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Femtolasik Lux[®] Light for your eyes

Solutions in sight www.seri-lugano.ch









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Lugano sees the first non-surgical procedure using light

No more invasive surgical instruments to treat the most common vision problems, but only the energy generated by **intelligent photons**. This is the concept lying at the heart of the innovative solution proposed by the **Switzerland Eye Research Institute (SERI Lugano).**

It is known as **Femtolasik Lux®** and is **an entirely non-invasive "no-touch" procedure.** Without touching the eye with any instrument, it resolves any **visual defect** in a few minutes in a pain-free way employing **three different light sources,** including the **femtosecond laser.**

This type of laser was used **for the first time in Ticino** by **Dr. Roberto Pinelli** at the very institute he founded and directs - **SERI Lugano.**



How does Femtolasik Lux® work?

The Femtolasik Lux[®] is the latest and most innovative advancement of the Lasik technique. It can eliminate one or more vision deficiencies simultaneously using three separate calibrated light emissions.

It consists of the photonic radiation of three types of lasers. The first is a **femtosecond laser**, a femtosecond being a unit of measurement that expresses the transmission speed **of intelligent photons**. **These photons**, with a precision of the order of **billionths of a second**, gently brush against the surface **of the cornea** and free it of its outermost layer without damaging it. The second is an **excimer laser**, which modifies the **curvature** of the cornea to restore correct vision to those who are **short-sighted**, **astigmatic**, **hypermetropic** and even **presbyopic** by means of the Pinelli Presby Profile[®] algorithm.

Finally, in addition to the traditional Lasik technique, this **"no-touch" procedure** designed by Dr. Pinelli features a third radiation, this time one of **ultraviolet light**, assisted by a few riboflavin-based eye drops to create **new collagen bonds in the cornea** and thus strengthen its structure and elasticity.

Femtolasik Lux[®] is proposed solely by SERI Lugano, having been internationally patented. Patients appreciate its extreme simplicity, rapidity and the total **absence of pain** during and after the procedure. The treatment is performed on both eyes in the same session, given the undoubted advantage for the **optic** system, the **bilateral** organ par excellence.

What are the advantages of Femtolasik Lux®?

- It is an entirely non-invasive and safe non- surgical procedure and therefore particularly welcomed by patients.
- The surgery is **bilateral**, **completely pain-free**, and allows the patient to **resume their usual activities** immediately.
- It guarantees considerable corneal strengthening.

Who is it for?

- Young people (ideal candidates), forced to wear glasses or contact lenses to overcome their short-sightedness, farsightedness and astigmatism.
- The "over 40s", who need glasses to read or send text messages, can now eliminate their nearsightedness with a specific algorithm designed for them in a tailor-made manner, known as the **Pinelli Presby Profile**[®]. Glasses for *near* and *far* sight can be discarded thanks to the technique developed by Dr. Pinelli.



Are previous treatments a contraindication?

No. In fact, Femtolasik Lux[®] is very well indicated for improving impaired vision resulting from previous procedures. The reinforcing effect of the Femtolasik Lux[®] treatment also means that many people who were previously unsuitable for an intervention can now be successfully treated.

Photons and biophotons: clarity of eyesight and a healthy individual

The **photons** emitted during **Femtolasik Lux**[®] are infinitesimal particles of light that, on penetrating the body through the pupillary foramen, come into contact with other cells of our body, as **biophotons.** In this way, they can **transport the same wellness-bearing information to other areas of the body.** The existence and role of biophotons have been demonstrated by the German quantum physicist, Fritz Albert Popp.



Riboflavin is instilled onto the corneal surface

The Switzerland Eye Research Institute (SERI Lugano) is a centre for research and innovation in vision science. Founded in Lugano in 2013, it offers solutions for all visual impairments (including presbyopia) through scientifically validated, non-invasive, bilateral procedures that are consistently pain-free.

SERI Lugano not only deals with the correction of visual defects, but also offers services recognized by LAMal (the Swiss Federal Law on Health Insurance) for personalized diagnosis and treatment in all areas of ophthalmology, from retinal disorders to pediatric ophthalmology.

Under its Scientific Director, Dr. Roberto Pinelli, SERI Lugano is continuously developing its research in the fields of vision science, medical ophthalmology, paediatric ophthalmology, and the use of nutraceuticals and light in ophthalmology.

SERI Lugano delivers a range of treatments, whether medical or involving a range of photon-based procedures, which are always in keeping with the most innovative, safe, and effective scientific developments. These results have been brought about through continuous ongoing research and state-of-the-art diagnostic and procedural tools and technology.

The treatment procedures are many and varied; the approach is completely personalized and based on the use of sophisticated equipment. The latest generation of advanced technology is always combined with the technical and interpersonal skills of the various specialists who work within the institute.

SERI Lugano is inspired by, and committed to, an institutional culture of excellence in the field of vision science and in patient satisfaction.

Switzerland Eye Research Institute SA (SERI Lugano)



Photo by F. Simonetti - Studio Camponovo archive.

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