

Aerolase NeoElite:

A New Way to Address and Eradicate All Types of Acne

BY KSENIYA KOBETS, MD

Affecting up to 50 million Americans annually, acne is the most common skin condition in the United States, according to the American Academy of Dermatology. Acne is associated with physical and emotional scars and has been linked to poor quality of life, depression, and anxiety.

More than 5.1 million people seek medical treatment for acne, but satisfaction rates with therapy remain low. Topical therapy, including retinoids and benzoyl peroxide, is often first-line therapy for acne, but topical drugs can be ineffective, take many weeks to start working and are associated with side effects such as sun sensitivity, skin dryness and irritation. Compliance with topical regimens is also an obstacle.

As many as 65 percent of acne patients do not comply with topical prescriptions, and dermatologists remain powerless. Control over patient outcome is lost as soon as a prescription is dispensed. Systemic therapies such as oral isotretinoin and/or antibiotics confer side effects, may require extensive monitoring and in some cases remain expensive, even with insurance. Acne medications can cost up to \$1,000 per month.

The bottom line is that dermatologists are losing revenue — and patients — with conventional acne treatments.

Many acne patients are open and enthusiastic about the idea of using energy-based devices to eradicate acne but hesitant and weary due to potential pain and downtime; Aerolase breaks those pre-conceived notions. Aerolase's NeoElite, a 650-microsecond 1064nm Nd:YAG laser, is a gentle, effective and cost-efficient method for preventing acne, treating current inflammation and preventing scarring. Unlike other lasers that treat acne, Aerolase's NeoElite can safely be used on any type or severity of acne and is safe for all skin tones.

The Aerolase NeoElite uses light energy to target sebum production, inflammation and Propionibacterium acnes bacteria. This is the only laser that addresses all of the causative factors of acne. Most other laser treatments for acne can help reduce inflammation or help destroy some of the acne bacte-



Top: Patient is shown before (left) and after (right) 12 weekly Aerolase NeoElite treatments plus low-dose isotretinoin. Bottom: Before (left) and after (right) Aerolase NeoElite treatments.

ria, but 650-microsecond therapy stops the root cause of acne in its tracks by reducing sebum output from the sebaceous gland. There are very few devices that we can use on active acne. We know that treatment with NeoElite will help calm these lesions. It can be used right before an event, lessening acne and providing a glow.

In addition to treating acne, the laser energy also induces neocollagenesis and improvement of tone, texture and tightening after repeated treatments. Most acne patients desire these benefits and they can't be attained with topical or systemic therapies.

WHAT THE LITERATURE SHOWS

A study¹ compared laser treatment of moderate to severe acne with The NeoElite to a sham treatment. The study comprised 20 subjects aged 12-40 with moderate to severe acne. Subjects received three treatments spaced two weeks apart and were evaluated for investigator global improvement

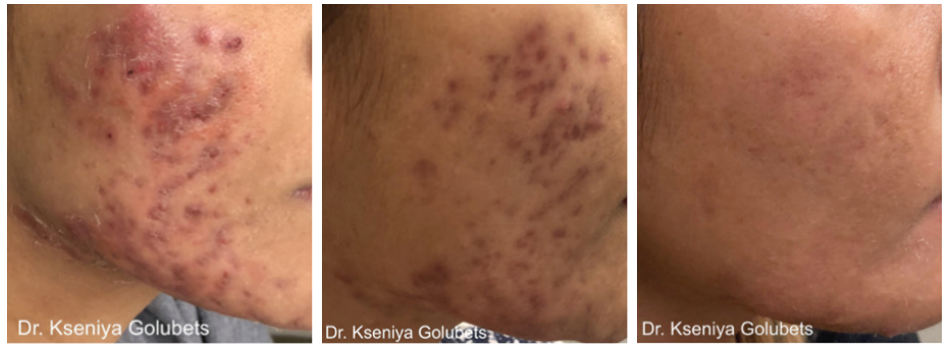
(IGA), improvement in inflammatory lesions, improvement in comedonal lesions, total porphyrin score and total sebum score. Participants in the laser-treated group showed IGA improvement of 26 percent, compared with seven percent seen in the sham group. Moreover, there was a 42 percent reduction in inflammatory lesions among participants in the laser arm versus 26 percent for the sham group. The laser-treated group showed a:

- 23 percent decrease in total porphyrin score vs. 12 percent for sham group
- 18 percent decrease in sebumeter reading vs. nine percent for sham group

In one double-blinded, randomized, three-center study² of 60 subjects ages 12 to 40 with moderate to severe acne vulgaris, treatment with NeoElite resulted in improvements in sebum values, porphyrin count and the number of inflammatory and non-inflammatory lesions. By contrast, individuals randomized to the control group showed either worsening or no improvement in inflammatory and non-inflammatory lesions from baseline up until 12-week follow up. This study is slated for publication and will be the basis of a presentation at the 2020 American Society for Laser Medicine and Surgery (ASLMS) meeting.

Treatment with NeoElite can be combined with topical or systemic medical therapies, including isotretinoin and intralésional steroid injections.

Specifically, the combination therapy of NeoElite and low-dose isotretinoin (0.2-0.3mg/kg/day) is a safe and effective for patients with acne and atrophic scars who are genetically prone to the formation of post-acne scarring, according to research³ presented at the 2019 ASLMS meeting in Denver. This combination effectively stimulates the synthesis and reorganization of collagen without the risk of excessive tissue heating and pain. Moreover, pathological scarring common



Left: Patient is shown after months of treatment with doxycycline, spironolactone, intralesional injections and topical retinoids. **Middle:** Patient after two Aerolase NeoElite treatments. **Right:** After 5 Aerolase NeoElite treatments.

in patients with acne was not observed and improvement of pre-existing scars was observed in many of the patients.

In general, my acne patients receive five monthly treatments of NeoElite with interlesional injections or chemical peels. Each session lasts 10 to 15 minutes. The pulses enter the skin so rapidly that patients feel no pain. The impressive results keep patients coming back.

There is low no downtime and patient out-of-pocket costs are relatively reasonable. Insurers do not cover the cost of acne treatment with the NeoElite, but they do cover the cost of treating psoriasis with this laser. Most patients are willing to pay when they learn the benefits of treating acne with this gentle laser.

The device is easy to use. There are no disposables. The handpiece does not contact the skin and the laser pulses are much gentler than other laser systems. This makes it a sanitary treatment.

The NeoElite is highly versatile. In addition to treating acne, this device also helps reduce melasma, psoriatic lesions, pigmented lesions, rosacea, redness, unwanted hair, spider veins, wrinkles and fine lines. Thanks in part to the quick results it produces when used alone or in combination with other modalities, the new laser therapy allows dermatologists to make more money, keep patients in the office and retain patients who would otherwise go elsewhere for a solution that works. ■

Key Attributes

- > Targets all causative factors of acne
- > Highly versatile
- > Sanitary
- > Cost-efficient
- > Cost-effective
- > Gentle
- > Safe on all skin types
- > Safe during pregnancy



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1. Gold M, Goldberg DJ, Nestor MS. Current treatments of acne: Medications, lights, lasers, and a novel 650-Is 1064-nm Nd:YAG laser. *J Cosmet Dermatol.* 2017;00:1-16.

2. Khatri K, Geraskova N. Clinical Study: Treatment of moderate to severe acne with a 650-microsecond pulsed Nd:YAG 1064-nm laser using high fluences and stacked pulses at a low repetition rate. Paper presented at: American Society for Laser Medicine and Surgery 2014 Annual Conference; April 2-6, 2014; Phoenix, AZ.

3. Evgeniyevna MN, et al. Treatment of moderate to severe acne and post acne scars with 650 microsecond 1064nm laser combined with low-dose Isotretinoin. Presented at 2019 American Society for Laser Medicine and Surgery.