



The Future of **Skin rejuvenation**

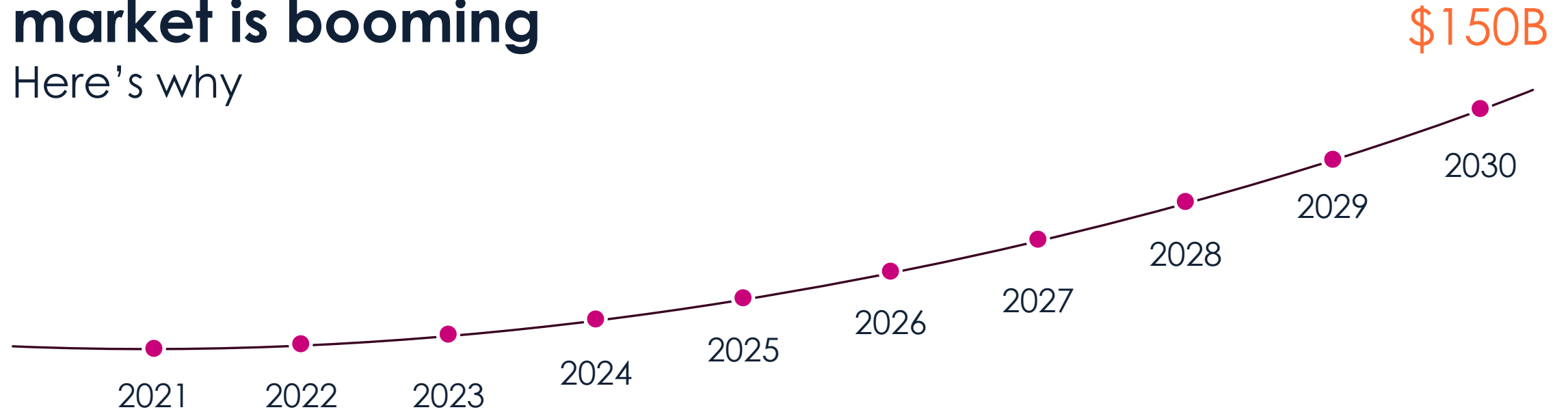
Fractional CO₂-Like Results with
Significantly Reduced Downtime.

The only Q-Switch Ablative Thulium laser
in the world



The non-invasive aesthetic treatment market is booming

Here's why



Pre-Surgical Patients

Patients seeking effective aesthetic improvement while postponing or avoiding surgical procedures

Post-Surgical Maintenance

Post-surgical patients seeking less aggressive treatments to preserve and prolong aesthetic results.

Male and Young Clients

Aesthetic procedures are in high demand among men. Aesthetic medicine offers subtle tweaks instead of dramatic procedures.

For non-invasive treatments,
**Lasers are
leading the way**

There are **4 major issues**
with the current laser
treatments:



Me too options



4 major issues with current lasers

2

**MULTIPLE
SIDE EFFECTS**



Side Effects

- ✗ Scarring
- ✗ Burns
- ✗ Pain
- ✗ Infection
- ✗ Hypopigmentation
- ✗ PIH (Post Inflammatory Hyperpigmentation)



4 major issues
with current
lasers

3

**BARRIERS FOR
PEOPLE OF COLOR**

50%

of potential patients of color
can't receive best treatment



4 major issues with current lasers

4

LONG DOWNTIME -
UP TO 2 WEEKS!



Ablative Lasers Ultimate Goal

Maximal Dermal coagulation with minimal epidermal side effects

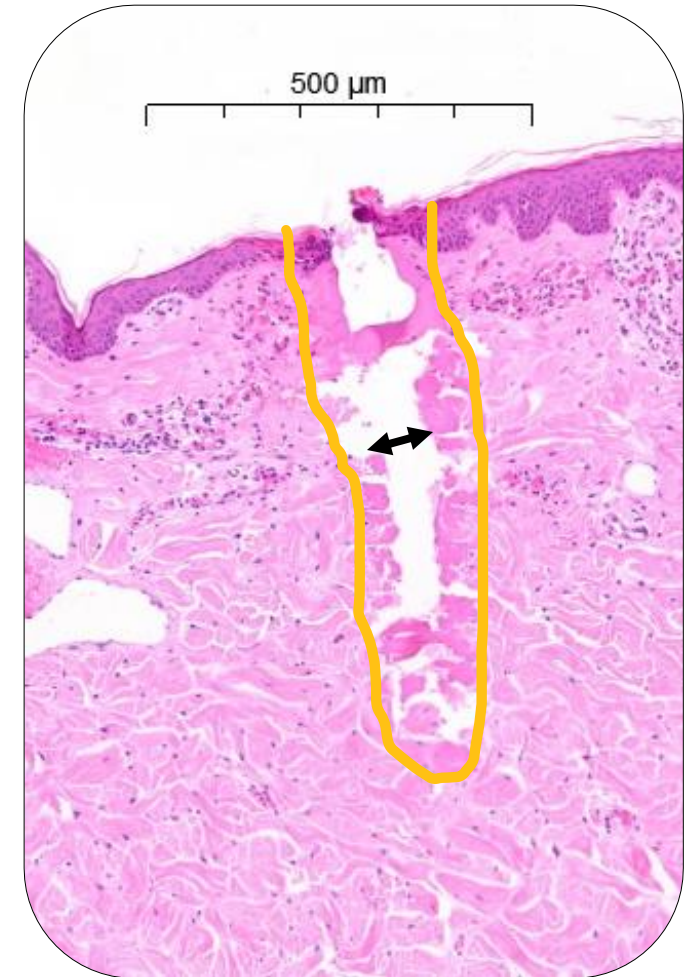
Laser Machine	Epicare	Er-Yag	CO2
Coagulation	Up To 300%	From 0+ to <<30%	30%
Column Diameter	40µm Overnight Re-epithelialization	170µm	120µm
Max power	2 Watt	10Watt	60Watt



Novelty: First Q-switch ablative Thulium laser

The Epicare's ablative mode creates **narrow ablation micro-tunnels** (black arrow) with **narrow surrounding coagulation** (**Orange Zone**). At the **8% maximum density** (based on $\sim 150\text{ }\mu\text{m}$ coagulation width), the ablation area is **$\sim 3.5\%$** , giving an ablation-to-coagulation ratio of **~ 0.8** .

The **microtunnels are much narrower** than CO_2 lasers, with a **similar ablation/coagulation ratio**.

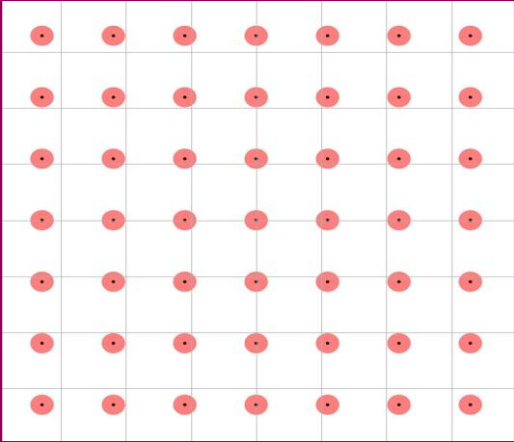
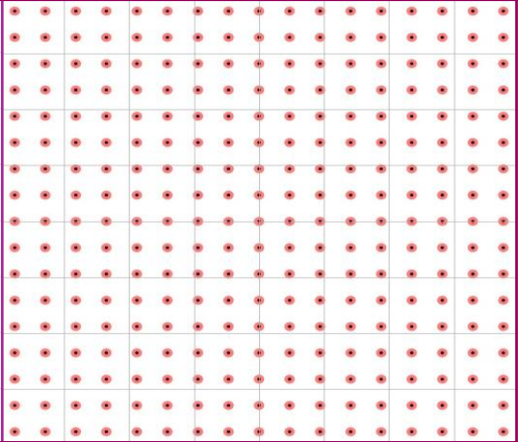


Coagulative mode: Maximal Dermal coagulation with minimal epidermal side effects

The Epicare's coagulative mode creates **narrow ablation micro-tunnels** (black arrow) surrounded by **wide coagulation zones** (Orange Zone). At the **15% maximum density** (based on $\sim 350\text{ }\mu\text{m}$ coagulation width), the ablation portion is **under 1.5%**, giving an ablation-to-coagulation ratio of ~ 0.1 . This mode is **less painful** and **less bleeding**. Unlike conventional non-ablative lasers, the coagulation is produced by **uniform depth heating** (not tied to the absorption curve), and heat **does not extend much beyond the coagulated tissue**.



How Does It Work?

Coagulative	Ablative
Fewer Number of Columns Each with More Coagulation	Greater Number of Columns Each with less Coagulation
	
Coagulative, 8 mm, 8% Red : coagulation , Black : ablation	Ablative, 8 mm, 8% Red : coagulation , Black : ablation
	

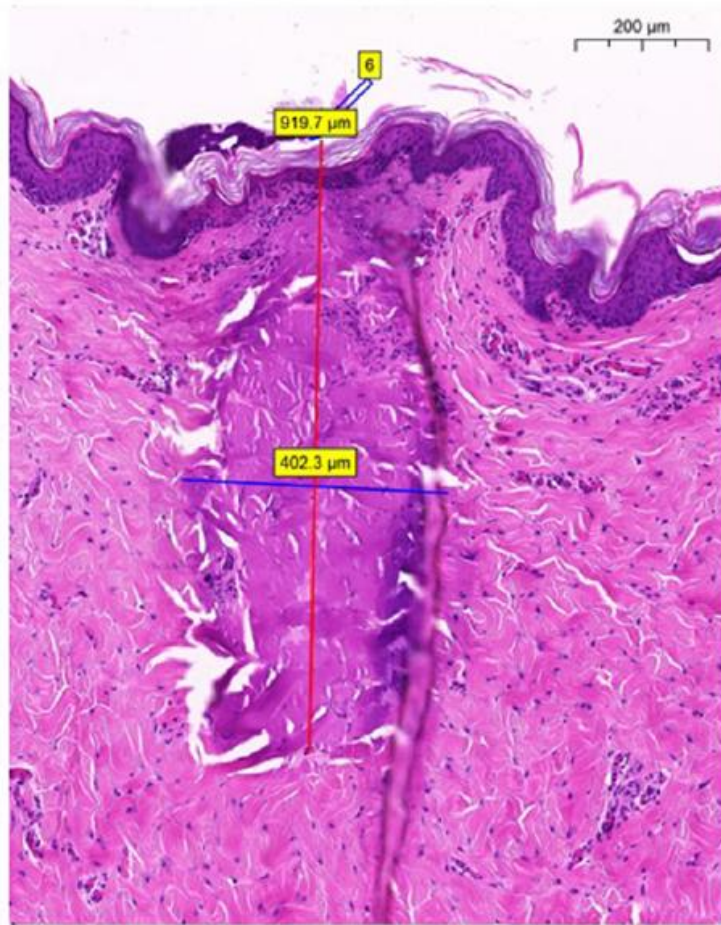
Coagulative	Ablative
High frequency For each column, the pulses are shot one right after another	Low frequency Each pulse is shot to a different column so for each column the pulses are shot in low frequency
Lower pain	More pain - More columns leads to more neural interaction
Less bleeding	More bleeding
Less spots	More spots
24 hours medical downtime	48 hours medical downtime
GUI - Same density – total affected area (Coagulation + ablation) percentage	



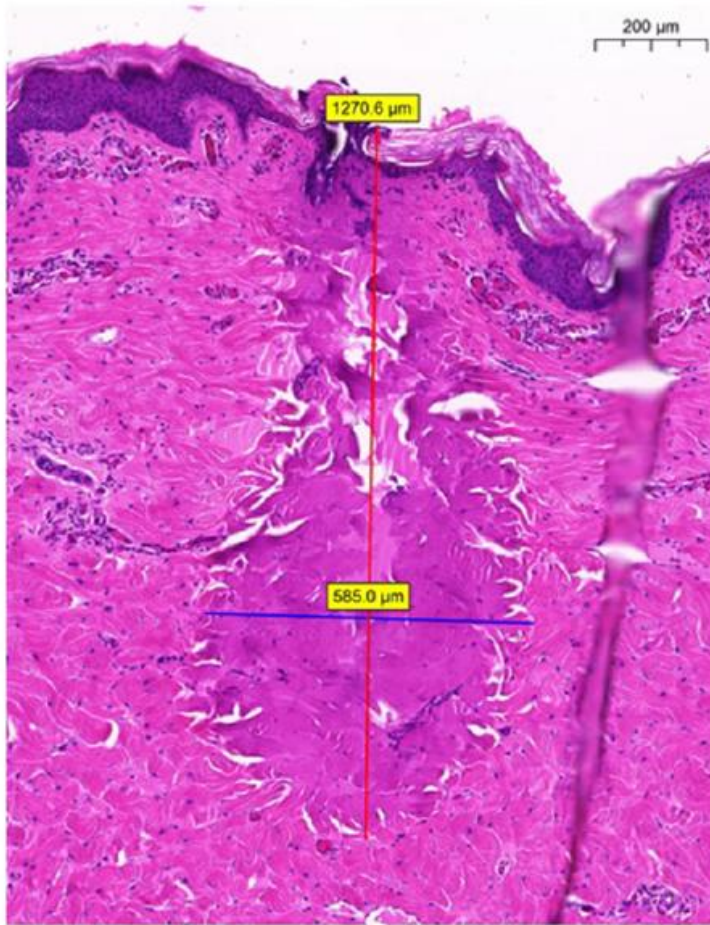
Histological comparison

Actual Coagulation width

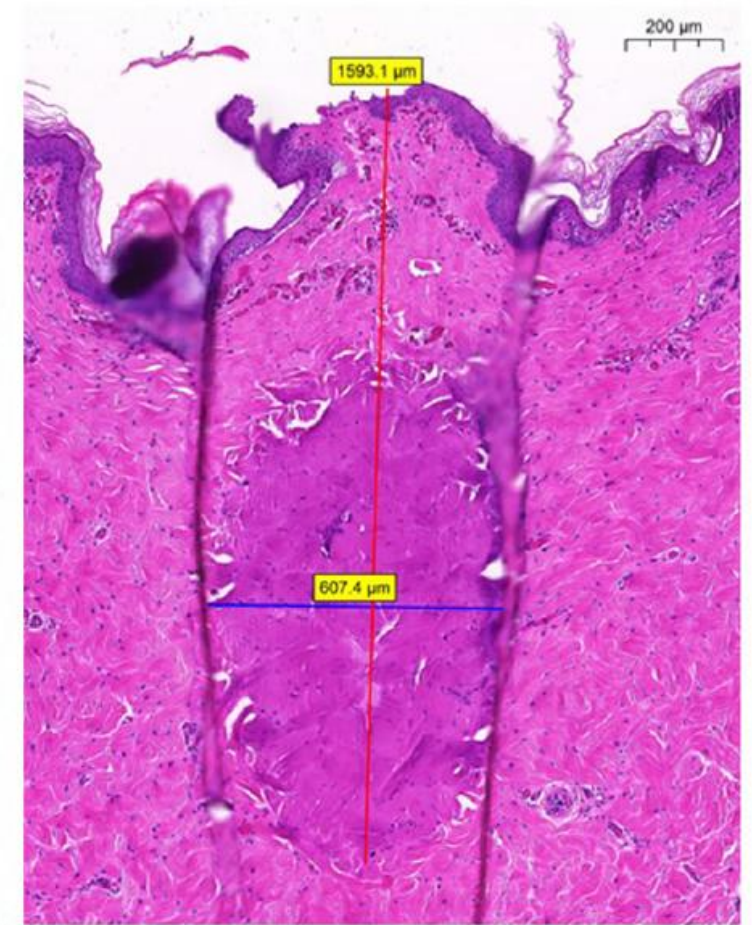
A 80 mJ



B 120 mJ



C 160 mJ

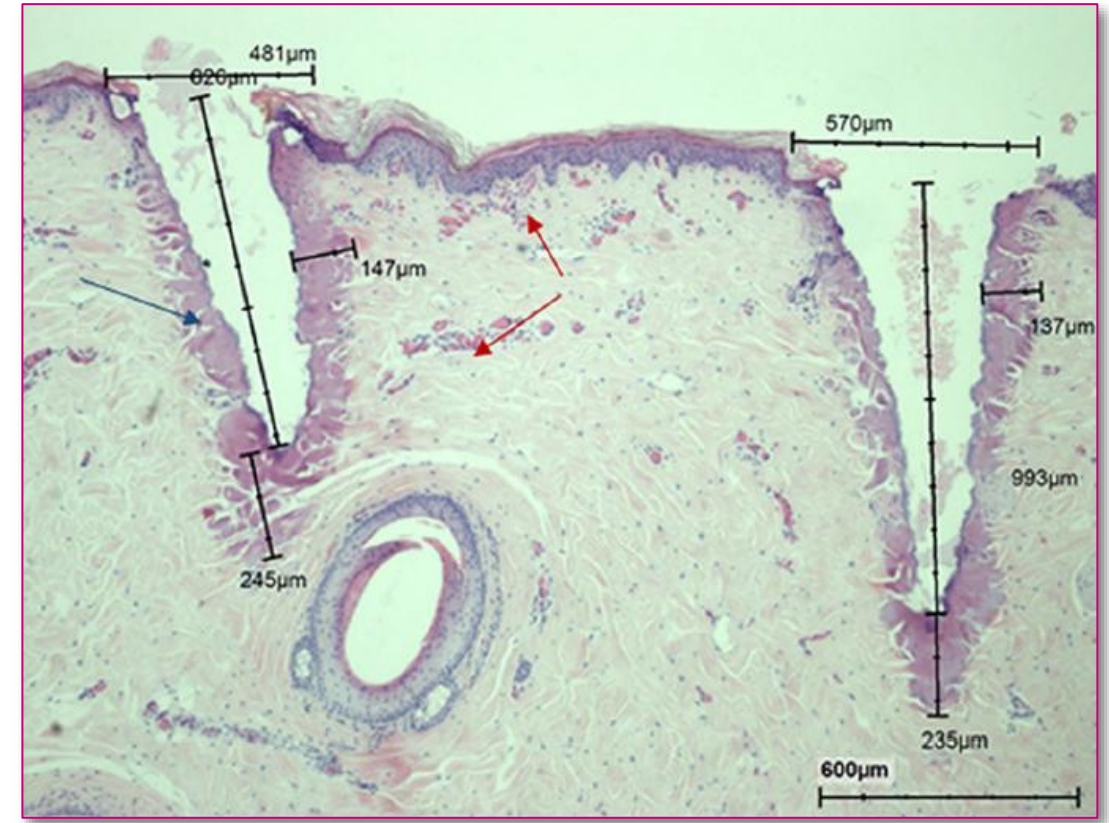
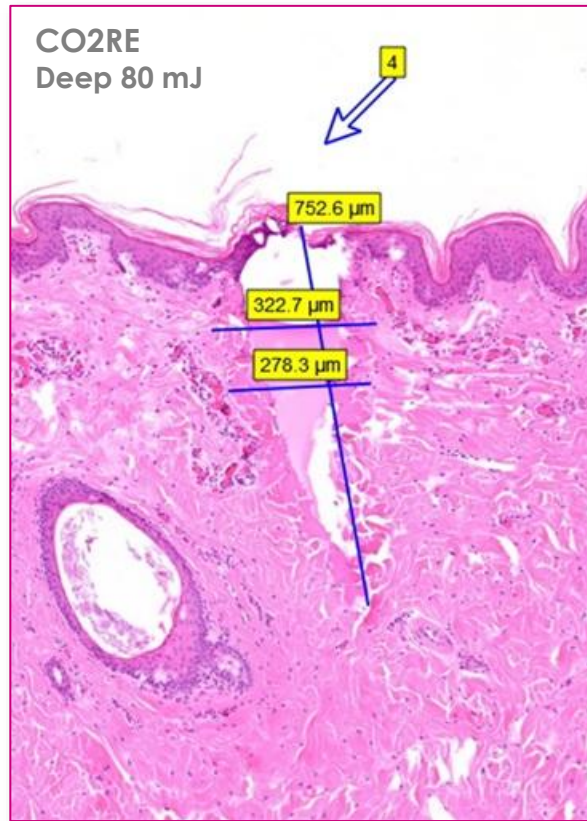


Up to 300% coagulation

High coagulation microcolumns
at various energies



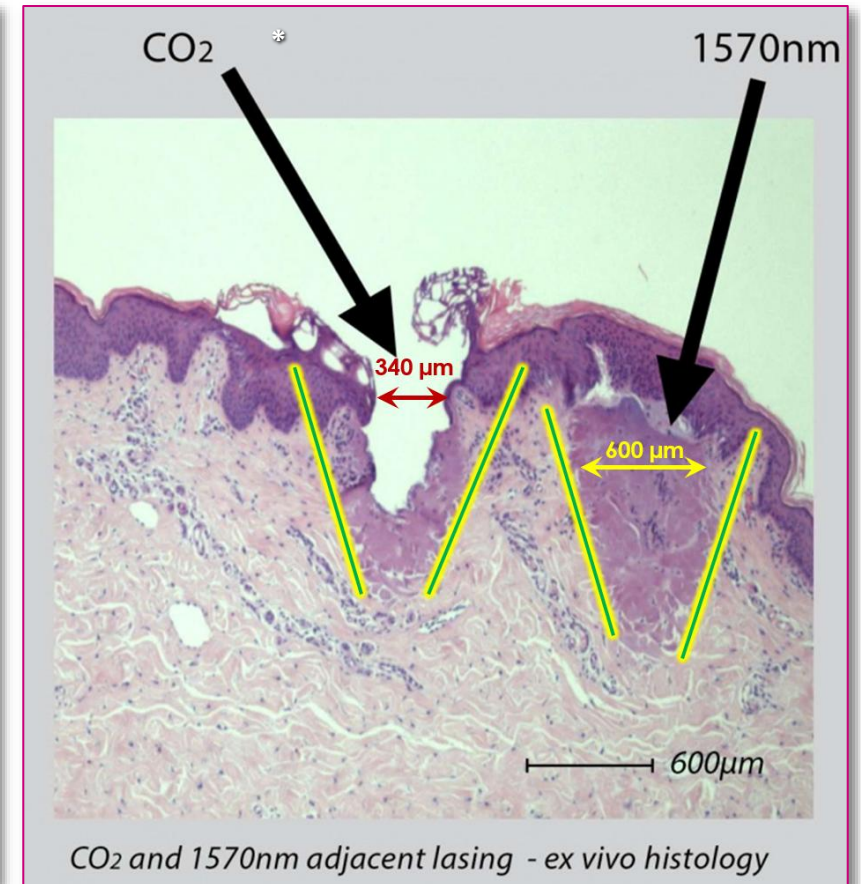
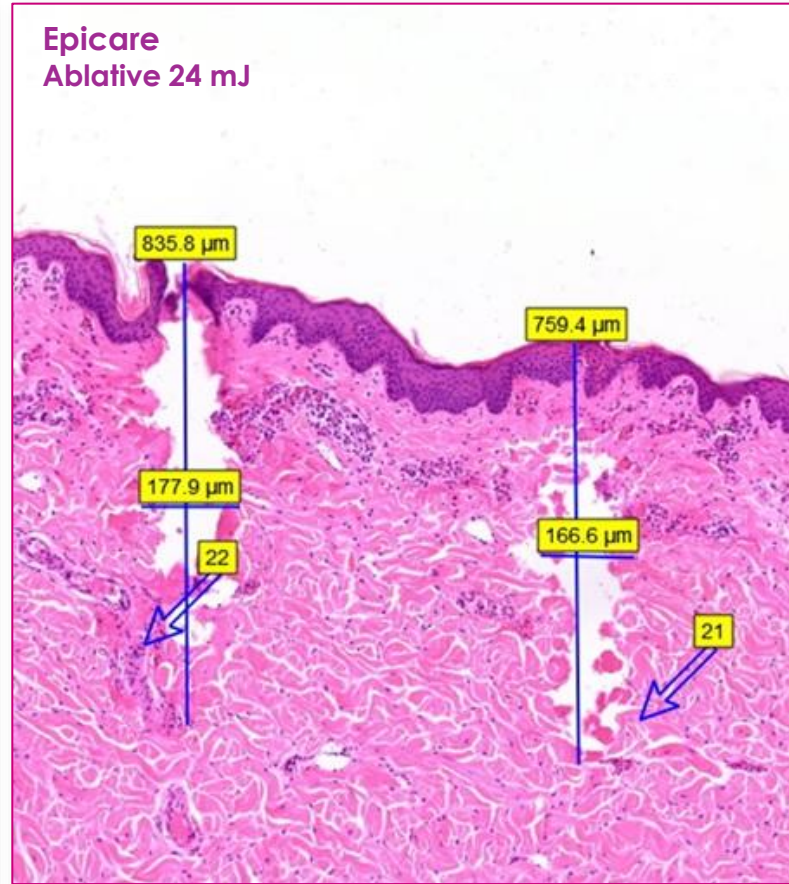
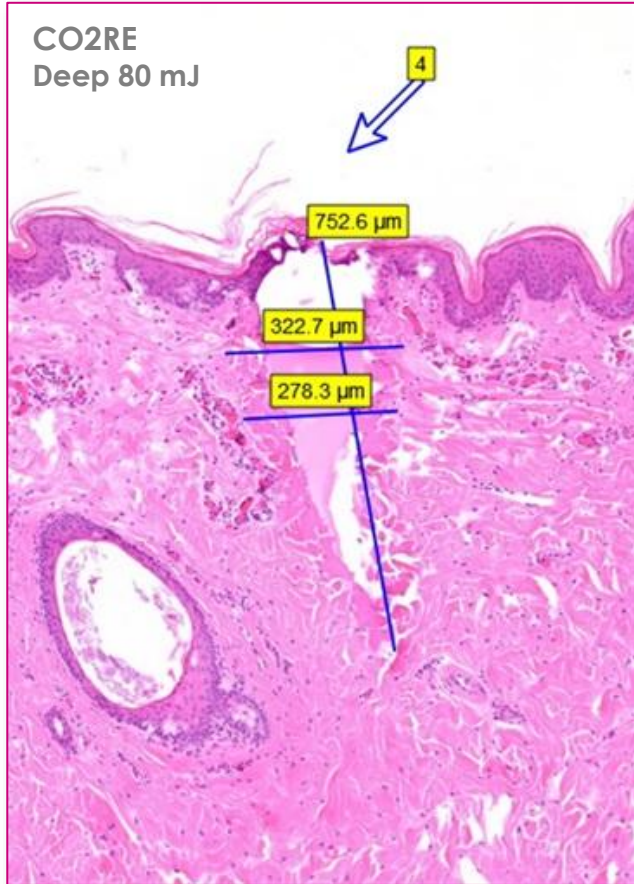
Histological comparison



* Cited from: *Clinical and histological evaluation of a dual sequential application of fractional 10,600 nm and 1570 nm lasers, compared to single applications in a porcine model*, Igor Snast · Moshe Lapidoth · Assi Levi



Histological Comparison

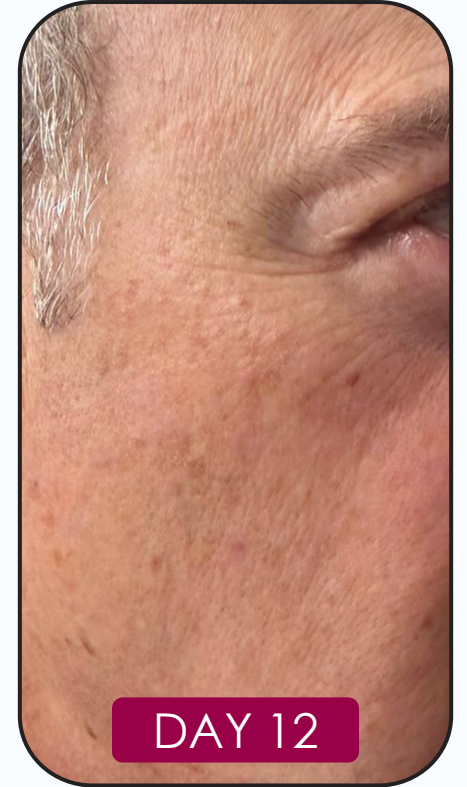
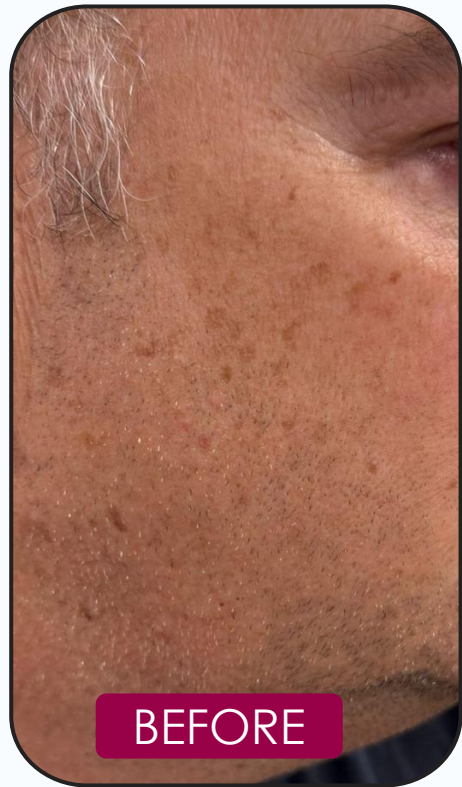


* Cited from: <https://aexelbiomed.com/alma-hybrid/>



Post Epicare Laser Treatment

Ablative Superficial



Size: 6 mm | Density: 25% | Single Pulse



Post Epicare Laser Treatment

Ablative Mode



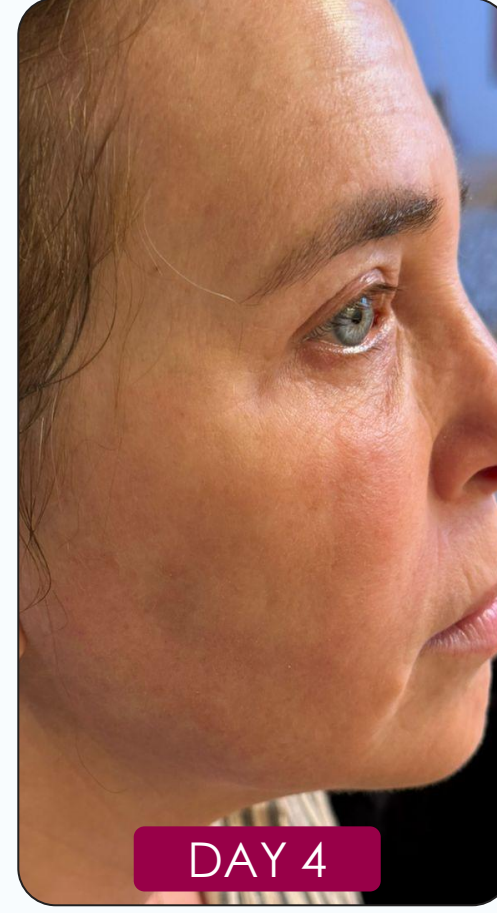
23/04/26

Size: 14(mm) | Density: 4% | Energy: 13 mJ



Post Epicare Laser Treatment

Ablative Mode



23/04/26

Size: 14(mm) | Density: 4% | Energy: 13 mJ



Post Epicare Laser Treatment Weekend Downtime

Ablative Mode



Size: 14(mm) | Density: 4% | Energy: 13 mJ



Post Epicare Laser Treatment

Coagulative Mode



12/03/26

Size: 8 mm | Density: 12% | Energy: 45 mJ



45 Days Post Coagulative Treatment



Size: 8 mm | Density: 12% | Energy: 45 mJ



Fotona SP Dynamis
2,940 nm Er:YAG

Fraxel re:store
1550 nm
Erbium

UltraPulse,
10,600 nm
CO2

Our vision: All-in-One

One platform for multiple indications with minimal downtime and maximum patient comfort

Indication:

Wrinkles

Scars

Rejuvenation

All skin types

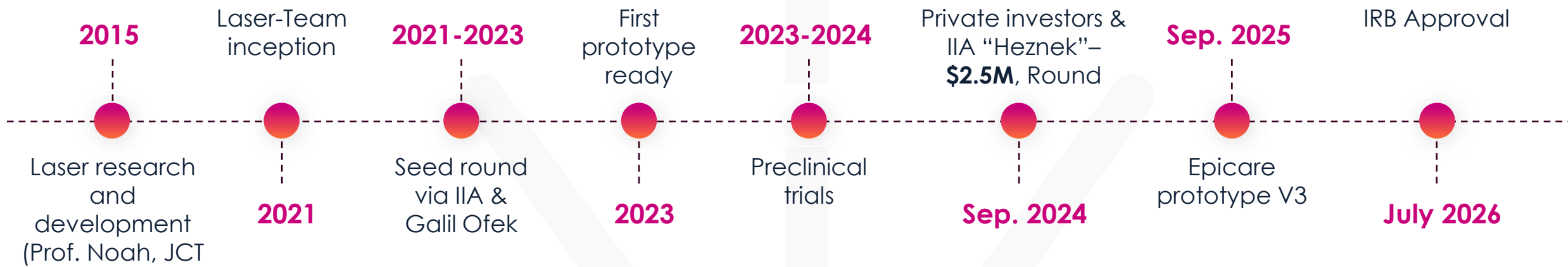
Pigmentation

Acne Scarring

Tightening



The Founding of LaserTeam



What is the Novelty: Patents

Granted Patents

2 μ m Q-SWITCH Technology

Enable to achieve high energy pulses in nanosecond regime

Status: GRANTED

Filing date: April 2, 2018

Granted US Patent No. 10,978,850



1.7 to 3 μ m Tunable Q-Switch Technology

Enable to achieve different wavelengths of high energy pulses in nanosecond regime with a tunable spectral range of at least 20 nm;

Status: GRANTED

Filing date: May 22, 2019

Granted US Patent No. 11,791,602



Pending Patents

Precise control over laser medical treatments

Enable to achieve Different controlled depth and different controlled coagulation width on a human tissue (skin)

Status: PENDING - National phase
(US; China; European patent office; Korea)

Filing date: Aug 29, 2023

Pending PCT Application No. PCT/IL2023/050915



Special laser pulse scanning to achieve fast treatment

Enable to achieve ultra fast treatment on treated area

Status: PENDING PCT

Filing date: Jan 25, 2024

*Pending PCT Application No.
PCT/IL2024/050100*





Proven efficacy in published studies

Lasers in Surgery and Medicine

PRECLINICAL STUDY **OPEN ACCESS**

Evaluation of a Novel Ablative 1940 nm Pulsed Laser for Skin Rejuvenation

Yoav Gronovich¹  | Yaniv Raderman¹ | Ronen Toledano¹ | Rotem Nahear² | Neria Suliman² | Alon Shacham² | David Fridman² | Salman Noach^{2,3}

¹Plastic and Reconstructive Surgery Department, Shaare Zedek Medical Center, Jerusalem, Israel | ²Laser Team Medical Ltd., Jerusalem, Israel | ³Department of Applied Physics, Electro-Optics Engineering Faculty, Jerusalem College of Technology, Jerusalem, Israel

Correspondence: Yoav Gronovich (yoavgg@gmail.com)

Received: 18 February 2024 | Revised: 29 May 2024 | Accepted: 18 April 2025

Keywords: 1940 nm | ablative | laser | resurfacing | skin rejuvenation



PRECLINICAL STUDY **OPEN ACCESS**

Safety Assessment of a 1940 nm Tm:YAP Laser for Fractional Skin Ablation in a Swine Model

Yuval Ramot^{1,2}  | Michal Steiner³ | Udi Vazana⁴ | Rotem Nahear⁵ | Neria Suliman⁵ | David J. Friedman⁵ | Salman Noach^{5,6} | Abraham Nyska⁷

¹Department of Dermatology, Hadassah Medical Center, Jerusalem, Israel | ²The Faculty of Medicine, Hebrew University of Jerusalem, Jerusalem, Israel | ³Preclinical Consultant, Rehovot, Israel | ⁴LAHAV CRO, Kibbutz Lahav, Israel | ⁵Laser Team Medical Ltd., Jerusalem, Israel | ⁶Department of Applied Physics, Electro-Optics Engineering Faculty, Jerusalem College of Technology, Jerusalem, Israel | ⁷Consultant in Toxicologic Pathology, Tel Aviv University, Tel Aviv, Israel

Correspondence: Abraham Nyska (anyska@nyska.net)

Received: 23 February 2025 | Revised: 11 April 2025 | Accepted: 18 April 2025

Funding: The study was funded by LaserTeam Ltd., Jerusalem, Israel and supported by the Israel Innovation Authority (Grant No. 73276).

Keywords: 1940 nm laser | collagen remodeling | dermatologic applications | epidermal regeneration | fractional laser ablation | histopathology | laser safety and efficacy | skin resurfacing | swine model | thulium-doped yttrium aluminum perovskite (Tm:YAP)



Regulatory pathway to market success

Executed by Building 66 (Dr Shlomit Halachmi) and BioVision Ltd.

510(k) submission

Q4
2026

Estimated time
for the
submission date

Q2
2027

Estimated time
to receive FDA
clearance

1

510K-Submission

Indications for Use: The Epicare System is indicated for dermatological procedures requiring ablation, coagulation and resurfacing of soft tissue

2

Predicate and Reference devices:

- Primary Predicate: LASEMD Laser System (K171009)
- Reference Device: Syneron Medical Ltd. CO2RE (K151655)

3

FIH Study: evaluation of the Safety and Efficacy of the Epicare System in Performing Fractional Skin Ablation & Coagulation study in a patient undergoing Abdominoplasty

4

Clinical Study: A Prospective, Interventional, Study for the Assessment of the Safety and Efficacy of Epicare for the Treatment of Periorbital Wrinkles.



Our team is a collection of engineers and medical doctors who understand the market and its needs



LTM CEO

Pini Ben Elazar, MBA

Veteran CEO in healthcare, led Mor Research applications, TIO of Clalit for 20 years.
Founded more than 80 startup companies.



CTO & CO-Founder

Prof. Salman Noach

Experienced CTO, inventor and founder of the 2 μ m solid-state laser lab at JCT, a faculty member at the physics department at JCT.



CMO

Dr. David J. Friedman, MD.

Expert in non-surgical aesthetic and laser dermatology, with extensive experience in clinical trials and training.
US Board Certified Dermatologist in the US and Israel. Former Assistant Professor at Brown. Medical Director of Candela Israel and Physician Trainer at Allergan Israel.



COO

Avi Mendelson, B.Sc

Over 25 years of senior management in R&D and operations within startup and leading Medical Device companies (Lumenis, Candela)



Our team is a collection of engineers and medical doctors who understand the market and its needs



Software Lead

Tomer Ashtar

Expert in bridging software and hardware for complex systems. Active since 2018, currently leading product development and systems architecture at Laser Team Medical with a focus on embedded solutions and high-performance data processing. B.Sc. in Electrical and Electronics Engineering.



Physicist

Neria Suliman

Holds Bachelor's and Master's degrees in Physics/Electro-Optical Engineering. Active since 2018 in 2-micron laser development for Laser Team Medical.



Mechanical Engineer

Boris Frenkel

With over 30 years of experience in opto-mechanical design, including work at Visionix, Xtellus (acquired by Oclaro), and Hebrew University. Since 2013, he has provided consulting and outsourcing services. He holds an MSc in Mechanical Engineering and has ten patents and three academic publications.



Physicist

Rotem Nahear

Holds Bachelor's and Master's degrees in Physics/Electro-Optical Engineering. Active since 2017 in 2-micron laser development and Laser-Team company formation.



Board of directors



Board Member

Stuart Hershkowitz

Experienced entrepreneur with a vast banking background.
Chairman of the Board of JC Technologies Ltd.



CTO & CO-Founder

Prof. Salman Noach

Experienced CTO, inventor and founder of the 2 μ m solid-state laser lab at JCT, a faculty member at the physics department at JCT.



Board Member

Miko Gilat

Former VP Marketing at IML, Israel's second-largest defense company. Chairman and Co-Owner of Soltam and ITL, sold to Elbit for \$100M in 2010. Currently, Chairman and Co-Owner of Mikal Ltd, with investments in 30+ high-tech companies.



Chairman

Eyal Aviram

CEO of Galil Ofek incubator. former Pfizer Project Leader and VP at Mor, is a seasoned CEO and innovation leader.



Scientific advisory board



Dr. Jeffrey S. Dover, MD

A former Associate Professor of Dermatology at Harvard Medical School, he is the author of over 550 scientific publications and has co-authored and edited over 55 textbooks. Dr. Dover is the past president of the American Society for Lasers in Medicine and Surgery, the American Society for Dermatologic Surgery, and the New England Dermatology Society.



Paul M. Friedman, MD

Director of Dermatology & Laser Surgery Center in Houston. Board-certified in dermatology, he trained at NYU and completed a fellowship in dermatologic and Mohs surgery. He is recognized globally for his advancements in dermatologic laser treatments.



Dr. Sarit Cohen, MD

Head of the Israeli Center of Facial Sculpting, specializes in invasive and minimally invasive facial aesthetic procedures. Board-certified in plastic, reconstructive, and aesthetic surgery, she is a consultant for leading aesthetic companies and has published extensively on facial and body procedures.



Dr. Yakir Levin, MD, PhD

An Assistant Professor of Dermatology at Harvard Medical School and is a physician-scientist at the Massachusetts General Hospital. He maintains an active clinical practice at MGH's acclaimed Laser and Cosmetic Center and a significant research portfolio at its world-renowned Wellman Center for Photomedicine. He subspecializes in aesthetic dermatology and in the treatment of disfiguring birthmarks in children and conducts human and preclinical research studies geared toward improving these treatments



Future applications and markets



Gynecology

Vaginal
rejuvenation
and more



Ophthalmology



ENT

Middle ear surgery,
stapedotomy
Laryngeal cancer,
and more



Brain Surgery



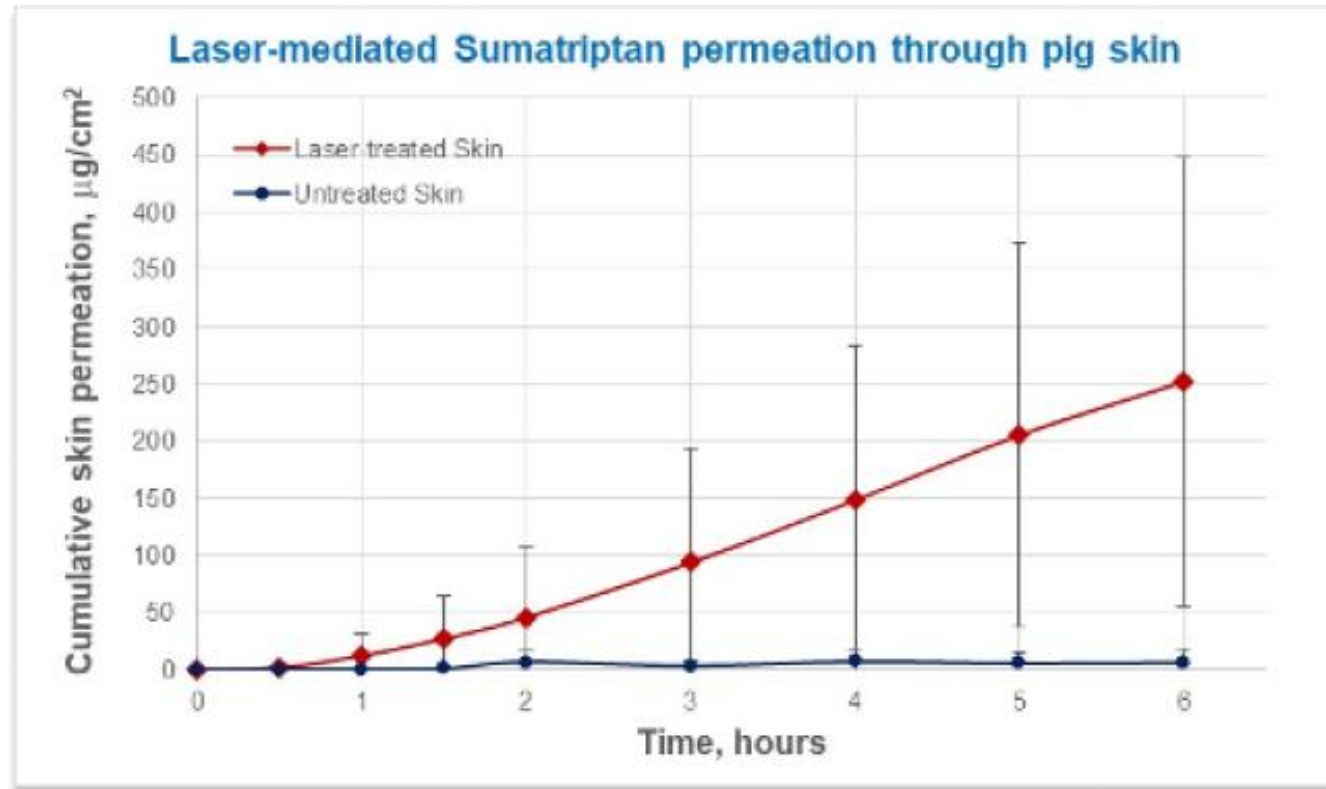
Drug Delivery

Enhanced trans
dermal drug
delivery



Enhanced Transdermal Delivery of Sumatriptan Using Laser Technology

Experiment done by Prof. Amnon Sintov Ben-Gurion U, April 2024



Methodology

Diffusion Cell System: Used excised porcine ear skin.

Laser Treatment: Applied as pretreatment for transdermal delivery.

Control: Compared laser-treated vs. untreated skin.

Key Results

Increased Permeability

Laser-treated Skin: 252 $\mu\text{g}/\text{cm}^2$ after 6 hours (x42)

Untreated Skin: 6 $\mu\text{g}/\text{cm}^2$ after 6 hours.

Statistical Significance: ANOVA, $p < 0.05$.

Conclusion

LTM's treatment significantly enhances skin permeability for sumatriptan, indicating its potential for better drug absorption.



Israel as EBD world leader

SYNERON
CANDELA



CO2RE

INMODE



Morpheus

LUMENIS®



UltraPulse

sofwave™



Softwave

Alma
Lasers™



Harmony

Business Development : Options

Option 1

Strategic M&A Partnership

- FDA clearance achieved
- Exclusive deal with a strategic partner
- M&A
- Fast market penetration through an established global player

Option 2

OEM / Non Exclusive Licensing

Commercialization through partnerships with leading aesthetic companies following FDA clearance.

Two commercialization models:

1 - Optical Unit Licensing

- License the Epicare Thulium optical unit to OEM partners.
- Integrated into partners' laser platforms.
- Commercialized under the partner's own brand.
- Enables multiple licensing agreements with leading industry companies.

2 - Complete System OEM

- Supply the complete Epicare system in its final commercial configuration.
- Manufactured and branded under the partner's name (White Label).

Option 3

Series A Fundraising

Raise \$10–15M

Funds will support:

- Manufacturing facility & production line
- Commercial expansion
- Sales & marketing
- Additional FDA/CE indications
- Regulatory approvals in additional territories
- Global distribution network





Invest in Epicare

The game-changing innovation the laser market has been waiting for!

Thank You!

pinib@lasertm.com



What is the Novelty?

First Ablative Thulium Laser

Specifications

Property	
Wavelength	1940 nm
Average Power	2 W
Pulse Duration	10 ns
Pulse Energy	2 mJ
Peak Power	200 KW
Repetition Rate	1 KHz
Laser Spot size	40 μ m



Low power / High efficacy aspect



Small footprint



No need for water cooling

