



MEDICAL INSIGHT[®]

Skin Rejuvenation Market Study

August 2015

i. Methodology

Skin rejuvenation data was compiled from a wide variety of public and proprietary sources. Information was cross-checked against other data, using Medical Insight's proprietary forecasting models, and synthesized into both qualitative and quantitative analyses and projections.

Public sources that were utilized include:

- articles in trade publications, medical journals and regulatory documents;
- articles in consumer magazines and newspapers;
- company news releases, website information, patent documents, regulatory data, marketing materials and financial filings;
- information from trade associations

Proprietary sources that were utilized include:

- Medical Insight's extensive database of industry and product information;
- Medical Insight's physician survey data;
- industry analyst reports;
- exclusive interviews with, and feedback from, company executives, researchers, sales representatives, physicians, patients, consultants and other industry experts

ii. New in August 2015

This mini report represents the eighth edition of Medical Insight, Inc.'s Skin Rejuvenation report.

Like its predecessor, which was published in August 2014, this report contains the latest industry news and updated market forecasts, which take into account recent technology, product, company, regulatory and other developments, as well as an in-depth analysis of the competitive positions of key players selling to both core and non-core aesthetic practices.

In addition to updated qualitative and quantitative product, global and regional manufacturer and market information, this report also includes:

- expanded forecasts from 2013 to 2018 to 2014 to 2019;
- discussion of industry mergers and acquisitions;
- expanded section on manufacturer profiles;
- videos of selected devices;
- expanded tables, graphs and images.

M.I.I Disclaimer

Information in this study has been obtained by Medical Insight, Inc. from sources believed to be reliable. While Medical Insight believes the data provided herein to be accurate, no expressed or implied guarantees regarding accuracy or adequacy are made. Product and corporate data can change very quickly and without notice and Medical Insight continually updates its research products. Because of this, certain figures in Medical Insight reports may differ from corresponding figures in earlier reports, even if those reports were issued relatively recently. Furthermore, current economic conditions are contributing to a highly volatile market, in which actual results often diverge significantly from estimates developed by manufacturers, analysts and others, resulting in a revision of projections. Therefore, while Medical Insight will provide an explanation of figures in any of its reports, only the most recent reports contain Medical Insight's latest estimates.

This study is not intended as a substitute for proper due diligence. Although an attempt has been made to provide thorough coverage of the subject matter of this report, no guarantees regarding completeness or thoroughness are made. Medical Insight is not responsible for any errors, omissions, or results obtained from use of information provided herein.

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Michael Moretti has served as a medical industry analyst and strategic advisor for more than 20 years. As an industry consultant, Mr. Moretti specializes in strategic business development projects and high-growth, emerging market segments. He provides custom reports and confidential market studies for a variety of clients, including global medical and pharmaceutical companies.

In 1993, Mr. Moretti founded Medical Insight, Inc., the leader in focused aesthetic market research offering comprehensive data on procedure volume and growth, revenue forecasts and new product introductions. Under Mr. Moretti's leadership, Medical Insight publishes global market studies and forecasts for major industry sectors such as facial injectables, cosmeceuticals, body shaping procedures, skin rejuvenation technologies and home-use aesthetic products. Medical Insight also sponsors executive business forums to address scientific developments and market trends for the investment community.

Mr. Moretti is the founder of *Aesthetic TV*[®], the first and only one-stop online resource for current, reliable information about cosmetic and anti-aging treatments. *Aesthetic TV* offers expert advice for consumers via interviews with the top physicians in the field, and unprecedented access to the latest beauty-enhancing procedures and products created specifically to help people look and feel their absolute best.

Mr. Moretti is also founder and publisher of *THE Aesthetic Guide*[®] – a digital and print publication from Medical Insight featuring in-depth reports on new products, procedures and trends, reaching over 70,000 physicians, industry executives and investment analyst subscribers globally. Special editions of *THE Aesthetic Guide* address the European market and the Asian markets.

In 2007, Mr. Moretti debuted *THE Aesthetic Show*[™], the first multidisciplinary annual business to business trade show that brings thousands of the highest profile physicians and medical professionals together in Las Vegas to learn about the newest aesthetic procedures, products and technologies in a dynamic, interactive, educational format. For more information please visit: www.miinews.com.

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Section	Executive Summary
1	

Demand for a low downtime procedure that can quickly improve the skin's appearance remains high. An improving U.S. economy in which unemployment has recently declined to 5.5%, a stock market that continues to hit new highs and increased consumer confidence is also supporting consumer spending.

Over the next five years, skin rejuvenation platform and disposables revenues will expand by 14.1% per year, on average, from \$503.1 million in 2014 to \$972.5 million in 2019. This is in line with Medical Insight's prior skin rejuvenation report, released in August 2014.

North America represents the largest regional market for skin rejuvenation devices and disposables. It will remain the largest market through 2019, with strong growth of 13.2% per year as aesthetic practitioners acquire new devices to keep up with current technology. This compares with annual growth of 19.1% in Asia, 17.9% in Latin America and just 11.4% in Europe. The European region will continue to suffer from ongoing economic challenges, particularly in the large countries of Spain, Italy, France and the U.K., although there has been some improvement in recent months.

As the installed base of skin rejuvenation platforms increases, sales of disposables, such as handpieces, will also rise, growing from \$42.1 million in 2014 to an estimated \$61.5 million in 2019. While Solta Medical dominated disposable sales in 2014, it is anticipated that some other developers will follow this model for future systems.

As with sales of platforms and disposables, skin rejuvenation procedure volume will benefit from a growing installed base of systems and the continuing introduction of newer, more efficacious devices. Although rising competition will pressure treatment fees, as physicians increasingly utilize single-treatment ablative equipment, total procedure fees will rise from \$4.0 billion in 2014 to more than \$4.6 billion in 2019. It is assumed that 10% of the prior year's installed base will be retired as practitioners upgrade older systems with newer technologies.

Table 1
Top Skin Rejuvenation Devices in North America
August 2015

SKIN REJUVENATION COMPARISON CHART

Supplier Product Name	Device Type	Wavelength (nm)	Energy Output (Joules)	Pulse Length	Price	Accessories
Aerolase						
LightPod Neo	MicroPulse Nd:YAG	1064 nm	Up to 1272 J/cm ²	650 μs – 1.5 ms	Contact mfr.	No anesthetic needed, no consumables and no skin contact by handpiece. No service contracts. Portable (25 lbs.). All laser accessories, training and marketing package included.
LightPod Era	Er:YAG	2940 nm	Up to 1400 mJ	300 μs	Contact mfr.	
Alma Lasers, Ltd.						
Harmony XL Pro	AFT Pulsed Light	515 – 950 nm	30 J/cm ²	10, 12, 15 ms	Contact mfr.	Contact cooled version or non-cooled module options. 2 mm, 6 mm and 10 mm tips with contact cooling.
	Nd:YAG ClearLift Q-Switched / Nd:YAG Dye-VL AFT Pulsed Light	1064 nm 1064 nm 500 – 600 nm	30 – 450 J/cm ² Up to 1200 J/cm ² Up to 25 J/cm ²	10, 15, 45, 60 ms 20 ns 5, 10, 25 ms		
SINON	Alexandrite Ruby Q-Switched	755 nm 694 nm	1 – 32 J/cm ² 2 – 14 J/cm ²	3 ms 20 ns	Contact mfr.	5 mm and 8 mm tips.
BTL Industries, Inc.						
Protegé Elite	Focused Monopolar RF	N/A	Up to 50 W	N/A	Contact mfr.	Impedance intelligence and square spectrum energy profiling handpiece prevents sparking or tissue burn. No consumables. Multi-application RF platform for treatment of most body areas; real time temperature monitoring; controlled cooling for patient comfort. Impedance intelligence and square spectrum energy profiling handpiece prevents sparking or tissue burn. No consumables.
Exilis Elite	Focused RF	N/A	Up to 90 W	N/A	Contact mfr.	
Chromogenex						
Regenlite	Pulsed Dye Laser	585 nm	9 J/cm ²	150 – 350 ms	Contact mfr.	Treatment tip kit included. No disposables.
Cynosure, Inc.						
Icon Aesthetic System MaxG handpiece	Optimized Light	500 – 670 nm, 870 – 1200 nm	Up to 80 J/cm ²	1 – 100 ms	Contact mfr.	Advanced contact cooling and dual filters minimize unnecessary epidermal exposure for enhanced patient comfort. XF Microlens provides high, non-ablative coverage for fast resurfacing treatments; XD Microlens offers greater treatment depth for challenging conditions.
1540 handpiece	Fractional Non-Ablative Laser	1540 nm	Up to 70 mJ per microbeam	10 – 15 ms		
2940 handpiece	Fractional Ablative Laser	2940 nm	3 – 24 mJ	0.25 – 5 ms		
Emerge	Fractional Non-Ablative Laser	1410 nm	10-30 mJ per microbeam	4 – 20 ms	Contact mfr.	Three light delivery modes: Manual activation for focused Tx areas, AutoStamp for faster treatments, AutoGlide for ease of use and enhanced comfort; five pre-set parameters for the treatment of pigment, wrinkles or general skin resurfacing; multiple energy and microbeam density settings; each setting can be manually adjusted for a range of Tx parameters. Lightweight, compact system design; intuitive user interface.
PicoSure	Alexandrite	755 nm	165 – 200 mJ	550 – 750 picoseconds	Contact mfr.	Multiple aesthetic applications including tattoo removal, acne scar treatment, removal of pigmented lesions and wrinkle treatment. Addition of Focus Lens Array allows clinicians to expand the capabilities of PicoSure within the aesthetic realm.
RevLite SI	Nd:YAG	1064 nm, 532 nm, 585 nm, 650 nm	Up to 30 J/cm ²	5 – 20 ns	Contact mfr.	MultiLite handpieces converting to 585 and 650 nm wavelengths. Additional MultiSpot handpiece offering 2 - 8 mm spot sizes.
MedLite C6	Nd:YAG	1064 nm, 532 nm, 585 nm, 650 nm	Up to 14 J/cm ²	5 – 20 ns	Contact mfr.	Same as above.
Elite	Alexandrite / Nd:YAG	755 nm / 1064 nm	Up to 600 J/cm ²	0.4 – 300 ms	Contact mfr.	High powered Nd:YAG and Alexandrite with spot sizes ranging from 1.5 - 15 mm. Compatible with SmartCool air cooling system.
Elite+	Alexandrite / Nd:YAG	755 nm / 1064 nm	Up to 600 J/cm ²	0.4 – 300 ms	Contact mfr.	High powered Nd:YAG and Alexandrite with spot sizes ranging from 1.5 - 24 mm. Compatible with SmartCool air cooling system.
Elite MPX	Multi-Wavelength Aesthetic Platform	755 nm / 1064 nm / MultiPlex / IPL	Up to 600 J/cm ²	0.5 – 300 ms	Contact mfr.	High powered Nd:YAG and Alexandrite with spot sizes ranging from 1.5 - 24 mm. Patented MultiPlex technology blends wavelengths for superior results. Integrated IPL (530, 560, 590 nm). Integrated Zimmer cooler. Windows XP based graphical user interface.
Pellevé Wrinkle Reduction System	High Frequency Monopolar RF (4.0 MHz)	N/A	N/A	N/A	Contact mfr.	Pellevé GlideSafe handpieces – four sizes (7.5, 10, 15 and 20 mm) enable customized treatment for each patient. Fixed-life reusable design minimizes consumable costs per patient. Pellevé S5 Generator powers GlideSafe handpieces, as well as hundreds of traditional electrosurgery tips for a variety of surgical procedures.
Cortex Resurfacing Work Station Medley Multifunction Laser and IPL System	CO ₂ / Er:YAG Laser	10,600 nm / 2940 nm	Up to 40 W / up to 1 J	Adjustable to 6 ms / 300 μs	Contact mfr.	Fractional CO ₂ combined with Er:YAG with 1.5, 3 and 6 mm spot sizes. Three year manufacturer warranty.
	Er:YAG / QS Nd:YAG / IPL / 810 nm Diode	2940 nm / 532 nm, 1064 / 450 – 1200 nm / 910 nm	N/A	N/A	Contact mfr.	

Note: Data subject to change; please refer to Company Directory for supplier contact information. Not all devices are FDA cleared for the application(s) indicated.

**Table 1 Cont'd.
Top Skin Rejuvenation Devices in North America
August 2015**

SKIN REJUVENATION COMPARISON CHART

Supplier Product Name	Device Type	Wavelength (nm)	Energy Output (Joules)	Pulse Length	Price	Accessories
Eclipse Aesthetics, LLC						
Skinfinity RF Firma	RF RF	N/A N/A	0 – 100 W 65 W	N/A N/A	Contact mfr. Contact mfr.	Ever Pulse Rollers and reusable stamp. Options: iFine, Fine, Small, Shape and Large.
Ellipse						
Nordlys	Selective Waveband Technology (SWT)	555 – 950 nm; 530 – 750 nm; 400 – 720 nm	2 – 26 J/cm ²	0.5 – 99.5 ms	Contact mfr.	Patented Dual Mode Filtering. No topical anesthetic required. No consumables. 16 second power-up time. Before and after stored. Stored patient data (easily integrates into EMR). Product manual and clinical workbook downloaded on system. Clinical intelligence ensures safe and efficacious treatments.
EndyMed						
EndyMed PRO PURE+ GLOW	Radiofrequency Radiofrequency Radiofrequency	N/A N/A N/A	65 W 50 W 40 W	N/A N/A N/A	Contact mfr. Contact mfr. Contact mfr.	Large, Small, Fine, iFine, Intensif. Large, Small, Fine, iFine. Same as above.
Focus Medical						
NaturaLight NaturaLase Er NaturaLase QS NaturaLase CO ₂	Pulsed Light Er:YAG Laser Q-switched Nd:YAG Laser Fractional CO ₂	530 – 1200 nm 2940 nm 1064 nm, 532 nm, 585 nm, 650 nm 10,600 nm	50 J/cm ² 3 J 1 J or 2 J per pulse 50 W	Up to 500 ms 350 µm 10 ns Up to 10 ms	Contact mfr. Contact mfr. Contact mfr. Contact mfr.	Included. MicroHex fractional handpiece included. Dye pack handpieces. Accessories included.
Fotona						
SP Dynamis	Nd:YAG / Er:YAG	1064 nm / 2940 nm	Up to 600 J/cm ²	0.1 – 50 ms	Contact mfr.	F-Runner, fractional Er:YAG scanner; 250 µm spot size, 168 mm ² Tx area S-Runner, Er:YAG scanner; 4 mm spot size, 16 cm ² Tx area. S-11; Nd:YAG scanner; 42 cm ² Tx area. Er:YAG handpieces: 0.25 - 12 mm spot sizes; Nd:YAG handpieces: 2 - 20 mm spot sizes.
XS Dynamis	Er:YAG	2940 nm	Up to 500 J/cm ²	0.1 – 1.5 ms	Contact mfr.	F-Runner, fractional Er:YAG scanner; 250 µm spot size, 168 mm ² Tx area S-Runner, Er:YAG scanner; 4 mm spot size, 16 cm ² Tx area. Er:YAG handpieces: 0.25 - 12 mm spot sizes.
XP MAX	Nd:YAG	1064 nm	Up to 600 J/cm ²	0.1 – 300 ms	Contact mfr.	S-11; Nd:YAG scanner; 42 cm ² Tx area. Nd:YAG handpieces: 2 - 20 mm spot sizes.
QX MAX	Nd:YAG Q-Switched / Long Pulse	1064 nm	Up to 160 J/cm ²	5 – 20 ns / 250 µs	Contact mfr.	Handpieces: 2 - 8 mm spot sizes.
SP Spectro	Nd:YAG / Er:YAG	1064 nm / 2940 nm	Up to 600 J/cm ²	N/A	Contact mfr.	F-Runner fractional Er:YAG scanner; 250 µm spot size, 168 mm ² Tx area. S-Runner Er:YAG scanner; 4 mm spot size, 16 cm ² Tx area. S-11 Nd:YAG scanner; 42 cm ² Tx area. Er:YAG handpieces: 0.25 - 12 mm spot sizes; Nd:YAG handpieces: 2 - 20 mm spot sizes.
XP Spectro	Nd:YAG / Long Pulse	1064 nm	Up to 600 J/cm ²	0.1 – 50 ms	Contact mfr.	S-11 Nd:YAG scanner; 42 cm ² Tx area. Nd:YAG handpieces: 2 - 20 mm spot sizes.
XP Dynamis	Nd:YAG / Long Pulse	1064 nm	Up to 600 J/cm ²	0.1 – 50 ms	Contact mfr.	Same as above.
Healux Corporation						
Caspian Yello Toning	QS Nd:YAG Narrow band Alexandrite	1064 nm / 532 nm 750 nm	1.8 J / 700 mJ 60 J/cm ²	Up to 3 ns 2 – 100 ms	Contact mfr. Contact mfr.	Zoom and collimated handpieces.
InMode						
Lumecca	Spectrum Shifted IPL	515 – 1200 nm, 580 – 1200 nm	10 – 30 J/cm ²	5 – 30 ms	Contact mfr.	Delivers 40% of total energy between 500 - 600 nm. Provides a photofacial in one to three treatments. Powerful peak power: 3,000 W/cm ² . No consumables. Non-invasive subdermal heating for collagen remodeling and contraction. RF current flows uniformly between the electrodes for a comfortable and safe Tx. ACE technology features built-in temperature controls to attain clinically proven optimal epidermal temperature, and exclusive capability for prolonged exposure at therapeutic temperatures.
Forma	Bi-polar RF	N/A	Up to 65 W	N/A	Contact mfr.	
Lumenis						
M22	Multi-Application, Multi-Technology Modular Platform	IPL: 515 – 1200 nm / Nd:YAG: 1064 nm	10 – 35 J/cm ² / 20 – 225 J/cm ²	4 – 20 ms / 2 – 20 ms	Contact mfr.	Universal IPL module treats 24 applications, Universal IPL handpiece has two light guides (15 x 35 mm and 8 x 15 mm), with six exchangeable ExpertFilters: 515, 560, 590, 615, 640, 695 nm. Nd:YAG module treats five applications, MultiSpot Nd:YAG handpiece has 2 x 4 mm and 6 mm light guides. Optimal Pulse Technology (OPT) and Multiple-Sequential-Pulsing. Continuous contact cooling with SapphireCool light guides. Optimized presets.
M22 ResurFX	1565 nm Erbium Fiber Laser	1565 nm	10 – 70 mJ per microbeam	N/A	Contact mfr.	Single pass CoolScan scanner for non-sequential scanning, continuous contact cooling for increased patient comfort and protection of epidermis. No disposables; 600 combinations of shape, size and density.
M22 Q-Switched Nd:YAG	Q-Switched Nd:YAG	N/A	1.6 – 14 J/cm ²	6 – 8 ns	Contact mfr.	Homogenous "Top-Hat" beam profile. Multiple disposable and non-disposable tips, multiple spot sizes: 2, 2.5, 3.5, 5 and 6 mm

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Supplier Product Name	Device Type	Wavelength (nm)	Energy Output (Joules)	Pulse Length	Price	Accessories
Lumenis - continued						
Lumenis One	Multi-Application, Multi-Technology Modular Platform	IPL: 515 – 1200 nm / Nd:YAG: 1064 nm / LightSheer Diode: 800 nm	10 – 40 J/cm ² / 10 – 225 J/cm ² / 10 – 100 J/cm ²	3 – 100 ms / 2 – 20 ms / 5 – 400 ms	Contact mfr.	Upgradable, expandable, seven IPL filters, OPT for multiple sequential pulsing, optimized presets and patient database, spot sizes: IPL: 15 x 35 mm and 8 x 15 mm, Nd:YAG: 2 x 4, 6 and 9 mm, LightSheer: 9 x 15 mm.
UltraPulse (with ActiveFX, DeepFX, TotalFX and SCAAR FX)	Fractional and Full Ablative CO ₂	10,600 nm	Proprietary, unique UltraPulse technology: Up to 225 mJ per single pulse (short pulse duration). Avg. power up to 60 W, peak power up to 240 W	Unique 225 mJ in less than 2 ms	Contact mfr.	Two scanners: CoolScan (CPG) delivers UltraPulse telecentric, collimated scanning with 1.3 mm spot size. DeepFX micro-scanner delivers energy with 0.12 mm spot size, up to 4 mm penetration depth. Collimated single spot energy delivery and focused incisional handpieces. SCAAR FX fractional mode delivers 150 mJ per pulse, deep treatment up to 4 mm in a single pulse and optimal ablation/coagulation ratio. 34 FDA cleared aesthetic indications.
AcuPulse MultiMode	Fractional and Full Ablative CO ₂	10,600 nm	Average power up to 40 W, peak power up to 200 W	SuperPulse pulses less than 0.3 ms	Contact mfr.	Ten modes: FeatherTouch, SilkTouch, FineTouch, ToeTouch, Paint, Superficial, Deep, Combo, StretchTouch and Bleph. Two scanners: AcuScan120 for fractional resurfacing and SurgiTouch for full resurfacing. Three handpieces for use with SurgiTouch scanner and one incisional handpiece. 34 FDA cleared indications.
Fotona QX Max (distributed by Lumenis)	Q-switched Nanosecond / Accelera sub-millisecond	1064 nm, 532 nm, 585 nm, 650 nm / 1064 nm	1600 mJ, 600 mJ, 340 mJ, 220 mJ / 5,000 mJ	N/A	Contact mfr.	Five laser sources in one system, high single-pulse energy for more efficiency. Advanced performance guarantees efficacy at larger spot sizes, uniform beam profiles with VCT, OPTOflex arm increases precision and accuracy. Wider range of treatments including FRAC3; wireless footswitch.
Lutronic						
SPECTRA	Q-switched Nd:YAG	532 nm, 585 nm, 650 nm, 1064 nm	Up to 1.5 J	5 – 7 ns / 300 µs, (Spectra Mode)	Contact mfr.	Variety of handpieces: 3 - 8 mm Zoom Collimated; 1 - 7 mm Zoom; 7 mm Fixed Collimated; 585 nm and 650 nm Dye.
SOLARI	IPL	420 – 950 nm	35 J/cm ² (with 510 nm filter)	5 – 300 ms	Contact mfr.	Cut-off filters.
HEALITE	LED	830 nm (with 590 nm); 633 nm; 415 nm available (single wavelength per head)	Focused: up to 150 mW/cm ² ; up to 80 mW/cm ² ; up to 50 mW/cm ²	N/A	Contact mfr.	Variety of heads and configurations available: single and dual wavelength heads. Planar and Focused (max. intensity) delivery options.
eCO2	CO ₂ Fractional	10,600 nm	2 – 240 mJ	Ultra Pulse: 40 – 1,000 µs; Super Pulse: 1 – 5 ms	Contact mfr.	Fractional or Incisional handpieces. Variety of fractional handpiece tips available: 120, 300, 500 micron tip.
MOSAIC HP INFINI	Er:Glass Fractional Bi-polar RF	1550 nm / N/A	4 – 120 mJ / 50 W	N/A / 10 – 1,000 ms	Contact mfr. / Contact mfr.	Skin and hair tips. Variety of handpieces and tips available. MFR handpiece: 49 tip (7 x 7 needles, scan size: 10 x 10 mm); Comfort / 16 tip (4 x 4 needles, scan size: 5 x 5 mm); SFR handpiece: 144L tip (12 x 12 electrodes, Dual Channels, scan size: 20 x 20 mm); 64S tip (8 x 8 electrodes, Single Channel, scan size: 10 x 10 mm). Not available in the U.S.
CLARITY	Long Pulsed Alexandrite / Nd:YAG Laser	755 nm / 1064 nm	Up to 600 J/cm ²	0.35 – 300 ms	Contact mfr.	Nine spot sizes including 2, 3, 5, 8, 10, 12, 15, 18, 20 mm. ICD cryogen or air cooling available.
Perigee Medical						
Jeisys EDGE	Fractional CO ₂	10.6 µm	Proprietary peak power >200 W	100 µs – CW	Contact Perigee	Fractional handpiece with variable spot size, finder tip controls on handpiece, Superpulse mode, wide-range of parameters; surgical and vaginal handpieces.
Jeisys SmoothCool	IPL	420 – 1200 nm	Up to 65 J/cm ²	100 µs – 40 ms	Contact Perigee	IPL with eight filters, smooth cooling technology controls skin temperature to 1° C. Up to 3,000 W peak power and cell toning pulse mode.
Sciton						
JOULE	Nd:YAG / Er:YAG / BroadBand Light / Alexandrite	Various	Up to 400 J/cm ²	0.1 – 200 ms, 1 – 10 sec	Contact mfr.	Configurable up to ten modules.
Halo	Hybrid Fractional Laser (ablative and non-ablative)	1470 nm / 2940 nm	150 mJ/MTZ, 50 mJ/MTZ	Up to 5 ms	Contact mfr.	Delivery of ablative and non-ablative wavelengths in single pass. Dynamic Thermal Optimization (DTO) for precise energy delivery. Roller tip adaptors; optical navigation; integrated Zimmer cooling advanced mode for precise and independent control of depth and density. Pre-programmed modes and integrated smoke evacuation system.
ClearScan YAG Contour TRL	Nd:YAG Tunable Resurfacing Laser (TRL)	1064 nm / 2940 nm	Up to 400 J/cm ² / Up to 40 W	Up to 200 ms / Up to 50 ms	Contact mfr. / Contact mfr.	Computerized scanner; 30 x 30 mm Tx; integrated cooling.
ProFractional-XC	Er:YAG	2940 nm	Up to 400 J/cm ²	Variable for desired ablation and coagulation	Contact mfr.	Expandable module.
ProFractional ThermoScan BBLs	Er:YAG / Nd:YAG / BroadBand Light	2940 nm / 1319 nm / 420 – 1400 nm	Up to 400 J/cm ² / Up to 30 J/cm ² / Up to 30 J/cm ²	Variable / Up to 200 ms / Up to 200 ms	Contact mfr. / Contact mfr. / Contact mfr.	Expandable module / density 1.5% – 26%. Computerized scanner; 30 x 30 mm Tx; integrated cooling.
BBL	BroadBand Light	420 – 1400 nm	Up to 30 J/cm ²	Up to 200 ms	Contact mfr.	Table top system, SkinTyte II, 420, 515, 560 590, 640, 695 nm filters, 15 x 45 mm and 15 x 15 mm spot sizes, integrated cooling. SkinTyte II, 420, 515, 560, 590, 640, 695 nm filters. 15 x 45 mm and 15 x 15 mm spot sizes, integrated cooling.

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August 2015**

SKIN REJUVENATION COMPARISON CHART

Supplier Product Name	Device Type	Wavelength (nm)	Energy Output (Joules)	Pulse Length	Price	Accessories
Solta Medical						
Fraxel re:pair SST	CO ₂ Laser	10,600 nm	Up to 70 mJ/MTZ	N/A	Contact mfr.	Four plug-and-play handpieces with fractional and surgical applications. Built-in smokeless evacuation system. Intelligent Optical Tracking system (IOTS) with roller tip. Over 240 pre-programmed Tx settings for targeted indications.
Fraxel DUAL 1550 / 1927	1550 nm Erbium Fiber / 1927 nm Thulium Fiber Laser	1550 nm / 1927 nm	Up to 70 mJ/MTZ / up to 20 mJ/MTZ	N/A	Contact mfr.	Two non-ablative lasers. IOTS adjusts to hand speed and ensures uniform Tx. Maximized lesion depth for chosen pulse energy. Variable optical spot size with telescope. Zimmer cooling integrated into handpiece. IOTS adjusts to hand speed and ensures uniform Tx. Variable optical spot size using telescope. Zimmer cooling integrated into handpiece. Precise dosimetry increases patient comfort for targeted indications.
Fraxel 1550	1550 nm Erbium Fiber Laser	1550 nm	Up to 70 mJ/MTZ	N/A	Contact mfr.	Desktop system with ergonomic handpiece and roller tip. IOTS adjusts to hand speed and ensures uniform Tx. Same as above.
Clear+Brilliant	Diode Laser	1440 nm	Up to 9 mJ/MTZ	N/A	Contact mfr.	
Clear+Brilliant Perm�a	Fractional Diode Laser	1927 nm	5 mJ	N/A	Contact mfr.	
SupraMedical, LLC						
DualMax	IPL	590 – 1200 nm	Up to 60 J/cm ²	1 – 20 ms	Contact mfr.	Six IPL filters, two handpieces (two spot sizes), one set of protective goggles, one set of patient protective eyewear, user manual, parameter sheet, hose, funnel and foot switch.
Syneron Candela						
Profound	RF – 460, 5 kHz	N/A	Max. output voltage 84 VRMS Light Fluence: up to 45 J/cm ² / RF Energy: up to 25 J/cm ³	N/A	Contact mfr.	Single use, sterile treatment cartridge with five independently controlled, bi-polar microneedle pairs. Spot size: 12 x 25 mm; tip cooling temp: 5° C.
el�s Plus with SRA applicator	Multi-Application Platform: Optical Energy/RF (el�s), Electrical Energy, Pulsed Dye	470 – 980 nm	Light Fluence: up to 35 J/cm ² / RF Energy: up to 25 J/cm ³	1 Hz	Contact mfr.	Spot size: 35 x 14 mm; tip cooling temp: 5° C.
el�s Plus with SRA Plus applicator	Multi-Application Platform: el�s, Electrical Energy, Pulsed Dye	470 – 980 nm	Light Fluence: up to 35 J/cm ² / RF Energy: up to 25 J/cm ³	Up to 2 Hz	Contact mfr.	Spot size: 15 x 14 mm; tip cooling temp: 5° C.
el�s Plus with SRA mini applicator	Multi-Application Platform: el�s, Electrical Energy, Pulsed Dye	470 – 980 nm	Light Fluence: up to 45 J/cm ² / RF Energy: up to 25 J/cm ³	Up to 1 Hz	Contact mfr.	Spot size: 25 x 12 mm; tip cooling temp: 5° C.
el�s Plus with SR applicator	Multi-Application Platform: el�s, Electrical Energy, Pulsed Dye	580 – 980 nm	Light Fluence: up to 35 J/cm ² / RF Energy: up to 25 J/cm ³	1 Hz	Contact mfr.	Spot size: 35 x 14 mm; tip cooling temp: 5° C.
el�s Plus with SR Plus applicator	Multi-Application Platform: el�s, Electrical Energy, Pulsed Dye	580 – 980 nm	Light Fluence: up to 35 J/cm ² / RF Energy: up to 25 J/cm ³	Up to 2 Hz	Contact mfr.	Exclusive Fusion Tx mode treats superficial and deep skin layers simultaneously. Multi-use featherweight delivery system, multiple Tx spots, full length fractional, short fractional and tapered surgical handpieces, 10.4" high-resolution color LCD, touchscreen user interface, footswitch. Standard spot sizes from 6 - 18 mm; new, small spot delivery system handpiece provides 1.5, 3 and 3 x 10 mm Tx spots; finger and foot switch pulse control; unique, patented Dynamic Cooling Device (DCD) maximizing patient comfort and Tx efficacy; rejuvenation, wrinkle reduction, treats vascular and other dyschromia for all skin types. Same as above. Alexandrite system upgrade to GentleMax Pro available.
CO ₂ RE	CO ₂ Resurfacing System	10,600 nm	Up to 396 J/cm ²	20 – 3,000 µs	Contact mfr.	2, 3, 4 and 5 mm Tx spots.
GentleMax Pro	Long Pulse, Dual Wavelength Alexandrite / Nd:YAG	755 nm / 1064 nm	Up to 600 J/cm ² / up to 600 J/cm ²	0.250 – 100 ms	Contact mfr.	Six spot sizes up to 12 mm, including 3 x 10 elliptical and two pigmented lesion handpieces; unique, patented DCD, maximizing patient comfort and Tx efficacy.
GentleYAG Pro U	Long Pulse Nd:YAG	1064 nm	Up to 600 J/cm ²	0.250 – 100 ms	Contact mfr.	
Alex TriVantage	Three wavelength Q-switched and Long Pulse Laser	755 nm Alexandrite / 1064 nm Nd:YAG / 532 nm KTP Nd:YAG	Up to 18 J/cm ² (QS Alexandrite), up to 70 J/cm ² (microsecond 755 nm) / up to 10 J/cm ² (QS Nd:YAG) / up to 5 J/cm ² (QS KTP Nd:YAG)	50 ns	Contact mfr.	
Vbeam Perfecta	High Output Pulsed Dye Laser	595 nm	Up to 40 J/cm ²	0.45 – 40 ms	Contact mfr.	
Viora						
TRIOS	IPL	570 – 1200 nm	Up to 22 J/cm ²	25 ms	\$29,900 for all handpieces	Practitioner goggles, client brochures and poster, training DVD.
V30	IPL	580 – 1200 nm	Up to 35 J/cm ²	10 – 190 ms	Contact mfr.	
V20	IPL	580 – 1200 nm	Up to 35 J/cm ²	10 – 190 ms	Contact mfr.	

Note: Data subject to change; please refer to Company Directory for supplier contact information. Not all devices are FDA cleared for the application(s) indicated.