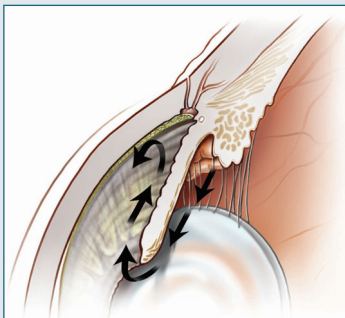


# SLT Photoregeneration

## A new hope to glaucoma patients.

For many years the most common option for glaucoma patients was the lifelong use of eye drops. Now there is a non-invasive alternative available called SLT. In less than thirty minutes, this painless procedure can help to reduce intraocular pressure to the point where patients may be able to forego medication for several years.



**Open Angle Glaucoma:** Blockage of the trabecular meshwork restricts the outflow of aqueous fluid, causing an increase of pressure inside the eye.

Nobody likes to use medication, especially when it involves the administration of eye drops at certain hours every day for the rest of one's life. A new laser-based procedure called SLT is a possible alternative to pharmaceutical remedies or surgical procedures for Glaucoma patients. First introduced in 2001, SLT has been used effectively throughout the world to treat open angle glaucoma. Hundreds of thousands of patients have already benefited from this gentle, non-invasive laser procedure.

Glaucoma is the leading cause of blindness in North America and Europe and the second leading cause worldwide. It is most often associated with an increase of pressure inside the eye, which, over time, can cause damage to some of the sensitive structures that receive and transmit images in the back of the eye, ultimately resulting in irreversible loss of vision.

In the past, Glaucoma patients were treated with medication, mainly pressure-reducing eye drops, or surgical procedures that aimed at improving the outflow of fluids through the trabecular meshwork (the eye's drainage system).

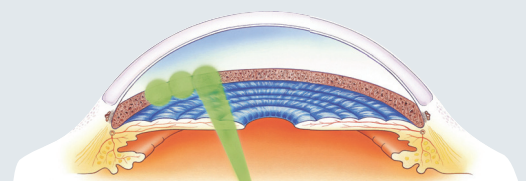
Compared to other treatment options, SLT is not associated with any major side effects. Gentle, non-invasive and

repeatable, the SLT laser applies short pulses of low-energy light to prompt a photo-regenerative response in the trabecular meshwork, which leads to lowered intraocular pressure.

"We are excited about offering SLT to our patients", states Dr. Audrey Kaplan-Messas, Director of glaucoma service, Assaf Harofe Medical Center, Israel, "it is the first non-invasive laser-based alternative for patients that have glaucoma. Especially in patients where glaucoma is detected during the early stages, SLT can be used as a primary treatment option, preventing the need for medication for many years. This not only dramatically improves the patient's quality of life, but also prolongs the health of the eye as many patients eventually become intolerant to the drugs."

Patient compliance has been a huge problem for doctors. Many Glaucoma patients struggle with the administration of eye drops and do not comply with their schedule. This poses a big risk for the patient as every increase of intraocular pressure above a certain threshold can potentially lead to harmful damage to the eye. Michael Belkin,

**"SLT can be used as a primary treatment option, preventing the need for medication for many years. This not only dramatically improves the patient's quality of life, but also prolongs the health of the eye..."**



# SLT Photoregeneration



During treatment, the gentle SLT laser is applied to the eye using a special lens.

## Who is a good candidate for SLT?

Good candidates for SLT include primary-open angle, normal tension, pseudoexfoliation, or pigmentary glaucoma patients who:

- Wish to use SLT as a primary treatment
- Find it challenging to take glaucoma medications due to time or financial constraints and quality-of-life issues
- Are currently undergoing drug therapy and need to further reduce IOP without adding drugs
- Wish to keep the number of drugs to a minimum
- Do not tolerate drugs due to their adverse effects
- Experience loss of the pressure-lowering effects of drug therapy
- Have had Argon Laser Trabeculoplasty (ALT) that has failed

Professor of Ophthalmology at the University of Tel Aviv explains: “We estimate that only 25% of patients comply with the drug regimen prescribed by their doctor. And even worse, over time many patients eventually become intolerant to the drugs, which only leaves surgery as their last option.”

As SLT is an in-office laser treatment, patient compliance is not an issue. And even in the event that patients may eventually need a combination treatment of SLT and drugs, it still means that the patient will start on medication later and

at smaller dosages than under regular treatment conditions.

“We have seen over 70% of patients respond to the treatment well and intraocular pressure has remained lowered and stable for several years”, adds Dr. Audrey Kaplan-Messas, “SLT finally brings new hope to patients who suffer from Glaucoma.”



## Information Box:

SLT is an in-office procedure that takes approximately thirty minutes.

- Step 1:** The doctor conducts a pressure measurement to determine the eye's intraocular pressure.
- Step 2:** Numbing eye drops are applied
- Step 3:** The patient is seated in front of the ophthalmologist's microscope.
- Step 4:** The doctor will align the patient's head to the chin rest.
- Step 5:** A contact lens is placed on the patient's eye
- Step 6:** The doctor will start to apply short laser pulses. The patient hears the laser pulses as short ticking sounds and may see bright light flashes. The procedure will take approximately three to five minutes.
- Step 7:** Once the treatment is complete, the patient is asked to rest.
- Step 8:** In most patients, a decrease in pressure will be observed immediately following treatment. However, in some patients the photoregenerative process may take from weeks to a few months before impacting eye pressure.

