



DENSITY

Non-Invasive Radiofrequency: Significant Advantages of DENSITY

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Introduction

Monopolar radiofrequency (RF) device for non-invasive skin lifting and elasticity improvement is playing an important role in dermatology and cosmetic procedures. Particularly, it is known as a symbolic treatment to provide an effective treatment for improving skin elasticity, wrinkles, and sagging. DENSITY enables customized treatment for patients based on its differentiated features from other monopolar RF devices and provides flexibility to apply to various skin types and conditions. In this paper, based on clinical experience, we will discuss the advantages of DENSITY over other monopolar RF devices and the differences between the High tip and Classic tip.

1. DENSITY: Significant Advantages

1.1 Energy Efficiency and Depth Control: Combination of Monopolar and Bipolar RF Energy

The other RF devices usually target deep dermal layers, while DENSITY irradiates monopolar RF first and then sequentially uses bipolar energy to maximize its effect. According to the animal experiment, this combination is extremely effective for neocollagenesis and neoeLASTOgenesis

Due to general electrical circulation, as the temperature becomes higher, skin impedance becomes lower. This causes conductivity to be higher. By this principle, heating dermis with monopolar RF leads to the skin impedance to be lower. This process creates higher electric conductivity of bipolar RF, which allows RF to

flow more effectively even at lower energy levels.

1.2 Patient Customized Treatment

DENSITY provides customized treatments based on each patient's skin type, age and expected treatment results. It offers an option to choose the Classic or High tip based on a patient's skin thickness, elasticity, wrinkle depth. The device controls the balance of monopolar and bipolar RF energy, whereas other monopolar devices typically offer only one type of tip in a standardized protocol. For treatment of overall face rejuvenation, 600 shots are usually recommended; however, there are two options depending on the area of the face: Using either 600 shots of Classic tip only or 300 shots of both the Classic and High tip together for 1 treatment session.

1.3 Pain Reduction & Fast Recovery

DENSITY utilizes a qualified cooling system and energy transmitting principle to reduce pain during the treatment, providing more comfortable treatment for patients who are sensitive to pain compared to other devices. In particular, the High tip maximizes the effects of neocollagenesis and neoeLASTOgenesis by sequential pulsing of monopolar and Bipolar RF. Since this process does not use high energy, the pain level is minimized while maximizing collagen and elastin regeneration effects. This principle of DENSITY enables safer and more efficient skin regeneration compared to other RF devices, making it a suitable option, especially for patients who are sensitive to pain.

1.4 Treatment Convenience & Efficiency

Another advantage of DENSITY is the auto-shot mode that maximizes convenience during the treatment. This

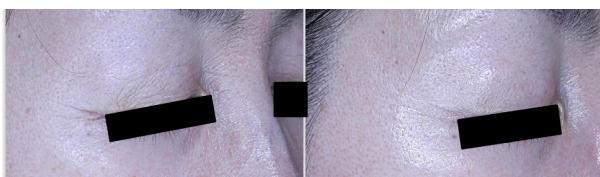
mode automatically delivers energy without stepping on the foot switch or pressing the button for each shot, and it reduces practitioner fatigue levels. This helps practitioners maintain concentration, especially during longer treatment sessions.

Furthermore, the auto-shot mode adjusts treatment time to be shorter than that of other monopolar RF devices and allows practitioners to treat more patients in one session. (For 600 shots treatment, while other monopolar RF devices take around 40 minutes, DENSITY, takes only 25 minutes.) This efficiency enhances clinical operation and allows more treatment per hour, contributing to increasing sales.

1.5 Eye Tip Treatment

DENSITY provides specialized eye tips, which have the advantage of safe and effective treatment for the thin skin around the eyes. There are two types of eye tips: High Eye tip and Classic Eye tip. Particularly, the High Eye tip is effective for the thin skin areas around the eyes.

The High Eye tip delivers energy more delicately to take care of thin skin, and when 600 shots are irradiated to both upper and lower eyelids, it is clinically confirmed that fine wrinkles and skin elasticity are clearly improved after 8 weeks. These results prove the advantages of DENSITY which improve collagen regeneration and skin remodeling without side effects even to the sensitive area around the eyes, along with the principle of combining monopolar and bipolar RF.



[DENSITY (High Eye tip: 600 shots; Before, After 8 weeks)]

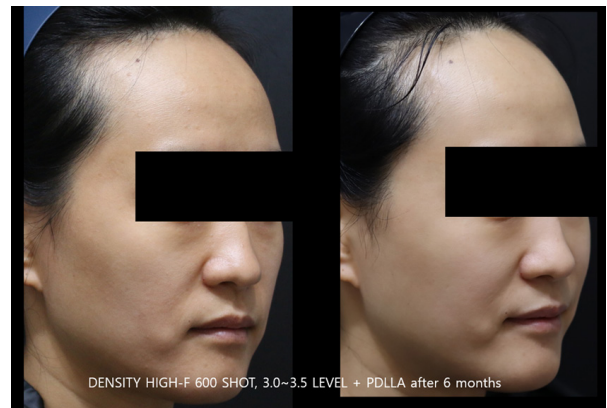
Even though the periorbital area is more difficult to treat than other areas, DENSITY Eye tip enables practitioners to treat wrinkles and elasticity problems effectively and safely.

1.6 Combination Treatment: Collagen Stimulator (Long Term Skin Improvement Effect)

DENSITY can maximize long-term skin regeneration

effects when its treatment includes collagen stimulators PLA (Poly-lactic acid) or CaHA (Calcium Hydroxylapatite). This combination treatment promotes collagen regeneration in the deep layers of the skin, which can lead to continuous effects of skin rejuvenation for more than 6 to 12 months.

DENSITY's RF energy provides improved elasticity and lifting effects on the skin, and when it includes use of the collagen stimulator, the skin regeneration process becomes more stable in longer periods. Particularly PLA and CaHA encourage the skin to produce collagen continuously and it makes long-term improvement effects even after the treatment. This combination treatment effectively takes care of deep wrinkles, sagging, loss of elasticity and increases patient satisfaction.



[DENSITY (High tip: 600 shots+ PDLLA Collagen stimulator; Before, After 6 months)]

2. High Tip & Classic Tip Difference

2.1 Patient's Choice

The High tip or Classic tip is selected based on a patient's skin condition.

The High tip is suitable for patients with thin skin, fine lines, or specific indications of epidermis and upper dermis (redness, fine lines, enlarged pores). It is also a good option for patients who want immediate lifting and skin texture improvement.

The Classic tip is suitable for patients with thick, deep wrinkles or severe sagging skin, and delivers energy to the deep dermal layer which induces collagen regeneration in long term.

2.2 Parameter Option

Treatment Area	Level	Session
Forehead	1.0~2.0	1~2
Cheek	2.0~3.0	4~5
Jaw line	2.0~2.5	4~5
Submental	1.5~2.0	2~3
Neck	1.0~1.5	4~5
Vocal Cord	Not treated	

[DENSITY Classic tip Recommended Parameter]

The High tip is usually applied at a level approximately 1.0 higher than the recommended level for the Classic tip. The treatment is performed at levels of 3.0 to 4.0 on both cheeks, targeting both the upper and lower dermis for long-term effects.

2.3 Effect Difference

The High tip is effective for fast lifting, improving fine wrinkles, skin tone and pore size. The noticeable improvement usually occurs within 1 to 2 weeks after the treatment.

The Classic tip is effective to improve deep wrinkles and sagging. The gradual improvement occurs in 4-8 weeks after the treatment and long-term results keep occurring for more than 6 months.

The Classic tip usually applies levels of 2.0 to 3.0 on both cheeks, delivering energy to the deep dermal layer for long-term skin regeneration and elasticity improvement.



[DENSITY (High tip: 600 shots; Before, After 4 weeks; pore, marionette line improvement)]

2.4 Pain & Post-Treatment

The High tip irradiates monopolar radiofrequency first and then applies bipolar radiofrequency sequentially.

This method does not use high energy and minimizes pain while the regenerative effect of collagen and elastin is maximized. Therefore, the pain is low with the VAS (Visual Analogue Scale) level from 2 to 4.

Since the Classic tip delivers energy to the deeper layers, it is slightly more painful with the VAS level from 4 to 6.

Even though there can be mild erythema after treatment for both the Classic and High tips, it usually disappears within 12 hours, and soothing care or moisturizer use is recommended as post-treatment.

2.5 Maintenance Period

The High tip's treatment result appears early and quickly, and the maintenance period is usually more than 4 to 6 months. Although the Classic tip has a slower early effect, it provides long-term skin remodeling effects of collagen regeneration, and the treatment result maintains for more than 6 months.

2.6 Side Effect

Even though both tips are safe, the patients with sensitive skin may occasionally have temporary redness or swelling. The use of topical or systemic steroid medications can prevent erythema or burns (extreme rare case). Therefore, as long as the treatment area is closely monitored, it becomes easier to prevent certain skin conditions (localized erythema, swelling, pain) at an early stage, significantly reducing their risk.

Conclusion

DENSITY is a device that maximizes skin regeneration and elasticity improvement by sequentially applying non-invasive monopolar and bipolar radiofrequency energy, enabling a variety of customized treatments for patients compared to other monopolar RF devices. The High tip and Classic tip provide customized energy delivery based on the patient's skin condition, and it improves fine wrinkles and elasticity safely and effectively, even to thin and sensitive skin like the eye areas.

Especially specialized eye treatment is possible with the Eye tip, and a complex treatment combined with collagen stimulators (PLA, CaHA, etc.) provides long-term skin rejuvenation effects more than 6 to 12 months. This combination treatment more effectively addresses deep wrinkles, sagging, and loss of skin elasticity,

contributing to patient satisfaction being increased.

DENSITY's auto-shot mode significantly improves the efficiency of clinic operation by reducing practitioner's fatigue and shortening treatment time. It also minimizes post-treatment pain and side effects, maximizing comfort for both patients and practitioners.

DENSITY has been clinically proven to be effective and will play a significant role in the field of skin lifting and elasticity improvement through long-term skin improvement and collagen regeneration effects.