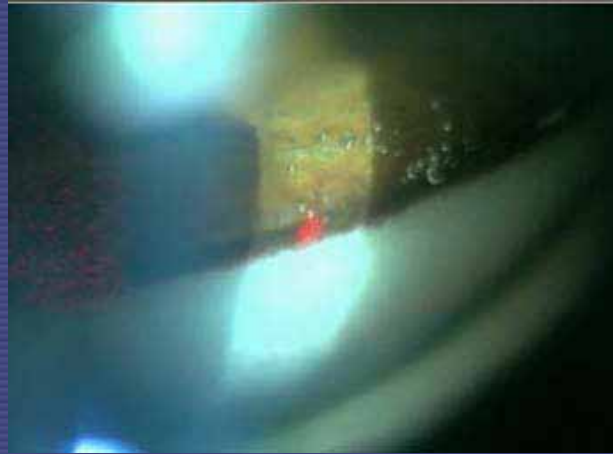


SLT: The First Drop



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Financial Disclosures-Travel Grant: Alcon, Ellex

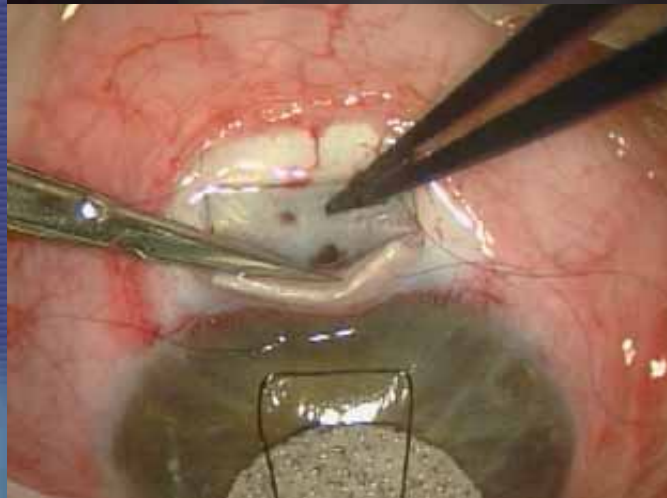
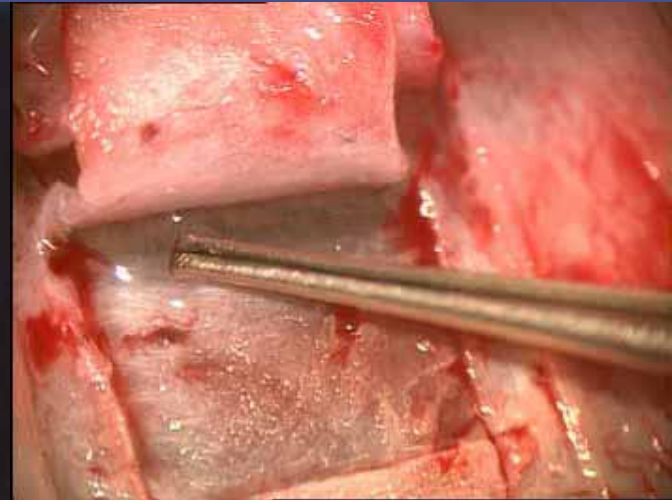
Research Grant : Merck



60.5 million, 79.6 by 2020

In the Ocular Hypertension Treatment Study, 40% of patients required more than two medications to achieve a 20% decrease in IOP¹⁸. In the Collaborative Initial Glaucoma Treatment Study, 75% of patients with early-to-moderate glaucoma required more than two medications to control their IOP within 5 years¹⁹.

Options



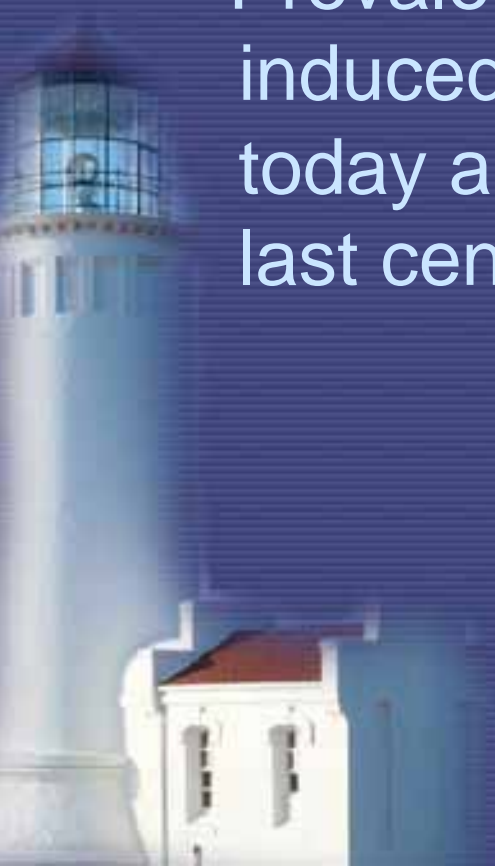
Glaucoma Treatment : A Tight Rope Walk

Prevalence and incidence of glaucoma-induced blindness and visual impairment today are not very different from those of the last century

Ophthalmic Epidemiol 2006;13:35-42.

Ophthalmology 2003;110:726-33.

Ophthalmology 1998;105:2099-104.

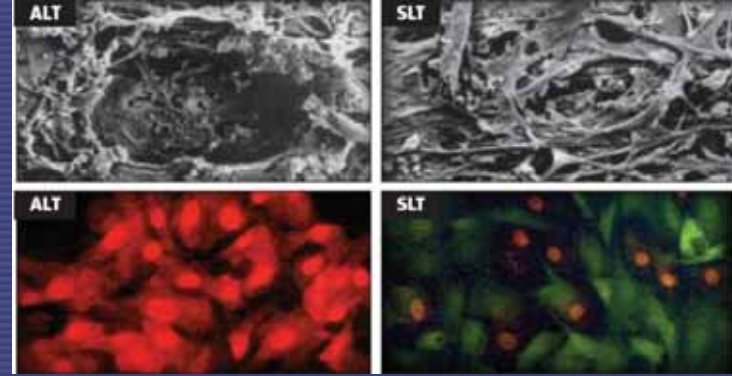


Glaucoma Treatment : A Tight Rope Walk

- Efficacy
- Compliance
- Quality of Life
- Economics



Efficacy



- Primary SLT significantly increased the tonographic outflow facility and decreased IOP in patients with POAG and OHT
- The level of IOP reduction could not be explained by the increase in tonographic outflow facility alone.

Saurabh Goyal, Laura Beltran-Agullo, Safina Rashid, et al.

Br J Ophthalmol published online May 14, 2010

Intraocular pressure control and fluctuation: the effect of treatment with selective laser trabeculoplasty

M Nagar, E Luhishi and N Shah

Br J Ophthalmol 2009 93: 497-501 originally published online December 23, 2008

- Success in IOP control: 75% with SLT, 73% with latanoprost
- Absolute reduction 6.2 mm Hg with SLT, 7.8 mm Hg with latanoprost
- Treatment with SLT successful in lowering IOP fluctuation in 50% of patients, latanoprost in 83%

Compliance



- Between 28% and 58% of glaucoma patients do not use their medications as prescribed
- Non compliance is probably 30%-40

Surv Ophthalmol 2008; 53(6 Suppl):S57-68.

Ophthalmology 2007;114:648-52.

Am J Ophthalmol 2004;137(1 Suppl):S3-12.

Can J Ophthalmol 2008;43:454-61.

Arq Bras Oftalmol. 2008 ;71:207-14.

Compliance



- Nonadherence between 23% and 60% over 12 months.
- Nonpersistence between 30% and 95% at 1 year.
- Higher adherence and persistence with
- prostaglandin analogs
- 50% discontinuing prostaglandin therapy failed to restart any other topical therapy

Conventional Treatment



- Number of years that people would have visual impairment (or blindness) would be reduced from 5.2 years to 1.0-2.6 years.
- These changes would cost between \$28,000 and \$46,000/ QALY Quality Adjusted Life Year

Rein DB, Wittenborn JS, Lee PP, et al
Ophthalmology 2009;116:823–32.

TUNNEL VISION

The Economic Impact of Primary Open Angle Glaucoma -

A Dynamic Economic Model



- A change to initial laser trabeculoplasty followed by topical medication and then trabeculectomy was surprisingly cost-effective and was actually cost savings, returning \$2.50 for every \$1.00 spent.
- Even if the cost of laser treatment increased 4-fold, it still returned \$1.74 for each \$1.00 spent.

Taylor HR. Glaucoma: Where to Now?
Ophthalmology, 2009.

Taylor HR, Crowston J, Keeffe J, et al.

www.cera.org.au

TUNNEL VISION

The Economic Impact of Primary Open Angle Glaucoma -

A Dynamic Economic Model



- Increasing the number of diagnosed and treated people with glaucoma was quite expensive at \$AU153,000–167,000/QALY and at this cost not very cost effective.

Taylor HR. Glaucoma: Where to Now?
Ophthalmology, 2009.

Taylor HR, Crowston J, Keeffe J, et al.

www.cera.org.au

Price per mm of IOP

- Side effects
- Complications
- Quality of life
- Economics



SLT : The First drop?

- Interventions involving simplified dosing regimes, reminder devices, education and individualised care planning, are known to show improvements in adherence

Cochrane Database Syst Rev. 2009:CD006132.

Ophthalmology. 2009 ;116:2286-93



- “From inability to let well alone; from too much zeal for the new and contempt for what is old; from putting knowledge before wisdom, science before art, and cleverness before common sense; from treating patients as cases, and from making the cure of the disease more grievous than the endurance of the same, Good Lord, deliver us.””

Sir Robert Hutchison
(1871-1960).

