

CO₂RE[®]

**Complete platform for
your patients' needs**

Versatile CO₂ laser platform for a wide
range of conditions



 **CANDELA**[™]
Science. Results. Trust.

CO₂RE[®]



Dear Reader,

On behalf of Candela Corporation, we would like to say thank you for your interest in the CO₂RE[®] system, the first fully integrated CO₂ laser, worldwide. This system with its many indications cleared in 10 medical specialties, including dermatology, plastic surgery, and gynaecology¹, is truly designed to adapt to your patients' needs.

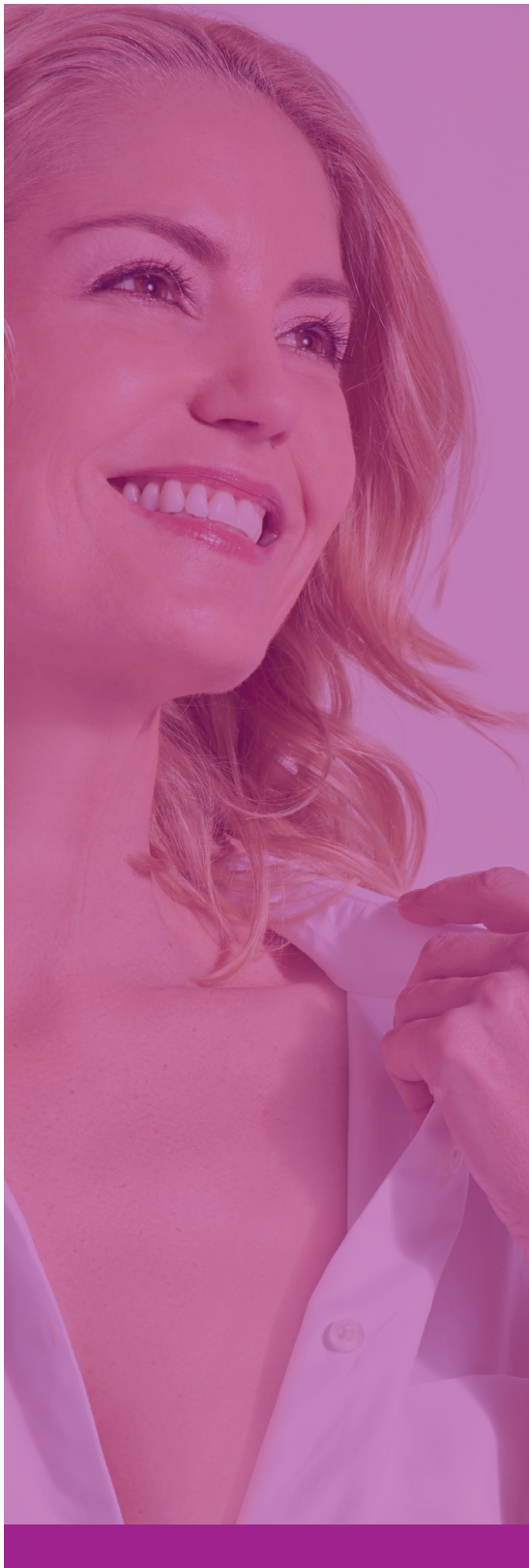
In this eBook, we provide you with the most important information regarding this device, from technology overview to some of the results clinical experts have achieved with their patients.

Know that when you decide to work with one or more of our devices, we'll do everything we can to provide you with the highest level of customer service possible.

That's our promise to you.

Candela Marketing Team

1. CO₂RE Laser System is CE marked from June 6th 2011.

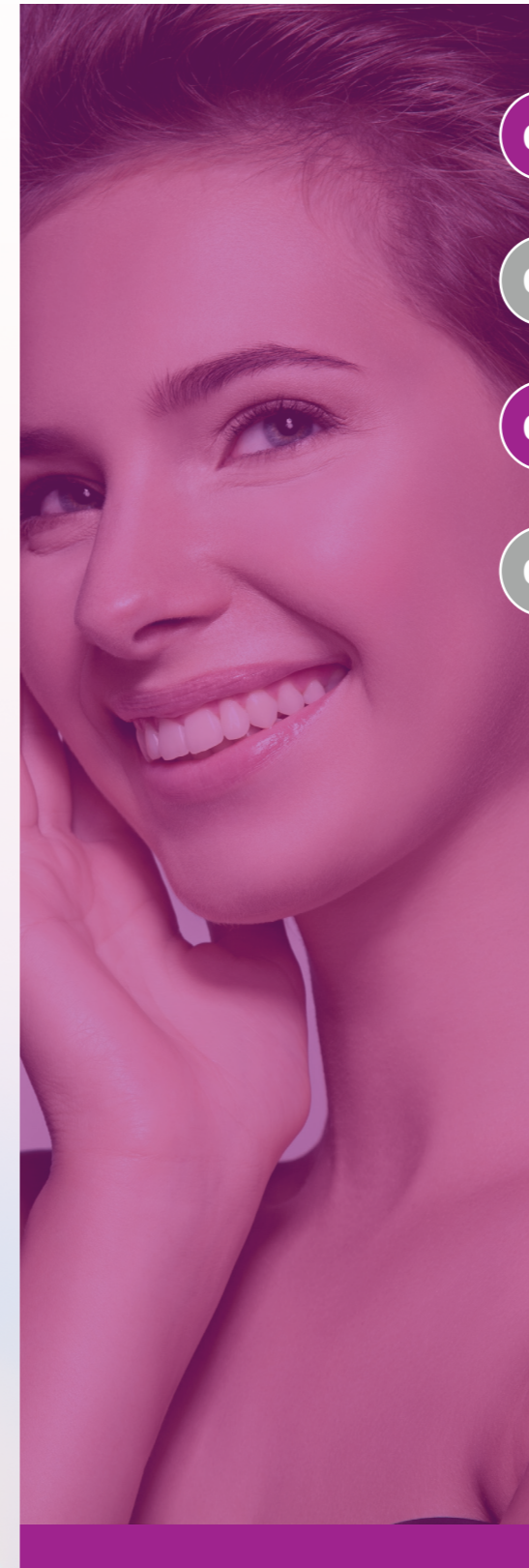


What can you treat?

The CO₂RE[®] system is a highly versatile fractional CO₂ laser engineered to assist you in performing procedures requiring the excision, incision, ablation, coagulation, and resurfacing of soft tissue. You can treat multiple skin layers in one pass, perform full and fractional resurfacing, enhance coagulation and encourage neocollagenesis.

The system is designed from the inside out to be a comprehensive workstation, delivering proven, predictable, visible results across various indications¹²³⁴.

- ✓ CO₂RE[®] Aesthetics for skin resurfacing, from superficial to deep skin treatments, including several options and combinations tailored for your patients' needs
- ✓ CO₂RE[®] Surgical for a true, continuous wave with efficient skin coagulation after the surgical cut
- ✓ CO₂RE[®] Intima for gynaecology applications, enabling you to broaden your portfolio offering



Patient advantages

- 01 Treatments with the CO₂RE[®] system are **fast** and require limited downtime.
- 02 With **multiple indications** you can give your patients the treatment the CO₂RE[®] system has.
- 03 Clinically proven, the CO₂RE[®] system offers predictable, **visible results**.
- 04 With the **full-coverage settings**, better results can be achieved with less treatments.

**CO₂ laser treatments on RealSelf:
89% say it's "Worth It"**

“Never thought the outcome would be this fantastic. It took at least 20 years off my face.”

Patient review of CO₂RE[®] System on RealSelf.

1. CO₂RE[®] Laser System is CE marked from June 6th 2011.
 2. Mahlberg MJ. Rhinophyma - CO₂RE[®] Laser. Candela, data on file, 2015.
 3. Friedman D. Ablative fractional skin resurfacing and facial scar reduction with the CO₂RE[®] device. Candela, data on file, 2015.
 4. Arroyo C. CO₂RE[®] laser for burn scar and striae distensae patients. Candela, data on file, 2016.



Practice advantages

- 01 A potent new revenue stream.** Treatments can easily be bundled into packages of two, four and annual maintenance.
- 02 Repeat business.** With the broad range of treatment possibilities, you can match the age and different desires of all your patients, at any stage in their life.
- 03 Treatment versatility.** With many indications, from wrinkles to pigmentation and scarring, you'll gain unparalleled treatment flexibility that can help your practice grow.
- 04 It's a laser, not a tank.** The CO₂RE[®] system is a small, light machine which can easily be wheeled around from room to room.
- 05 Ease-of-use.** The CO₂RE[®] system can easily switch over from incising to resurfacing on the run in the middle of a case. The laser that does not require restarting, rebooting, or exiting a bunch of treatment screens on the device.

Mechanism of action | The CO₂RE[®] System

- 01** Six treatment modes allow for precise and individualised treatments.

4 fractional ablative treatment modes + 4 pattern shapes

1 classic resurfacing mode

1 surgical mode + defined shape and freehand modes for minor dermal excisions



- 02** The CO₂RE[®] system gives you the ability to treat both superficial and deep skin layers simultaneously with precision control over the intensity, pattern, and depth of ablation, with a single platform.
- 03** You'll also experience the versatility of 3 modules - Aesthetic, Surgical, and Intima- along with a true continuous wave surgical mode for efficient skin coagulation, and laser energy that is rapidly varied to deliver multi-level treatment capabilities.

CO₂RE[®] Clinical Results. Photo-aged skin

Wrinkles & Texture - Long Term Follow-up



Baseline



1 Year After 1 Treatment

Photos: Craig Mezrow, M.D.

Photo-aged skin

Wrinkles & Pigmentation



Baseline



1 Month After Treatment

Photos: Lenka Kucerova, M.D.

Forehead: Mid Mode - Ring 3, 180 mJ
Periorbital: Mid Mode - Ring 3, 128 mJ
Nose: Mid Mode - Ring 3, 30% Fractional Coverage, 143 mJ
Cheeks, Perioral: Fusion Mode - 30% Fractional Coverage, Ring 3 101 mJ, CORE 70 mJ

Wrinkles & Pigmentation



Baseline



6 Months After 1 Treatment



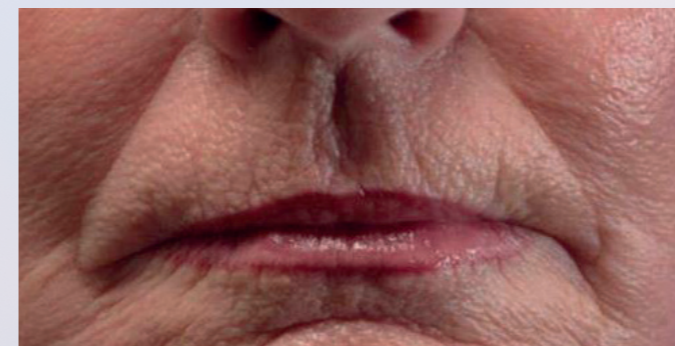
1 Month After 2 Treatments

Photos: Lenka Kucerova, M.D.

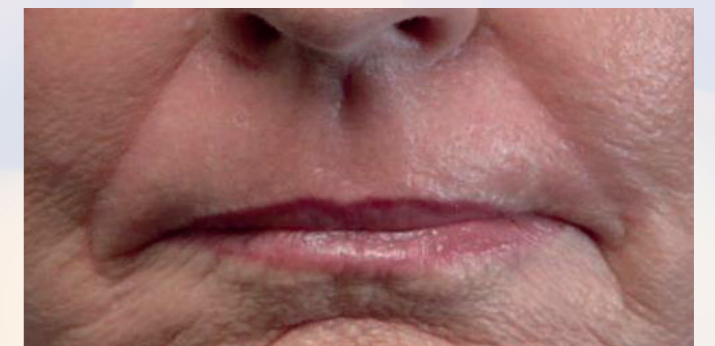
Forehead: Mid Mode - Ring 3, 20% Fractional Coverage, 161 mJ
Nose, Eyelids: Mid Mode - Ring 3, 30% Fractional Coverage, 128 mJ
Cheeks, Perioral: Fusion Mode - 30% Fractional Coverage, Ring 101 mJ, CORE 70 mJ

Photos are unretouched. Individual results may vary.

Wrinkles



Baseline



After Treatment

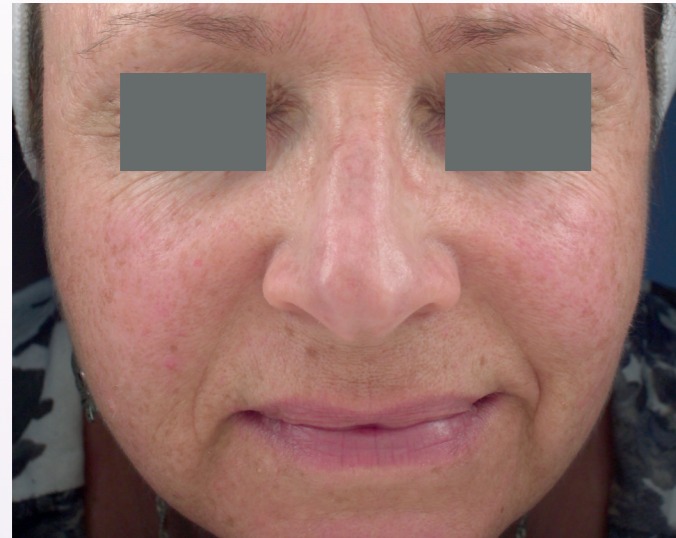
Classic Mode - 3 mJ, 2 passes

Photos: Dr. Powell, M.D.

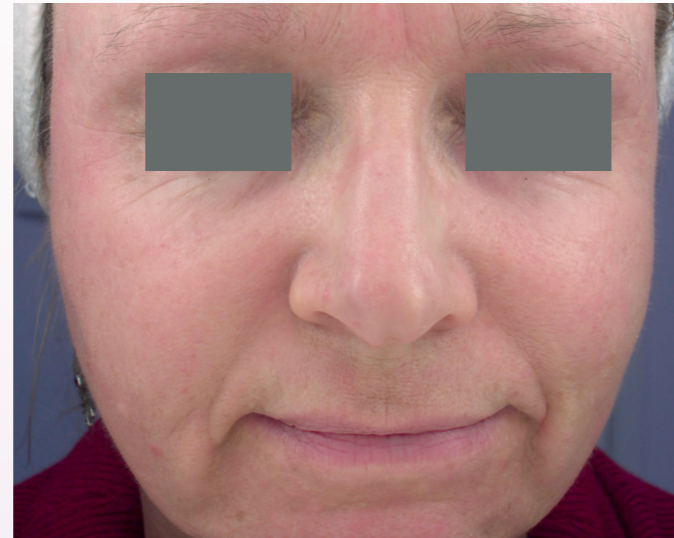
Photos are unretouched. Individual results may vary.

CO₂RE[®] Clinical Results. Photo-aged skin

Pigmentation & Irregular Texture



Baseline



1 Month After Treatment

(Light Mode (no parameters available

Photos: Dinesh Maini, M.D.

Wrinkles & Irregular Texture



Baseline

Cheeks: Mid Mode - 30% Fractional Coverage, Ring size 3, 70-75 mJ



3 Weeks After 1 Treatment

Photos: Steven Eubanks, M.D.

Photos are unretouched. Individual results may vary.

Photo-aged skin

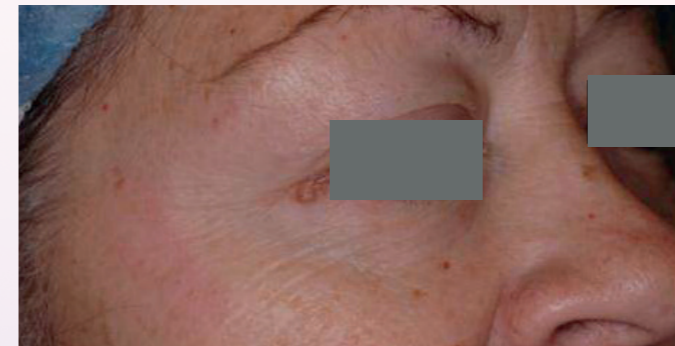
Wrinkles & Pigmentation - Upper Face



Baseline

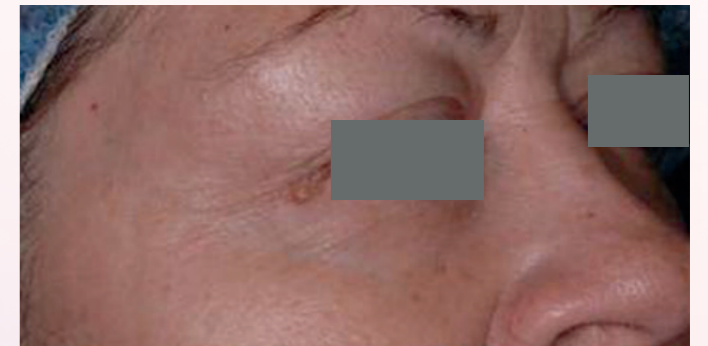


4-6 Weeks Follow Up



Baseline

Lower Cheeks & Forehead: Mid Mode - 30% Fractional Coverage, 75mJ
Nose & Upper Cheeks: Mid Mode - 40% Fractional Coverage, 90mJ
Peri-Oral: Fusion Mode - 40% Fractional Coverage, 90mJ



4-6 Weeks Follow Up

Photos: E. Victor Ross, M.D.

Wrinkles & Pigmentation - Lower Face



Baseline

Lower Cheeks & Forehead: Mid Mode - 30% Fractional Coverage, 75mJ
Nose & Upper Cheeks: Mid Mode - 40% Fractional Coverage, 90mJ
Peri-Oral: Fusion Mode - 40% Fractional Coverage, 90mJ



4-6 Weeks Follow Up

Photos: E. Victor Ross, M.D.

Photos are unretouched. Individual results may vary.

CO₂RE® Clinical Results.

Photo-aged skin

Wrinkles



Baseline



After 1 Treatment

Photos: Craig Mezrow, M.D.

Fusion Mode: Lower 2/3 of face
Deep Mode: 5% Fractional Coverage, 70 mJ
Mid Mode: Periorbital and forehead 129 mJ

Pigmentation & Texture



Baseline

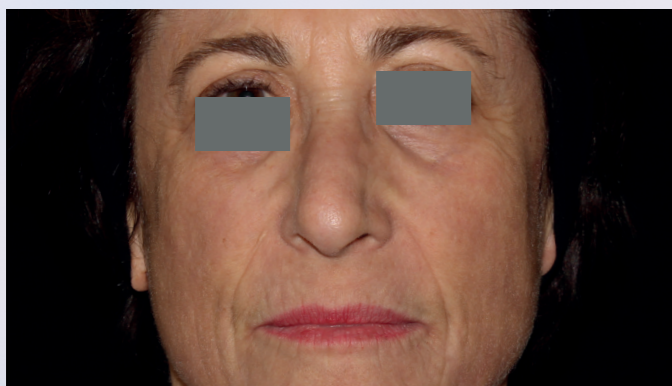


5 Days After Treatment

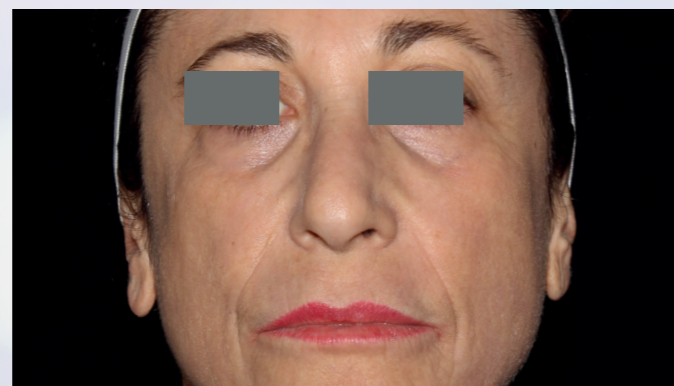
Photos: Susan Tanne, M.D.

Mid Mode: Ring 3, 30% Fractional Coverage, 111mJ

Photo-damaged Skin



Baseline



After 1 Treatment

Photos: Craig Mezrow, M.D.

Perioral: 2 Passes of Deep Mode 5% (70 mJ) followed by 1 pass of Fusion Mode at 40% (Deep Mode 70 mJ and Mid Mode 129 mJ)

Periorbital: 1 Pass of Deep Mode 5% (70 mJ) followed by 1 pass of Mid Mode 40% Ring Size 3, 259 mJ

Forehead: glabellar area and strip along brows: 1 pass of Deep Mode at 5% at 70 mJ followed by 1 pass of Mid Mode 40% Ring Size 3 and 259J; the rest of forehead Mid Mode only - same parameters

Cheeks: Fusion Mode at 40% Deep Mode 70 mJ and Mid Mode 129 mJ. At jawline same parameters except at 30%
Photos are unretouched. Individual results may vary.

Scars

Acne Scars



Baseline



After 3 Treatments

Photos: David Friedman, M.D.

Deep Mode: from 40 to 70 mJ

Acne Scars



Baseline



After 3 Treatments

Photos: Davide Brunelli, M.D.

Deep Mode: from 40 to 70 mJ

Acne Scars



Baseline



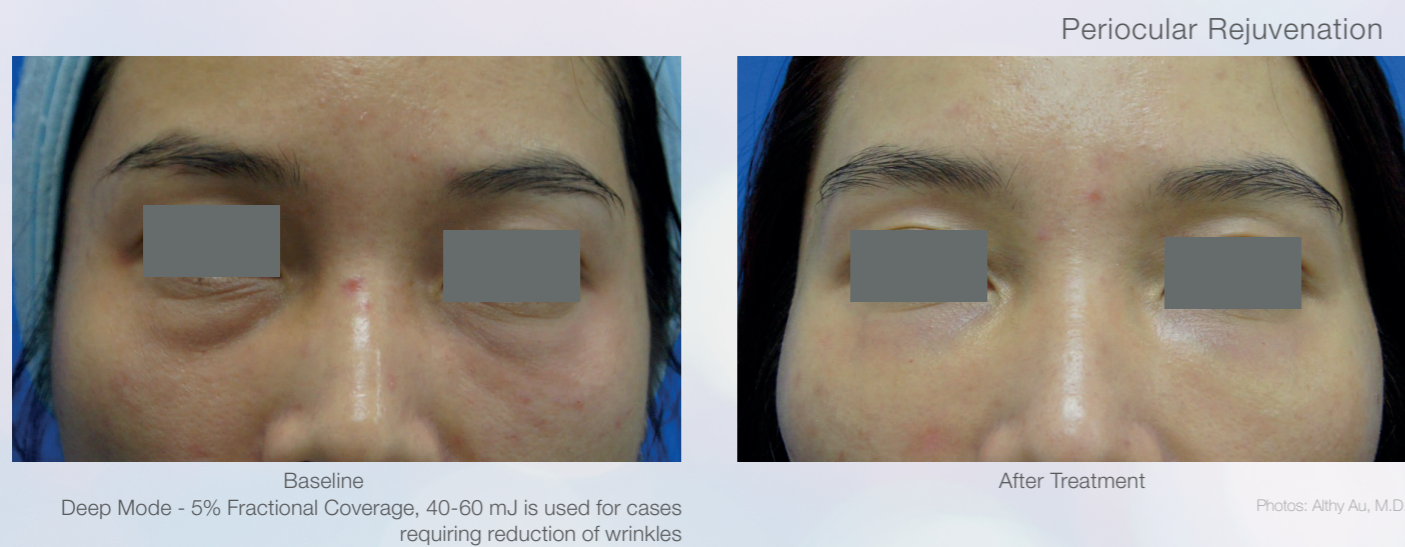
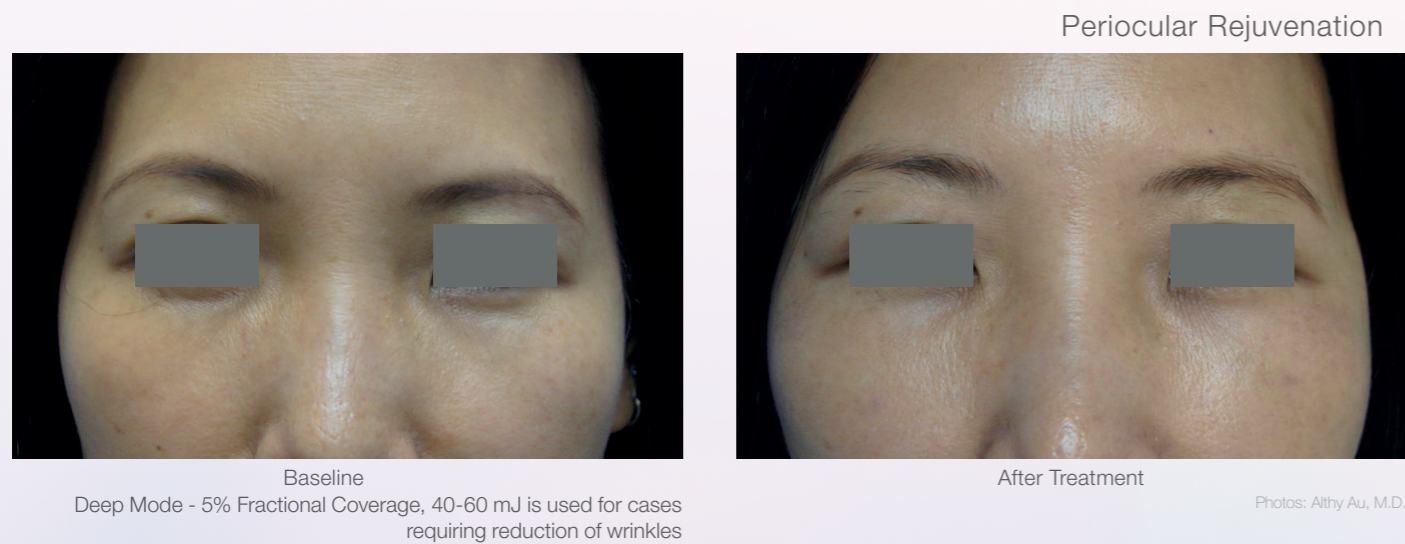
After 3 Treatments

Photos: Davide Brunelli, M.D.

Deep Mode: from 40 to 70 mJ

CO₂RE® Clinical Results.

Peri-orbital treatment



Photos are unretouched. Individual results may vary.

Arms, rhinophyma & skin lesions



Photos are unretouched. Individual results may vary.

Don't take our word.

Take it from our customers.

“The CO₂RE[®] system can deliver superficial ablative treatments at variable densities, for a peel-like effect, as well as deep ablative treatments for dermal remodelling.”

- Moshe Lapidoth, MD Dermatologist, Israel

“We've been very happy with the results that we've seen using the CO₂RE[®] system. It has a lot of versatility and we find it works well for both fractionated ablative resurfacing as well as traditional ablative resurfacing.”

- Brian Zelickson, MD Dermatologist, Edina, Minnesota

“For my practice, we selected the CO₂RE[®] CO₂ device because it is so versatile with traditional and fractional resurfacing, which means we can treat a wide range of conditions. Adding it to our practice has been easy - it has an excellent graphic interface, as well as a small footprint - and has expanded our patient offerings.”

- Hayes B. Gladstone, MD Dermatologic Surgeon, San Ramon, California

“One of the advantages of the CO₂RE[®] system is the handpiece, which is very easy to hold. In comparison to other fractional handpieces the CO₂RE[®] handpiece is thin, lightweight and easy to maneuver around the skin during treatments.”

- E. Victor Ross, MD Dermatologist, San Diego, California

Summary of peer-reviewed articles | The CO₂RE[®] System

A Fractional Bipolar Radiofrequency Device Combined with a Bipolar Radiofrequency and Infrared Light Treatment for Improvement in Facial Wrinkles and Overall Skin Tone and Texture.

- Gold AH, Pozner J, Weiss R., *Aesthet Surg J.* 2016 Oct; 36(9):1058-67. doi: 10.1093/asj/sjw086. Epub 2016 Jul 29.

"Fitzpatrick Wrinkling and Elastosis Score was decreased significantly at three months ($P < .01$; paired t test) and at six months ($P < .001$; paired t test) after the final treatment. Investigators' assessments of overall improvement in facial appearance, demonstrated 88% improvement at 12 weeks and 82% at 24 weeks after the final treatment. Subject evaluations were similar, consistently reporting improvement in wrinkles and overall facial skin appearance throughout the study, and high a degree of satisfaction with their final results. Subjects tolerated the procedures well, with only transient mild to moderate erythema and edema occurring in most patients, and without complications."

Clinical evaluation of the efficacy and safety of combined bipolar radiofrequency and optical energies vs. optical energy alone for the treatment of pigmented lesions and photo-damage in aging hands.

- Ines Verner *Global Dermatology, Lasers Med Sci.* 2017 Aug;32(6):1387-1392. doi: 10.1007/s10103-017-2257-z. Epub 2017 Jun 23.

"This study evaluated the efficacy and safety of a novel technology, which combines bipolar radio frequency (RF) and optical energies for the cosmetic treatment of aging hands. Participants received three treatments: combined RF and intense pulsed light (IPL) on one hand and IPL treatment alone on the other. At the 1 and 3 months follow-up, skin laxity and pigmentation, investigator and patient improvement assessments, and satisfaction were significantly better in the hand treated with combined bipolar RF and IPL. This study demonstrates the safety and efficacy of combining RF and optical energies for the esthetic improvement of aging hands. Combined RF and IPL treatment was more efficient than IPL alone in improving skin pigmentation, skin laxity, and texture."

Successful removal of freckles with the bipolar radiofrequency and optical energy.

- Köse O. *J Cosmet Laser Ther., Journal of Cosmetic and Laser Therapy* Volume 18, 2016 - Issue 4.

"Thirty patients with facial freckles received four treatment at 3-week intervals with RF and optical energy, combination of broadband light (580-980 nm) + bipolar RF energy 100 J/cm². The improvement of the freckles was evaluated using the Freckles Area and Severity Index (FASI), and physician and patient assessment at the end of the sessions, at Months 3 and 12 after the treatment. By the end of the study, assessment of results by physician for 83% at Week 12 and by patients for 70% at Week 52 was excellent or good. On the other hand, 88% at Week 12 and 76% at Week 52 of the patients reported that they were extremely or very satisfied. FASI was noted to be 65.15 at pretreatment, 25.60 at 12th week, and 27.40 at the end of the follow-up (one year). Mean improvement rate ($n = 30$), as determined from the difference in mean FASI score, was 70% at 3 months and 66% at 12 months."

Safety and Efficacy Evaluation of Pulsed Dye Laser Treatment, CO₂ Ablative Fractional Resurfacing, and Combined Treatment for Surgical Scar Clearance.

- Cohen JL, Geronemus RG. *J Drugs Dermatol.* 2016 Nov 1;15(11):1315-1319.

"Both pulsed dye laser treatment and CO₂ ablative fractional resurfacing, when used as a monotherapy, are safe and effective in the treatment and improvement of recent surgical scarring. When both of these modalities are used in combination, however, they appear to potentially have a synergistic effect and an accelerated outcome on the cosmesis of recent surgical scars."

In-Vivo Histological Analysis of a Fractional CO₂ Laser System Intended for Treatment of Soft Tissue

- Hurliman E, Zelickson B, Kenkel J. J Drugs Dermatol. Nov. 2017.

“9 healthy females (mean age 39 years) with Fitzpatrick Skin Types I-IV received the CO₂RE laser treatment, with different modes and energy, to abdomen prior to abdominoplasty at different time points. Histologic evaluation showed ablation to levels of up to 900 microns in depth using the Deep Mode. Healing process of up to 10 days with Deep Mode. In conclusion, the higher the energy used with CO₂RE, the greater the degree of ablation and coagulation in tissue, which can lead to a greater tissue response in terms of fibroblast activity, collagen remodeling, and new collagen formation.”



System Specifications

CO ₂ RE® SYSTEM SPECIFICATIONS	
Laser Type	CO ₂
Wavelength	10,600 nm
Laser Emission Mode	Pulsed
Output Power	60 Watts (maximum peak)
Laser Beam Energy	Variable from 1-70 mJ
Pulse Repetition Rate	Up to 16.7 kHz
Pulse Duration	20-1166 µsec
Power Stability	±1.5 Watts (±5%)
Mode Quality (M ²)	<1.2
Beam Size	Ø 1.8 ±0.5 mm
Beam Divergence	7.5 ±0.5 mrad (full angle)
Polarization	>100:1 linear (orthogonal to mounting pads)
Maximum Scan Area	10 mm diameter
Aiming Laser	5 mW, 650 nm (red) diode laser
Articulated Arm	Lightweight, aluminum fiber, 7-joint, pneumatically balanced Treatment radius at full arm extension: • 85 cm (33.5") • Horizontal rotation: 360°
Lens Assemblies	• 150 µm spot size • 120 µm spot size
Handpiece	Single use or surgical
User Interface	10.4" high-resolution
Laser Emission Control	Footswitch
Laser Emission Indicators	• Solid amber LED in Standby and Ready modes • Flashing red LED during laser emission
Electrical Requirements	• 100-240 VAC self-sensing • 50-60 Hz, 7.1 A, single phase
Dimensions	40 cm x 44 cm x 177 cm (15.75" x 17.3" x 70")
Weight	26 kg (58 lbs)



www.candelamedical.com



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