

Waterlase
ReNewTM
SKIN RESURFACING



Waterlase ReNew™

SKIN RESURFACING

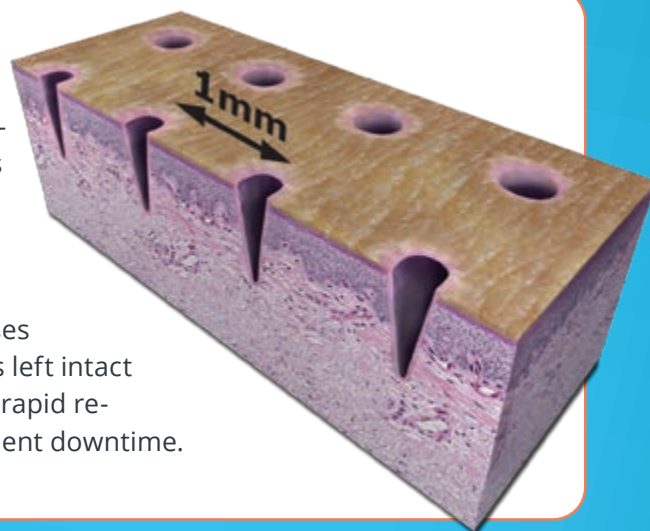
with Waterlase iPlus® and the Waterlase Fractional Handpiece™



How It Works

Waterlase iPlus, equipped with the Waterlase Fractional Handpiece, treats fractions of the skin by perforating the epidermis with 10 microbeams in a row. The "Pixelated" perforations (about 250µm diameter) are made in the skin as the clinician moves the handpiece in a single pass.

Coagulation of the dermal collagen is produced, which increases cutaneous contraction after healing. The surrounding tissue is left intact and undamaged. Neo-collagenesis (new collagen growth) and rapid re-epithelialization occurs in as little as 48 hours, minimizing patient downtime.



Unveiling Radiant Skin with Waterlase ReNew Skin Resurfacing

Welcome to the forefront of fractional skin resurfacing! **Waterlase ReNew Skin Resurfacing** is an innovative protocol raising the bar in esthetic dentistry and comprehensive patient care. Consider the evolving landscape of today's dental industry, where oral healthcare intersects with comprehensive dental-facial esthetics.

Waterlase Renew offers multiple benefits—enhancing skin and addressing various dermatological concerns with minimal patient downtime. Beyond traditional dental care, dental clinics have become a haven for those seeking holistic expertise in oral health and facial esthetics. Waterlase ReNew appeals to a diverse clientele eager to experience its transformative effects. Waterlase provides gentle laser therapy procedures with a cooling water spray, in comparison to “hot” lasers without atomized water. Because of Waterlase's patented YSGG wavelength's targeted interaction with water, Waterlase ReNew Skin Resurfacing may be performed without anesthetic for most procedures.¹

As dentistry and esthetics converge, staying ahead the competition is crucial. The integration of facial aesthetics into dental clinics is a rapidly growing trend that shows no signs of slowing down. Patients are actively seeking comprehensive care, encompassing both functional and cosmetic therapies. This guidebook equips clinicians with the knowledge to navigate the exciting world of fractional laser skin resurfacing. Join us as we lead the future of dental esthetics, where radiant skin and confident smiles meet!



Benefits of Adding ReNew Skin Resurfacing

✦ DIVERSIFICATION OF SERVICE OFFERINGS

Elevate your patient care by providing a **unique and highly sought after esthetic therapy**, particularly appealing to patients who are increasingly seeking comprehensive, holistic, oral and esthetic healthcare solutions. Waterlase Renew provides clinicians the opportunity to further contribute to the overall well-being of their patients by offering minimally invasive service in conjunction with already popular esthetic therapies such as botox, fillers, and veneers.

✦ COMPETITIVE EDGE

In the competitive landscape of dental care, offering innovative services like Waterlase ReNew Skin Resurfacing provides a distinct competitive edge. Stay ahead of the curve and stand out by **expanding your service offerings** and attract a discerning clientele that prioritizes a higher level of care in esthetics and oral health.

✦ INCREASE PATIENT SATISFACTION AND LOYALTY

Great results not only enhance patient satisfaction but also fosters loyalty, as patients are more likely to continue their relationship with a dental practice which is not only looking out for their oral health, but **makes them look great as well**. Packaging facial esthetics with smile design makeovers is a highly in-demand, value add to the patient, who are **more likely to refer their friends** once they get *“Your skin looks amazing!”* comments. This value added procedure allows you to increase your competitive edge with esthetic providers.



Courtesy of Dr. Mason Miner

Introduction

Contraindications and Treatment Considerations

Consult the Waterlase iPlus User Manual for additional information, including contraindications, expected transient events, possible risks, and adverse effects.



PATIENT SKIN TYPES

Patient selection and good treatment planning will help prevent unwanted side effects such as hyperpigmentation. Avoid treatment on skin with recent sunburns, diseases, infections, acne outbreak, and tattoos.

RECENT SPRAY TANNING

Spray tans involve the application of pigmented substances to the skin. Treating recently tanned skin with lasers can lead to uneven results, as the laser may interact with the pigments in the tan, potentially causing discoloration or undesirable outcomes.

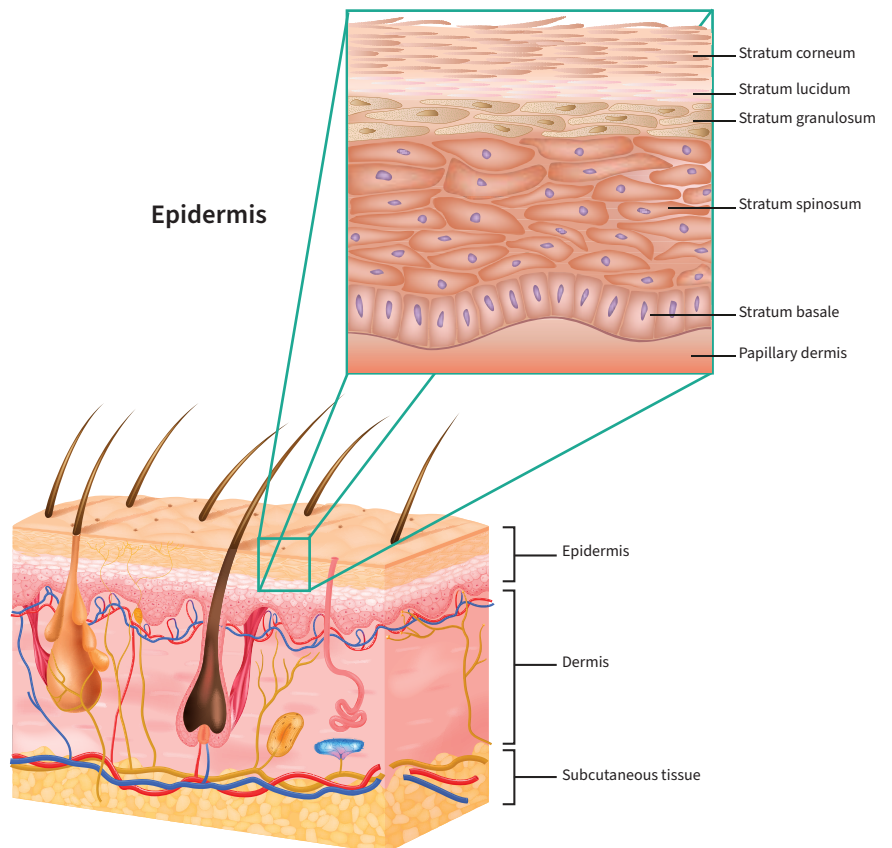
HISTORY OF SKIN CANCER

A history of skin cancer raises concerns about the skin's overall health and ability to heal. Laser treatments involve controlled damage to the skin for rejuvenation. In individuals with a history of skin cancer, the skin may be more vulnerable, and the procedure could potentially exacerbate existing conditions or interfere with ongoing treatments.

The Extra Cellular Matrix

Understanding the composition and function of the Extra Cellular Matrix (ECM) is integral to appreciating how Waterlase ReNew leverages this natural framework. The ECM is a dynamic and intricate structure essential for tissue reconstruction during healing.

ECM is a reservoir of collagen, growth factors, and other bioactive components that regulate and contribute to skin regeneration. The "pixelated" ablation pattern from the fractional treatment leaves most of the skin and ECM intact, leaving much of the ECM reservoir healthy and untouched. The un-injured ECM surrounding the fractional spots contributes growth factors and collagen to quickly heal and rebuild the perforated skin. This process allows for fast repair because of the migration and proliferation of surrounding healthy cells from the ECM. The healing process is much longer with other laser resurfacing methods such as non-fractional treatments, where the full skin layer is removed.



Patient Susceptibility and Follow-Up

Be aware of increased susceptibility to irritation or infection post-treatment. Proper follow-up care, diagnosis, and treatment can avoid delayed wound healing, scarring, or spread of infection.

Pre-Operative Care



Patient Consultation and Medical History

Conduct a thorough patient consultation, including a comprehensive medical history assessment. This step lays the foundation for personalized care and identifies any pre-existing conditions that may impact the procedure.

Evaluation of Pigmented Lesions

Pigmented lesions should be evaluated for potential skin cancer prior to treatment. If these are present, the lesion should not be treated unless diagnosed as benign.

Setting Patient Expectations

Clearly communicate with patients regarding the anticipated social downtime—typically 48-72 hours. Managing patient expectations is crucial for a positive overall experience and satisfaction with the results.

Skin Preparation

Closely shave hair in the treatment area, clean the skin, including removal of all make-up and other skin care products. Any creams or products left on the skin will interfere with the light and may cause irregular results and unwanted side-effects.

Topical Anesthetic

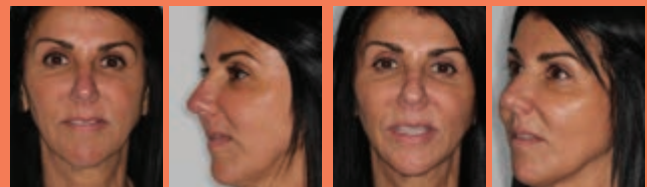
In many cases topical anesthetic is simply not needed, thanks to the proprietary integrated water cooling effect of Waterlase. If using, remove anesthetic completely prior to treatment. Any residual anesthetic will absorb light and may cause irregular results or unwanted side effects.

Alcohol Wiping and Hygiene

Wipe the skin with alcohol before treatment, ensuring a clean and sterile environment. Maintain proper hygiene to prevent complications, and allow the skin to dry before treating with the laser.



MARKETING TIP:



Pre-operative photographs (with a signed media release form) should be taken with consistent technique (patient positioning, camera settings, and room lighting) prior to the initial treatment for general reference. Printed pre-operative photos can also be used to compare and duplicate the same patient position when taking follow-up photos. Creating a pre-op and post op video of the patients input on how treatment felt is a KEY element for Social Media and gaining referrals!



Scan the QR code or visit [biolase.com/fractional](https://www.biolase.com/fractional) to view testimonial videos and case photos



Summation

By comprehensively addressing preoperative care considerations, clinicians instill confidence in both themselves and their patients, laying the groundwork for a smooth (pun intended) and effective Waterlase ReNew Skin Resurfacing procedure.

Treatment Technique

Choosing Appropriate Laser Settings

Optimal outcomes begin with choosing the appropriate settings that align with the desired treatment goals.

✦ WATTS INFLUENCE TISSUE INTERACTION

Higher settings in Power (Watts) contribute to increased energy delivery during the procedure. Higher energy results in deeper interaction with the targeted skin tissues.

✦ DEEPER PENETRATION AND STIMULATION

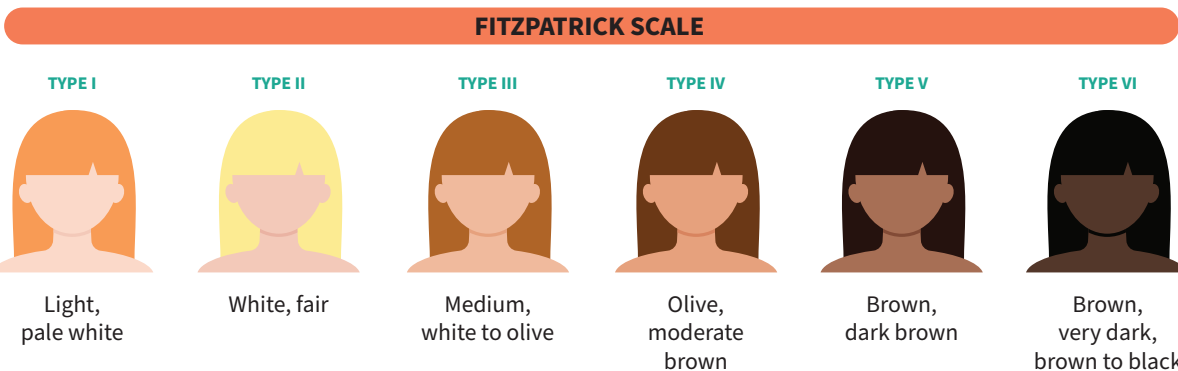
Higher power settings enable the laser to penetrate deeper into the skin layers, promoting greater stimulation of collagen and elastin. This depth of interaction enhances the skin's regenerative response, addressing concerns such as fine lines, wrinkles, and uneven texture. AAFE suggests lowering wattage for thinner skin.

✦ ADDRESSING SPECIFIC DERMATOLOGICAL ISSUES

Conditions requiring more aggressive treatment, such as deep wrinkles or pronounced skin damage, can be more effectively addressed by tailoring the settings to deliver a more impactful and targeted laser treatment, and multiple sessions may be required.

✦ BALANCING SAFETY AND EFFICACY

Clinicians must assess each patient's skin type, sensitivity, and the specific nature of the dermatological concerns to ensure a personalized and safe approach to treatment.



Handpiece Placement and Movement Technique

1



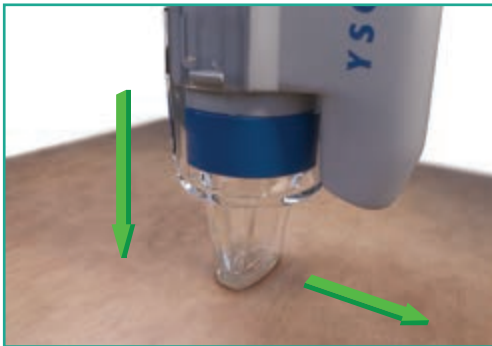
Hold handpiece perpendicular to the skin with a new disposable applicator in contact with skin.

2



Hold the handpiece with the air/water spray nozzle pointed in the direction of intended travel.

3



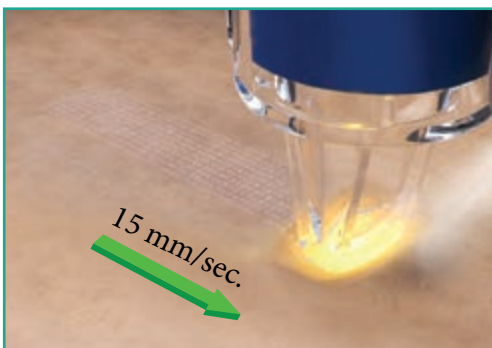
Maintain light pressure to ensure consistent contact and **initiate movement before activating the laser** using the footswitch.

4



Do not pull the handpiece away or tilt the handpiece during treatment.

5



Activating the Laser: Key to the procedure is the consistent application of the laser to create a single row of perforations.

6



Release the footswitch before repositioning the handpiece for the next treatment area. Ensure a systematic and controlled approach with consistent, steady movement.



SCAN THE QR CODE TO WATCH THE CLINICAL ANIMATION



Safety Considerations

- ✦ Gauze or paper products should be moistened with water
- ✦ **Always use protective eyewear** for 2780nm wavelength laser. Laser safety eyewear is required for everyone in the room.
- ✦ Avoid treating the hairline and eyebrow area. **Do not** treat areas with tattoos, including permanent make-up.
- ✦ Periodically check the disposable applicator for debris and wipe the opening.
- ✦ Pinpoint bleeding may occur during treatment. It can easily be controlled with manual pressure.
- ✦ **Always use a test spot** prior, to the initial treatment to assess the suitability of settings. If the patient experiences pain, stop treatment, or decrease the power, increase the air and or water setting. Ice or topical anesthetic may be applied prior to treatment, if necessary.

Postoperative Care

Congratulations on completing the laser skin resurfacing procedure with Waterlase ReNew! This section provides tips for optimal recovery and long-lasting results.

Immediately Post-Treatment

Immediately following treatment, apply a thick layer of occlusive ointment. The AAFE recommends *Aquaphor Healing Ointment*. Reapply as needed to maintain a thin continuous layer for 3-7 days post-treatment. Topical antibiotics (e.g., *Neosporin*, *Polysporin* or *Bacitracin*) are common sources for Contact Dermatitis and should be avoided.

Managing Post-Treatment Bleeding and Erythema

Pinpoint bleeding may increase and continue after treatment. This usually resolves within 24 hours. Erythema (superficial reddening) is a normal reaction to treatment. More aggressive treatments may result in longer lasting erythema, which resolves with time.

Swelling and Burning Sensation

Edema (swelling) may occur in some patients. Some patients experience a burning sensation immediately after treatment. Sleep with the head elevated in order to minimize edema. Burning sensations typically resolve within an hour after applying an occlusive ointment, such as *Aquaphor*.



Re-epithelialization and Make-up Application

Re-epithelialization occurs within 2 or 3 days after treatment for most patients. Encourage the patient to avoid applying makeup to the treated skin for at least 7 days.

✦ MICRO-INJURIES PROPEL NATURAL REPAIR

Laser energy delicately induces micro-injuries, activating the skin's innate repair mechanism.

✦ CELLULAR RENEWAL UNFOLDS

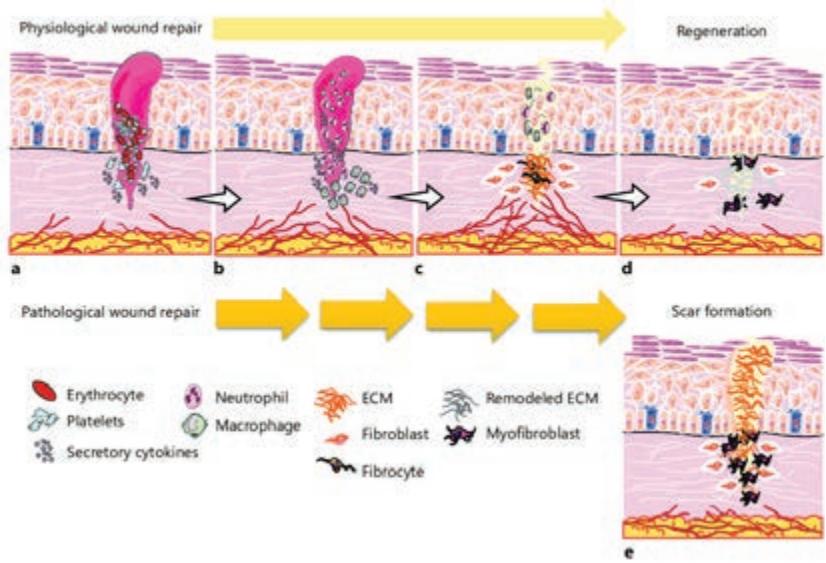
Basal cells, like diligent artisans, proliferate and migrate, sculpting new skin layers that refresh the skin surface.

✦ INTEGRATION INTO THE OUTER SKIN

Newly formed cells seamlessly integrate into the outer layer, enhancing the skin's texture and appearance.

✦ COLLAGEN AND ELASTIN CREATION ENHANCE RESILIENCE

During this process, the skin undergoes the creation of new collagen and elastin, contributing significantly to improved firmness and resilience.



Source: *The Emerging Therapeutic Targets for Scar Management: Genetic and Epigenetic Landscapes* - Scientific Figure on ResearchGate.



Sun Exposure and Protection

Advise patients to avoid sun exposure post-treatment and to use a broad-spectrum, non-tinted, and fragrance-free, **SPF 50+ sunscreen** for 7-14 days post-treatment.

Post-Operative Creams

Introduce recommended post-operative creams, including *Aquaphor* or *Vaseline*, broad-spectrum, non-tinted, fragrance-free SPF 50+ sunscreen for 7-14 days, Vitamin C cream or serum, Hyaluronic acid cream or serum, and ALA (5-aminolevulinic acid) cream for chemical peel effects. The AAFE recommends Comfortox Restore.



Waterlase Fractional Handpiece Tips

Remember to replace the single-use, clear Waterlase Fractional Handpiece Tip after each procedure to prevent cross-contamination. Visit store.biolase.com to purchase additional tips and accessories.

Effective postoperative care is key to ensuring optimal healing and prolonged results. By following these guidelines, clinicians can contribute to a smooth recovery and enhance patient satisfaction.

Impressive Results

BEFORE

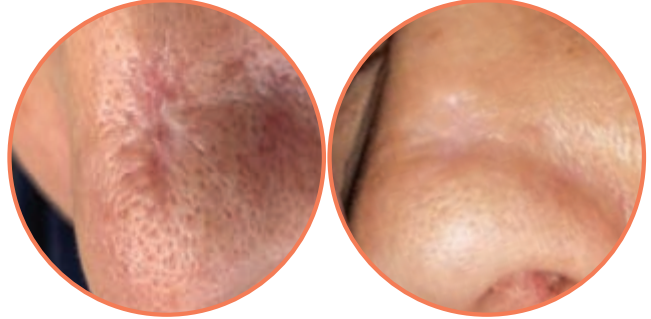
AFTER



Courtesy of Dr. Pilar Martin Santiago

BEFORE

AFTER



Courtesy of Dr. Barbelescu

BEFORE

AFTER



Courtesy of Dr. Mason Miner

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Courtesy of Dr. Pilar Martin Santiago

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Courtesy of Dr. Mason Miner

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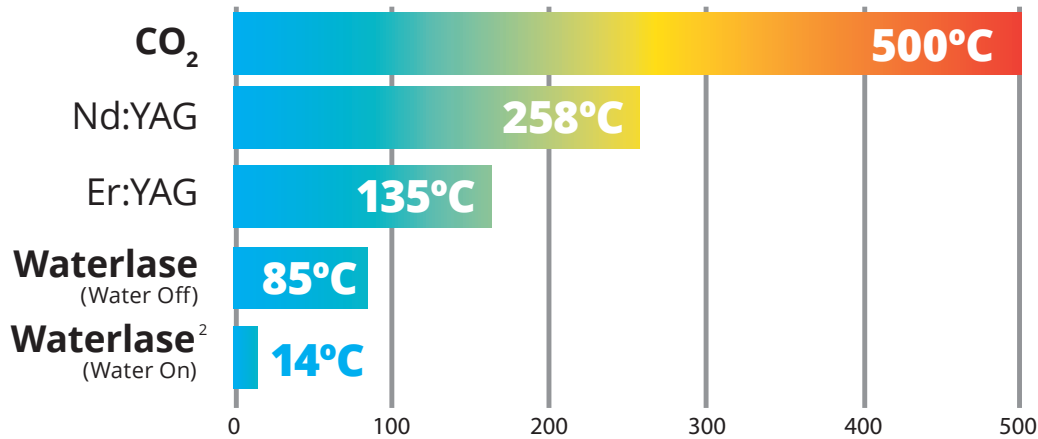
Courtesy of Dr. Peter Harnois



THE WATERLASE FRACTIONAL HANDPIECE™

Waterlase vs. CO₂ Lasers

Waterlase produces lower thermal effects than CO₂ lasers — even with the water turned off, CO₂ is **over five times hotter than Waterlase!**¹



¹ Kawamura R, Mizutani K, Lin T, et al. *Ex Vivo Evaluation of Gingival Ablation with Various Laser Systems and Electroscalpel. Photobiomodulation, Photomedicine, and Laser Surgery.* 2020;38(6):364-373. doi:10.1089/photob.2019.47131.

What Patients are saying about Waterlase ReNew Skin Resurfacing

“My fine wrinkles and deeper set wrinkles were diminished. I’m very pleased so far. Also, my skin tone and color have greatly improved. Just overall, a more vibrant and youthful appearance.”

— Carol M.

“I was starting to see minor laxity around my jawline and chest, and definitely more sun spots. Since my third treatment, I’ve significantly noticed tighter skin and less spots, and just more of an even skin tone.”

— Heather O.

“My skin is soft and glowing all of the time. I don’t need to wear foundation, only moisturizer, it’s beautiful. I love it! I want to continue this indefinitely.”

— Dr. K. Keturka





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