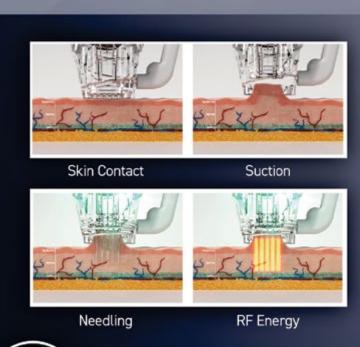




# Multi-Modality Platform With Vacuum Assisted RF Microneedling

Enhance your treatments by combining RF Microneedling with IPL and Surface RF in 1 unique platform

- ➤ RF Microneedling with vacuum assist improves the patient experience on sensitive areas
- ► Both Insulated and Non-Insulated needles available to customize treatment protocols to match patient expectations







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The Darwin offers an efficient and versatile platform to address each of my patients concerns: pigment, vascularity, hair removal, texture, wrinkles, laxity, et al. The intuitive graphic user interface and power enable me to customize and combine from a variety of different energy modalities including IPL, Diode, Radiofrequency, and RFMN.

—Dr. Rishi Gandhi, MD, FAAD Ohio Skin Center, Dayton, Ohio



# Multimodality System Puts Radiofrequency Microneedling with Suction Front and Center

By Kevin A. Wilson, Contributing Editor

Platforms with multiple modalities offer a wide variety of indications that can be of tremendous value to any medical office. "There are many upsides to a good multi-use system, especially if the cost of consumables is manageable," remarked Michael Gold, MD, founder and medical director of Gold Skin Care Center, Advanced Aesthetics Medical Spa, The Laser & Rejuvenation Center, and Tennessee Clinical Research Center in Nashville, Tenn. "The one downside to all, regardless of quality, is that it is only one unit or tower, so you have tied up a lot into one system. However, a good multi-treatment platform always has a place in any practice, more so if it can be easily expanded to meet future needs."

Offering an industry-first suction capability, the Darwin, manufactured by LUVO Medical (Cambridge, Ontario, Canada) and distributed in the U.S. by Powered by MRP (Park City, Utah) stands out in a crowded marketplace. This multimodality platform can accommodate up to five modules, or "handpieces," four of which are currently available in the U.S. These include: ProLift RFM: a 2 MHz radiofrequency microneedling (RFM) system with an industry-first suction capability; Lucent IPL: a powerful intense pulsed light with seven filters and advanced cooling to expand applications and improve patient comfort and safety; Bare 808: an 808 nm diode laser ideal for treating a wide range of patients and areas; and Refresh RF: monopoloar surface radiofrequency (RF) with three treatment spot sizes, two treatment modes and Non-Pole Thermal Structure™ (NTTS™) technology.

The fifth handpiece, not yet available in the U.S., is ProLift HIFU. "Usually when you get something like this, you are lucky if two of the modalities are solid. The rest are passable at best," stated dermatologist Zaki Taher, MD, of Lucere Dermatology & Laser Clinic (Edmonton,

Alberta, Canada). "With Darwin all the modalities are excellent, from old standbys like IPL to leading-edge RFM with suction. You will use them all in your practice. It is literally onestop shopping for your dermatology practice."

Additionally, a practice can manage costs by selectively choosing handpieces and expanding to include others when the time is right. According to Cory Torgerson, MD, PhD, a head and neck surgeon who specializes in facial plastic surgery (Toronto, Ontario, Canada), the three watchwords for Darwin are quality, versatility and flexibility. "Handpieces just plug right into the device. As the practice grows, Darwin can grow with it. This also paves the way for the inclusion of future technology developed for the system."

Brian Biesman, MD, an oculofacial plastic surgeon in Nashville, Tenn., has three of the Darwin handpieces. "Here in Nashville, there is not much call for IPL in the sunny summer months, but the versatility of having the ProLift RFM and the monopolar Refresh RF means that in those months there is still demand for the system. You can treat any skin type with those modalities, and the Refresh RF does not require any topical anesthetic."

Austin Cope, MD, a dermatologist at Cope Cosmetic Dermatology (Provo, Utah) was medical director for Powered by MRP for six months before starting his own practice. "It is a great practice builder," he said. "We had a Darwin from day one with all four available handpieces, and it was essential for helping us get off the ground. It has been a year and a half now, and we still love it." The manageable consumables cost is also helpful. "Only two of the handpieces have consumables, and they are very reasonably (CONTINUED ON PAGE 6)



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priced through Powered by MRP and shipped same day. This Company knows the business and labors toward the safety and success of its customer base. They do not want to sell devices to a practice that it does not need or cannot succeed with."

#### ProLift RFM

ProLift RFM combines the gold standard in fractional RF therapy for skin rejuvenation with microneedling to improve skin texture and elasticity, reduce fine lines and wrinkles and improve scarring and stretch marks. The 2 MHz RF delivery gives the most comfortable treatment of its kind, to date. Noninsulated needles provide optimized results; insulated needles are also available. Penetration depth can be adjusted up to 3.5 mm, and tip configurations include arrays of 10 and 25 microneedles. The device's unique motor mounting control technology assures smooth, rapid needle insertion without severe recoil. "RFM is among the most popular treatments out there, but not all RFM systems are the same," explained Dr. Gold. "The needles and how they penetrate, as well as the uniform delivery of RF, are important. They put a lot of effort into development from the needle up to the motor that cycles insertion. RFM is a go-to treatment around the world for acne scars - even active acne - wrinkles, lifting and tightening, because it works."

"Onboard impedance monitoring measures energy and how the skin is reacting to that – not just for the tip, like most devices, but for each individual needle," commented Dr. Taher. "We delegate as much as possible

in my practice, and with this I feel safe about every pulse delivered. Patients love the safety, comfort and results."

ProLift RFM uses fractional needle penetrations combined with RF irradiation to cause microwounds with thermal effects that stimulate collagen synthesis during the healing process, according to Dr. Torgerson. The microwounds re-epithelialize rapidly, minimizing

downtime. Neocollagenesis and neoelastinogenesis manifest in the months after treatment. The novel vacuum-assist feature gently suctions tissue into the handpiece before needle penetration. "This makes for consistent treatment depth with each penetration. This is safer, more effective and more comfortable for the patient," Dr. Torgerson asserted. This feature is incredibly useful when treating the periocular or T-zone regions of the face, which are extremely sensitive. "ProLift RFM enables precise deposition of energy that is extremely controllable and consistent, providing better results with a more comfortable treatment that patients appreciate."

Dr. Biesman agreed. "The suction component maintains consistency and predictability in delivery of energy for a better result," he said. "If you are targeting tissue at a specific depth, some technologies are just not as accurate or consistent as you would think. [In] some treatment areas, you will want to be even more precise, and ProLift RFM gives you that assurance." Also, recovery time with RFM treatment is minimal. "People look fine within a day or two at most, and that is helpful because we usually recommend a series of three sessions at one-month intervals, so the good experience and results promote compliance."

ProLift RFM capabilities were highlighted in a white paper<sup>1</sup> by dermatologist Rishi Gandhi, MD, director of Ohio Skin Center (Dayton, Ohio). The case study examined the handpiece for scarring of the upper arm, a relatively sensitive area to treat. A light-skinned 67-year-old woman with previous brachioplasty presented



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Post-brachioplasty scarring before and after treatment with ProLift RFM Photos courtesy of Powered by MRP

with raised, red and thick scarring. A single treatment was administered using ProLift RFM (power four, depth 3.5 mm, 200-ms pulse duration, vacuum level one, two passes at 20% overlap). Results were remarkable by any estimation. "The redness was almost completely dissipated," Dr. Gandhi shared. "The quality and texture of skin in the area improved, and the scar was dramatically less visible overall."



Crow's feet before and after treatment with ProLift RFM Photos courtesy of Powered by MRP

Dr. Gandhi praised the non-insulated needles and the vacuum suction, specifically. "With scarring you want to treat the full thickness and depth of the scar, and the non-insulated needles with ProLift RFM do that exceedingly well. Suction promotes the most predictable and uniform administration of energy regardless of the topography of tissue which, again, is ideal for raised scarring. It is safe, effective and relatively gentle, and well suited for treating darker skin."

#### Lucent IPL

Since its first clearance for lower extremity telangiectasias in 1995,² IPL has undergone numerous refinements, becoming a powerful, predictable and versatile workhorse in dermatologic and aesthetic practices. According to Dr. Taher the Lucent name is revered. "Lucent is one of the oldest names out there with a lot of credibility, even when I was doing my fellowship training some time ago. And it is a very intelligent device because the cutoff filters for the different wavelengths are super effective."

Lucent IPL on the Darwin platform includes seven filters (430 nm, 515 nm, 560 nm, 585 nm, 640 nm, 700 nm and 755 nm) for treating all standard IPL indications, including acne, unwanted pigmented or vascular lesions, skin rejuvenation and hair removal to name a few. It also offers four pulse modes – single, double, triple and Lucent Toning – to maximize safety and efficacy by allowing for higher energy delivery with cooling between pulses. Three spot sizes are available, including the large 15-mm

by 40-mm rectangle, with rapid shot speed. Advanced cooling technology protects the epidermis to reduce erythema and maximize efficacy and patient comfort.

"All the handpieces are great, but this is a standout," remarked Dr. Cope. "If someone has a lot of red or brown spots, this takes those off better than anything else. There are a lot of IPLs out there and people may shy away because of the reputation for complications (which is mostly old news), but safety may be an issue due to poor training or a substandard device. Quality training helps users become comfortable with it as well as learn how to best harness its capabilities safely, and Powered by MRP provides that to make sure users have the confidence and skill to succeed. I feel as if I get as good of a result with the 585 nm filter as one might expect with a pulse dye laser."



Redness and pigmentation before and after a course of treatments with Lucent IPL
Photos courtesy of Powered by MRP

#### **Bare 808**

Laser hair reduction still rests among the most sought-after aesthetic treatments, according to Dr. Taher. Hence the utility of Bare 808, an 808 nm diode laser with a 14-mm by 14-mm spot size, onboard contact cooling and continuous moving mode features that work together to optimize speed and comfort on the face or body. The repetition rate can be modulated to accommodate the application, up to 3 Hz in single pulse mode and up to 15 Hz in in-motion mode. "Bare 808 is a very comfortable hair removal system," asserted Dr. Taher. "I have used this on all skin types and areas of the body. It has proven very helpful with my diverse patient population."

### Refresh RF

RF for skin rejuvenation is a gold standard due to its reputation for safety and efficacy, minimal risk and downtime and its ability to work with a variety of adjunctive therapies. Aggressiveness can be modulated by changing treatment settings, but the Refresh RF treatment tips plus treatment mode options accommodate additional adjustment toward specific clinical endpoints. Shot Mode with the TRF Tip S offers more intensive thermal treatment of deeper dermal tissue for superior collagen remodeling. Rubbing Mode with the TRF Tip R or E provides a gentler, more comfortable epidermal treatment. Additionally, treatment tips harness NTTS technology that provides more predictable and uniform energy delivery.

## ProLift HIFU

While not yet available in the U.S., Darwin's ProLift HIFU is highly touted among Canadian practices. The handpiece is ergonomically designed and easy to operate. Its long-lasting



Forehead scar before and after treatment with ProLift RFM Photos courtesy of Powered by MRP

transducers will fire 20.000 shots each. According to Dr. Taher, Transhole Macro Transducer (TMT) technology provides a more stable ultrasound delivery that decreases the potential for side effects or damage to skin, optimized for patient comfort during treatment. "The high intensity focused ultrasound (HIFU) generates a thermal effect where directed, elevating temperature to 65° C, which induces the desired clinical effects," he noted. Energy can be focused at three separate depths -1.5mm, 3.0 mm and 4.5 mm – using specialized tips. "The 1.5 mm treats the superficial dermis, which is made up of more loosely arranged collagen fiber. The 3.0 mm is best for tightening because it targets the deeper dermis with its higher concentration of fibroblasts. The 'lifting' effect comes from the 4.5 mm depth, which is focused on the SMAS.

"This HIFU is far more comfortable than the modality's reputation would suggest," Dr. Taher continued, "and HIFU typically has very expensive consumables. With Darwin this is significantly less costly than competitors."

#### Combination Therapies with Darwin

Combination possibilities are virtually endless, considering the variety of modalities that each feature different tips, settings and modes. "One of my favorite things about Darwin is the stacking of different therapies for a much better overall result," Dr. Torgerson shared. "When it is using the same platform, even better. One of the most popular combinations that I use incorporates the ProLift RFM for texture, scars and/or fine lines and Lucent IPL for toning. We have the ability to make someone with fine lines and wrinkles, who also has dilated vessels with reds and browns in their

skin, look so much better faster by dealing with both at the same time. Downtime is extremely manageable, which is helpful when big events are coming up in the patient's life, such as a wedding, and you want a safe, reliable therapy."

ProLift RFM plus Lucent IPL is also Dr. Gandhi's go-to combination with Darwin. "We start by targeting pigment and vascularity using the IPL, then treating texture and scarring with



Skin laxity of the abdomen before and after treatment with ProLift RFM Photos courtesy of Powered by MRP

the RFM," he explained. "We may even add the IPL using the 585 nm filter to address posttreatment erythema."

A poster by Dr. Gold and colleagues (including Dr. Biesman and Dr. Taher) presented at the SCALE 2024 Aesthetic Medicine and Dermatology Convention in May 2024 in Nashville, Tenn. highlighted seven individual case studies.3 Its purpose was to impart realworld experience using all five handpieces in the Darwin system, either alone or in combination, at 12-week follow up. Of note, is the case of a 37-year-old woman (Skin Type II) with facial laxity and overall textural issues. Erythema and skin texture improved significantly after three monthly sessions of Lucent IPL (for redness) plus ProLift RFM (for skin tightening and texture). "The combination of IPL and ProLift RFM is a real winner," Dr. Gold elaborated. "We used a basic protocol that has been around a long time, alternating the IPL and RFM every two weeks, each treatment type spaced a month apart. The IPL hits the reds and browns and helps a little with texture because of the collagen changes. Then you hit it with RFM for dermal remodeling and elastin formation."

Dr. Cope offers what he calls 'The Combo' in his practice, a same-day IPL plus RFM treatment. "We do the IPL first, to get that one out of the way. We then apply topical numbing for 30 or 40 minutes and then do the RFM. We

can top it off with some platelet-rich plasma (PRP) or growth factors or a few different topical protocols to help. They essentially go home and have some redness for a day or two, but no true downtime because the next day they can cover up with some sunscreen and go live their life."

Although Powered by MRP distributes the platform in the U.S., LUVO Medical, the manufacturer of Darwin, has built a solid reputation in the medical community and is a star on the rise, according to Dr. Gold. "If you have not heard of LUVO yet, you should soon," he commented. "Whenever you are thinking 'platform,' make sure you are dealing with a company that knows the space, knows how to make robust and reliable devices and has been listening to the feedback of practitioners. LUVO is part of a company that has been around a long time, and they know the business and the needs of its physician users."

#### References:

- Gandhi R. Treating surgical scar with the LUVO Prolift RF. White paper, data on file, LUVO Medical.
- 2. Goldberg DJ. Current trends in intense pulsed light. J Clin Aesthet Dermatol. 2012 Jun;5(6):45-53.
- Gold MH, Andriessen A, Biesman B, et al. Real-world experience using a multi-modality system that combines IPL, 808, HIFU, RFM, and RF for skin rejuvenation treatment. Poster presented at the SCALE 2024 Aesthetic Medicine and Dermatology Convention, May 15 – 19 2024 in Nashville, Tenn