Assessing the Current Spectrum of Dermatologic Devices

Here’s a look at the market with a focus on tips for finding the right fit for your practice.

BY TODD SCHLESINGER, MD

The realm of aesthetic devices is vast and continues to expand, leading recently to the emergence of high-quality at-home devices. For the dermatologist seeking to integrate a device for the first time or expand his/her service menu with additional devices, the selection of an appropriate system can be a challenge. To help practices navigate the device market and make wise patient care and practice planning decisions, I will review the device market and offer tips for identifying and evaluating new opportunities.

THE SPECTRUM OF DEVICES

The available systems can be broadly classified according to energy types, mainly light, radiofrequency, microwave, and ultrasound. Within the light category, the primary offerings are: narrow band light including low-level light therapy, intense pulsed broadband light (IPL, BBL), infrared, and coherent light or laser. Each energy type has a specific depth of penetration and tissue targets. As such, while there is a good deal of overlap with regard to the potential targets or effects of each energy device, there are some applications that are unique to a specific energy source. Furthermore, each energy source typically excels at a distinct range of applications, providing less impressive results for other applications.

The dermatologist looking to acquire a device must, therefore, assess each available system on the basis of what it does, and then seek to match those capabilities against the services the clinician wants to provide to patients. In a vast majority of practices, patients seek treatment for photodamaged skin. Light-based devices, specifically BBL or IPL, provide a good entrée into device-based treatment of photodamage for most clinicians. Benefits of IPL, especially for
the first-time adopter, include a broad range of effects and
hence flexibility, as well as a history of use. IPL is available
with a relatively small investment, yet it provides possibly
the broadest range of treatment options.

The “next step” for many practices is a laser, and this
represents a natural progression in terms of cosmetic pro-
cedures; for some practices, a laser can be a suitable first
acquisition, based on the types of services to be provided.
Compared to IPL, laser will provide for more specific treat-
ments, such as vascular lesions or deeper lines and wrinkles.
Laser could actually become a second-tier service for many
patients who have had IPL, such as an individual who wants
to address specific deeper rhytides.

THE ROLE OF DEVICES TODAY
Some practices wonder whether a device is essential for
cosmetic practice or if they can build a practice around
injectable agents only. The answer to this question
depends, of course, on the business model for the practice.
Certainly, some practices develop a thriving practice seg-
ment around injectables and topical anti-aging interven-
tions. The providers and patients are satisfied, and there is
no compelling reason to modify the status quo, unless the
desires of the practitioner or patients change.

It should be noted, though, that many practices will
experience pressure to expand beyond injectables and top-
icals. This pressure may come from within, as the clinician
desires to provide even better cosmetic results for patients,
or from without, as patients seek new options for cosmetic
treatment. Devices can be used to compliment or augment
fillers and injectables. Again, a crucial consideration is the
aesthetic goal and the ability of the device to reach it.

There is substantial support of combination injectable/
device approaches and also a good deal of anecdotal
evidence and reporting from the podium at major meet-
ings. It is essential to ensure the safety and efficacy of any
combination. For example, while I have had good results
using infrared devices in conjunction with poly-L-lactic acid
(Sculptra, Valeant) injections, I would caution use of the
same device with a more superficially placed dermal filler.

It should be noted that a device added to a primarily
injectables-based aesthetic practice need not be chosen for
use in conjunction with fillers or toxins. Instead, an ideal
device is likely one that lets the clinician expand his/her
skill and perhaps makes it possible to target a condition or
complaint that existing services cannot address.

BRIDGING THE GAP
The concept of photodynamic therapy (PDT) continues to
develop in dermatology, and the technique may have bearing
on a practice’s decision to purchase or not to purchase
a particular device. PDT, in simplest terms, involves the
application of a topical photosensitizer to the skin followed
by application of an appropriate light source. In the US,
5-aminolevulinic acid (Levulan, DUSA) and methyl ami-
nolevulinate (Metvixia, Galderma) are approved as topical
photosensitizers for the treatment of actinic keratoses, and
treatment was shown to provide some overall rejuvenat-
ing effects for many patients. A novel photosensitizer
(Allumera, Photocure) is now available in the US, marketed
as a cosmetic. Allumera has been shown in small studies to
improve the texture, tone, and evenness of photodamaged
skin when combined with light in a PDT fashion.

Photodynamic cosmetic therapy enhances the effects
of light therapy and may in that sense expand the physi-
cian’s treatment options. As such, incorporating PDT may
present an opportunity for a clinician to offer enhanced
results or expand the level of service without having to
incorporate a new device. Similarly, a practice just adding a
device may consider the potential for its use in PDT proto-
cols when weighing one device against another. Most PDT
protocols rely on visible light sources, typically red or blue,
but the broad absorption spectrum of available cosmetic
and therapeutic PDT agents allows for the use of a variety of
light sources. Another attractive feature of PDT is that
it may have applications in the more “traditional” medical
realm, such as for treatment of acne.

CHOOSING A SPECIFIC DEVICE
Successful implementation of device-based procedures into
a practice requires that patients sense that the physician
has confidence in the system and the results it provides.
Therefore, the clinician must thoroughly assess any system
and its efficacy. Look not only at information from the
company but also at published data and the opinions of
experienced peers. Look to companies that stand by their
products and their results.

Always get hands-on experience with a system prior to
purchase and evaluate its utility in your practice. Even if
a system offers dramatic and consistent results, it is not a
wise investment if it’s not a match for your patient base.

Anyone evaluating a system should consider any con-
flicts of interest from study authors, presenters, and even
peers with whom he or she dialogues. This is not to suggest
that people are prone to excessive bias, but one’s unique
experience may color one’s assessment of new technology.
Be cautious if disclosures are withheld or hidden, as this
may suggest an attempt to conceal bias.

Experience is critical to ensure success. A cosmetic
dermatology or procedural fellowship can be invaluable.
Younger dermatologists may consider a young physi-
cian preceptorship through the American Society for
Dermatologic Surgery (ASDS). Always get training specific to the device or procedure you intend to offer.

**DOS AND DON'TS**

With these considerations in place, the dermatologist is able to make a reasoned decision about adding a device or procedure. There are other points to consider before taking action.

Don’t “over-buy.” There are two main ways to over-buy. The first is to jump at every new device or procedure that becomes available. While it can be beneficial to be on the leading edge in your community, some “exciting, new” procedures may not provide their initially anticipated aesthetic (patient) or financial (practice) benefits. Unless a practice strives to be the leading cosmetic provider in an area, there is no need to be ahead of every hot trend. There will always be a market for the “basic” device-based services with a proven record of efficacy.

One can also over-buy when the system is good but the investment is simply too great. If practice demand is not sufficient to cover the costs of the device, then don’t proceed. Being saddled with high loans or purchase payments can cripple even a very busy practice.

Do focus on devices that will allow a broad range of application. It is no stretch to say that a practice can meet the needs of 60-70 percent of its aesthetic patients with just two or three strategically selected devices.

Do calculate an ROI that predicts demand as accurately as possible. To that end, use intake questionnaires to help identify interest in cosmetic procedures among existing patients. Especially early on, most cosmetic patients will be converts from the medical practice. It typically takes some time for a clinician to become established as a cosmetic service provider and thus attract new patients specifically for aesthetic services. Make the questionnaire simple, and provide check boxes for the procedures you may be considering. Ask patients to check off all services that may be of interest.

**A WORD ON HOME-USE DEVICES**

As mentioned in the introduction, the nascent home-use device market is attracting interest and slowly growing. The main categories of devices available or forthcoming are: fractional laser, low-level LED for cosmetic and medical indications (like acne), microdermabrasion, and hair restoration or removal. Many systems now available are actually marketed as tools to help maintain the effects of an in-office procedure or to prepare for a procedure. At present, it does not appear that this sector will pose any significant challenge to in-office procedures. In fact, at-home devices may be a practice opportunity for physicians interested in distributing them.

Generally, practices should approach at-home device distribution cautiously. There is no doubt that some of these devices provide some cosmetic or therapeutic benefit, but others may not be effective at all. A key challenge for engineers has been to develop a laser- or light-based device that substantially reduces the energy output in order to reduce the side-effect risk but still delivers enough energy to confer an effect. In trying to strike that balance, many devices may provide limited benefit.

**STRIVING FOR SATISFACTION**

Acquiring a device can be an anxiety-inducing process for any practice. Most devices require a significant investment by the practice in terms of acquisition costs, not to mention the investment of time in system research, training, staff education, and marketing. The anxiety is compounded by questions about patient response to the new system or device. Whether a device is the first or fifth for your practice, it is never possible to know that patient demand will be sufficient to justify the purchase.

It’s important to recognize that with the proper research and thoughtful consideration, a practice can optimize its chances for success. Understanding the types of devices available, their respective effects, and their realistic role in your practice will help you make a smart decision. Practices should be receptive to opportunities to augment their service menu with new treatments that do not require a significant financial outlay. A procedure like PDT may expand treatment options with minimal cost to the practice.

Dr. Schlesinger has served as an investigator for Galderma, Photocure, Innocutis, Amgen, Janssen, and Abbott, a speaker for Medicis and Warner-Chilcott, a consultant for Innocutis, and on the advisory board for Suneva Medical.

Todd E. Schlesinger, MD, is director of Dermatology and Laser Center of Charleston in South Carolina. A Fellow of the American Society for Mohs Surgery, he is past president of the South Carolina Dermatologic Association and a fellow of the AAD, ASDS, and ASLMS.

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