



Selective Laser Trabeculoplasty Bibliography

Clinical Papers | Journal Articles

CLINICAL PAPERS:

AUTHOR	PUBLICATION	STUDY NAME	SYNOPSIS
Alvarado, JA et al.	Br. J. Ophthalmol. 2005;89;1500-1505.	A new insight into the cellular regulation of aqueous: how trabecular meshwork endothelial cells drive a mechanism that regulates the permeability of outflow Schlemm's canal endothelial cells	<ul style="list-style-type: none">○ Substantiates hypothesis that trabecular endothelial cells secrete substances that increase transmission through Schlemm's canal endothelium under normal circumstances.○ When SLT energy is applied, it activates the trabecular endothelium to secrete more of the substances, thus increasing aqueous outflow and reducing IOP
Arranz-Marquez, E et al.	Graefe's Arch Clin Exp Ophthalmol 2006.	Effect of previous argon laser trabeculoplasty on the ocular hypotensive action of latanoprost.	<ul style="list-style-type: none">○ Total of 86 eyes, from 86 different patients; 43 with POAG had undergone ALT previously, and 43 controls with POAG had not undergone previous therapy.
Best, U.P. et al	Klin Monatsbl Augenheilkd 2005; 222: 326-331	Long-Term Results after Selective Laser Trabeculoplasty – A Clinical Study on 269 Eyes	<ul style="list-style-type: none">○ Response curve of eyes with OHT resembled eyes with POAG and low tension glaucoma○ SLT effective for patients who have had prior ALT as both primary and adjunctive therapy



Selective Laser Trabeculoplasty Bibliography

Clinical Papers | Journal Articles

AUTHOR	PUBLICATION	STUDY NAME	SYNOPSIS
Chandrasekara, S et al. The. It can be assumed that	J Ophthalmol 2005	Associations between Elevated Intraocular Pressure and Glaucoma, Use of Glaucoma Medications, and 5-Year Incident Cataract	<ul style="list-style-type: none">o Elevated IOP may increase the risk of nuclear cataract, but not that of other types.o Use of glaucoma medications could magnify this risk - benefit of SLT given that it doesn't cause cataract while reducing IOP
Chen, Enping; Saeed, Glochin et al.	J Glaucoma 2004; 13(1):62-65.	Comparison between 90° and 180° Selective Laser Trabeculoplasty (SLT).	<ul style="list-style-type: none">o SLT with 25 laser spots on 90° of TM has a similar IOP-lowering effect as 50 spots on 180°o Potential for increased repeatabilityo New treatment regimen?
Damji, Karim F; Shah, Kirtida C et al.	Br J Ophthalmol 1999 Jun; 83(6): 718-722.	Selective Laser Trabeculoplasty vs. Argon Laser Trabeculoplasty	<ul style="list-style-type: none">o SLT equivalent to ALTo Patients with previous failed ALT had a much greater drop in IOP when treated with SLT vs. ALT
Francis, B.A. et al.	Am J Ophthalmol 2005 Sep ; 140(3) : 524-525	Selective Laser Trabeculoplasty as a replacement for medical therapy in open-angle glaucoma	<ul style="list-style-type: none">o Prospective, non-randomized, interventional clinical trialo 97% reduction in medications attained (64 of 66 eyes)o SLT enabled reduction in medicine



Selective Laser Trabeculoplasty Bibliography

Clinical Papers | Journal Articles

AUTHOR	PUBLICATION	STUDY NAME	SYNOPSIS
Gracner, Tomaz.	Ophthalmologica 2001; 215: 267-270.	IOP Response to Selective Laser Trabeculoplasty in the Treatment of POAG.	<ul style="list-style-type: none">○ At one month follow-up IOP was reduced with a mean of 4.86 mmHg○ At the end of six months IOP was reduced by a mean of 5.06 mmHg
Johnson, P. et al.	Br. J. Ophthalmol. Feb 2006	Early IOP Measurements for SLT	<ul style="list-style-type: none">○ SLT effective over short observation period
Juzych, M; Chopra, V. et al.	Ophthalmology 2004, October; 111(10): 1853-59	Comparison of Long-term Outcomes of SLT versus ALT in OAG.	<ul style="list-style-type: none">○ SLT as effective as ALT over a five-year period
Kim, Yong J; Moon, Chul S.	Ophthalmic Surgery & Lasers 2000; 31(5): 394-399.	One-Year Follow-up of laser trabeculoplasty using Q-switched frequency-doubled Nd:YAG Laser	<ul style="list-style-type: none">○ SLT shown efficacy and safety over a one year period○ Mean IOP reduction of 4.94 mmHg at 12 months
Kajiya, S; Hayakawa, K. et al.	Jpn. J Ophthalmol 2000; 44: 569-577.	Clinical Results of Selective Laser Trabeculoplasty.	<ul style="list-style-type: none">○ SLT effective modality for OAG○ Average max. IOP reduction was 8.8 mmHg
Lai, J; Chua, J., et al.	Clinical & Exp. Ophthalmol. 2004; 32: 368-372.	Five year follow up of SLT in Chinese eyes.	<ul style="list-style-type: none">○ Prospective, randomized controlled clinical study○ Comparison between SLT medication in Asian eyes; found SLT to be as effective



Selective Laser Trabeculoplasty Bibliography

Clinical Papers | Journal Articles

AUTHOR	PUBLICATION	STUDY NAME	SYNOPSIS
Lanzetta, Paolo; Menchini, Ugo et al.	Br J Ophthalmol 1999; 83:29-32.	Immediate intraocular pressure response to selective laser trabeculoplasty.	<ul style="list-style-type: none">o Average post-operative fall in IOP of 10.6 mmHg (39.9%)o SLT decreased IOP by similar amount as ALT
Latina, MA; Park C.	Exp Eye Res 1995; 60: 359-372.	Selective targeting of trabecular meshwork cells: in vitro studies of pulsed and CW laser interaction.	<ul style="list-style-type: none">o Demonstrated selective targeting of pigmented TM cells (one of the first foundation papers)
Latina, Mark; Cioffi et al.	J Glaucoma 2004; 13(2):174-177.	Argon versus Selective Laser Trabeculoplasty.	<ul style="list-style-type: none">o Address practical & theoretical differences between SLT and ALT in the treatment of OAG
Latina, Mark A; Sibayan, Sanitago A et al.	Ophthalmology 1998 Nov; 105(11): 2082- 2088.	Q-switched 532-nm Nd: YAG laser trabeculoplasty (selective laser trabeculoplasty):	<ul style="list-style-type: none">o SLT safe and effective in reducing IOP = >70% successo A multi-centre pilot, clinical study.
Latina, M; De Leon, J.	Glaucoma Today Nov-Dec 2004; 31-33.	The Effect of Topical Glaucoma Medication on the Efficacy of SLT.	<ul style="list-style-type: none">o The type of medication affects additional IOP lowering with SLTo SLT more effective if eyes concomitantly receive aqueous suppressants vs. prostaglandinso SLT an “outflow therapy”



Selective Laser Trabeculoplasty Bibliography

Clinical Papers | Journal Articles

AUTHOR	PUBLICATION	STUDY NAME	SYNOPSIS
Martinez-de-la-Casa, JM; Castillo, A.	Eye 2004; 18: 498-502.	Selective vs. argon laser trabeculoplasty: Hypotensive efficacy, anterior chamber inflammation, and postoperative pain.	<ul style="list-style-type: none">o IOP lowering effect similar for both treatmentso Energy released during treatment and inflammation in postoperative period were significantly lower with SLTo SLT procedure better tolerated than ALT, producing less discomfort
McIlraith, I et al.,	J Glaucoma 2006;15:124–130)	Selective Laser Trabeculoplasty as Initial and Adjunctive Treatment for Open-Angle Glaucoma	<ul style="list-style-type: none">o Study results support contention that SLT should be the preferable initial glaucoma therapyo SLT safe and efficacious OAG primary and adjunctive therapy
Melamed, S; Simon, Guy et al.	Arch Ophthalmol. 2003 July; 121: 957-960.	Selective Laser Trabeculoplasty as Primary Treatment for Open-angle Glaucoma:	<ul style="list-style-type: none">o A prospective, non-randomized pilot studyo SLT safe and effective as primary treatment for OAGo Mean IOP reduction of 7.7 mmHg
Nagar, M.	Br. J. Ophthalmol 2005. 89; 1413-1417.	SLT compared with latanoprost for OHT and OAG	<ul style="list-style-type: none">o Randomized, prospective study



Selective Laser Trabeculoplasty Bibliography

Clinical Papers | Journal Articles

AUTHOR	PUBLICATION	STUDY NAME	SYNOPSIS
The Glaucoma Laser Trial Research Group.	Am J Ophthalmol. 1995; 120: 718-731.	The Glaucoma Laser Trial (GLT) and Glaucoma Laser Trial Follow Up study: Results of ALT vs. Topical Medicines	<ul style="list-style-type: none">o Randomized clinical trials involving 271 patientso ALT safe and efficacious OAG treatment alternative to topical medications
Vaidergorn, P. et al.	Can J Ophthalmol 2006;41:44–50	Argon laser trabeculoplasty and reduction of ocular hypotensive medication used by glaucoma patients	<ul style="list-style-type: none">o ALT (and, by inference, SLT) can reduce chronic drug useo Implications of: 1. better compliance with less drugs 3. monetary saving 4. less medical complications. e.g., oral acetazolamide occasionally has severe systemic complications, pilocarpine reduces vision at the cataract age group, timolol is relatively contraindicated in many patients at the relevant age-group



Selective Laser Trabeculoplasty Bibliography

Clinical Papers | Journal Articles

JOURNAL ARTICLES:

AUTHOR	PUBLICATION	STUDY NAME	SYNOPSIS
Latina, Mark A; Tumbocon, Joseph AJ.	Review of Ophthalmol. 2001; 113-118.	SLT Evolves as a Treatment for Open- angle Glaucoma.	<ul style="list-style-type: none">o SLT a safe and efficacious alternative to ALTo SLT repeatable due to lack of coagulation
Sanfillipo, P.	Clinical & Exp. Optometry 1999, December; 82(6): 225-229.	A review of argon and selective laser trabeculoplasty as primary treatments of open-angle glaucoma.	<ul style="list-style-type: none">o Discusses efficacy of SLT and ALT relative to medical therapyo SLT delivers less than 1% of the energy of ALT
Tuli, Deven; Sihota, Ramanjit et al.	DOS Times 2004; 9 (9): 391-392.	SLT – Review of a New Technique.	<ul style="list-style-type: none">o SLT suitable for primary OAG treatment
Guttman, Cheryl.	Ophthalmology Times 2002, June; 43.	Primary therapy with SLT has potential for durable efficacy	<ul style="list-style-type: none">o Patients with primary open- angle glaucoma, pseudoexfoliation glaucoma can maintain IOP control
Guttman, C.	Ophthalmology Times, January 2003.	Dual function laser system big boon to anterior segment surgeons.	<ul style="list-style-type: none">o Discusses the benefits and cost effectiveness of the SLT/YAG combination system



Selective Laser Trabeculoplasty Bibliography

Clinical Papers | Journal Articles

AUTHOR	PUBLICATION	STUDY NAME	SYNOPSIS
Guttman, C.	Ophthalmology Times, June 2002.	Primary therapy with SLT has potential for durable efficacy	<ul style="list-style-type: none"> o Patients with POAG, pseudoexfoliation glaucoma can maintain IOP control
Iwach, A.	Ophthalmology Times, April 15, 2005.	SLT fares best as early intervention in glaucoma – laser therapy compares favorably with medications in terms of efficacy, side effects, compliance	<ul style="list-style-type: none"> o “SLT is cost effective to patients, eliminates compliance issues, and improves quality of life.” o SLT can be used at a variety of intervention points o SLT appears most effective as primary therapy or in conjunction with meds
Geipert, N. Porta, A. (Italy) Ahemd, I. (Canada)	EuroTimes July 2006; Vol 11 (1); 8-9	Is selective laser trabeculoplasty the first line treatment of open-angle glaucoma?	<ul style="list-style-type: none"> o SLT in early stages yields better results o SLT makes compliance less of an issue
Nagar, M.	EuroTimes May 2004.	Evidence supports SLT	<ul style="list-style-type: none"> o SLT safe and efficacious treatment for OAG
Nagar, M.	Ophthalmology Times, June 2004, 55-56.	Randomized controlled clinical trial finds dose-response effect of SLT	<ul style="list-style-type: none"> o SLT safe and efficacious alternative to ALT o SLT repeatable due to lack of coagulation



Selective Laser Trabeculoplasty Bibliography

Clinical Papers | Journal Articles

AUTHOR	PUBLICATION	STUDY NAME	SYNOPSIS
Nagar, M.	EuroTimes, January 2003.	Long term SLT results promise valuable primary treatment	o SLT suitable for primary OAG treatment
Scerra, Chet.	Ophthalmology Times, May 2002.	SLT a safe alternative to ALT.	o Positions SLT as a suitable first line treatment for OAG
Scerra, Chet.	Ophthalmology Times 2002, May	Treating POAG: SLT a safe alternative to ALT.	o SLT a safe alternative to ALT
Kent, C.	Ophthalmology Times, 2003. <i>Insert: Spotlight on Technology & Technique.</i>	Lowering Pressure Safely – a new laser therapy could eventually replace medication as the glaucoma treatment of choice.	o Highlights four main benefits of SLT: 1). Selective 2). Non thermal 3). Repeatable 4). Effective for patient who have undergone prior ALT treatment
Katz, J.	Review of Ophthalmol. 2003, June; 67-72.	Selective Laser Trabeculoplasty for Glaucoma Therapy.	o SLT is a viable, primary treatment alternative to medical therapy, especially for non-compliant [patients
Kaulen P.	Ocular Surgery News 2000 Mar.17	International Clinical Experience with SLT.	o SLT safe as both primary and adjunctive therapy



Selective Laser Trabeculoplasty Bibliography

Clinical Papers | Journal Articles

AUTHOR	PUBLICATION	STUDY NAME	SYNOPSIS
Kronemyer, B.	Ocular Surgery News 2005 Oct 1.	Selective Laser Trabeculoplasty effective in lowering, maintaining IOP	<ul style="list-style-type: none">o Retrospective chart review of 850 eyeso Significantly reduced no. of medications over long-term
Latina, Mark A.	Ocular Surgery News: International Edition, October 2004. 28-31.	SLT safely lowered IOP in glaucoma patients, surgeon says.	<ul style="list-style-type: none">o SLT used in conjunction with aqueous suppressants provides better IOP responseo Repeat SLT has higher response rate in first-time responders
Piechocki, M.	Ocular Surgery News Europe/Asia Pacific. Oct. 2004.	SLT's effect on IOP equal to medical therapy, study shows.	<ul style="list-style-type: none">o SLT generates a reduction in IOP comparable to medical therapy.
Piechocki, M. Study:	Ocular Surgery News Supersite, October 2003.	SLT equally effective as ALT at 3-year follow-up.	<ul style="list-style-type: none">o Refers to results from Karim and Damji's studyo SLT proven as effective as ALT a three-year follow-up
Wolkoff, L.	Ocular Surgery News Supersite, June 2003.	Debate over SLT continues.	<ul style="list-style-type: none">o Latina and Wilson discuss benefits of SLT as opposed to ALT



Selective Laser Trabeculoplasty Bibliography

Clinical Papers | Journal Articles

AUTHOR	PUBLICATION	STUDY NAME	SYNOPSIS
N/A	Ocular Surgery News Supersite, 26 October 2004.	SLT compared to drugs as first line glaucoma therapy.	<ul style="list-style-type: none"> o Introduction to randomized trial comparing SLT to medical therapy as initial therapy for OAG – SLT/Med study
N/A	Ocular Surgery News Supersite “Hot Stories”, 29 March 2005	Trials find SLT safe, effective in different populations.	<ul style="list-style-type: none"> o Summarized studies presented by Dr. Goldberg and Dr. Lai at APAO 2005 o SLT shown to be effective and safe in Asian and Australian populations
N/A	Ocular Surgery News Supersite - Europe/Asia-Pacific Edition, June 2003.	New laser options exist for patients with glaucoma.	<ul style="list-style-type: none"> o Introduction to SLT and Xe-CI excimer laser for glaucoma treatment o Espouse benefit of potential repeatability with SLT
Realini, T, M.D.	EyeWorld, February 2005.	Selective Laser Trabeculoplasty: A silver bullet for glaucoma?	<ul style="list-style-type: none"> o Highlights obsolescence of ALT due to emergence of SLT o Demonstrated efficacy of SLT on patients who have already undergone ALT



Selective Laser Trabeculoplasty Bibliography

Clinical Papers | Journal Articles

AUTHOR	PUBLICATION	STUDY NAME	SYNOPSIS
Stephenson, M.	EyeWorld, March 2003.	SLT to be tested as a first line therapy for open-angle glaucoma.	<ul style="list-style-type: none">o Refers to Lumenis-sponsored SLT/Med studyo Highlights problems of compliance, i.e. side effects and cost
N/A	EyeWorld, July 2003.	Is SLT a better choice than ALT for lowering IOP?	<ul style="list-style-type: none">o Points out that SLT has no clinical applications other than for OAG, therefore expensive acquisition??o Reports results from Juzych's study, concluding that SLT is as effective as ALT, but a much more gentle treatment option
Damji KF. et al.	Ophthalmic Practice Feb 2003; 21(2).	Selective Laser Trabeculoplasty: A review and comparison to Argon Laser Trabeculoplasty	