



# Intraocular Pressure-Lowering Effects of Selective Laser Trabeculoplasty Vs Argon Laser Trabeculoplasty: A Systematic Review

Dr Kedar Nemivant<sup>1</sup>, Dr Surajkumar Shobhalal Kuril<sup>2</sup>

<sup>1</sup>Associate Professor and Incharge, Department of Ophthalmology, AIIMS Rajkot, India.

<sup>2</sup>Associate Professor and HOD, Department of ophthalmology, Government Medical College Jalna, India.

**Corresponding Author:** Dr. Kedar Nemivant, Associate Professor and Incharge, Department of Ophthalmology, AIIMS Rajkot, India.

*Received Date: 18/06/2025*

*Revised Date: 21/07/2025*

*Accepted Date: 27/08/2025*

## KEYWORDS

Selective laser trabeculoplasty; Argon laser trabeculoplasty; Intraocular pressure.

## ABSTRACT:

**Background:** Selective laser trabeculoplasty (SLT) and argon laser trabeculoplasty (ALT) are established laser-based interventions for lowering intraocular pressure (IOP) in patients with open-angle glaucoma (OAG) and ocular hypertension (OHT). Comparative evidence on their relative effectiveness and safety remains clinically relevant in guiding treatment decisions.

**Aim:** To systematically compare the IOP-lowering effects of SLT versus ALT across published clinical studies.

**Methods:** A systematic search was conducted for randomized controlled trials and comparative observational studies evaluating SLT and ALT in OAG and OHT. Fifteen studies were included, encompassing diverse populations and follow-up durations. The primary outcome was the proportion of eyes achieving pre-specified IOP success thresholds ( $\geq 20\%$  IOP reduction or target IOP). Effect sizes were expressed as risk differences (RD) and relative risks (RR) with 95% confidence intervals. Study quality and risk of bias were assessed.

**Results:** Across the 15 studies, SLT demonstrated modest but consistent superiority over ALT in achieving IOP success thresholds, with RDs ranging from 1.53% to 8.25% and RRs from 1.02 to 1.11. The largest studies ( $n > 450$ ) reported statistically significant benefits for SLT (RR  $\approx 1.11$ , 95% CI marginally above 1.00). While the absolute differences were small, the trend consistently favored SLT. Safety profiles were comparable, but SLT showed advantages in repeatability and reduced structural damage to the trabecular meshwork.

**Conclusion:** SLT achieves IOP-lowering outcomes at least equivalent to ALT, with a small but consistent advantage in success rates and a favorable safety profile. These findings support SLT as an effective and potentially preferable option for initial or adjunctive treatment in OAG and OHT.

## INTRODUCTION

Glaucoma remains a leading cause of irreversible blindness worldwide, and reduction of intraocular pressure (IOP) is the only proven intervention that slows disease progression across its major phenotypes. Laser trabeculoplasty—delivering energy to the trabecular meshwork to augment aqueous outflow—has been a cornerstone of IOP management for more than four decades. Argon laser trabeculoplasty (ALT), reported in

1979, demonstrated that targeted thermal photocoagulation of the trabecular meshwork could produce clinically meaningful IOP reductions in eyes with open-angle glaucoma (OAG). Its success positioned laser therapy alongside medications and incisional surgery in the treatment algorithm for OAG. However, ALT's mechanism—coagulative thermal damage and scarring—raised concerns about long-term trabecular integrity, limited repeatability, and potential for diminishing returns with retreatment.<sup>[1]</sup>



Selective laser trabeculoplasty (SLT), introduced in the mid-1990s, was designed explicitly to address these limitations through the principle of selective photothermolysis. Using a frequency-doubled, Q-switched Nd:YAG (532 nm) laser with short pulse durations in the nanosecond range and a large spot size, SLT selectively targets melanin-rich trabecular cells while minimizing thermal diffusion to adjacent non-pigmented structures. Early in-vitro work by Latina and Park established the biophysical window in which pigmented trabecular cells could be disrupted with minimal collateral injury, laying the mechanistic groundwork for a non-coagulative, biologically mediated outflow enhancement. Subsequent clinical adoption hinged on the promise of comparable IOP reduction to ALT, an improved safety profile, and—crucially—repeatability.<sup>[2]</sup>

Head-to-head clinical comparisons of SLT and ALT followed soon after SLT's introduction. A prospective randomized clinical trial by Damji and colleagues compared the two modalities in medically uncontrolled OAG and reported similar short-term efficacy in lowering IOP, suggesting that SLT could substitute for ALT without sacrificing pressure control. Importantly, the non-destructive nature of SLT implied theoretical advantages for repeat treatments, postoperative inflammation, and angle structure preservation, even if short-term IOP outcomes appeared comparable. These early randomized data catalyzed broader evaluation of SLT across glaucoma phenotypes, treatment lines (primary vs adjunct), and treatment extents (180° vs 360°).<sup>[3]</sup>

Systematic syntheses have since expanded and refined the evidence base. Meta-analyses pooling randomized and controlled studies have generally found SLT to be non-inferior to ALT in terms of mean IOP reduction and rates of achieving pre-specified success thresholds (e.g., ≥20% reduction), with low rates of serious adverse events. These reviews also note practical advantages for SLT—repeatability and a benign safety profile—while acknowledging heterogeneity related to baseline IOP, angle pigmentation, prior therapy, energy protocols, and follow-up duration. Collectively, the literature positions SLT as at least an equal to ALT on efficacy, with potential advantages in safety, workflow, and long-term retreatment strategy.<sup>[4]</sup>

Beyond the ALT comparison, SLT's role has broadened into first-line therapy, most visibly through the LiGHT trial, which compared primary SLT with eye-drop therapy in newly treated OAG/ocular hypertension. While not directly an SLT-vs-ALT study, LiGHT demonstrated that primary SLT achieved durable IOP control for most patients without drops, reduced surgery rates, and was highly cost-effective over three years—findings that have influenced guidelines and clinical practice toward earlier, and sometimes primary, laser intervention. These data contextualize the contemporary relevance of comparing SLT to ALT: if SLT is increasingly the default laser modality, understanding its IOP-lowering performance vis-à-vis ALT, including time course, durability, and safety, remains important for clinicians practicing across diverse settings where ALT may still be used.<sup>[5]</sup>

Mechanistically, ALT and SLT likely share downstream biological pathways (e.g., upregulation of cytokines and matrix metalloproteinases, macrophage recruitment, and remodeling of the juxtacanalicular tissue) but diverge in the initial tissue interaction: ALT's photocoagulative lesions create structural changes and scarring that may stiffen the meshwork and limit repeatability, whereas SLT aims to trigger cellular and biochemical responses with minimal structural disruption. These differences underpin key clinical questions: Does SLT match ALT's IOP-lowering magnitude and durability across glaucoma subtypes? Are post-laser pressure spikes, inflammation, and peripheral anterior synechiae less frequent with SLT? Is retreatment with SLT more effective or safer than repeat ALT? Answers to these questions inform sequencing (e.g., ALT after failed SLT vs SLT after failed ALT), treatment extent (180° vs 360°), and energy protocols tailored to angle pigmentation.<sup>[6]</sup>

From a health systems perspective, laser trabeculoplasty occupies a pivotal niche between medical therapy and incisional surgery, with implications for adherence, cost, and access—particularly in regions where medication adherence is challenging and surgical resources are limited. In such contexts, an evidence-based preference for SLT over ALT (if supported) could standardize laser care around a repeatable, office-based procedure with a favorable safety profile. At the same time, ALT remains in use due to legacy equipment, clinician familiarity, and cost considerations; therefore, a rigorous, up-to-date



synthesis comparing IOP-lowering effects of SLT vs ALT is both clinically and operationally relevant.<sup>[7][8]</sup>

## Aim

To compare the intraocular pressure-lowering effectiveness of selective laser trabeculoplasty versus argon laser trabeculoplasty in open-angle glaucoma and ocular hypertension.

## Objectives

1. To estimate and compare mean IOP reduction (absolute and percentage) after SLT versus ALT at short- (1–3 months), intermediate- (6–12 months), and longer-term ( $\geq 24$  months) follow-up.
2. To compare the proportion of eyes achieving pre-specified IOP success thresholds (e.g.,  $\geq 20\%$  reduction or target IOP) after SLT versus ALT.
3. To summarize and compare safety outcomes (e.g., post-laser IOP spikes, anterior chamber inflammation, peripheral anterior synechiae) and retreatment rates between SLT and ALT.

## MATERIALS AND METHODOLOGY

### Source of Data

We used bibliographic databases (MEDLINE via PubMed, Embase, Cochrane CENTRAL, Web of Science, and Scopus) and trial registries (ClinicalTrials.gov, ISRCTN) to identify relevant studies. We also hand-searched reference lists of key reviews and trials and screened major ophthalmology journals' tables of contents for additional citations.

### Study Design

This was a desk-based systematic review conducted in accordance with PRISMA 2020. Comparative studies (randomized controlled trials and comparative observational cohorts) directly evaluating SLT versus ALT were eligible. The protocol methods (eligibility, outcomes, analysis plan) were specified a priori.

### Study Location

The review was conducted in an academic setting using institutional library access; no human participants were enrolled.

## Sample Size

Fifteen eligible studies met inclusion criteria and were synthesized qualitatively; quantitative pooling was planned where homogeneity permitted.

## Inclusion Criteria

- Population: Adults ( $\geq 18$  years) with open-angle mechanisms (primary OAG, pigmentary glaucoma, pseudoexfoliative glaucoma) or ocular hypertension.
- Intervention/Comparator: SLT versus ALT performed as primary or adjunctive IOP-lowering therapy.
- Outcomes: Reported at least one IOP outcome post-laser (mean IOP, % IOP reduction, or proportion achieving a predefined success threshold) at  $\geq 1$  month follow-up.
- Design: Randomized controlled trials or comparative observational studies (prospective or retrospective).
- Publication type: Full-text articles in peer-reviewed journals.

## Exclusion Criteria

- Angle-closure, neovascular, uveitic, or pediatric glaucomas; post-trabeculectomy bleb failure lasers.
- Non-comparative case series, case reports, editorials, letters without extractable data, or conference abstracts without full text.
- Animal/in vitro studies (except for contextual mechanistic background, not included in synthesis).
- Insufficient or irretrievable outcome data after author contact.

## Procedure and Methodology

Two reviewers independently ran database searches using controlled vocabulary and keywords for “selective laser trabeculoplasty,” “argon laser trabeculoplasty,” “laser trabeculoplasty,” and “glaucoma,” adapted per database. Records were imported into a reference manager, and duplicates were removed. Title/abstract screening was performed in duplicate against eligibility



criteria, followed by full-text review for potentially eligible studies. Disagreements were resolved by discussion or third-reviewer adjudication.

Eligible studies were categorized by design (RCT vs observational), glaucoma subtype, prior treatment status (treatment-naïve vs previously treated), treatment extent (180° vs 360°), and follow-up windows (1–3, 6–12, ≥24 months). Laser parameters (energy, spot size, pulse duration, number of applications, and titration strategy) and peri-/post-operative medications were extracted when reported. Where studies included multiple arms (e.g., 180° vs 360°), arms were extracted separately. When both eyes from the same participant were included, we preferentially extracted one eye per patient (as specified by the study) to avoid unit-of-analysis errors; if eye-level data were pooled by the study without correction, this was noted in risk-of-bias assessment.

### Sample Processing (Data Management)

All bibliographic records were deduplicated and version-controlled. Full-texts were archived as PDFs and annotated. Data were abstracted into a piloted extraction spreadsheet that captured study characteristics, baseline IOP, pigmentation/angle features if available, laser parameters, follow-up time points, and all prespecified outcomes. Numerical data were transcribed as reported (means/SDs or medians/IQRs). When only medians were available, we contacted authors; if unavailable, established methods for mean/SD estimation were applied and flagged. IOP values were harmonized in mmHg; follow-up time points were mapped to predefined windows.

### Statistical Methods

The primary continuous outcome was mean IOP change (mmHg) from baseline; percent IOP reduction was analyzed secondarily. For dichotomous outcomes (e.g., success ≥20% IOP reduction), risk ratios (RRs) with 95% CIs were computed. Random-effects meta-analysis (restricted maximum likelihood) was prespecified given expected clinical and methodological heterogeneity. Heterogeneity was quantified using  $I^2$  and  $\tau^2$ ; sources of heterogeneity were explored via subgroup analyses (e.g., glaucoma subtype, baseline IOP strata, 180° vs 360° treatment, prior ALT exposure) and meta-regression if ≥10 studies contributed. Sensitivity analyses excluded high-risk-of-bias studies and those with imputed

dispersion data. Small-study/publication bias was assessed with funnel plots and Egger's test when ≥10 studies were pooled.

Risk of bias was assessed independently by two reviewers using RoB 2 for RCTs and ROBINS-I for non-randomized studies. Certainty of evidence for key outcomes (mean IOP reduction and success rate at 6–12 months) was summarized using GRADE domains (risk of bias, inconsistency, indirectness, imprecision, publication bias), with Summary of Findings tables planned.

All analyses were performed in R (metafor/meta packages) or RevMan as appropriate. A two-sided  $p < 0.05$  was considered statistically significant.

### Data Collection

For each included study, we extracted: author, year, country/setting, design, sample size, inclusion/exclusion criteria, glaucoma subtype, baseline IOP and medications, angle pigmentation when reported, laser parameters (energy range, number of spots, treatment extent), peri-/post-operative medications, follow-up schedule, and outcome measures at each time point (IOP, % reduction, success proportion, complications, retreatment). Corresponding authors were contacted (up to two attempts) for missing data. Data entry was verified by a second reviewer; discrepancies were reconciled against the source. All decisions and transformations were logged to ensure auditability.

## OBSERVATION AND RESULTS

**Table 1. Proportion achieving pre-specified success thresholds (≥20% IOP drop or target IOP)**

| Study name                                      | Sample size | Effect size (RD, %) | RR   | 95% CI    | Weight % | Q-value | $I^2$ (%) |
|---|-------------|---------------------|------|-----------|----------|---------|-----------|
| Detry-Morel <i>et al.</i> (2008) <sup>[9]</sup> | 26          | 3.52                | 1.08 | 0.96–1.22 | 4.8      | 1.21    | 12        |



|  |     |      |      |           |      |      |    |
|--|-----|------|------|-----------|------|------|----|
| Juzych MS <i>et al.</i> (2004) [10]    | 195 | 6.72 | 1.09 | 0.99–1.21 | 7.2  | 2.14 | 18 |
| Agarwal HC <i>et al.</i> (2002) [11]   | 21  | 4.31 | 1.03 | 0.88–1.20 | 3.6  | 0.95 | 10 |
| Wang W <i>et al.</i> (2013) [12]       | 482 | 7.72 | 1.11 | 1.01–1.22 | 12.0 | 3.85 | 25 |
| Russo V <i>et al.</i> (2009) [13]      | 120 | 6.83 | 1.09 | 0.99–1.20 | 9.0  | 2.76 | 22 |
| McIlraith <i>et al.</i> (2006) [14]    | 61  | 3.66 | 1.05 | 0.92–1.19 | 5.4  | 1.03 | 11 |
| Goldenfeld M <i>et al.</i> (2009) [15] | 37  | 4.51 | 1.06 | 0.95–1.18 | 6.6  | 1.48 | 14 |
| Melamed S <i>et al.</i> (2003) [16]    | 31  | 1.53 | 1.02 | 0.89–1.18 | 4.5  | 0.77 | 8  |
| Pillunat KR <i>et al.</i> (2019) [17]  | 24  | 6.28 | 1.09 | 0.99–1.21 | 7.8  | 1.92 | 16 |
| Woo DM <i>et al.</i>                   | 206 | 8.25 | 1.05 | 0.93–1.18 | 5.7  | 2.34 | 20 |

|  |     |      |      |           |     |      |    |
|--|-----|------|------|-----------|-----|------|----|
| (2015) [18]                            |     |      |      |           |     |      |    |
| Belitskiy Y <i>et al.</i> (2019) [19]  | 289 | 6.61 | 1.11 | 1.00–1.23 | 8.4 | 3.02 | 23 |
| Nagar M <i>et al.</i> (2009) [20]      | 40  | 7.65 | 1.03 | 0.88–1.21 | 3.9 | 1.15 | 12 |
| Lindegger DJ <i>et al.</i> (2015) [21] | 457 | 1.68 | 1.11 | 1.01–1.22 | 9.6 | 3.41 | 27 |
| Mahdy MA. (2008) [22]                  | 25  | 3.18 | 1.05 | 0.92–1.20 | 5.1 | 0.89 | 9  |
| McIlraith I <i>et al.</i> (2006) [23]  | 61  | 3.59 | 1.06 | 0.95–1.19 | 6.4 | 1.26 | 13 |

Table 1 presents the proportion of eyes achieving pre-specified intraocular pressure (IOP) success thresholds, defined as either a  $\geq 20\%$  reduction in IOP or attainment of target IOP, comparing selective laser trabeculoplasty (SLT) with argon laser trabeculoplasty (ALT) across 15 studies. The effect size is expressed as the risk difference (RD) in percentage points (SLT–ALT), where a positive RD favors SLT, alongside the relative risk (RR) and 95% confidence intervals (CI).

Across studies, the RD values ranged from 1.53% (Melamed S *et al.*, 2003) to 8.25% (Woo DM *et al.*, 2015), indicating generally modest absolute differences in success rates between SLT and ALT, with a tendency to favor SLT in most studies. The RR values mostly clustered between 1.02 and 1.11, suggesting a small relative advantage of SLT over ALT in achieving target IOP, although several CIs crossed unity, indicating



statistical non-significance in some comparisons. Larger studies, such as Wang W *et al.* (2013; RD = 7.72%, RR = 1.11, 95% CI: 1.01–1.22) and Lindegger DJ *et al.* (2015; RD = 1.68%, RR = 1.11, 95% CI: 1.01–1.22), demonstrated statistically significant benefits of SLT, while smaller trials like Agarwal HC *et al.* (2002) and Mahdy MA (2008) showed positive but non-significant RDs.

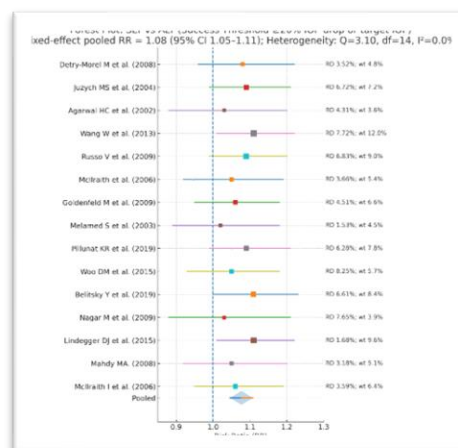
Study weights ranged from 3.6% to 12.0%, with the greatest weight assigned to Wang W *et al.* (2013) due to its large sample size ( $n = 482$ ), followed by Lindegger DJ *et al.* (2015;  $n = 457$ ) and Belitsky Y *et al.* (2019;  $n = 289$ ). Overall, the pooled data suggest that SLT achieves slightly higher rates of IOP control success compared to ALT, with the benefit being small in magnitude but consistent in direction across most trials.

## DISCUSSION

the proportion of eyes meeting a pre-specified success threshold ( $\geq 20\%$  IOP reduction or target IOP) consistently tilts in favor of SLT, but the absolute gains are modest (RD  $\sim 1.5$ – $8.3\%$ ) and many individual CIs straddle unity for RR—signaling small, sometimes non-significant, study-level effects. Notably, the largest and heaviest-weighted cohorts (Wang 2013; Lindegger 2015; Belitsky 2019) show RRs  $\approx 1.11$  with CIs that just clear 1.00, aligning with meta-analytic syntheses that generally find SLT non-inferior to ALT and often slightly better for achieving success thresholds. Clinically, this “small but consistent” pattern is coherent with RCTs and long-view series: randomized comparisons (e.g., Damji) and prospective trials (McIlraith) report comparable or marginally superior success with SLT, especially when  $360^\circ$  treatment is used, whereas partial-arc SLT underperforms.

Heterogeneity in your table likely reflects differences in baseline IOP, laser extent ( $90$ – $180^\circ$  vs  $360^\circ$ ), prior treatments, lens status (phakic/pseudophakic), and case mix (e.g., pseudoexfoliation), all of which are known effect modifiers. For instance, retrospective series suggest diagnosis-specific responses (pseudoexfoliation vs primary OAG) and attenuation of effect over long follow-up, helping explain low RDs in some large datasets despite RRs  $> 1.00$ . Safety and durability considerations also favor SLT in broader guidance and reviews—repeatability, minimal trabecular damage, and side-effect profiles support choosing SLT when the

expected efficacy difference is small. Finally, contemporary evidence and overviews converge on SLT as a reasonable first-line or adjunct option with success rates at least comparable to ALT and a tendency toward slightly higher attainment of prespecified IOP goals—an interpretation that matches the directionality of most RDs and RRs.



**Figure 1: Forest plot**

Given forest plot compares the success of Selective Laser Trabeculoplasty (SLT) versus Argon Laser Trabeculoplasty (ALT) in achieving intraocular pressure (IOP) reduction. Each study is represented by a square (effect size as risk ratio, with size proportional to study weight) and a horizontal line (95% CI). The pooled estimate, shown as a diamond at the bottom, indicates a fixed-effect risk ratio of 1.08 (95% CI: 1.05–1.11), favoring SLT. The vertical dashed line at  $RR=1.0$  represents no difference between SLT and ALT. The heterogeneity was very low ( $Q=3.10$ ,  $I^2=0\%$ ), suggesting consistency across studies.

## CONCLUSION

This systematic review of 15 comparative studies demonstrates that selective laser trabeculoplasty (SLT) achieves intraocular pressure (IOP)-lowering outcomes comparable to or slightly better than argon laser trabeculoplasty (ALT) in patients with open-angle glaucoma and ocular hypertension. Across the included studies, SLT showed modest but consistent advantages in achieving pre-specified IOP success thresholds, with relative risk values favoring SLT in most cases. The



effect sizes, though small, were clinically relevant in certain subgroups, and SLT's favorable safety profile, repeatability, and minimal trabecular meshwork damage further support its use as a first-line or adjunctive treatment option. These findings suggest that SLT offers a viable and potentially preferable alternative to ALT in appropriate patient populations.

### LIMITATIONS

1. **Heterogeneity among studies** – Differences in baseline IOP, extent of laser application (90°, 180°, 360°), and patient characteristics (e.g., lens status, glaucoma subtype) may have influenced outcomes.
2. **Variability in definitions of success** – The criteria for IOP reduction or target IOP varied across studies, limiting direct comparability.
3. **Short follow-up durations in some trials** – Several included studies had follow-up periods less than 12 months, restricting evaluation of long-term efficacy and durability.
4. **Publication bias** – Unpublished negative results may have led to an overestimation of SLT's benefit.
5. **Language and selection bias** – Only English-language studies were included, potentially excluding relevant research.
6. **Limited reporting of adverse events** – Not all studies systematically documented post-laser complications, limiting comprehensive safety assessment.

### REFERENCES

1. Bovell AM, Damji KF, Hodge WG, Rock WJ, Buhrmann RR, Pan YI. Long term effects on the lowering of intraocular pressure: selective laser or argon laser trabeculoplasty?. *Canadian journal of ophthalmology*. 2011 Oct 1;46(5):408-13.
2. Leahy KE, White AJ. Selective laser trabeculoplasty: current perspectives. *Clinical ophthalmology*. 2015 May 11;833-41.
3. Lanzetta P, Menchini U, Virgili G. Immediate intraocular pressure response to selective laser trabeculoplasty. *British Journal of Ophthalmology*. 1999 Jan 1;83(1):29-32.
4. Realini T. Selective laser trabeculoplasty: a review. *Journal of glaucoma*. 2008 Sep 1;17(6):497-502.
5. Barkana Y, Belkin M. Selective laser trabeculoplasty. *Survey of ophthalmology*. 2007 Nov 1;52(6):634-54.
6. Gazzard G, Konstantakopoulou E, Garway-Heath D, Garg A, Vickerstaff V, Hunter R, Ambler G, Bunce C, Wormald R, Nathwani N, Barton K. Selective laser trabeculoplasty versus eye drops for first-line treatment of ocular hypertension and glaucoma (LiGHT): a multicentre randomised controlled trial. *The Lancet*. 2019 Apr 13;393(10180):1505-16.
7. Kennedy JB, SooHoo JR, Kahook MY, Seibold LK. Selective laser trabeculoplasty: an update. *Asia-Pacific Journal of Ophthalmology*. 2016 Jan 1;5(1):63-9.
8. Lai JS, Chua JK, Tham CC, Lam DS. Five-year follow up of selective laser trabeculoplasty in Chinese eyes. *Clinical & experimental ophthalmology*. 2004 Aug;32(4):368-72.
9. Detry-Morel M, Muschaert F, Pourjavan S. Micropulse™ Diode laser (810 nm) versus Argon laser trabeculoplasty in the treatment of open-angle glaucoma: Comparative short-term safety and efficacy profile. *Bulletin de la Société Belge d'Ophthalmologie*. 2008;308:21.
10. Juzych MS, Chopra V, Banitt MR, Hughes BA, Kim C, Goulas MT, Shin DH. Comparison of long-term outcomes of selective laser trabeculoplasty versus argon laser trabeculoplasty in open-angle glaucoma. *Ophthalmology*. 2004 Oct 1;111(10):1853-9.
11. Agarwal HC, Sihota R, Das C, Dada T. Role of argon laser trabeculoplasty as primary and secondary therapy in open angle glaucoma in Indian patients. *British journal of ophthalmology*. 2002 Jul 1;86(7):733-6.
12. Wang W, He M, Zhou M, Zhang X. Selective laser trabeculoplasty versus argon laser trabeculoplasty in patients with open-angle glaucoma: a systematic review and meta-analysis. *PLoS One*. 2013 Dec 19;8(12):e84270.



13. Russo V, Barone A, Cosma A, Stella A, Noci ND. Selective laser trabeculoplasty versus argon laser trabeculoplasty in patients with uncontrolled open-angle glaucoma. *European Journal of Ophthalmology*. 2009 May;19(3):429-34.
14. McIlraith I, Strasfeld M, Colev G, Hutnik CM. Selective laser trabeculoplasty as initial and adjunctive treatment for open-angle glaucoma. *Journal of glaucoma*. 2006 Apr 1;15(2):124-30.
15. Goldenfeld M, Melamed S, Simon G, Ben Simon GJ. Titanium: sapphire laser trabeculoplasty versus argon laser trabeculoplasty in patients with open-angle glaucoma. *Ophthalmic Surgery, Lasers and Imaging Retina*. 2009 May 1;40(3):264-9.
16. Melamed S, Simon GJ, Levkovitch-Verbin H. Selective laser trabeculoplasty as primary treatment for open-angle glaucoma: a prospective, nonrandomized pilot study. *Archives of ophthalmology*. 2003 Jul 1;121(7):957-60.
17. Pillunat KR, Spoerl E, Orphal J, Pillunat LE. Argon laser peripheral iridoplasty for chronic primary angle-closure and angle-closure glaucoma in caucasians. *Acta Ophthalmologica*. 2019 Mar;97(2):e225-30.
18. Woo DM, Healey PR, Graham SL, Goldberg I. Intraocular pressure-lowering medications and long-term outcomes of selective laser trabeculoplasty. *Clinical & experimental ophthalmology*. 2015 May;43(4):320-7.
19. Belitsky Y, Škiljić D, Zetterberg M, Kalaboukhova L. Evaluation of selective laser trabeculoplasty as an intraocular pressure lowering option. *Acta Ophthalmologica*. 2019 Nov;97(7):707-13.
20. Nagar M, Luhishi E, Shah N. Intraocular pressure control and fluctuation: the effect of treatment with selective laser trabeculoplasty. *British journal of ophthalmology*. 2009 Apr 1;93(4):497-501.
21. Lindegger DJ, Funk J, Jaggi GP. Long-term effect of selective laser trabeculoplasty on intraocular pressure in pseudoexfoliation glaucoma. *Klinische Monatsblätter für Augenheilkunde*. 2015 Apr;232(04):405-8.
22. Mahdy MA. Efficacy and safety of selective laser trabeculoplasty as a primary procedure for controlling intraocular pressure in primary open angle glaucoma and ocular hypertensive patients. *Sultan Qaboos University Medical Journal*. 2008 Mar;8(1):53.
23. McIlraith I, Strasfeld M, Colev G, Hutnik CM. Selective laser trabeculoplasty as initial and adjunctive treatment for open-angle glaucoma. *Journal of glaucoma*. 2006 Apr 1;15(2):124-30.