



LA&HA Doctor's Notes

SuperSMOOTH™

SuperSMOOTH™ is a new Er:YAG laser treatment modality that combines the impressive skin tightening effects of Fotona SMOOTH® mode with the skin resurfacing effects of cold MSP peeling. This two-in-one modality provides fast treatment and effective skin rejuvenation with minimal downtime.

The ideal candidates for this treatment are individuals with lighter skin types who experience mild skin sagging and fine lines, and desire a healthy, radiant skin. Since the procedure combines the thermal SMOOTH mode with the ablative MSP mode, there is a risk of hyperpigmentation, particularly in patients with darker skin tone or those prone to pigmentation issues. Additionally, using excessively high SMOOTH fluences may increase the risk of burns, while overly high MSP fluences could lead to skin injury and scarring.

Mechanism of action

Fotona's SuperSMOOTH™ modality marks a significant advancement in laser technology, made possible by proprietary innovations in laser power supply. This cutting-edge hybrid approach integrates two of the most effective Er:YAG laser modalities from the multimodal Fotona4D® rejuvenation protocol into a single, streamlined, 2D treatment step.

One of the components, known as the "SMOOTH" step, delivers rapid sequences of sub-ablative pulses, lasting between 0.1 to 1 second. These pulses create controlled thermal effects in the deeper layers of the skin, stimulating collagen remodeling, skin tightening, and tissue regeneration.

The second component, the "Superficial" mode, provides a gentle peel through a very superficial "cold" ablation of the uppermost skin layer. Using short laser pulses (≤ 0.5 ms) at fluences above the ablation threshold, this step targets uneven texture and dullness, resulting in a brighter and more even complexion.

SuperSMOOTH™ offers several unique advantages:

- ***Twice as fast:***

Treatment time is reduced by 50%, enhancing efficiency for both practitioner and patient.

- ***Enhanced effectiveness:***

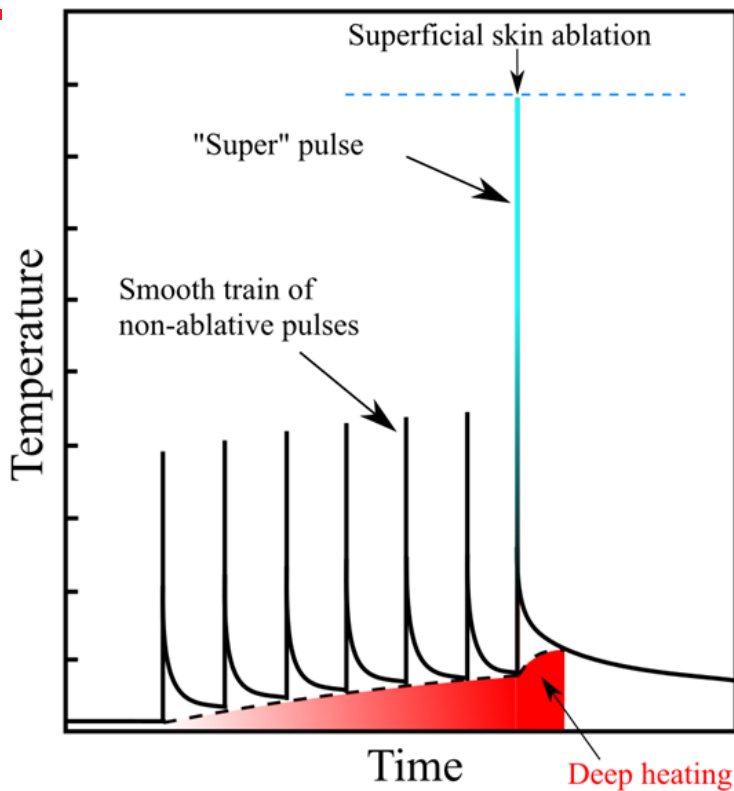
The synergistic action of combining superficial ablation with deep thermal stimulation leads to improved clinical outcomes.

- ***Greater comfort:***

By delivering both modalities nearly simultaneously, SuperSMOOTH™ leverages the gate control theory of pain. This theory suggests that the transmission of afferent impulses through the spinal cord is influenced by the relative amount of activity through large and small diameter fibers. This means that afferent signals from superficial ablation (conveyed through larger-diameter A δ fibers) relative to signals due to intense heat (conveyed through smaller C fibers) can attenuate the actual perception of pain.

- ***Enables tracking:***

The ablation pulse leaves a visible mark on the skin, enabling the user to visually track treatment progression in real time.



SuperSMOOTH™ protocol

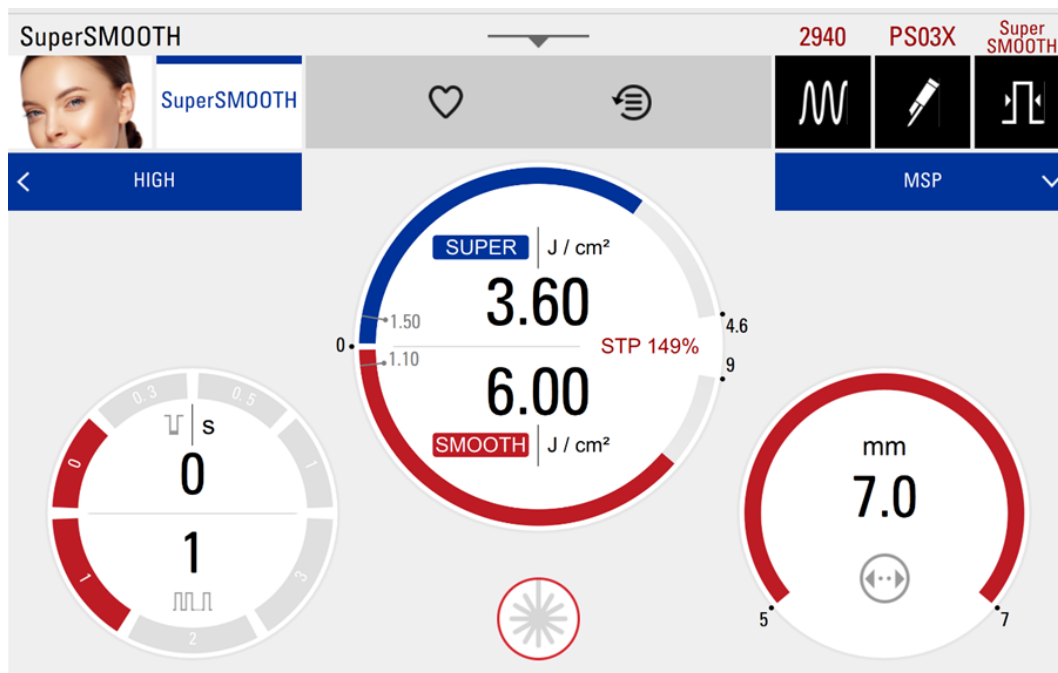
The SuperSMOOTH™ protocol is performed using the PS03X handpiece. When selecting the SuperSMOOTH™ icon on the touch screen, users will see predefined parameters optimized for the best results. Users can choose between high and low parameters, or alternatively, parameters can be manually adjusted to tailor the treatment according to an individual patient's needs. High parameters are recommended for a more pronounced tightening and peeling effect. If the patient has more sensitive skin or can't tolerate the high presets, then low presets can be selected.

Adjustable parameters:

- SMOOTH pulse: adjust fluence, number of stacks and delay between pulses
- MSP pulse: adjust fluence or select an alternative short pulse mode (SSP, SP)

The following parameters are provided as factory presets.

		SMOOTH pulse	MSP pulse
HIGH	Fluence	6 J/cm ²	3.6 J/cm ²
	Number of stacks	1 stack	/
	Delay between pulses	No delay	/
LOW	Fluence	4 J/cm ²	3 J/cm ²
	Number of stacks	1 stack	/
	Delay between pulses	No delay	/



When the no-delay setting is used (as per the presets), the laser operates at a 3.3 Hz frequency. Each SMOOTH pulse train is followed by one MSP pulse.

High presets: The treatment is performed with a fast brushing technique. Divide the face into smaller sections (e.g. one cheek, chin, the other cheek, forehead). Perform three passes per area, ensuring complete coverage, which should be visible by the ablative effect of the MSP pulse.

Low presets: With lower settings, the treatment should be performed with a slow brushing technique, ensuring complete and uniform coverage with one pass.

Post treatment

Immediately after the treatment, patients will experience a sunburn-like sensation. Repair and hydration cream should be applied for a few days after the procedure, as the skin will be extremely dry. Erythema usually subsides within 48h and peeling may continue for up to one week post-treatment. It is very important to use sun protection for at least two weeks post-treatment.

Results

You can expect to see initial results within a week, including improved skin texture and a noticeable glow. The final tightening effects develop gradually over the following weeks and months.

Low presets, one treatment



Fig. 1: Before



Fig. 2: Three weeks after the treatment

High presets, two treatments, three weeks apart



Fig. 1: Before



Fig. 2: Three weeks after the second treatment
