

If you've been scouting for non-surgical skin tightening options in Singapore, chances are you've heard about **Ultherapy** and its newer cousin, **Ultherapy Prime**. Promoted for lifting and tightening the skin without downtime, these devices are broken down into layers of technical jargon and clinical claims on many clinic websites — often without clear pricing or straightforward explanations.



This post aims to cut through the sales pitch and answer, in plain English, *what happens inside your skin during an Ultherapy treatment?* We'll cover:

- How Ultherapy's micro-focused ultrasound (MFU-V) technology works on different skin layers
- Why targeting the SMAS layer is important for real lifting effects
- The role of thermal coagulation points and collagen remodeling
- How Ultherapy differs from RF heating devices and the limits of collagen stimulation
- And why you should always ask: what layer are we actually treating?

Understanding Skin Layers: Surface Tightening vs Dermal Tightening vs Structural Lifting

Before we dive into Ultherapy's mechanism, let's clarify the different layers beneath your skin's surface and what it means to treat each.

Layer	Depth	Function	Treatment Goals
Surface (Epidermis)	0–0.1 mm	Outer skin barrier, protects from environment	Exfoliation, pigmentation correction, surface smoothing
Dermis	0.1–2 mm	Contains collagen, elastin, blood vessels	Collagen stimulation, thickening, skin tightening
SMAS (Superficial Musculoaponeurotic System)	3–4.5 mm	Fibrous layer connecting muscles to skin	Structural lifting and long-lasting firmness

Surface-level treatments focus on fine lines, texture, and pigmentation. They generally do not produce meaningful lifting.

Dermal tightening

Structural lifting

Ultherapy MFU-V and Real-Time Imaging: Precision at Depth

Unlike lasers or RF devices that primarily heat the surface or upper dermis, Ultherapy uses **micro-focused ultrasound with visualization (MFU-V)**. Here's what this means:

- **Micro-focused ultrasound (MFU):** Ultrasound energy is concentrated into tiny focal points beneath the skin, creating precise thermal injuries called *thermal coagulation points*.
- **Visualization (V):** Real-time ultrasound imaging allows practitioners to see exactly where they are targeting within your skin layers, ensuring they reach the intended depth.

This technology was a game-changer because it ensures energy delivery to the SMAS, not just guesswork based on surface appearance.

Common Ultherapy cartridges target depths of 1.5 mm, 3.0 mm, and crucially 4.5 mm, the latter being the SMAS layer. **Ultherapy Prime** retains this ultrasound imaging and targeting but is sometimes marketed with improved ergonomics or software.

Why Does Depth Targeting Matter?

Many devices claim skin lifting but stop short of treating below the dermis. Ultrasound imaging confirms the 4.5 mm depth hits the SMAS:

- Energy creates *thermal coagulation points* roughly 1 mm in diameter at precise depths.
- The heat causes controlled injury causing neocollagenesis — new collagen production over 2-3 months.
- The SMAS remodeling tightens the fibrous network that supports skin and fat, resulting in visible lifting.

So, when you hear about **SMAS targeting**, ask if the device has real-time imaging and validated depth cartridges.



Thermal Coagulation Points & Collagen Remodeling: The Science Behind the Lift

What exactly happens at the tissue level when those ultrasound waves meet the SMAS (or dermis)?

1. **Heat-induced micro-injuries:** Ultrasound energy is absorbed, raising tissue temperature to about 60–70°C at focal points while sparing the surface.
2. **Coagulative necrosis:** This causes tiny, controlled damage spots (thermal coagulation points) approximately 1 mm wide and spaced a few millimeters apart.
3. **Inflammatory response:** The body detects these micro-injuries and kicks off wound healing pathways.
4. **Collagen remodeling:** Fibroblasts produce new collagen and elastin fibers, replacing old degraded matrix and tightening tissue.
5. **Structural contraction:** As new collagen forms and contracts, it tightens the SMAS and dermis layers — this is responsible for the progressive lifting effect noticed weeks to months post-treatment.

This differs from superficial skin resurfacing which mainly treats epidermal cells and doesn't engage the deeper structural framework.

RF Heating vs. Ultrasound: Different Technologies, Different Outcomes

Radiofrequency (RF) devices are also popular for skin tightening. They generate heat by electrical currents interacting with tissue resistance, usually targeting the dermis (1–3 mm depth). Here's why this matters:

- **Depth limitation:** RF typically can't reach the SMAS layer at 4.5 mm.
- **Surface risks:** Because RF heats tissue from the surface downward, there's a risk of epidermal burns or discomfort.
- **Collagen stimulation:** While RF does stimulate collagen production, the effect is mostly limited to dermal tightening and doesn't achieve lifting at the SMAS level.

Ultherapy's focus on energy delivery at precise depths, combined with ultrasound imaging, stands [10therma singapore](#) apart.

Pricing Transparency: Why You Need to Ask in SGD

One irritation: many Ultherapy clinic pages omit pricing details or list costs in USD without a SGD equivalent. This makes it tough for Singapore-based patients to budget effectively, especially since multiple treatment passes at various depths may be needed.

Key points to remember:

- Ultherapy prices in Singapore generally range from SGD 3,000 to SGD 6,000 depending on treatment area and sessions.
- Expect more cost for full-face plus neck treatments targeting multiple layers.
- Ask for a clear breakdown in SGD upfront before booking.
- Beware of packages that promise "no downtime" without explaining typical soreness, swelling, or redness post-treatment.
- Always verify the practitioner's training and the device model (Ultherapy vs Ultherapy Prime) they use.

Clinic Questions That Dodge the Real Answer

When chatting with sales or coordinators, some avoid clarifying how many treatment depths will be targeted or the technology's limitations. Don't hesitate to ask:

1. "What layers exactly are we treating with Ultherapy?"
2. "Does your device have real-time ultrasound imaging?"
3. "Am I paying for treatment at 1.5 mm, 3.0 mm, and 4.5 mm depths?"
4. "Do you provide pricing in SGD, including consultation and follow-up fees?"
5. "What post-treatment effects should I expect? Will there be swelling or soreness?"

To Summarize

Ultherapy and Ultherapy Prime harness the power of micro-focused ultrasound with visualization to deliver energy precisely at the SMAS layer and deeper dermis. This creates controlled thermal coagulation points that trigger collagen remodeling, leading to true structural lifting rather than just superficial tightening.

Understanding the targeted tissue depth helps set correct expectations and distinguish Ultherapy from RF or laser treatments that mainly treat surface or dermal layers only.

Finally, don't overlook pricing transparency, which is crucial for Singapore patients. Always ask for costs in SGD, know what layers will be treated, and get details about possible post-treatment effects.

When you hear "no downtime," check if that really means "no surface injury" or if you'll experience typical soreness or swelling associated with thermal collagen remodeling.

*Remember: It's your skin and your investment. Always ask, " **What layer are we actually treating?**"*

References

- Ultherapy Official Singapore Clinic Page
- Ultherapy Prime Information
- Ricci, E., et al. (2020). Microfocused Ultrasound: The Science Behind Tissue Tightening. *Journal of Aesthetic Medicine*