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FormaGlow Case Study: Advanced Integrated Skin Rejuvenation Protocol Powered by the Forma System

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Background

The field of aesthetic medicine continues to evolve, with increasing demand for non-invasive facial treatments that offer visible, long-lasting results without the need for recovery time. This shift in patient expectations has redefined clinical priorities, pushing practitioners toward advanced, multi-modal solutions that can effectively address a range of skin aging concerns including pigmentation, fine lines, age spots, and diminished elasticityoften caused by prolonged ultraviolet (UV) exposure.

Meeting these challenges requires more than a single treatment modality. It demands a strategic, science-based approach that combines precise energy delivery, biological stimulation, and transdermal infusion of active ingredients. This philosophy forms the foundation of a unique treatment protocol independently developed by Hadar Or-Bach, a licensed cosmetician and aesthetic technology expert, in her clinic at Haem Street 9, Rishon LeZion, Israel. Built through years of hands-on clinical experience, Hadar crafted this protocol using the Forma System by Formatk Systems Ltd (Tirat Carmel, Israel) - a multi-platform device offering both light-based and transdermal technologies. Her protocol blends advanced medical technologies with a carefully selected regimen of cosmetic formulations, personalized to meet the needs of each patient. Importantly, this protocol was not created as part of a formal collaboration with Formatk.

Rather, it is the result of Hadar's independent innovation and clinical insight. She later chose to share the outcomes of her protocol with Formatk Systems as a clinical case study, showcasing how her integrative methodology optimizes the full therapeutic potential of the Forma System.

The protocol incorporates two of Formatk's proprietary applicators:

1. **USP F-SR IPL 530nm** - A high-precision IPL (Intense Pulsed Light) with USP (Ultar Short Pulse) applicator, designed for superficial pigmentation reduction, photorejuvenation, and collagen stimulation.
2. **R-Sonic** - A dual-function applicator capable of delivering ultrasonic vibrations and radiofrequency. For this protocol, Hadar employed vibration-only mode, without RF, to improve skin permeability and enhance the transdermal delivery of active ingredients most notably pure Vitamin C.

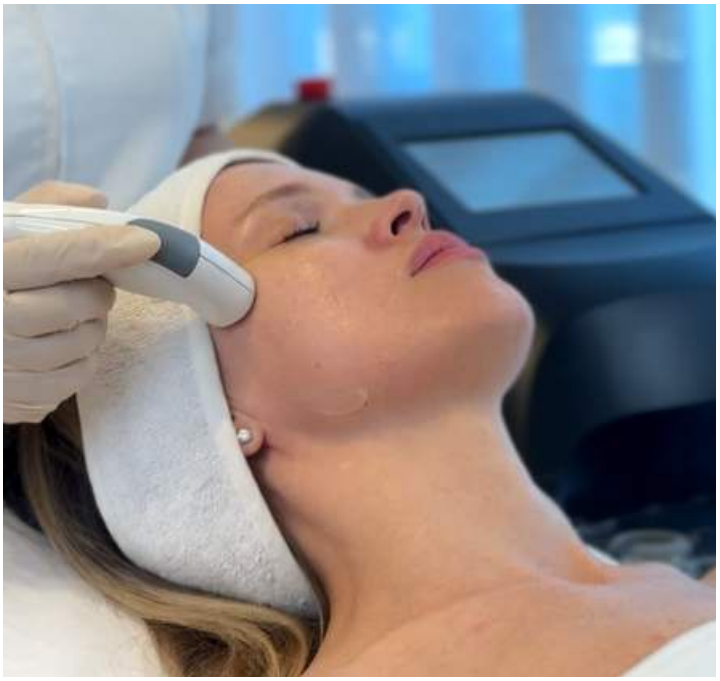
What makes this protocol distinctive is Hadar's ability to integrate Formatk's energy-based technologies with her customized cosmetic regimen, developed in clinical practice. The treatment begins with pre-procedure skin conditioning, including:
Melanin-inhibiting serums to suppress melanogenesis and promote even skin tone.
Deep moisturizers to restore the skin barrier and boost hydration.

Once the skin is primed, USP IPL 530nm is applied in single-pulse mode with a 10% overlap across the full face, delivering controlled photothermal energy to break up pigmentation and activate fibroblast activity. Immediately following this, R-Sonic in vibration-only mode is used to infuse ascorbic acid (Vitamin C) into the skin supporting antioxidant defense, skin brightening, and collagen production. The final step involves microneedling paired with ESO OX exosomes bioactive nanovesicles containing growth factors, peptides, cytokines, and functional mRNA. This stage enhances cellular regeneration, improves skin elasticity, and visibly refines tone and texture.

The complete protocol is typically delivered as a series of 2 to 6 treatment sessions, spaced one month apart, allowing for progressive improvement and optimal skin rejuvenation. This multi-step, synergistic protocol exclusively designed by Hadar Or-Bach represents a new benchmark in non-invasive facial rejuvenation. It harmonizes Formatk's technological innovation with evidence-based skincare, offering patients clinically significant improvements in pigmentation, texture, firmness, and radiance with high safety, comfort, and no downtime.

Aim

The objective of this case study is to present a clinically validated, multi-modal facial rejuvenation protocol independently developed by licensed cosmetician Hadar Or-Bach, utilizing the Forma System by Formatk Systems Ltd. This comprehensive protocol combines USP F-SR IPL 530nm phototherapy, transdermal delivery through R-Sonic ultrasonic vibration, and microneedling enhanced with exosome-based biocellular therapy. The primary goal is to demonstrate the synergistic efficacy of integrating advanced energy-based technologies with a targeted cosmeceutical regimen to address key signs of photoaging such as hyperpigmentation, fine lines, and reduced skin elasticity while prioritizing safety, patient comfort, and minimal downtime. The study also aims to assess clinical outcomes over a series of 2 to 6 treatment sessions, performed at one-month intervals, with each session averaging approximately one hour in duration.



Inclusion criteria

- Patients presenting with noticeable signs of facial skin aging, including visible pigmentation and wrinkles.
- Completion of at least one full treatment session using the combined protocol.
- Age 30 years or older.
- Patients who provided informed consent and agreed to participate in the study.

Exclusion criteria

- Pregnancy and breastfeeding
- Cancer
- Epilepsy
- Severe diseases
- Autoimmune diseases
- Frequent episodes of labial Herpes Simplex in the the face
- Immunosuppressive pharmacologic therapy
- Uncontrolled diabetes
- History of keloid scarring
- Tanned or sunburned skin

Methods

This retrospective, single-center observational case study was carried out at the clinic of Hadar Or-Bach – Licensed Cosmetician, Expert Consultation & Personalized Guidance in Aesthetic Technologies, Haem Street 9, Rishon LeZion, Israel. Hadar Or-Bach is a licensed cosmetician with over a decade of hands-on experience in advanced skin rejuvenation and aesthetic protocols. She specializes in personalized consultation and the clinical application of energy-based technologies, combining her deep understanding of cosmetic science with practical expertise in non-invasive facial treatments.

Known for her evidence-based approach and individualized care, Hadar has developed and implemented innovative treatment protocols integrating IPL, ultrasonic infusion, and cosmeceutical therapy. Her clinic in Rishon LeZion serves as a hub for advanced skin restoration, offering tailored solutions that prioritize both safety and visible results.

Patient recruitment occurred between January 1, 2025, and July 15, 2025. A total of 4 female participants, aged 40 to 56 years, presenting with visible signs of facial skin aging, were enrolled. Each combined treatment protocol session was performed at one-month intervals, allowing sufficient time for skin recovery, remodeling, and optimal integration of active ingredients between sessions. Standardized pre- and post-treatment clinical photographs were evaluated by Dr. Nadav Pam using a validated 4-point grading scale.

Pre-Treatment Preparation Protocol

To optimize clinical outcomes and minimize risks such as post-inflammatory hyperpigmentation, it is recommended to follow a structured pre-treatment skincare protocol for 5–7 days prior to the first session. This includes twice-daily application of TIROSINOL SERUM by KB PURE, which contains undecylenic acid, butyl resorcinol, kojic acid, arbutin, niacinamide, and tetrapeptides to inhibit melanin production and promote even skin tone.

To support epidermal hydration and barrier restoration, patients should apply Gold Medium Cream by KB PURE daily, a formulation enriched with lactic acid, hyaluronic acid, amino acids, shea butter, and vitamins C and E. In addition, on alternating evenings, use of Retinol Active Cream by KB PURE, which contains 1% retinol along with lactic acid, kojic acid, phytic acid, urea, panthenol, and hyaluronic acid, helps accelerate cell turnover and address early signs of aging. This regimen enhances skin tolerance to IPL and microneedling, improves absorption of actives, and supports faster post-treatment recovery.

Step 1 – IPL F-SR 530nm: Targeted Photothermal Rejuvenation

Estimated duration: 20-25 min per session.
This foundational step involves the use of the IPL F-SR applicator at a wavelength of 530 nm, which is selectively absorbed by melanin and oxyhemoglobin, making it ideal for addressing early signs of photoaging, superficial pigmentation, and diffuse redness. The treatment is performed using a single-mode delivery with approximately 10% overlap to ensure uniform energy coverage across the entire facial surface, promoting consistent results while minimizing the risk of untreated gaps or hot spots.

Parameters such as fluence (J/cm²), pulse duration, and repetition rate are customized based on the patient's Fitzpatrick skin type, sensitivity, and clinical goals, ensuring both efficacy and safety, particularly important in skin types III–V. Following the initial full-face pass, a second, more focused pass is performed selectively on solid pigmented lesions such as freckles, solar lentigines, and age spots.

This targeted approach allows for precise photothermolysis of excess melanin within these lesions, leading to gradual clearance over the following days as the pigment is broken down and naturally eliminated by the skin's repair mechanisms.

The controlled photothermal effect also stimulates fibroblasts in the dermis, promoting collagen remodeling, improved skin tone, and overall rejuvenation. Importantly, the IPL 530 nm wavelength offers shallow to mid-dermal penetration, making it especially suitable for epidermal pigmentation and early vascular changes, while preserving surrounding healthy tissue and minimizing downtime. This step primes the skin for enhanced absorption of topically applied actives in subsequent stages.

Step 2 – R-Sonic in Vibration Mode: Transdermal Delivery of Vitamin C

Estimated duration: 7-10 min per session.
In this phase of the treatment protocol, the R-Sonic applicator is used exclusively in vibration-only mod, without thermal or RF energy, for approximately 5 to 7 minutes, with the face divided into three distinct zones (e.g., forehead, cheeks, lower face). The R-Sonic device emits high-frequency mechanical micro-vibrations that create temporary micro-disruptions in the stratum corneum (the outermost layer of the epidermis), thereby enhancing skin permeability without causing discomfort or visible trauma.

This gentle stimulation not only increases microcirculation but also facilitates deeper transdermal penetration of topically applied actives. During this process, 5 mL of pure Vitamin C (ascorbic acid) - sourced from MCCosmetics, is applied to the skin. Vitamin C is a powerful antioxidant and collagen stimulator known for its ability to brighten the complexion, reduce pigmentation, neutralize free radicals, and support dermal repair.

By combining R-Sonic's micro-vibrational delivery with high-purity Vitamin C, this step ensures optimal bioavailability of the active ingredient at deeper layers of the epidermis and upper dermis. The result is improved skin radiance, enhanced antioxidant defense, and preparation of the skin for subsequent procedures such as microneedling or exosome infusion.

Step 3 – Microneedling with ESO OX Exosomes: Deep Cellular Repair

Estimated duration: 20-25 min per session.
Microneedling is performed using a flat nano-needle to create microscopic channels, activating the skin's natural repair mechanisms. EXO OX by Sykymedic is a lyophilized plant-derived exosome formula infused into the skin to stimulate regeneration and rejuvenation. These biologically active nanovesicles sourced from Centella Asiatica contain a potent combination of growth factors, cytokines, peptides, and functional mRNA that work synergistically to promote collagen and elastin synthesis, reduce inflammation, and enhance cellular repair. Delivered in a hyaluronic acid base, EXO OX penetrates deep into the skin via microneedling, mesotherapy, or post-energy-based procedures, offering a non-cellular yet powerful approach to improving hydration, texture, elasticity, and overall skin health.

Post-Treatment Guidelines

- To ensure optimal clinical outcomes and reduce the risk of irritation or post-inflammatory pigmentation:
- Avoid direct sun exposure for several days post-treatment. Use protective measures such as wide-brimmed hats and shade.
- Daily use of SPF 50 or higher – even indoors or on cloudy days. Reapply every two hours.
- Apply intensive moisturizer – at least twice a day (morning and evening), or as needed based on skin condition.
- Use a calming product as needed – in cases of localized sensitivity or erythema, a soothing topical may be applied to the full face or specific areas.
- Gradual reintroduction of active products:
- After 2–3 days, resume melanogenesis inhibitors (e.g., TIROSINOL).
- Avoid exfoliants or retinoids for approximately 6 days, or as advised by your skincare professional.

Results

A total of 4 healthy adult female volunteers (ages 40-56 years) with Fitzpatrick skin types 1-4 were recruited. All participants presented signs of skin aging, including facial wrinkles and visible pigmentation. Fitzpatrick classification, was based on Milo - a melanin meter, with an optical sensor reading.

Patient #	Age	Gender	Fitzpatrick skin type
1	56	Female	4
2	50	Female	3
3	40	Female	3
4	47	Female	1

4-point scale evaluation based on photographic Images from before the first and after the last treatment:

Patient #	Overall, 4-point scale improvement, Dr. Nadav Pam	Total number of treatments with a month time interval	Side effects
1	84%	3	N/A
2	82%	3	N/A
3	87%	3	N/A
4	86%	3	N/A

Discussion

This case study presents a clinically structured evaluation of a novel, integrative facial rejuvenation protocol that leverages the synergistic effects of light-based therapy (IPL 530nm), transdermal cosmeceutical delivery via ultrasonic vibration (R-Sonic), and biocellular stimulation through exosome-infused microneedling (EXO OX). The protocol, independently developed and applied by licensed cosmetician Hadar Or-Bach, was assessed for safety, tolerability, and efficacy in addressing signs of photoaging - specifically, hyperpigmentation, fine lines, and dermal laxity.

All patients underwent a standardized pre-treatment regimen that included melanogenesis inhibition, barrier restoration, and controlled epidermal renewal to prime the skin for optimized clinical response and reduced risk of post-inflammatory hyperpigmentation, especially relevant for Fitzpatrick skin types III and IV. Each of the three treatment steps contributed distinct therapeutic mechanisms.

The first step, IPL F-SR 530nm, provided precise photothermal targeting of melanin-rich lesions and superficial vascular changes, leading to visible reduction in pigmentation and an overall improvement in skin tone and texture.

Its shallow-to-mid dermal penetration, combined with selective photothermolysis, served as an effective foundation to stimulate fibroblast activity while preserving healthy surrounding tissue.

The second phase utilized the R-Sonic applicator in vibration-only mode to enhance the transdermal delivery of Vitamin C - a critical antioxidant and cofactor for collagen synthesis. Mechanical microvibrations increased skin permeability while simultaneously improving microcirculation, creating a biologically receptive environment for infusion of active ingredients.

The final step involved microneedling using a nano-needle device in conjunction with EXO OX exosomes derived from Centella Asiatica. These plant-based, cell-free nanovesicles contained growth factors, cytokines, peptides, and functional mRNA that support dermal remodeling, reduce inflammation, and promote collagen and elastin production.

Clinical outcomes were evaluated using a standardized 4-point photographic scale assessed by Dr. Nadav Pam, with all four patients showing marked improvement after just three sessions performed at one-month intervals. The improvement scores ranged from 82% to 87%, with no reported adverse effects, underscoring the protocol's favorable safety profile. The treatment demonstrated particularly high efficacy in addressing uneven pigmentation and improving overall skin luminosity and elasticity.

Of note, the patient with Fitzpatrick type IV (Patient 1) exhibited an 84% improvement without post-inflammatory pigmentation, reinforcing the importance of careful parameter adjustment and adherence to pre-treatment priming protocols in darker skin tones.

EXO OX Exosomes by Sykymedic

Conclusion

This case study highlights the clinical efficacy, safety, and patient satisfaction associated with a multi-modal facial rejuvenation protocol combining USP F-SR IPL 530nm phototherapy, ultrasonic-assisted transdermal delivery of Vitamin C, and microneedling with plant-derived exosomes. All energy-based components specifically the IPL and R-Sonic technologies were delivered using the Forma System, a state-of-the-art platform manufactured by Formatk Systems Ltd, located in Tirat Carmel, Israel.

The protocol, developed and implemented by licensed cosmetician Hadar Or-Bach, leverages the synergistic benefits of advanced technology and targeted cosmeceutical formulations to address key signs of photoaging, including hyperpigmentation, fine lines, and skin laxity. In this preliminary study, four female participants (aged 40–56, Fitzpatrick types I–IV) completed three monthly sessions, showing consistent and significant improvement ranging from 82% to 87% on a standardized 4-point photographic evaluation, with no adverse effects reported.

Each step of the protocol contributed to the overall success IPL initiated dermal rejuvenation and pigment reduction, R-Sonic enhanced transdermal infusion of Vitamin C, and exosome-based microneedling stimulated deep cellular repair and collagen remodeling. The structured pre- and post-treatment care further ensured safety and maximized therapeutic outcomes, particularly in patients with higher Fitzpatrick skin types.

Despite the encouraging results, the study's limited sample size and short follow-up period present clear limitations. To confirm the reproducibility, scalability, and long-term efficacy of this protocol, future research should involve a larger, more diverse patient cohort, extended follow-up duration, and additional objective assessment tools such as imaging or histological analysis.

In conclusion, this protocol utilizing Formatk's Forma System offers a promising, safe, and non-invasive treatment pathway for facial rejuvenation, with strong potential for broader clinical adoption upon further validation.

Before & After Results

Patient #1

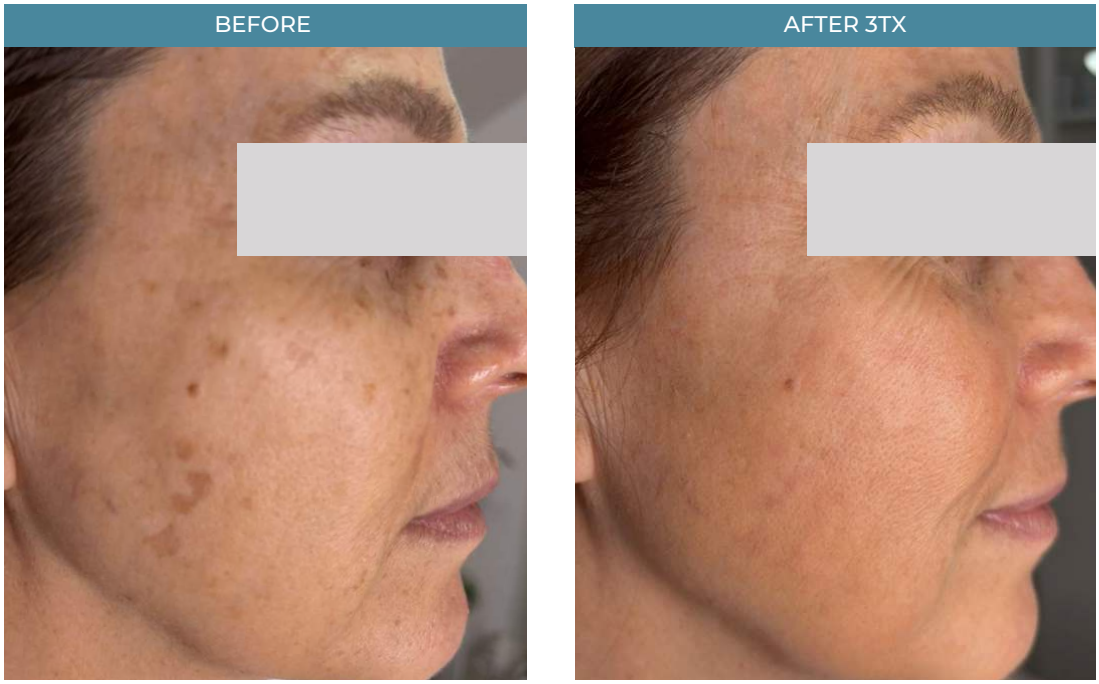
BEFORE

AFTER 3TX

BEFORE

AFTER 3TX

Patient #2



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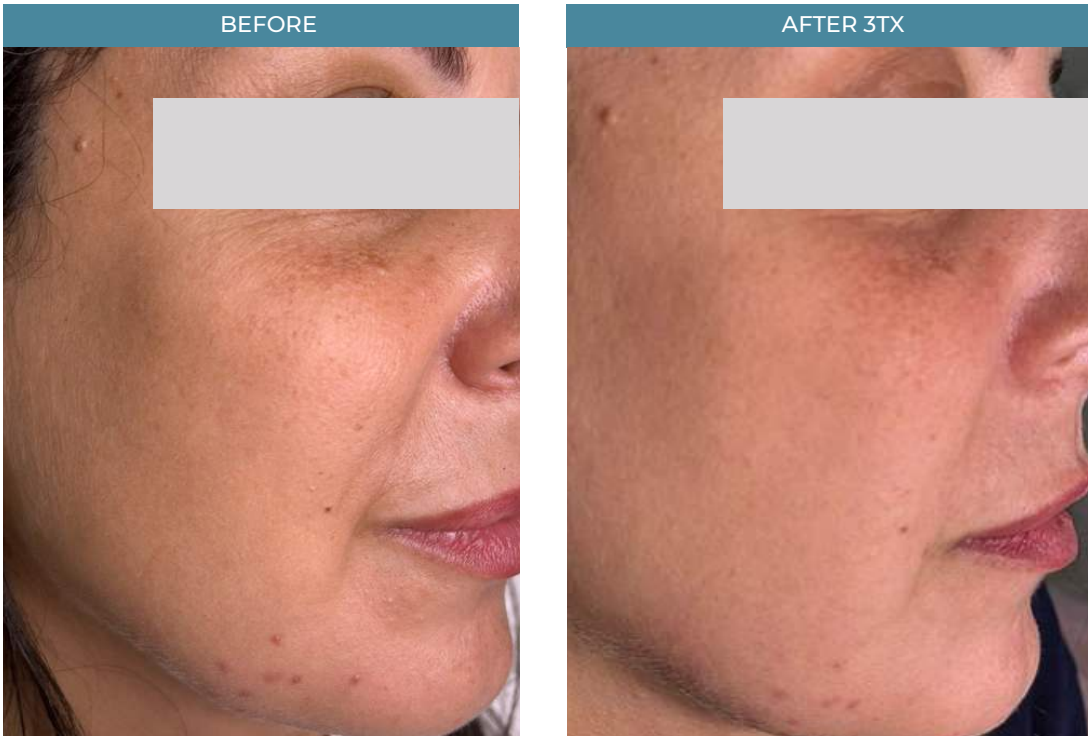
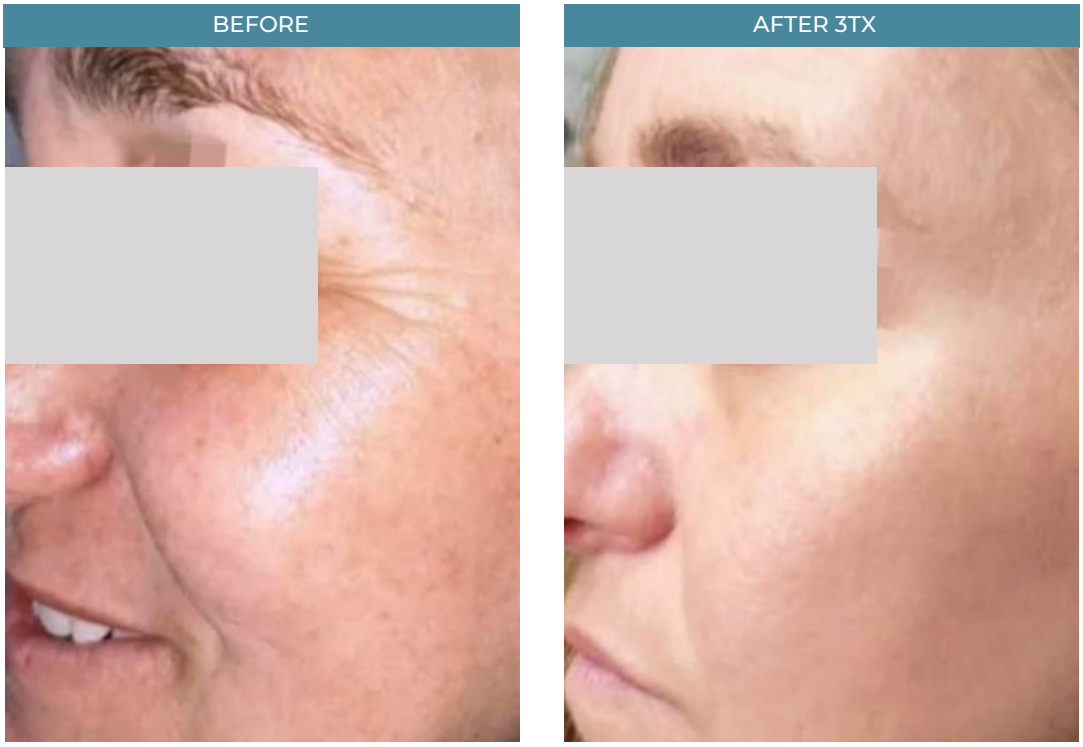


Patient #4



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