

Better Outcomes with the Lumenis PhotoFractional™ Therapy

A Case Study with Jennifer Peterson, MD



When Jennifer Peterson, MD relocated from La Jolla, CA to Houston several years ago, she noticed a distinct difference in the needs and preferences of her new patient-base. She found they were put off by more aggressive procedures and a seven to ten day downtime period was something to which they were completely unaccustomed. They wanted a safe, effective procedure that allowed them to keep going without feeling like they had missed a beat. "That was when I really had to shift my gears based on how I treated patients because they wouldn't accept the downtime of having ablative resurfacing," says Peterson.

By adding the ResurFX module for non-ablative fractional skin resurfacing to the M22 multi-application system (Lumenis Aesthetic) and its industry leading IPL module, Dr. Peterson now feels she has the optimal platform to meet her patients' expectations.

Adapting to the Marketplace

While ablative fractionated technology is seen as a superior method for improving photoaged skin in as few as one treatment, achieving such results leads to a significantly longer social downtime for the patient. For this exact reason, the popularity of non-ablative resurfacing is rising, and for Dr. Peterson, it's exactly what her patients demand.

She explains that her patients usually prefer to schedule a treatment on a Thursday or Friday and use the weekend for their social downtime and recovery. By Monday they feel ready to go back to work and live their normal lives. Non-ablative procedures fit their lifestyle. "My patients realize non-ablative procedures take longer to see the results, but they are okay with that." Peterson adds, "They do not mind having to return

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- 2 locations
- 6 full-time MDs
- 1 PA
- 3500 patient visits per month

to the clinic more frequently and receive more treatments." Common signs of photo-aging are far from limited to brown spots and wrinkles, and the typical patient may also need treatment for lentiginos, telangiectasias, enlarged pores, fine lines, or rosacea. Because of this, Dr. Peterson sought the flexibility to treat two or three, or sometimes even all of these disorders at once. So she began combining the M22 with Fraxel, Re:store, which allowed her to take advantage of both treatments on the same day. Having been on the forefront of combining these technologies, Dr. Peterson was enthusiastic when the Lumenis' M22 started offering PhotoFractional™ therapy, a combination of IPL and ResurFX.

The ResurFX Advantage

Following her decision to switch to the M22 laser with IPL and ResurFX, Dr. Peterson noticed the benefits immediately. The lack of consumables means a decrease in cost to her practice, and in turn she can pass the savings on to her patients to the tune of \$125 per treatment. Patients who may need upwards of five treatments for issues such as acne scars, are able to quickly see the savings and value of ResurFX. Almost all patients see the money saved as a way to more easily afford additional treatments or fillers. "I see it as a practice builder," says Peterson, "I'm passing the savings along to my

patients which allows them to have additional procedures and I think that's very beneficial to the success and growth of my practice."

Patients familiar with both re:store (Fraxel) and ResurFX notice the difference and they make sure to tell her how pleased they are with the increased comfort, decreased downtime and cost, and the overall improved results of ResurFX. Because of the edema that can occur with PhotoFractional therapy, Dr. Peterson opts away from same day neuromodulators and superficial fillers because of the potential for migration. She prefers a safer approach in order to avoid complications; however, she will use deeper fillers such as Sculptra Aesthetic or Voluma on the same day. She even shares that by injecting deeper fillers first additional anesthesia is provided, allowing her patients to become even more comfortable.

Figure 1: Common IPL Combination Procedures

	ResurFX	re:store
Consumables	None	Yes
Passes Required	1 – 2	6 – 8
Downtime*	2 – 3 days**	4 – 5 days

*This refers to social downtime. The patient is able to resume work activities immediately after the procedure and those that are not bothered by the mild erythema/edema return to work/social activities the same day. Other patients are more private and prefer to avoid work/social activities until all erythema/edema has been resolved. **The edema typically resolves in 1-2 days and redness typically resolved in 2-3 days.

The M22 Platform introduces two exciting new features, SapphireCool™ Light Guides technology, and the CoolScan™ scanner for non-sequential scanning, which means that superior treatment is achieved while passing the laser over the treatment area fewer times, resulting in a more comfortable procedure. "The randomized patterns and reproducible homogenous beams mean I'm not worrying about constant movement effecting my beam profile and resulting in a loss of efficacy." Peterson also states "With the non-sequential pattern of energy and the sapphire cooling tip, there's just so many ways for us to keep the patient comfortable." Peterson adds her patients tell her they can tolerate anything for one to two passes, but beyond that it can become uncomfortable. This can be quite an issue if six to eight passes are necessary, which happens with other systems. With ResurFX, most areas are treated with a single pass; if a second pass is needed,



75 year-old white female with extremely thin skin after two PhotoFractional™ treatments. IPL: Full face: 560 nm filter, double pulsed, pulse widths of 3.0 & 3.0 ms, pulse delay of 20 ms, & fluence of 18-19 J/cm² (18 first treatment and 19 on 2nd tx). ResurFX: Full face: Energy 30-35 mJ (35 first treatment and 30 second treatment), Density 350- 400 (spots/cm²) (350 - first treatment and 400 second treatment)

Peterson's patients are still comfortable. "ResurFX is just that much more comfortable to them. My patients describe less swelling and a decrease in their social downtime of at least a day or two. With Fraxel my patients were experiencing four to five days of social downtime, but with ResurFX it's a three day maximum," says Peterson. Dr. Peterson advises her patients to avoid exercise the day of the procedure, but the following day patients are able to apply makeup and resume exercise.

Dr. Peterson also appreciates the improved functionality and the ability to customize the size and shape while still being able to deliver a uniform and homogenous beam. In the past, she was limited to fixed beam widths of 7mm and 15mm and movement was limited to one direction.

ResurFX interface allows choosing the desired shape and size of the scanning area from a variety of 6 different shapes, and many more sizes. The size and shape options also allow her to get into the nooks and crannies and trickier areas on the face much easier than with Fraxel, especially around the root of the nose and the eye.

Adapting to the Marketplace

Because Houston is a hub of international business and innovation, Dr. Peterson sees a varied and eclectic mix of nationalities and skin tones come in her practice. She notes the large Latin-American, Indian, and African-American populations in the city and says she also treats many Korean,

Philippino, Chinese, Taiwanese, Vietnamese, Nigerian and Middle-Eastern patients.

She needs a versatile product that allows her to treat all skin types and colors. "I feel that I can safely treat all skin tones, with non-ablative fractionated resurfacing." Peterson notices fewer problems with inflammatory hyper-pigmentations and her darker skin-toned patients are doing very well. This is due in large part to the ease in which she is now able to adjust the energy on a per patient basis. For darker skin tones she can quickly and easily program in a lower energy and density level and begin treatment. Peterson notes that with past tools and products the energy levels were only adjustable in large, pre-set increments, whereas now she has the ability to customize the settings in very precise levels. With ResurFX, the density is available in increments of 50 ranging from 0 –500 microbeams/cm², and the energy can be adjusted in single digit increments from 10 – 70 mJ per micro-beam. Additionally, Dr. Peterson points out that having the M22 with IPL and ResurFX on the same platform has eliminated the need for changing heads, cutting down on calibration time. "Overall, there is no longer as much of a waste of time and energy. It's compact and mobile, and if I change from one device to another, 30 seconds later everything is recalibrated and ready to go," Peterson adds, "It's just easy, user-friendly, and efficient."

Patient outcomes

A recent study by Kearney et al concluded same day, sequential IPL followed by nonablative fractionated laser (NAFL) resurfacing are synergistic¹. This synergy is speculated to be due to the localized edema after IPL at the site of pigmented lesions and telangiectasias leading to an increased absorption of the NAFL's wavelengths at the sites of edema. Dr. Peterson describes her typical photofractional treatment regimen for photorejuvenation is based on the age of the patient and severity of the condition.

"My twenty and thirty year old patients typically love the results after only one or two treatments, while forty year olds often need two to three treatments." On average Dr. Peterson recommends 3 treatments of Photofractional therapy to her



57 year-old white female with thicker, photodamaged skin five months after PhotoFractional™ treatment, and six months following five cc of Voluma injected only on the zygoma and malar areas. No Voluma was injected into the crow's feet area or the submalar space. She received IPL to the full face: 560 nm filter, double pulsed, pulse widths of 3.5 & 3.5 ms, pulse delay of 25 ms, & fluence of 16 J/cm². She also had ResurFX: Cheeks/Chin: Energy 60 mJ, Density 400 (spots/cm²), Forehead/Nose: Energy 35 mJ, Density 400 (spots/cm²), Infraorbital: Energy 20 mJ, Density 250 (spots/cm²)

50-70 year old patients, followed by an additional 2-3 monthly treatments with the ResurFX alone. Dr. Peterson concludes, "Above everything else, my patients love it, and they're referring their friends and family."

¹ Kearney C, Brew D. Single-session combination treatment with intense pulsed light and nonablative fractional photothermolysis: A split-face study. *Dermatol Surg*. 2012;38:1002-1009.