

LACRYSTIM™

TREATMENT OF
DRY EYE



IPL System

LACRYSTIM™

Dry eye is a particularly common disease that affects the **health and well-being** of millions of people worldwide. **Meibomian gland dysfunction** (MGD) is the leading cause of dry eye syndrome, known as evaporative dry eye, because it causes excessive tear evaporation.

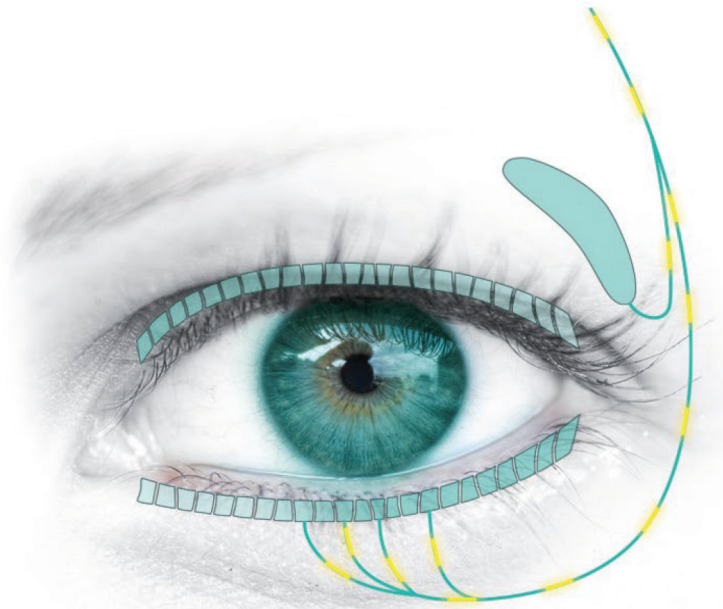
The **IPL LacryStim system** (Intense Pulsed Light) helps stimulate and reactivate the meibomian glands in order to treat dry eye. Intense Pulsed Light technology is one of a series of innovative technologies **acknowledged in the DEWS II Report**.

TREATS THE CAUSES OF DRY EYE OPTIMISES LONG-TERMS RESULTS.

MECHANISMS OF ACTION

Several studies detail the mechanisms of action of IPL systems:

- **Neurostimulation of the parasympathetic nerve pathways [1,2].** Tear production is stimulated by the nervous system, via the parasympathetic nerve [3], which is linked to both the lacrimal gland [3,4] and the meibomian glands [3,5].
- **Faster meibomian gland metabolism [1,2,3,4,5].**
- **Increased meibum expression due to heat [6].**
- **Small vessel coagulation: acts against inflammation of the skin (rosacea) and eyelids (blepharitis) [7,8,9].**
- **Reduces Demodex mites**



CLINICAL RESULTS

The expected results of IPL treatment may include [6]:

- Improved **tear film quality**
- Patient-reported **improvement in the following symptoms:** dryness, sensation of foreign body in the eye, itching, burning, eye fatigue, blurred vision, sensitivity to light, watery eyes, impaired secretion, pain.

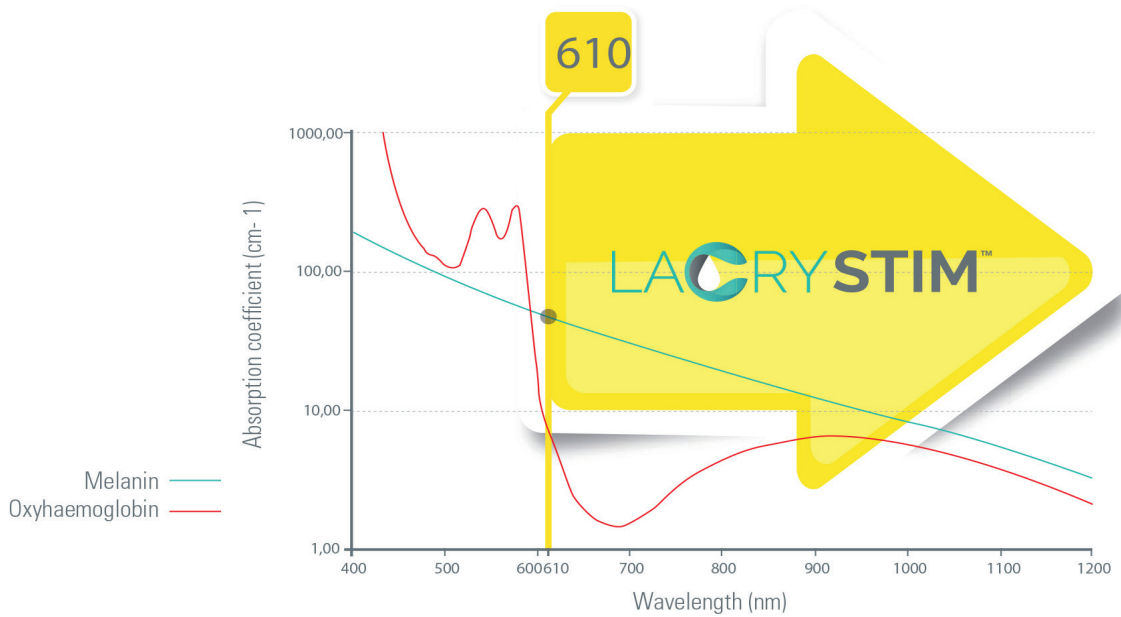
• Additional effects of IPL treatment may be observed:

- Pain relief
- Anti-inflammatory action (blepharitis, conjunctivitis, rosacea)
- Reduction in inflammatory markers (cytokines) in the tears [10]
- Antimicrobial action (bacteria and Demodex mites).

IPL System

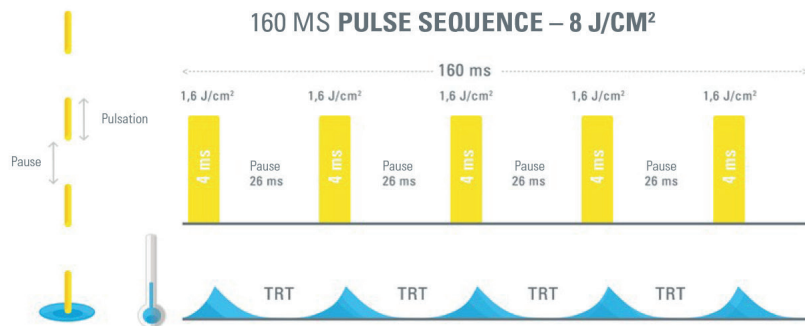
■ LIGHT SPECTRUM

- An IPL device is a generator of **polychromatic intense pulsed light**.
- The LacryStim light spectrum extends **from 610 nm to 1200 nm**.
- LacryStim uses a **610 nm filter** that blocks UVA, UVB and UVC rays.
- Thanks to **this 610 nm filter**:
 - The **melanin** in the skin **absorbs less light** [11]
 - **No phototyping** is required
 - **All types of skin** can be treated, including black skin (Fitzpatrick scale phototype VI).



■ SETTINGS AND PULSE SEQUENCE

- **The total energy** is between 8 and 12 J/cm² and is delivered in a **sequence of pulses**.
- The **time between each pulse respects the thermal relaxation time (TRT) of the skin**, thus limiting:
 - The increase in tissue temperature
 - Thermal damage to the skin
 - Inflammatory reactions
 - The phototyping required.



➤➤ A SAFE AND EFFECTIVE TREATMENT FOR ALL SKIN TYPES

SKIN TYPES



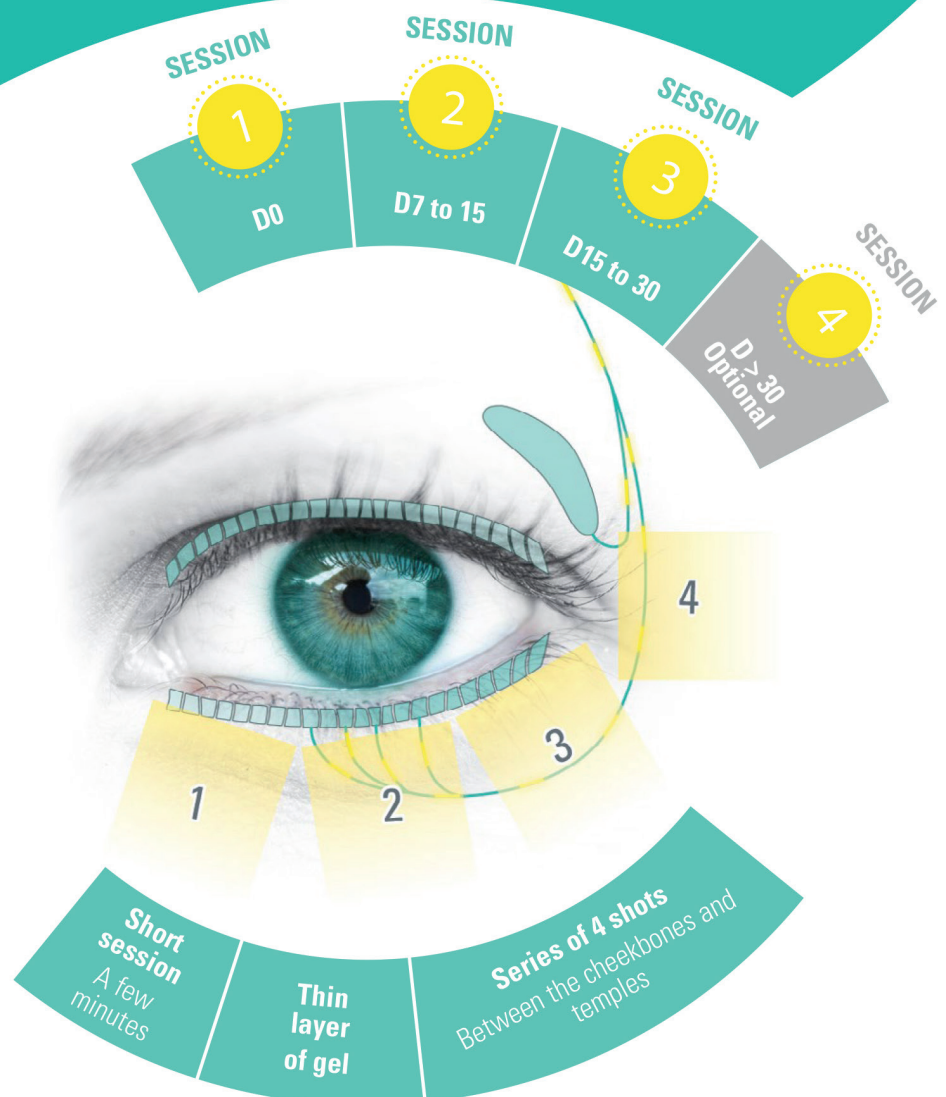
LACRYSTIM™
610 - 1200 nm

■ COMFORT AND EASE OF USE

- A single handpiece, no additional kit required.
- **Integrated water cooling.**
- **Does not burn** the skin.
- Applies a **thin layer of gel** during treatment.
- **Long-lasting** flash lamp.
- Delivers the **same energy level** from first to last shot.



■ SIMPLE AND FAST TREATMENT





THE BENEFITS OF

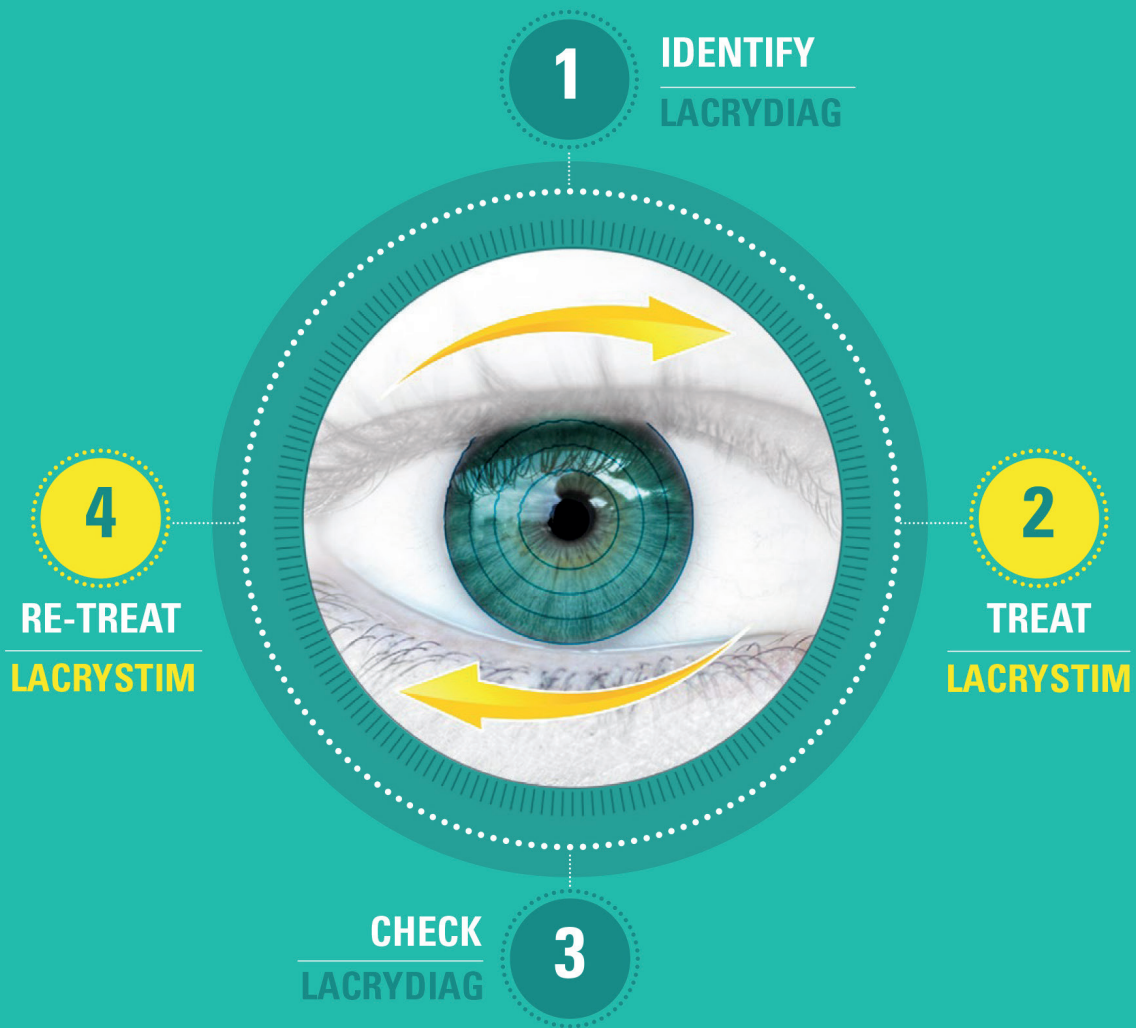
DIAGNOSIS LACRYDIAG

Eye surface analyser



TREATMENT LACRYSTIM

IPL System



ADDED VALUE FOR YOUR CLINICAL PRACTICE

- Extend your clinical offering from diagnosis to treatment.
- Diagnose and treat the cause of dry eye earlier.
- Offer effective and lasting IPL treatment.
- Optimise post-surgical results by diagnosing and treating before surgery (refractive, cataract).
- Improve the compliance of patients under topical treatment for glaucoma.



IMPROVED COMFORT FOR YOUR PATIENTS

- Perform a complete, fast contactless examination.
- Offer your patients painless and effective IPL treatment (< 5 min).
- Provide evidence of diagnosis and IPL treatment results.
- Improve patient care.
- Ensure patient satisfaction from the 1st IPL treatment.

LACRYSTIM™

TECHNICAL SPECIFICATIONS

LACRYSTIM™

Technology	IPL (Intense Pulsed Light)
Wavelength	610 – 1200 nm
Energy	1 to 14 J/cm ²
Dimensions	580 (H) x 275 (W) x 280 (D) mm
Weight	25 kg
Filter	610 nm, anti UVA, UVB and UVC filter
Cooling system	Water
	Replace water every 7000 shots
Flash lamp	Xenon lamp
Power supply	230 VAC or 110 VAC
Temperature for use	+5°C to +35°C
Treatment duration	3 to 4 sessions
Accessories	Operator safety glasses, patient eyeshields
CE marking	Class IIb medical device

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www.quantel-medical.com

LacryStim IPL is a class IIb medical device designed by CSB for QUANTEL MEDICAL and compliance assessed by IMQ CE 0051.

 Quantel
medical

ISO9001: 2015 – ISO13485: 2016

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