

Soprano Laser Delivers Effective Treatment for Permanent Hair Removal

BY BOB KRONEMYER, ASSOCIATE EDITOR

Practitioners are singing the praises of the Soprano diode laser from Alma Lasers, Inc. (Ft. Lauderdale, Fla.) because it provides excellent clinical results, with a low risk of side effects and minimal patient discomfort. Treatment for hair removal is also fast because of a large spot size and a super fast pulse repetition rate at a very high fluence.

Representing the new gold standard for 810 nm diode hair removal technology, the Soprano features 600 watt continuous wave to ensure homogenous distribution of energy across the entire pulse. The uniformity of the delivered energy leads to better clinical results, milder discomfort, and little or no skin damage. The Soprano laser can also be used safely on all skin types, including tanned skin.

The six preset programs – one for each skin type – translates into a short learning curve and an earlier return on investment. Pulse widths range from 10 to 1350 ms, and there is a large spot size of 10 x 12 mm. “The rectangular spot size slides along the patient’s skin, so you cover the area very efficiently, unlike overlapping circles,” said Madeline Krauss, M.D., a dermatologist in private practice in Wellesley, Mass.

At 3 Hz per repetition rate, the Soprano laser can deliver up to 73 J/cm². “Even at high energy, there is no need to slow down,” Dr. Krauss stated. “I can treat a patient’s back in 15 minutes. Ergonomically, the system is very nice, too, because of the sliding motion.”

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The touch screen user interface is intuitive and easy to use. “You simply choose the program, the energy level in joules and the speed. So it is much easier when delegating the procedure,” Dr. Krauss noted.

The Soprano provides the fastest throughput with the highest fluence (120 J/cm²) on the market. In addition, the laser’s unique pulse structure incorporates two

discreet pulses. The first is a preheating long pulse that safely heats tissue; the second pulse is short and effectively destroys the hair follicle and its surrounding vasculature. “I think incorporating two pulses yields better results,” Dr. Krauss said. “It takes away the guesswork of blending the shorter and longer pulses.”

The Soprano also offers dual cooling mechanisms for superior epidermal preservation: sapphire tip contact cooling and an integrated Cryo5 Zimmer (cold air) adapter. The combined cooling technologies (DualChill)

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increases patient comfort and allows a higher fluence for any given skin type. “Not only is the cooled sapphire window touching the skin, but cold air hits the skin before the pulse for additional cooling,” Dr. Krauss explained. “This cool blowing sensation distracts the patient from any discomfort of the procedure. The Soprano is engineered in such a way that the air is placed in the perfect position. Air cooling occurs right before you move the handpiece onto your next targeted area.”

Dr. Krauss appreciates the fact that the Soprano laser requires no consumables. The company’s warranty on the machine has also been extended because “they are so confident of its longevity,” she said. “The Soprano has made both the patients and the operators very satisfied. Whenever you offer a potentially uncomfortable procedure like hair removal, making it quicker and less uncomfortable definitely increases word-of-mouth referrals. Because the Soprano is a long pulsed diode, there are a lot fewer side effects, such as hyperpigmentation. Anyone who has used a laser for hair removal will be very pleased.”

Dr. Krauss uses the Soprano three to four times a day. “Outcomes are comparable to any other diode laser on the market,” she stated. The light weight system can also be conveniently moved between treatment rooms.

“The Soprano is relatively painless compared to some of the other machines,” said Mary Holmes, a certified physician assistant at Davis Laser Center, Inc. in Davis, Calif., where she is in practice with her husband, Kyle Holmes, M.D. “Treatment is much better tolerated than with older 810 diodes. In fact, I don’t use any topical anesthetic.”

With four to six sessions, nearly all patients achieve 90% to 95% clearance. “For the face, treatments are scheduled every four weeks,” Ms. Holmes said. “But for the bikini line, sessions are once every six weeks, and lower legs once every two months. Other systems would allow us to only go up to 2 Hz or less. However, I’m now able to complete a full back in about 45 minutes. Other systems might take 75 to 90 minutes.”

The Soprano is able to be placed directly on the skin. “Some of the other systems need a spacer,” Ms. Holmes conveyed. “With the slight compression of the Soprano, you can proceed very quickly and very safely. I have yet to encounter any poor outcomes. Having a continuous wave diode laser increases safety and patient comfort. Effectiveness is also better because you can deliver more joules more comfortably. You can also change your pulse widths to make them slightly shorter, in order to treat thinner, lighter hairs a little more effectively.”

“Because of the continuous wave technology, the Soprano is a much safer and predictable system,” said Andrea Hamel, R.N., who is director of Complete Laser

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Clinic with locations in Asheville and Morganton, N.C. “There is no doubt that continuous wave is the newest technology in diode hair removal. Before, when you had peaks, thermal relaxation time was increased. But peaks are not as predictable as continuous wave. Continuous wave takes all the guesswork out.”

Ms. Hamel said she was hesitant at first to use the combined cooling. “But now I love it,” she related. “The



Before Tx



After Soprano Tx

Photos courtesy of Kyle Holmes, M.D.

hose is all that you use and it is very light. I can also control the amount of cooling. A skilled operator should be able to comfortably do a back in 30 minutes, compared to at least 60 minutes with other systems. The Soprano has cut my time in half. Patients also don’t have to schedule as much time for treatment.”

There is also no downtime. “With other diode systems, you end up with perifolliculitis edema, redness and irritation,” Ms. Hamel said. “We’re located at the mall in Asheville, where patients can come in and have their lip treated. Fifteen minutes later, they don’t look like they have had anything done. And no post treatment ointment is required.”

The typical treatment protocol is four to six treatments, spaced six to eight weeks apart. “Patients can expect at least 90% hair removal after five sessions,” said Ms. Hamel, who is in practice with her husband, John Hamel, M.D. “For the most part, we’ve eliminated one session. So the Soprano is more effective than other diode lasers. We have also seen no side effects. I highly recommend the Soprano laser for any practice that does large volume hair removal.” ■