Support for the Primary Use of SLT in the Management of Glaucoma Based on its Mechanism of Action

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MONOCYTES INTERACT WITH TMEs & SCEs:


MONOCYTE FACTORS INCREASE OUTFLOW:

Fig. 3

Pressure (mmHg)

Baseline

monocyte CM

Baseline

0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
Facility (mmol/l)

Time (hr)

0.05
0.1
0.15
0.2
0.25
0.3
0.35
0.4
0.45
0.5
SLT & PGAs ACTIVATE TMEs AND SCEs:


**CLINICAL IMPLICATIONS:**

- SLT: ~170 bursts of 0.73 mJ, total 124.31 mJ, n = 24

**CLINICAL PROTOCOL:** PGAs stopped at time zero; a “baseline” is established 1-2 months later; SLT procedure performed & outcome determined 3 months later; then, the effect of restarting PGA (rechallenge) on IOP is ascertained again.

**OUTCOMES**

<table>
<thead>
<tr>
<th>IOP</th>
<th>Treatment Condition</th>
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<tbody>
<tr>
<td>OFF PGA</td>
<td>16.57</td>
</tr>
<tr>
<td>SLT</td>
<td>IOP BASELINE 21.73</td>
</tr>
<tr>
<td>SLT OUTCOME</td>
<td>15.01</td>
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<tr>
<td>PGA RE-Rx</td>
<td>IOP ON PGA 15.03</td>
</tr>
</tbody>
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**Predicted Sequence of Events in Primary SLT-Rx ed Pt.**

- Baseline: 21.73
- PGA-Rx: 16.57
- SLT-Rx: 15.01
- PGA-Rechallenge: 15.03
Support for the Primary Use of SLT:

1. SLT is already known (worldwide) as an effective primary glaucoma treatment

ISRAEL

BRITAIN

USA

2. SLT has also been shown to be cost effective compared to med rx,

CANADA
3 YEAR SAVINGS: SLT VS MONOTHERAPY = $580

USA
5 YEAR COST: SLT = $4838 VS MEDICATION = $6571

AUSTRALIA
SLT: COST SAVINGS OF $2.50 FOR EVERY $1 SPENT

3. SLT IS 100% PREDICTABLE PROVIDING THAT PT RESPONDS TO PGAs.


4. SLT IS AS POTENT AS MEDICAL THERAPY.

L. Jay katz, et al. Selective laser trabeculoplasty (slt) vs. Medical therapy as initial treatment of glaucoma: a prospective, randomized trial. (Submitted j glaucoma 2010)

5. SLT PROVIDES IOP STABILITY OVER A 24-HR PERIOD COMPARED TO MEDS.

Lee AC, Mosaed S, Weinreb RN, Kripke DF, Liu JH. Effect of laser trabeculoplasty on nocturnal intraocular pressure in medically treated glaucoma patients. Ophthalmology. 2007 Apr;114(4):666-
**RECOMMEND LASER TRABECULOPLASTY (SLT / ALT) AS A PRIMARY-TREATMENT SINCE LT IS:**

1. **SAFE:** Only transient flare/cell, +/- discomfort. **No allergies!**

2. **EFFECTIVE:** 100% predictable & effective!

3. **POTENT:** Equally potent (~30% IOP decrease) & have a similar non-responder rate (~20%) as PGAs! And **COMPLIANCE is eliminated as an imp. issue!**

**SUPPORT FROM OTHER INVESTIGATORS:**