

# Aesthetic Buyers Guide®

The Leading Aesthetic Practice Resource™

Primary Care  
Edition

Autumn 2006

Circulation: 20,000

Facial Rejuvenation  
Review

New Aesthetic  
Technologies

Practice Building  
Solutions

[www.miinews.com](http://www.miinews.com)

## Cynosure's Affirm System Advances Skin Rejuvenation

Cynosure, Inc. (Westford, Mass.) designed the new Affirm laser system to use innovative combined apex pulse (CAP) technology to produce varying levels of heat distribution in the skin for rejuvenation, wrinkle reduction and treatment of acne scars. This 1440 nm wavelength Nd:YAG laser is also effective on all skin types, including Asian skin, and most patients do not require time consuming topical anesthesia or the application and removal of dye that is required by some other fractional resurfacing technology.

"The Affirm is absolutely a good device for primary care physicians to invest in. I believe it is the newest technology for anti-aging treatments such as wrinkles, dyschromia and overall rejuvenation of aged skin," said Bruce Katz, M.D., director of JUVA Skin and Laser Center in New York City.

Dr. Katz noted that the Affirm is a significant improvement over fractional resurfacing. For example, the Fraxel laser "creates microthermal zones in the skin at a depth of about 500 to 600 microns in the dermis.

But you don't need to go that deep because most sun damage occurs at a depth of roughly 200 to 300 microns, which is the targeted depth of the Affirm. The Affirm also delivers energy between the microthermal zones. So not only are you creating new collagen in the microthermal zones, but the skin between the microthermal zones also achieves collagen stimulation."

For patients with fine wrinkling, lentigines and mild-to-moderate acne scarring Dr. Katz schedules the Affirm. "We are even finding good results now with melasma." Treatment is every two to three weeks, for a total of three or four sessions. "We've had excellent results and patients are very happy. In fact, improvement continues for several months after the last treatment."

Affirm's handpiece is also "very easy to use," said Dr. Katz, who uses SmartCool air cooling in conjunction with the handpiece. "Treatment is comfortable for the patient and you can move quickly at 1.5 Hz. The 10 mm spot size is also large. You are

*continued on page 6*

Primary Care  
Practice  
Development  
.....

Page 46

Monica Bonakdar, M.D.

PSRST STD  
U.S. POSTAGE PAID  
PERMIT NO. 1269  
LONG BEACH, CA

continued from page 1

able to cover the face very rapidly.” The learning curve of the Affirm “is pretty quick.” Overall, “the Affirm is a nice way to get into the aesthetic market. There is little risk to the patient, as long as the operator is trained properly. However, we usually recommend only two passes because if you do more, you can end up with blistering. We also recommend starting at low fluences, then gradually increasing the fluence with each treatment as the patient tolerates it.”

Brian Biesman, M.D., an ocular plastic surgeon in private practice in Nashville, Tenn. agrees, “The Affirm laser is certainly a better device than the Fraxel laser because you don’t use topical anesthesia and there is no dye to apply or remove. For physicians, not having to administer a topical anesthesia might be advantageous. We also seem to achieve good aesthetic results with the Affirm.”

*“You are usually able to significantly reduce the appearance of brown discoloration and enhance the global appearance of the skin. Skin is smoother and fuller and more youthful.”*

Typically, Dr. Biesman schedules a series of four to six sessions, spaced three to four weeks apart. A normal session lasts 20 minutes. “An ideal candidate is someone with mild-to-moderate photo-aging or pigmentation. But I don’t think the Affirm laser is appropriate for vascular lesions, such as those patients with rosacea or flushing. However, patients with lentigines and fine wrinkling seem to do very well.



Periorcular wrinkles before Tx

One month after three Affirm treatments

Photos courtesy of Robert Weiss, M.D.

You are usually able to significantly reduce the appearance of brown discoloration and enhance the global appearance of the skin. Skin is smoother and fuller and more youthful. Still, a large part of the duration of effect is related to patient practices, such as sun exposure, cigarette smoking and diet. Potentially, though, the most important factor is genetics. That said, my sense is that the effect of the Affirm laser will probably last one to two years.”

Marketing the procedure has also “been very easy. I would recommend focusing on internal marketing. That has proven the most successful for us. The advantage of primary care practices is that they have very large groups of patients who come in periodically. Even if you have elderly patients, often times younger family members accompany them,” Dr. Biesman noted.

A patient visit with competing technologies “can take up to two and one half hours, depending on what we are doing.” This compares to a mere 30 minutes on average with the Affirm. Moreover, “considering the depth of injury produced by the Affirm, it is quite a safe device and patients seem to tolerate treatment very well.”

“The Affirm laser has the intent of treating what I call the shallow region of aged skin,” explained Ray Sierra, Ph.D., chief technology officer at Cynosure. “If you look at a histological section of skin as it is aging, there is a relatively thin region near the surface that is often referred to as solar elastosis or sun damaged skin. You can see in the histology that the collagen has become thin and that the elastin is not very firm. This region extends from the surface down to roughly 200 microns. The existing part of the Affirm stimulates that region.”

In a 20 patient clinical study of the Affirm laser conducted at the Maryland Laser, Skin and Vein Institute in Hunt Valley, Md., patients received at least three treatments at four week intervals, and 90% of patients completed at least five sessions. Treatment areas received generally one to three passes.

Overall, 78% of patients achieved observer graded improvements of at least 26% to 50% (on a quartile



Perioral wrinkles before Tx

Six months after three Affirm treatments

Photos courtesy of Robert Weiss, M.D.

scale). Treatments were also well tolerated, with subjects reporting an average discomfort of 2.3 (moderate discomfort) on a scale of zero to five (five being the worst).

“These results are great, considering there is so little recovery time,” said Margaret Weiss, M.D., co-director at the Maryland Laser, Skin and Vein Institute. “We’ve had experience in the past with overly exaggerated results from other non-ablative devices. The Affirm seems to be showing more of a difference in improving lines, texture and scarring. Most patients seem to notice an improvement after their second treatment. But some patients remark that their skin feels smoother or looks better after only one session.”

---

*“Most patients seem to notice an improvement after their second treatment. But some patients remark that their skin feels smoother or looks better after only one session.”*

---

Dr. Weiss also pointed out that men find the Affirm laser “a very attractive treatment” compared to the Fraxel laser because there is no significant recovery time. “The worst-case scenario is looking like you are sunburned for a few days and a slight risk of a little crusting. Men also don’t like the dye that is necessary with the Fraxel laser. Patients can be in and out of the office in about 30 minutes with the Affirm. But with the Fraxel laser, we end up occupying a room for a long time.”

Another noteworthy feature is the Affirm’s safety profile. “The risk of a patient developing blisters or crusting of the skin is very low. The risk of pigmentation change is also extremely small. The sun sensitivity does not last very long either,” said Dr. Weiss, an assistant professor of dermatology at The Johns Hopkins University School of Medicine.” In addition, the Affirm’s handpiece is lightweight, “so it’s physically easy to use. However, you need to have the handpiece in full contact with the skin for the energy to transmit into the skin. Hence, you don’t want to treat too fast.”

Michael Gold, M.D., owner of Gold Skin Care Center in Nashville, Tenn., pointed out that of all the aesthetic light-based devices he has used, the Affirm laser “is as safe as they come. The proprietary CAP technology designed on the tip of the handpiece, in addition to the cooling apparatus, really takes care of patient comfort and cooling of the skin. You are also confining the energy to the top layers of the dermis, where you have your damage, so you are using less energy. As a result, there is less patient pain. With air cooling, treatment is virtually painless. We do not use topical anesthesia or local anesthesia. Patients like that.”

To date, there have been very few adverse events with the Affirm laser among all the clinical trials. “The Affirm is going to add to the repertoire of what these doctors are looking for,” said Dr. Gold, who participated in a portion of the original study. “Cynosure is a company that truly knows how to put a device together. Therefore, you are getting incredible technology in that box. All the treatment indications are improving very nicely and quickly, including pigmented concerns like melasma, as well as acne scars. We’ve treated a lot of patients with the Affirm laser. I have yet to hear one patient who is not happy with the results or would not schedule treatment again.” ■

