

CUTERA®



Introducing Pearl Fractional with YSGG

A new ablative wavelength perfected for the treatment of wrinkles

What is the Pearl Fractional Laser?

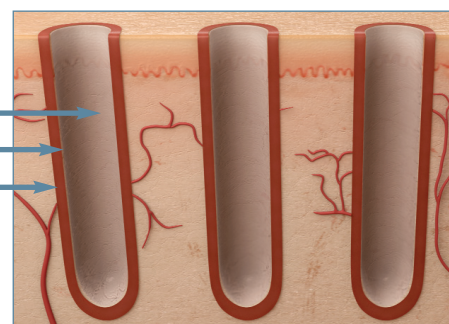
Pearl Fractional is a new fractional ablative laser with YSGG (2790 nm wavelength) technology. This exclusive laser wavelength was selected to maximise results and safety while minimising downtime—all in a single treatment—through an optimised combination of ablation and coagulation. Pearl Fractional's YSGG laser aggressively treats wrinkles, deep dermal imperfections and difficult-to-treat perioral and periorbital areas. Pearl Fractional presents fractional ablation in a new light.

Why Optimise Ablation and Coagulation?

Optimal treatment results demand both deep ablation and thermal coagulation. Moderate levels of coagulation are needed to minimise operative bleeding, but healing times and related risks of complications increase with excessive zones of thermal coagulation. Therefore, the ideal device combines deep ablation with controlled thermal coagulation to maximise results while minimising downtime. Due to its specific water absorption characteristics, YSGG is the only laser wavelength capable of providing the dual benefits of deep dermal ablation with a controlled zone of coagulation.

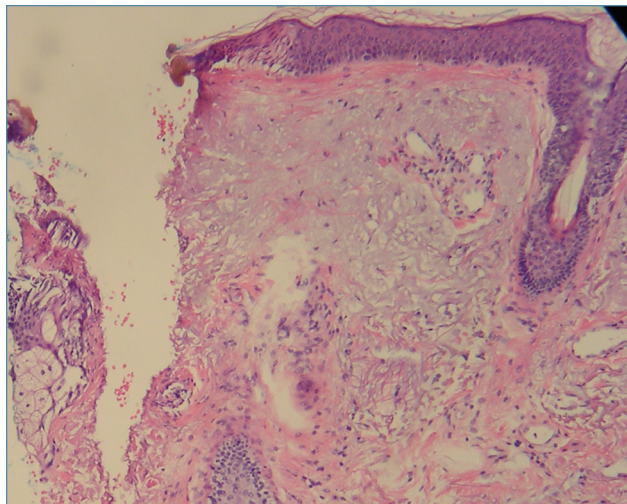
Mechanism of Action

- 300 micron diameter microcolumns ablate tissue deep in the dermis
- Thermal coagulation provides hemostasis
- Lateral zone of residual thermal damage promotes long-term collagen stimulation
- Minimal thermal overlap reduces risk of complications



"Pearl Fractional was specifically designed with the YSGG wavelength to combine the clinical advantages of both CO₂ and Erbium without the recognised limitations long associated with both lasers. YSGG is an extremely versatile laser wavelength that can be tailored to safely and predictably address wrinkles even in the difficult-to-treat perioral and periorbital areas." – Richard Green, M.D. FACS

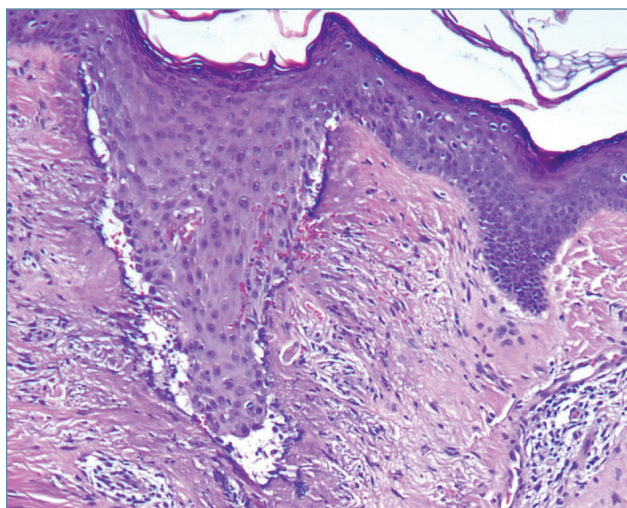
Histology



Histology slide courtesy of E. Victor Ross, MD

Immediate post-treatment histology – 160 mJ

- Deep ablation: user-selectable up to >1 mm
- Coagulation on the edges (~40 µm) provides hemostasis
- Balance of ablation and coagulation optimises tissue removal to safely improve or eliminate wrinkles and other dermal imperfections

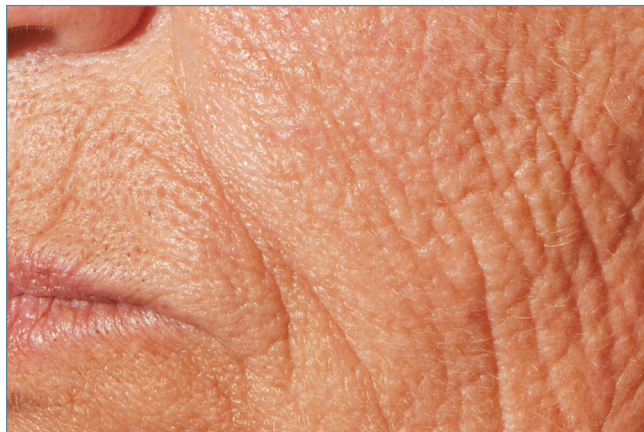


Histology slide courtesy of E. Victor Ross, MD

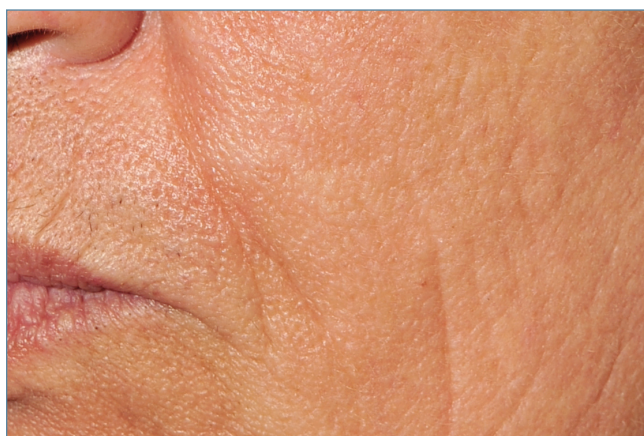
Day four histology – 160 mJ

- Rapid healing and recovery due to epidermal migration from healthy tissue
- Consolidation of coagulated zone
- Full re-epithelialisation is demonstrated by day four

Before treatment



Six weeks post, one treatment



Photos courtesy of Barry DiBernardo, MD FACS

160 mJ, density 2, 2 passes (perioral area 3 passes)

Pearl Fractional Specifications

Wavelength	2790 nm (2.79 µm)
Energy	60-320 mJ per microspot
Spot size	300 microns
Scan size	10 mm x 14 mm
Pulse width	600 microseconds
Scanner	Variable densities and patterns

An integrated smoke evacuator connection enables hands-free use with any smoke evacuator.