

Practice Advisor

9th Edition 2017

Grow your practice by starting at the top!

UltraPulse® & AcuPulse™ CO₂ Lasers



Interviews with leading European laser dermatologists and plastic surgeons on the use of CO₂ lasers in their daily practices

Dr. Francesca de Angelis, Dr. Gerd Gauglitz, Dr. Gerd Kautz, Dr. Patricia Ortiz Garcia, Dr. Alina Fratila and Dr. Matteo Tretti Clementoni share their expertise, tips and tricks

UltraPulse®. AcuPulse™.

The classic gold standard of the aesthetic medicine for your success

➤ CO₂ lasers 4

- UltraPulse® 4
- AcuPulse™ 4
- The “workhorse” 4
- CO₂ fables. Ablate or not ablate 5
- Combinations 5
- Downtime 5
- Lumenis lasers 6
- When to start slow 6
- Using the superficial and deep modes together 6
- Scars 7
- Keloids 7
- Dyschromia 7
- Consultations 7
- How Lumenis stacks up 8
- Anaesthesia 8
- Antiviral, antibiotics and steroids 8
- Should you buy a CO₂ laser? 8
- AcuPulse™ – MultiMode™ SuperPulse™ CO₂ Laser 9
- UltraPulse® – The most powerful CO₂ laser in aesthetic medicine 9

➤ Interviewed doctors 10

- Francesca de Angelis, MD, PhD, plastic surgeon – Napoli, Italy 10
- Matteo Tretti Clementoni, MD, plastic surgeon – Milan, Italy 10
- Gerd Gauglitz, MD, PhD, MMS, dermatologist – Munich, Germany 10
- Gerd Kautz, MD, dermatologist – Konz, Germany 10
- Alina Fratila, MD, PhD, dermatologic surgeon – Bonn, Germany 10
- Patricia Ortiz Garcia, MD, PhD, dermatologist – Almeria, Spain 10

UltraPulse®. AcuPulse™.

If you want to add or update your laser treatments, read what six of your colleagues have experienced with the Lumenis CO₂ lasers, the UltraPulse® and AcuPulse™.

➤ CO₂ Lasers

The CO₂ laser is the Gold Standard for full and fractional ablative skin resurfacing. It is also predictably effective on a variety of conditions such as warts, acne scars, wrinkles, and syringomas. The Lumenis UltraPulse® and AcuPulse™ are powerful, versatile, and user-friendly.

• UltraPulse®

The UltraPulse's DeepFX™ fractional configuration is designed for wrinkles, acne scars, and other deep conditions. To reach even deeper conditions in a single pulse, SCAAR FX™ has been added, enabling penetration of up to 4 mm to treat deep, hypertrophic and contracted lesions. For dyschromia and other superficial skin conditions, the ActiveFX™ configuration provides different energy levels and a different beam size. The UltraPulse's best ablation/coagulation ratio and shortest dwell time added to the CoolScan™ technology, leads to optimal clinical outcomes with the largest safety margin.



UltraPulse® fractional CO₂ laser

• AcuPulse™

With more than 30 FDA-cleared aesthetic indications, the AcuPulse™ deploys a wide range of patterns, spot sizes, and dwell times. The versatile laser delivers a continuous wave at low power for long durations, or a real SuperPulse™, a high-power burst of energy that penetrates up to 1 mm in 0.3 ms to minimise residual thermal damage. The AcuPulse™ can be used with the SurgiTouch™ scanner for full ablative resurfacing or along with the AcuScan120™ for fractional ablative resurfacing.



AcuPulse™ fractional CO₂ laser

• The “Workhorse”

The CO₂ laser is the “workhorse” in the dermatology and plastic surgery settings, according to Dr. Gauglitz. “You can use the CO₂ laser in both the fractional and full ablative modes,” he says. “You can tighten the skin and resurface at the same time.” Professor Fratila agrees. “You can achieve fantastic skin tightening that is long lasting,” she says. “Vaporisation is uniform which is important for intra-epidermal lesions such as warts and lentigos.”

Dr. de Angelis considers the CO₂ laser a “must device” in her surgical clinic. “I use the CO₂ laser to treat scars, especially post-surgical scars of all kinds,” she says. “As a surgical tool, the CO₂ laser enables the surgeon to remove small imperfections and lentigos effectively and in one second.” According to Dr. Ortiz Garcia, the CO₂ laser causes “the most dramatic change in the quality of skin.” “The CO₂ laser can penetrate much deeper into the skin than any other technology and can promote renewal of the skin and production of collagen fibers,” she says.

When asked to name the indication that stands out for the CO₂ laser, most of the interviewed physicians replied that it is the treatment of scars. “You can treat scars much better than with any other technology,” says Dr. Ortiz Garcia. Dr. Kautz adds, “CO₂ brings profound changing in skin structure. With only a single UltraPulse® treatment I see a big change in acne scars and results on both hypertrophic and hypotrophic scars are unbelievable.” Dr. Kautz also sees big changes in aging skin, adenoma, and rhinophyma after a single CO₂ laser treatment. “Scar results and skin resurfacing are amazing,” says Dr. Gauglitz. In Professor Fratila’s practice, skin resurfacing and treatment of severe sun damage are the stand-out indications for the CO₂ laser.

The “most wanted” CO₂ procedures among the 6 physicians are removal of skin lesions (Dr. Tretti Clementoni, Dr. Ortiz Garcia); all kinds of scars (Dr. de Angelis); treatment of sun damage and scars (Dr. Kautz); rejuvenation around the eyes without causing scars (Professor Fratila); and skin resurfacing, scars, and combinations with photodynamic therapy (Dr. Gauglitz).

• CO₂ Fables. Ablate or Not Ablate

The use of CO₂ lasers is surrounded by myths. “One is that you will look 20 years younger,” says Dr. Tretti Clementoni. “Well, we can do 10 years.” Side effects, pain and downtime

are other myths, according to Dr. Gauglitz. “It’s amazing to see how happy and surprised patients are after AcuPulse™ treatments,” says Dr. de Angelis. “They expect to see heavy crust and to look like babies after a single session.” Professor Fratila says that patients expect scars and burning with long erythema. “I never had a scar in any of my patients in 20 years of using the UltraPulse®,” she says. “Since I treat these patients with IPL three weeks later, there is no erythema left either.”

Full-face fractional treatments are in demand, but patients are starting to choose the gentler ResurFX™ at times. “I treat 15 to 20 patients a month,” says Dr. Kautz. “That number is dropping because we are doing many ResurFX™ treatments and many patients prefer the less aggressive procedure.” Dr. de Angelis treats about 10 patients a month with a fractional CO₂ laser, and much higher number with the ResurFX™. Dr. Gauglitz says, “I do about 80 full-face fractional resurfacing treatments each month during the September-May season and fewer during the summer. We use the ResurFX™ all year round.” Professor Fratila performs 30 to 40 full-face fractional treatments each month. “I often combine this procedure with photodynamic therapy,” she adds. Dr. de Angelis, Dr. Gauglitz, and Professor Fratila don’t use the CO₂ laser during the summer months. “I don’t use the CO₂ laser in the summer time to avoid hyperpigmentation,” says Professor Fratila.

Two physicians limit their use of fully ablative CO₂ treatments to excision while others prefer fractional treatments. “I live in the south of Spain so I always treat with the fractional laser to minimise side effects,” says Dr. Ortiz Garcia. Professor Fratila does not hesitate to treat patients with the fully ablative CO₂ laser. “I treat with 2 passes, the first with 125 mJ energy and density 5% or 6% and the second at 100 mJ and 4% or 5% density to remove the entire epidermis,” she says. “Downtime is 1 week and redness persists for about 3 weeks. I treat around the eyes and mouth with fully ablative and the full face with fractional to avoid pseudo hyperpigmentation.”

The decision of whether to treat a patient with a powerful CO₂ laser is based on the physician’s impression of the patient, the season of the year, the skin type, and the presence of melasma. “There are people who cannot endure side effects, even if they are mild,” says Dr. de Angelis. “Their anxiety pushes them to remove crust, so it’s important to understand if the patient is “designed” for the CO₂ after-protocol. I would start with a non-ablative laser, observe the patient’s behaviour, and then decide if he or she is fit for CO₂ treatment. I practice in Napoli, Italy, so I don’t use the CO₂ laser in the summer because of the side effects. I never treat patients with skin type IV and up, although I may treat a patient in this category who has applied hydroquinone for 3 months before the AcuPulse™ procedure.”

Dr. Tretti Clementoni does not treat patients with the CO₂ laser in the summer either. “Patients have to avoid the sun for several months after the procedure, so summer is not

a good time,” he says. Dr. Kautz considers the status of wound healing. “If the patient uses Accutane, wound healing is diminished,” he says. “I am also careful with darker skin types who have a history of poor healing.”

Dr. de Angelis, Dr. Ortiz Garcia, and Dr. Gauglitz do not recommend CO₂ treatment in patients with melasma. “Even if the condition improves after treatment, the long-term results are in question,” says Dr. Gauglitz. Dr. de Angelis is currently testing the ResurFX™ for the treatment of melasma.

Two physicians recommend treating only skin types I through III with the CO₂ laser. Another two suggest limiting CO₂ laser treatment to types I through IV, the fifth has no dark skin types, and the sixth treats patients of all skin types with the CO₂ laser.

• Combinations

The physicians combine CO₂ treatment with fillers, botulinum toxin, and IPL. “I use IPL to treat patients left with pigmentary abnormalities after CO₂ treatment,” says Dr. Kautz. “The combination reduces downtime and improves results. We also combine CO₂ treatment with botulinum toxin and dermal fillers. Hyaluronic acid dermal filler (Juvederm) works very well.” Dr. de Angelis also combines CO₂ and IPL. “I treat with IPL first, wait at least 1 hour, apply Pliaglis (topical anaesthetic; generic name lidocaine and tetracaine), and then treat with the CO₂ laser,” she says. “As for botulinum toxin or fillers, I treat with the CO₂ laser 1 month before or after using these injectable products. I also apply skin boosters 3 weeks before laser treatment.”

Dr. Gauglitz pre-treats with botulinum toxin, followed by CO₂ laser 4 weeks later, and hyaluronic acid fillers thereafter. “In order to reduce the post-operative redness patients usually receive an IPL treatment 2 to 3 weeks after the CO₂ procedure.”

Professor Fratila treats with botulinum toxin, waits for 2 weeks, and then uses either the fully ablative or fractional CO₂ laser, depending on skin damage.

Dr. Ortiz Garcia uses IPL and CO₂ in a single session or separately. “For wrinkles or full-face rejuvenation, I start with IPL to improve skin colour and then treat with the CO₂ laser 2 weeks later,” she says. “If the patient has both pigment and benign lesions I combine IPL and AcuPulse™ in a single treatment session. I give botulinum toxin 2 weeks before AcuPulse™ treatment and fillers 2 to 3 weeks after AcuPulse™ treatment.”

• Downtime

Downtime depends on the aggressiveness of the treatment, according to Dr. Tretti Clementoni. “For fractional lasers, the minimum downtime is 48 hours and the maximum is 5 to

6 days,” he says. With the CO₂ laser, Dr. Kautz’s downtime is 1 to 2 weeks and redness takes longer to fade. “I start to remove redness with IPL 2 weeks after UltraPulse® CO₂ treatment,” he says. In Dr. de Angelis practice, downtime is 10 days for the AcuPulse™ CO₂ laser. “I prefer to tell patients 10 days and they are happy to resume their usual life after 5 days,” she says. “With the ResurFX™, downtime depends on the patient. If we decide to do more treatments we alter the settings to reduce the downtime between treatments.” Dr. Gauglitz’s downtime is also 10 days for the UltraPulse® laser and 4 days for the PhotoFractional™ (combination of IPL and ResurFX™). Professor Fratila’s downtime is 2 weeks for fully ablative treatment and 10 days for fractional treatment. In Dr. Ortiz Garcia’s practice, downtime for wrinkle treatment is 3 to 5 days. “If wrinkles are very deep the settings are more aggressive and the downtime increases to 10 days,” she says. “Redness may persist for several weeks.”

• Lumenis Lasers

Physicians like their Lumenis CO₂ lasers for a variety of reasons. “The UltraPulse® provides controlled thermal damage around a very clean channel of ablation,” says Dr. Tretti Clementoni. Dr. Gauglitz uses the UltraPulse® to treat burn scars. “The UltraPulse® SCAAR FX™ is the only laser in the world that is so effective for burn scars,” he says. “I find the AcuPulse™ effective as well for many other indications.”

Dr. de Angelis, who uses the AcuPulse™, says: “I have compared the AcuPulse™ to other CO₂ systems and the AcuPulse™ provides the deeper and cleanest penetration. For me the AcuPulse™ is the gold standard.” AcuPulse™ provides deepest level of penetration compared to the other CO₂ lasers of its category, but UltraPulse® SCAAR FX™ has undoubtedly the deepest penetration rate in a single exposure.

Professor Fratila has used the UltraPulse® for years. “The UltraPulse® causes less erythema than other systems and provides a better tightening effect,” she says. “I know many doctors who have purchased cheaper CO₂ systems and they simply don’t use them. My patients keep coming for the last 23 years and bring their families and friends.” Dr. Kautz has also worked with the UltraPulse® for years and is very happy with the results. “I have tried 22 lasers in my clinic and I am not interested in any other CO₂ system,” he says.

Patients of all the physicians are happy with the results of their CO₂ laser treatment. “Patients want results without suffering and minimal downtime,” says Dr. Ortiz Garcia. “The correct use of the AcuPulse™ is a nice solution. Patients witness impressive results and they forget about the hardship. The CO₂ works especially well for older women who know what they want and are ready to do what it takes.”

• When to Start Slow...

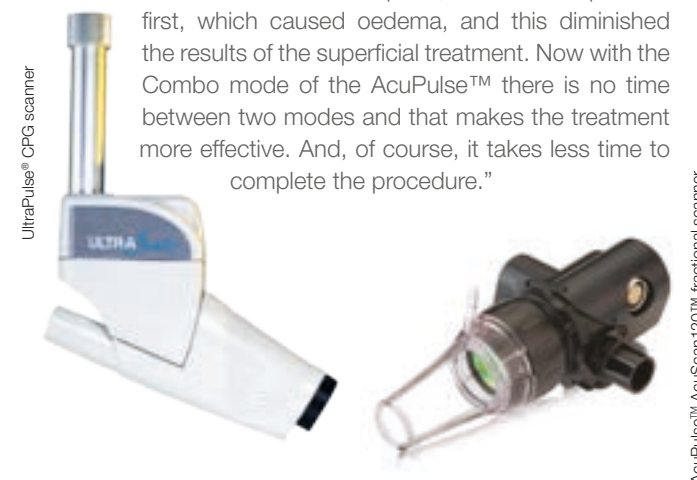
The physicians choose the non-ablative fractional ResurFX™ over the CO₂ laser when patients want to minimise downtime, are anxious about an aggressive CO₂ procedure and are willing to undergo multiple treatment sessions. “I start with the non-ablative when I see that the patient is not easy to handle,” says Dr. Kautz. Dr. de Angelis shares this opinion. “If a patient is anxious and not disciplined by nature to follow the CO₂ protocol, I don’t use the CO₂ laser,” she says.

Dr. Kautz uses a similar approach when he treats acne scars and severe sun damage. “With acne scars, I sometimes start with the ResurFX™ and then move to the CO₂ laser,” he says. “In patients with a lot of sun damage, I start with the PhotoFractional™. Then, if they need more treatments but are not ready for multiple treatments, I use the CO₂. For large treatment areas, I combine the UltraPulse® CO₂ with photodynamic therapy while the patient is under total anaesthesia.”

The age of the patient is another factor. “For women aged 38 to 50, I use a non-ablative laser unless the patient has many wrinkles around the eyes,” says Dr. Ortiz Garcia. “In these cases, I use the CO₂ laser and treat the rest of the face with the ResurFX™.” Professor Fratila, Dr. de Angelis, and Dr. Gauglitz prefer non-ablative lasers for younger patients. “The ResurFX™ makes more sense for younger patients because the results are good and there is no downtime,” says Professor Fratila, who also prefers the ResurFX™ in patients without pigmented or epidermal lesions.

• Using the Superficial and Deep Modes Together

The capability to treat in both superficial and deep modes simultaneously provides synergistic clinical outcomes for most physicians. “There are different targets for superficial and deep penetration and the UltraPulse® and AcuPulse™ hit both levels,” says Dr. Tretti Clementoni. Dr. Ortiz Garcia adds, “You can treat more aggressively and effectively in a short time. Before we had this option, we used Deep mode first, which caused oedema, and this diminished the results of the superficial treatment. Now with the Combo mode of the AcuPulse™ there is no time between two modes and that makes the treatment more effective. And, of course, it takes less time to complete the procedure.”



• Scars

All the physicians have treated traumatic scars with their CO₂ lasers and all have found the results rewarding for both patient and physician. “Range of motion and contraction both improve immediately after the first procedure,” says Dr. Tretti Clementoni. “Since new collagen deposition has started, results continue to improve over time. We experience both immediate and long-term improvement. The percentage of improvement varies but all the patients are extremely happy and grateful; and it’s a most gratifying procedure for us.”

Dr. Kautz’s experience with the UltraPulse® has been similar. “For years we believed nothing could be done for heavy traumatic scars, but seeing them now with such improved mobility and texture after treatment with the UltraPulse® is the happiest thing a doctor could wish for,” he says.

Dr. de Angelis treats traumatic scars with the AcuPulse™. “The scar improves very quickly and then in 3 months, 1 year, and 2 years the scars improve more, both in texture and range of motion,” she says. “Many patients call me when they hear about the miracles of AcuPulse™. Normally after suturing a wound, I lase both deeply and superficially with the AcuPulse™ and then pass with ResurFX™ to reduce the risk of pathological scar formation.”

Dr. Ortiz Garcia also uses the AcuPulse™. “Skin improves inside and on the surface of the scar,” she says. “Patients are very aware of their appearance and the AcuPulse™ treatment definitely helps to improve their quality of life and self-esteem. Although it takes time to see the final effect and we have to manage expectations, in the end patients are very happy - without exception.”

Dr. Gauglitz was trained several years at Shriners Burn Hospital in Texas, USA. “Scar tissue becoming less noticeable has a great impact on patients,” he says. “It’s impressive how much you can do for patient’s quality of life. Scar treatment is a medical indication that I appreciate a lot!”

• Keloids

Dr. de Angelis stresses the importance of correct identification before treating a keloid. “My current protocol is to inject Cortisone and then treat with a fractional non-ablative laser,” she says. Dr. de Angelis also prevents keloid recurrence by multiple ResurFX™ treatments, which are performed at the time of suture removal, which significantly reduces the rate of scar formation. “So far, keloids have not recurred with this approach,” she says. Professor Fratila treats keloids with the UltraPulse® SCAAR FX™ (or DeepFX™) and then steroid injection. Dr. Ortiz Garcia removes ear keloids with the incisional handpiece of the AcuPulse™ and then treats with corticosteroid. “There is no international consensus to remove keloids, so we keep on researching,” adds Dr. Kautz.

• Dyschromia

Dr. Kautz prefers to treat dyschromia with the Photo-Fractional™. “If the patient needs real structural changes, I go to TotalFX™ (combination of ActiveFX™ and DeepFX™ modes),” he says. “For just pigmentation, I prefer IPL and the Q-Switched Nd: YAG.” Dr. Kautz compares his approach to dyschromia with a builder who comes to fix his house. “The builder comes with different tools to address all the problems of my house,” he says. “I do the same —I mix and fix.”

For mild dyschromia and for rejuvenation, Dr. de Angelis normally treats with the IPL of her M22™ system. “If the dyschromia is severe and keratosis is present, I use IPL and the AcuPulse™ CO₂ laser in a single session,” she says. “After that, if the patient needs resurfacing, I go to the ResurFX™.” Dr. Ortiz Garcia bases her treatment decision on the type of dyschromia. “If the patient has pigmented keratociclesions, I use the AcuPulse™ in traditional or fractional superficial mode to remove them from the skin surface,” she says.

Professor Fratila uses her UltraPulse® with DeepFX™ followed by photodynamic therapy with a photosensitising agent under occlusion for 3 hours.

• Consultation

Dr. de Angelis stresses the importance of consultation before CO₂ treatment. “I always speak a lot to patients before the treatment,” she says. “The patients (especially those 50 to 60 years of age) expect a “lifting” result and you have to tell them that the result won’t be the same as a face lift. If I prepare them well, they are happy with the result.” Dr. Kautz agrees. “Patient consultation and setting expectations are most important,” he says. “Otherwise you get into trouble.”



• How Lumenis Stacks Up

The physicians agree that results are better and downtime is shorter with both the UltraPulse® and the AcuPulse™ when compared with other continuous wave

and fractional ablative systems. They attribute this to the unique UltraPulse® and SuperPulse™ technologies. “You cannot compare the UltraPulse® with any other laser,” says Dr. Tretti Clementoni. “If you compare the AcuPulse™ with its SuperPulse™ technology with other lasers, you might achieve the same penetration but have more control on the damage. The procedure is more precise, yielding better and safer results. The UltraPulse® is another universe, which no other laser can reach.” Professor Fratila agrees. “Of course, you cannot compare the UltraPulse® with any other systems,” she says. “The continuous wave that most systems use burn the skin and it takes weeks and weeks to heal. With the UltraPulse®, you do just one pass of ablation with amazing results.”

Dr. de Angelis has used other CO₂ lasers. “With the AcuPulse™, the downtime is 4 to 5 days shorter,” she says. “Coverage is greater, side effects are fewer, results are better, and the process is safer. You can always buy a cheaper laser, but patient safety will be jeopardised. Having a safe laser is very important, especially for beginners.” Dr. Gauglitz adds, “The Lumenis systems create less pain, deeper penetration, shorter downtime, and they are more precise.”

Compared to other systems, the AcuPulse™ with SuperPulse™ technology provides more control, greater precision, shorter pulses, and deeper penetration, according to Dr. Ortiz Garcia. “UltraPulse® penetrates 4 mm with 1 pulse, and no other laser in medicine can do that,” she says.

• Anaesthesia

Most of the interviewed physicians prefer Pliaglis topical anaesthetic with CO₂ treatments.

• Antiviral, Antibiotics and Steroids

Dr. Tretti Clementoni prescribes antiviral (valacyclovir 200 mg/day), antibacterial (cephalosporin 400 mg/day), and antifungal (ketoconazole 100 mg/day) drugs before CO₂ treatment. If Dr. Kautz treats a large area of the face, he prescribes an antiviral drug for herpes. Dr. de Angelis prescribes antiviral and antibiotic drugs for 3 days before CO₂ treatment and for 5 days after treatment. “I never use an antifungal drug because I use an antifungal cream immediately after laser treatment,” she says. “Then patients apply antibiotic and fungal cream until there is no redness, and after that only fungal cream until healing is complete. I use Cefotaxime antibiotic and Canesten (clotrimazole) antifungal.”

Dr. Gauglitz prescribes an antiviral (acyclovir 400 mg, 3 times daily) and antibiotic (Cefuroxime [cephalosporin antibiotic] 500 mg 2 times daily), both for 2 days before and 2 days after CO₂ treatment. Professor Fratila prescribes an antiviral

(acyclovir) around the mouth but no antibiotics before CO₂ treatment. “I use antibiotics only after full-face CO₂ treatments,” she says. Dr. Ortiz Garcia always prescribes antibiotic and antivirals routinely and antifungals only if she believes it’s appropriate for the specific patient.

Most of the physicians use only topical steroids on skin after resurfacing.

• Should You Buy a CO₂ Laser?

When asked what advice they would give to other doctors considering the purchase of a CO₂ laser, the physicians said to choose a system with (1) a track record and solid technical support, (2) high peak power, (3) a modern scanner, (4) deep penetration, and (5) a strong, stable, time-honoured technology. “It’s important that the system has a lot of scientific studies,” says Dr. Kautz. “The pulse should have high power and the system should have a sophisticated scanner. I have it all in my UltraPulse®.”

Dr. de Angelis stressed the importance of the CO₂ laser’s deep penetration mode. “As a plastic surgeon, the CO₂ is perfect for me since I can offer effective treatment of scars,” she says. “Many patients come to me because I treat with both CO₂ and ResurFX™ lasers soon after surgical procedures. They are confident they won’t have scars and they don’t.”

Dr. Gauglitz’s clinic has an UltraPulse®. “The UltraPulse® is my “golden goose”. The CO₂ technology is stable and can serve you for many years. I don’t believe many changes can be made and the UltraPulse® has been the one and only for a few decades,” he says. According to Professor Fratila, physicians should take the time to learn from other physicians who operate the laser they intend to buy. “The settings are not transferable from one machine to the other, especially with UltraPulse®,” she says. “There is no laser on the market that is similar to the UltraPulse®.”

Dr. Ortiz Garcia advises physicians to buy a CO₂ laser only if they are willing to acquire in-depth knowledge of laser-skin interactions so they can control side effects. “You have to be prepared to address patient concerns about such a strong technology,” she says. “They have to wait longer for results and side effects may come. I live in southern Spain and the IPL may be the best pick for this region, but I am groomed on UltraPulse® and I like the strong technology and its effectiveness. So, when buying a laser, one should look for the laser with the option to be fractional, with the shortest pulse duration (SuperPulse™ or UltraPulse®), the possibility to choose the spot size and spot form, and the capability to deliver the beam in a random or controlled manner.”

For safety use, Indications and Contraindications refer to the Operator Manuals and Instructions for Use of Lumenis Laser system and accessories and other cosmeceuticals or drugs used.

• AcuPulse™

MultiMode™ SuperPulse™ CO₂ Laser

- ✓ **SuperPulse™ Technology**
for the desired treatment depth with a single pulse
- ✓ **Shortest Pulse Duration**
for enhanced patient safety and comfort
- ✓ **10 Built-in Treatment Modes**
for maximum versatility
- ✓ **Intuitive User Interface**
for easy setup and quick treatments

• UltraPulse®

The most powerful CO₂ laser in medicine

- ✓ **DeepFX™ | ActiveFX™ Fractional Modes**
great versatility for all your resurfacing needs
- ✓ **Deepest Impact with SCAAR FX™ Mode**
up to 4mm in a single pulse
- ✓ **Best Ablation | Coagulation Ratio**
for optimal clinical outcomes
- ✓ **Shortest Pulse Duration**
for maximum patient safety and comfort

• Lumenis CO₂ lasers can treat >30 FDA approved indications, most common are:

- Skin resurfacing
- Acne scars
- Perioral rhytides
- Scar revision
- Blepharoplasty
- Warts
- Dyschromia
- Rhinophyma
- Moles



AcuPulse™

Powerful. Versatile. Simple.

UltraPulse®

Safe. Precise. Powerfully Fast.

• Interviewed Doctors

These interviews were conducted with renowned dermatologists and plastic surgeons from Europe. All the interviewed are well versed with Lumenis® UltraPulse® and/or AcuPulse™ CO₂ lasers and they rely heavily on these systems in their daily practices.

Francesca de Angelis, MD, PhD, plastic surgeon and the owner of DEA Centre (laser and plastic surgery clinic) in Napoli, Italy. An active member of medical societies, Dr. de Angelis has participated in clinical trials on new laser technologies for international laser societies and is an invited speaker in many Italian and International conferences. Dr. de Angelis is known for being highly experienced in many technologies and as an innovative practitioner. Dr. de Angelis operates the Lumenis AcuPulse™, M22™, and ResurFX™.



Matteo Tretti Clementoni, MD, is a board-certified plastic surgeon who practices in Milan, Italy. A member of numerous Regional and International Societies, Dr. Tretti took part in voluntary missions to Asia and Africa, treating paediatric malformations and severe burn scars. He is a widely recognised physician and speaker at worldwide conferences, author and instructor in the use of lasers in medicine. Dr. Tretti works with the Lumenis® UltraPulse®, AcuPulse™, M22™, ResurFX™ and LightSheer® systems.



Gerd Gauglitz, MD, PhD, MMS, serves as Assistant Professor and Department Head in the Department of Aesthetic Dermatology and Laser Medicine at Ludwig Maximilian University of Munich. Dr. Gauglitz completed his post-doctoral research in the Department of Surgery and Burns at Shriners Burn Hospital for Children at the University of Texas Medical Branch, Galveston, TX, USA. He continues to treat patients and research new technologies to manage burn scars. Dr. Gauglitz uses the Lumenis® UltraPulse®, M22™, and ResurFX™.



Gerd Kautz, MD, is a renowned dermatologist who owns Skin and Laser Clinic in Konz, Germany. After specialising in dermatology and venereology, allergology, phlebology, and environmental medicine at the University of Saarland, Dr. Kautz trained physicians in laser medicine at the University of Kaiserslautern and organised the German Annual Laser Therapy Congress. A respected author, speaker, and educator, Dr. Kautz is President of the German Society of Laser Dermatology (DDL). Dr. Kautz uses the Lumenis® UltraPulse®, M22™, ResurFX™, and LightSheer® systems.



Alina Fratila, MD, is a well-known expert in dermatology, phlebology and aesthetic laser therapy. After serving as Chief of Dermatologic Surgery at the University of Bonn, Dr. Fratila became medical director of Klinik Am Kurpark and then established the Jungbrunnen-Klinik in Bonn. Dr. Fratila has worked with lasers for more than 20 years. A respected and well known author, speaker, and educator, Dr. Fratila has received an ISDS presidency and many awards. Professor Fratila has been using the Lumenis® UltraPulse®, M22™, ResurFX™, and LightSheer® devices for many years.



Patricia Ortiz Garcia, MD, PhD, is a dermatologist-venereologist at her Plasderma clinic in Almeria, Spain. Dr. Ortiz Garcia has practiced and conducted research at Bispebjerg hospital, University of Copenhagen, Denmark, with Dr. Merete Haedersdal, where she was first introduced and experienced the UltraPulse® CO₂ laser. She has developed various treatments with laser technology, treated children with lasers, and trained resident physicians and nurses in the use of lasers and light-based treatments. Dr. Ortiz Garcia works on the Lumenis AcuPulse™, M22™, and ResurFX™ in her practice.





LightSheer®
INFINITY™



LightSheer®
DESIRE™



M22™



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