

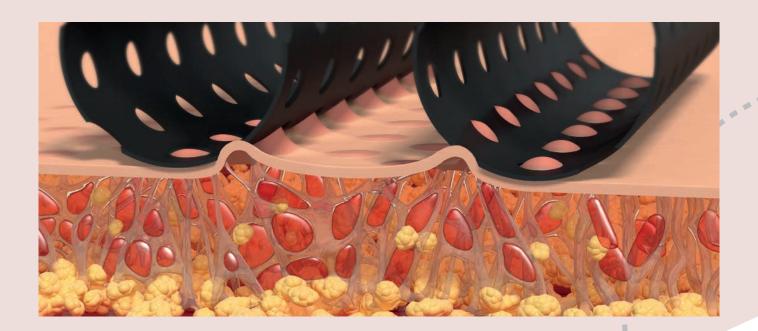
#### Introduction

Observing the skin from the outside, there was a great curiosity to go on, to make a journey under the skin stimulated with the **Multi Micro Alveolar Stimulation**.

This demo shot in vivo demonstrates better than images the unique mechanical action of mobilization in 3D dimension of **icoone**® on cutaneous and subcutaneous structures. The unique specificity and technology provided by **icoone**® is the full contact with the skin without the use of an

intermediate gel. Above all, **icoone**® works on the skin by executing 3D movements - rather than 2D - consistently with the conclusions of the new subcutaneous explorations performed with intratissular endoscopes.

It stimulates the surface of the skin and the propagation of the **microstimulations** can be observed not only under the headpiece, but also on far tissues.



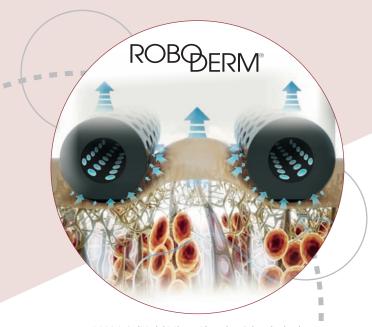
Roboderm® represents a new concept of technology for skin treatment. This patented technology works differently from any other technology and device available on the market today, thanks to the microstimulators.

The microstimulators rotate forward. backward, inward and outward to release multiple skin stimulation depending on the desired goals. The micro-hole matrices designed on the surface of the microstimulators (Roboderm®) work and stimulate the mechanical behavior of the subcutaneous fibrillar network.

The connective tissue fibers that delimit microvacuoles transmit this stimulation. to deeper tissues,

Microstimulators induce up to 21,600 Multi Micro Alveolar Stimulations every minute on the skin with their movements.

This specific action is called Multi Micro Alveolar Stimulation and it. allows to deliver a more efficient, gentler action for the client who receives the treatment and for the operator who applies it.



M.M.A.S. (Multi Micro Alveolar Stimulation)



#### MULTI MICRO ALVEOLAR STIMULATION

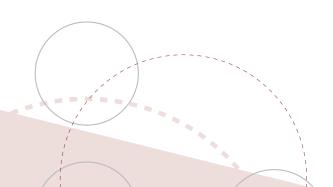
Superficial effect on a normal skin: Vascularization.

When we focus on the polyhedral skin structure, we can clearly see the vasodilation, papillary vessel movement and tissue oxygenation. We can also see the colour difference (redder) in the treated skin area as compared to the untreated skin area.

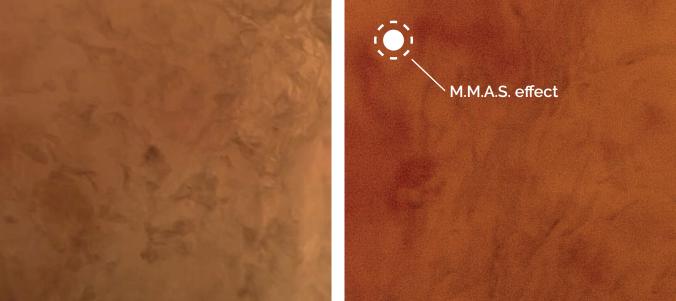
The Multi Micro Alveolar Stimulation is improving the blood flow.

The Multi Micro Alveolar Stimulation not only affects the blood, but it also has

an incredible effect on the polyhedral skin structure. We can see these results by comparing untreated and treated skin a few minutes after administering the treatment. Untreated skin is more stressed, while treated skin is smoother, its polyhedral structure is relaxed and lighter. This destressing action of icoone® also encourages the gymnastics of the cutaneous polyhedral of the skin with regard to the dermis and the hypodermis.



### Treated skin is smoother, its polyhedral structure Untreated skin is more stressed is relaxed and lighter BEFORE **AFTER**

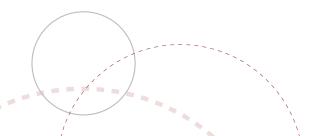


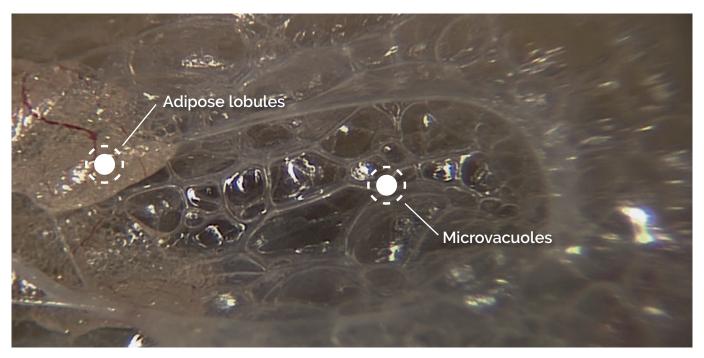
Superficial endoscopy: the skin under the M.M.A.S effect is more vascularized (red) then the untreated skin These images were extracted from the video made in surgery with icoone® Laser device

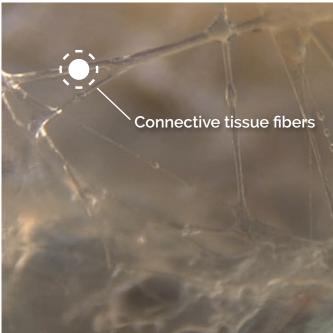
Effects on the subcutaneous tissue in a normal skin: Connective tissue fibers.

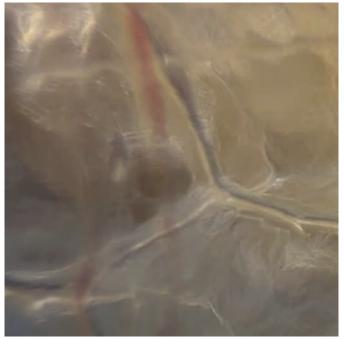
The action of the **icoone**® device is even more remarkable when the skin has been incised. Everything is moving under the mobility effect of the **icoone**® device. The epidermis and the gymnastics of its grooves, the papillary vessels of the vertical dermis, bent, the lobules of the hypodermis which are tossed to the rhythm of the machine until the muscular aponeurosis which also participates in this commotion. Everything is connected and moving. But when we bring the endoscope closer, the architecture of the material is revealed, and all the fine

and irregular fibrillary structures are agitated by the shuddering of **icoone**® mechanics, the polyhedral microvacuoles between the fibers absorb vibrations by deforming slightly the collagen frames, shaping them, exteriorizing themselves, testifying to their distension, their mobility and their mechanical harmony. Even the slightest fiber movement can be sensed with 3D observation. The cells sheltered by the fibrillar network are also shaken, both in groups and individually. It moves pericellular framework, the cells as well as the blood vessels carrying energy.





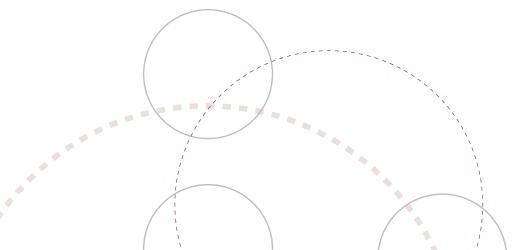


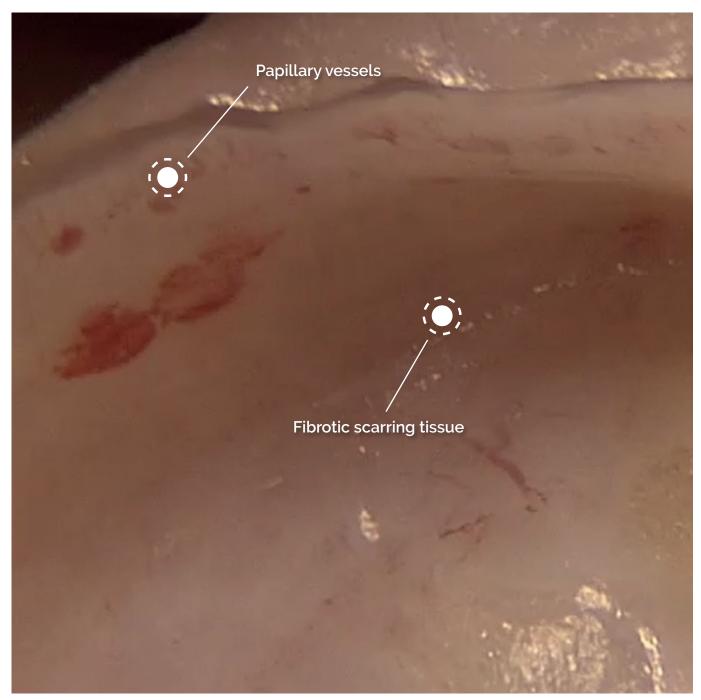


These images were extracted from the video made in surgery with icoone® Laser device

Effects on the subcutaneous layer in a scarring tissue.

How is the Multi Micro Alveolar Stimulation working on and under the surface of the scarring skin and the scarring tissue? During the subcutaneous visualization without stimulation, clearly there is no movement. We can see the fibrotic tissue linked to the scar that is fixed.





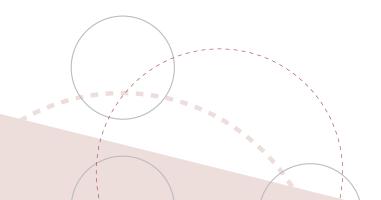
These images were extracted from the video made in surgery with icoone® Laser device

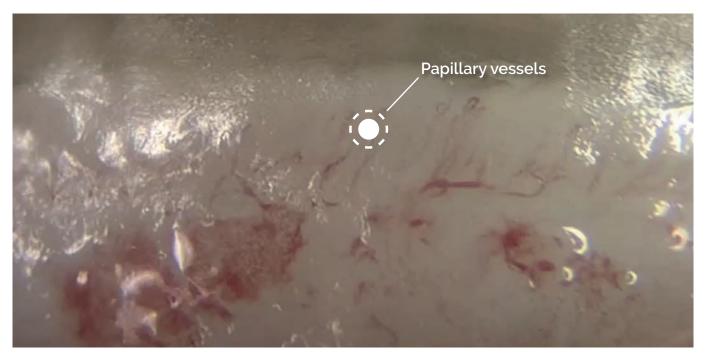
### **MULTI MICRO ALVEOLAR STIMULATION**

Effects on the subcutaneous layer in a scarring tissue.

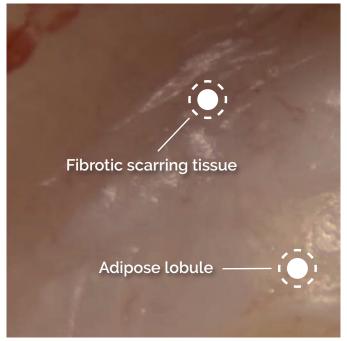
As soon as **icoone**® was turned on, the effects on the subcutaneous tissue was incredible: superficial movement and propagation on all superficial areas; 3D stimulation in all directions; papillary vessel movement (up and down); fibers movement, adipose lobules movement,

cells movement. Everything started to move thanks to the propagation of the **microstimulations**. All of that is translated into a mechanic transmission from the superficial area to the deeper and also lateral tissues. Everything is connected.





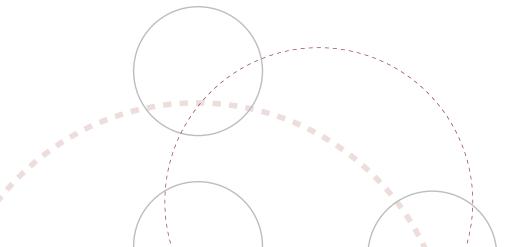


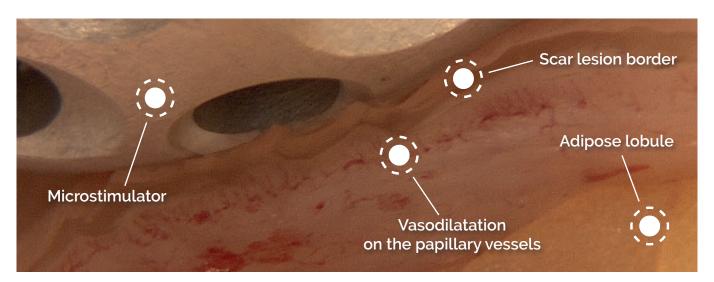


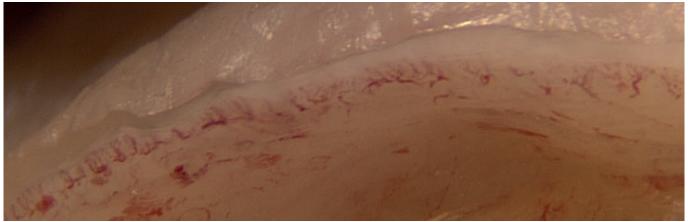
These images were extracted from the video made in surgery with icoone® Laser device

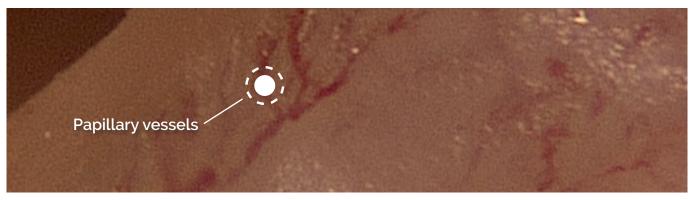
Effects on the subcutaneous layer in a scarring tissue: vascularization.

When we address a very hard tissue such as fibrotic scar tissue, the stimulation is not aggressive for the tissue and we can see that it is possible to reach the scar lesion borders. We can observe a clear vasodilation on the papillary vessels which suggests improved oxygenation.









These images were extracted from the video made in surgery with icoone® Laser device

#### MULTI MICRO ALVEOLAR STIMULATION

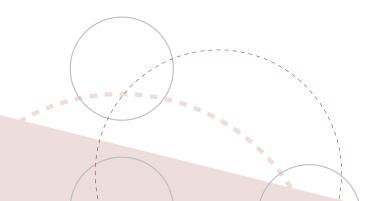
Effects on the subcutaneous layer in a scarring tissue: connective tissue fibers.

The fibers (fibrotic gymnastics) change their structure, stretching and expanding their length, they improve their shapes.

They also change in their diameter.

These changes are translated into collagen distension and microvacuole network

is also influenced. This mobilization is transmitted to each fiber in all three dimensions. This is the transmission of a mechanical action creating an increased mechanical behaviour.

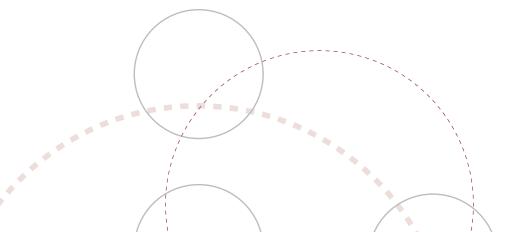


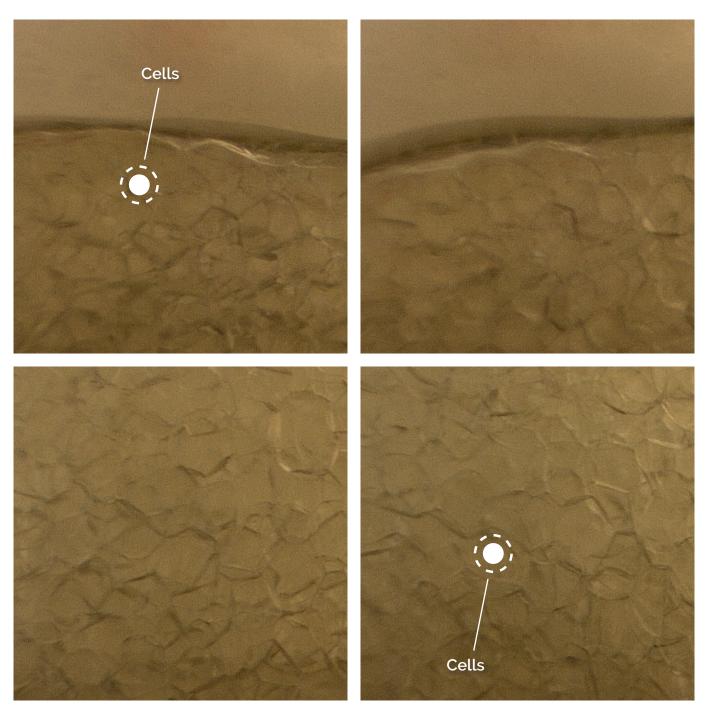


These images were extracted from the video made in surgery with icoone® Laser device

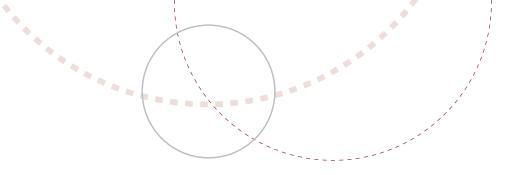
Effects on the subcutaneous layer in a scarring tissue: cells.

The same happens to cells. Cells are linked with this mechanical behaviour, they can change slightly in shape and this **microstimulation** could have an impact on protein production. This is the transmission of a mechanical action which increases the mechanical behaviour.





These images were extracted from the video made in surgery with icoone® Laser device



### The benefits of MULTI MICRO ALVEOLAR STIMULATION

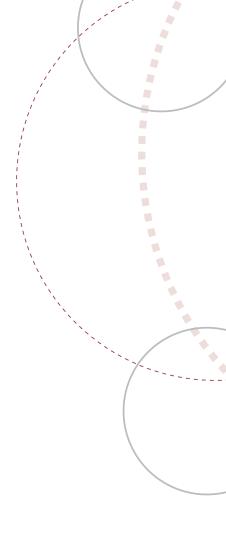
It is clear that the propagation of the mechanical action through the fibrillar network is passed onto the other tissues, fatty lobules, veins, arteries, nerves, lymphatics. The microstimulation is able to stimulate the smallest part of the tissues from the surface to the deeper tissues. The advantages of the Multi Micro Alveolar Stimulation at all the levels, improving all the capacities of the

fibrillar frame, our interior architecture, are well observed and can be efficient to improve the functional recovering of the scarring tissue.

The benefit of the 3 dimensional treatment by **icoone**® then takes all its meaning. Its adapted movements allow to recreate the conditions to return to the flexibility resting on the architecture of the original fibrillar network to get closer, to allow movement and keep the balance.

### "The patented technology: Roboderm®"

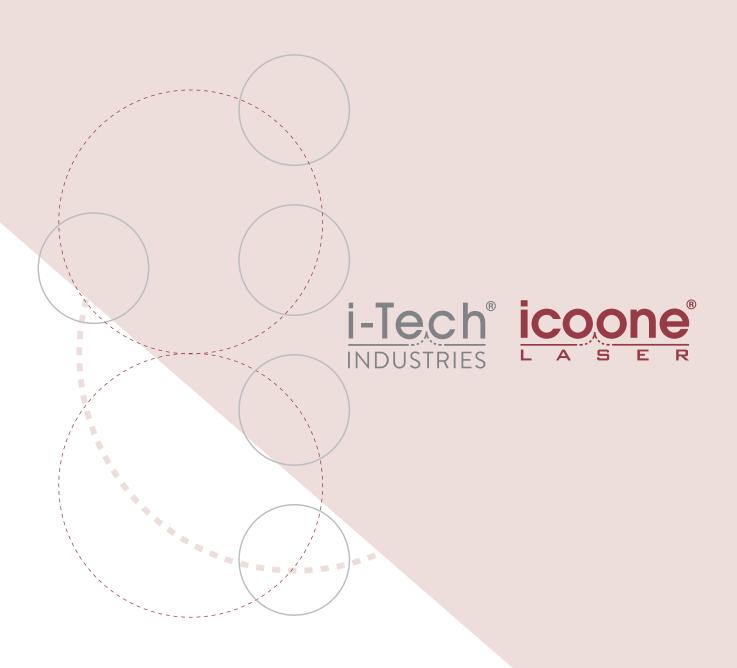




### The science behind Roboderm®

Thanks to Multi Micro Alveolar Stimulation. you can see the evidence of skin mobility under the efficiency of the device on normal skin and scars. You can see the influence of the action after skin incision on the dermis and epidermis - papillary vessels are moving up and down - also at the level of fatty lobules, fibers stretch and lengthening, mobility of cells.







i-Tech Industries<sup>®</sup> s.r.l. Via Cicogna 34/b 40068 San Lazzaro di Savena BOLOGNA – ITALY Phone +39.051.6259797

icoone.com

follow us on

f 
in

