

Doublo's HIFU Energy

Advances Skin Tightening



Before Tx



Four months after one Doublo Tx
Photos courtesy of David Friedman, M.D.

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By Ilya Petrou, M.D., Contributing Editor

The demand for non-invasive skin tightening treatments is on the rise and aesthetic devices based on high-intensity focused ultrasound (HIFU) technology have recently become very popular for this indication. Ever since its entrance in the aesthetic market, the Doublo from Hironic Co. Ltd. (Sungnam, Korea) has impressed physicians and their patients by achieving excellent lifting and tightening outcomes.

Ute Bauer, M.D., a plastic surgeon in Munich, Germany and Padova, Italy, faces demand from patients for quick and immediate results via surgical methods. However, for moderate skin laxity, “Doublo has become my treatment of choice,” he stated. “This non-invasive approach shows some immediate results that patients like. While they know that it will take about three months for the results to consolidate, patients appreciate the natural appearance of outcomes.”

Doublo's HIFU is different from other ultrasound-based systems in the way energy interacts with the soft tissues of the skin. Treatments provide microthermal volumes at the level of the superficial musculoaponeurotic system (SMAS) and deep subdermis via tissue remodeling characterized by neocollagenesis and elastogenesis leading to a volumization and lifting of the skin.

With the second generation Doublo device the ergonomic handpiece houses the actual ultrasound energy source that generates the linear emission of HIFU points. As well, real-time assessments of the targeted area are performed with a separate imaging probe, enabling much more precise treatments. High levels of energy transmission and adjustable parameters, such as the spacing between the microvolumes are additional features that enable both versatile and customizable therapy, leading to very tolerable treatments and enhanced outcomes.

“I also use the Doublo's imaging capability to perform pre-surgical assessments in some of my surgical cases, making it a useful diagnostic tool as well,” Dr. Bauer pointed out.

“In my experience, patients will initially request a limited treatment of smaller regions only, such as the periorbital, submental or cheek area,” said Elisabetta Bianchi, M.D., a dermatologist in Bologna, Italy. “Once they see the excellent results achieved, they often then ask for a full face treatment. Doublo has become my primary modality for non-invasive lifting at the muscular depth. The regeneration process initiated by HIFU not only results in an improved skin complexion, but also a firming of the deeper layers of the skin.”

A complete facial treatment may typically take 30-40 minutes Dr. Bauer advised, and since HIFU only affects the focal depth, the skin surface is left unchanged resulting in minimal and transient (1-2 hours) erythema and edema in the target areas for a no downtime procedure.

Doublo provides a consistent and elegant means to effectively place HIFU energy at a set depth, Dr. Bauer explained. It also allows experienced users to adjust the treatment parameters according to the individual patient's needs, providing a much more comfortable procedure. Those who benefit most from Doublo therapy include patients with mild to moderate skin laxity in the face and neck regions, offering a solution for those that do not require or desire cosmetic surgery.

“The reasonable operating cost of this second generation device allows me to optimally set treatment prices for a much wider patient base,” Dr. Bianchi added.