



The Invasion of the Picoseconds

Pico devices are finding their niche, with expanded applications that may make them more attractive for practices.

BY MICHAEL H GOLD, MD

SECTION EDITOR: JOEL SCHLESSINGER, MD

Picosecond technology has already changed the way we approach laser tattoo removal, but given the high cost of these devices, they need to truly become a workhorse for aesthetic practice.

Different than nanosecond lasers, picos are based on the photo-acoustic effect and emit ultra short pulses. Some newer indications include treating pigment, and fractionated picos can address wrinkles, scars, and texture quickly—but these capabilities may just be the beginning.

There are already a handful of pico devices available in the US including Syneron's PicoWay, Cynosure's Picosure, Cutera's Pico Genesis, Alma Laser's PicoClear, and Lutronics's Pico+4. We have performed clinical work with the PicoWay looking at wrinkles and acne scars with the Resolve fractional hand pieces and results to date have been very exciting and promising. What's more, there are newer picosecond lasers from other countries especially South Korea that are making an impact around the world. Some may find their way to our shores in the very near future.

MORE BELLS, MORE WHISTLES?

These next-generation devices have not been subject to rigorous study in the US so most of what we know or have heard is anecdotal at this point. They have more fractionated hand pieces than those that we currently have access to in the US. Instead of two or three wavelengths, they cover six or seven individual ones, allowing for uberprecise targeting of such hard-to-treat, resistant hues such as yellow, green, or blue. Syneron's PicoWay comprises 1064nm, 532nm, and the newer 785nm, but the ability match specific wavelengths to specific colors in tattoos is a game-changing idea.

For example, Wontech's PicoCare comprises multiple wavelengths and has eight to 10 different hand pieces to eradicate lesions and enhance facial rejuvenation quicker

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and easier than ever before. This device received European Medical Devices Directive certification and has a manufacturing license from Korea's Ministry of Food and Drug Safety. They will likely seek clearance from the US Food and Drug Administration as well. Aesthetic laser supplier Novus Medical will distribute Wontech devices in the UK. I will be starting clinical trials of the Wontech PicoCare in March 2017 and will hopefully report my findings at upcoming medical meetings.

PICO DEVICES IN THE US

PicoWay (Syneron)
Picosure (Cynosure)
Pico Genesis (Cutera)
PicoClear (Alma)
Pico+4 (Lutronics)

Laser Outlook

According to the research group, Markets and Markets, "The global aesthetic/cosmetic lasers market is projected to reach \$1,132.7 Million by 2021 from \$697.6 Million in 2016, growing at a CAGR of 10.2% during the forecast period."

PICO PRICE WARS?

The new pico-technology is fascinating. If it passes muster, we may see the bigger US companies begin to develop similar technologies as the market may demand them.

As it stands, picosecond lasers are expensive to manufacture and to buy, but when, and if, other machines come the US at lower price points, all companies will be forced to come down in price remain competitive.

These lasers can be a very good investment depending on the scope of your practice, and in the future they may offer even more return on investment for busy aesthetic surgeons. ■

This article is adapted from Dr. Gold's presentation at Cosmetic Surgery Forum 2016. For information or to register for Cosmetic Surgery Forum 2017, to be held November 29-December 2 at the Bellagio, visit cosmeticsurgeryforum.com.

Michael Gold, MD, is the founder of Gold Skin Care Center, Advanced Aesthetics Medical Spa, The Laser & Rejuvenation Center, and Tennessee Clinical Research Center in Nashville.



DIGITAL EXTRA



Watch Dermtube for more intel on new applications for picosecond lasers from Dr. Gold. Dr. Gold spoke with Joel Cohen, MD at Cosmetic Surgery Forum in Las Vegas.

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