Laser trabeculoplasty, whether MLT, SLT, or a combination thereof, allows for effective lowering of intraocular pressure (IOP) in open angle glaucoma (OAG).

**Purpose**
To evaluate the relative and combined effect of micropulse laser trabeculoplasty (MLT) and selective laser trabeculoplasty (SLT) on intraocular pressure (IOP) in open angle glaucoma (OAG).

**Methods**
A retrospective review of change in IOP after MLT, SLT, and a joint SLT-MLT treatment regimen in patients with OAG. Patient age, characteristics of glaucoma, central corneal thickness (CCT), pre-operative and post-operative glaucoma medication, and average pre-operative and post-operative IOP were evaluated. All patients had undergone a standardized treatment regimen consisting of 50 spots per 180 degree treatment.

**Results**
32 eyes from 22 patients underwent MLT. Median age was 69 years (range 56–91). Average CCT was 552±53. Mean pre-operative IOP was 19.6±4.9 mmHg and mean glaucoma medications were 1.9±1.2. Mean post-operative IOP was 15.4±2.4 mmHg, an 18% reduction in IOP from baseline (p = 0.0006). Subgroup analysis revealed 60% of patients underwent a 180 degree treatment with 14.5% reduction in IOP (p = 0.00015). 40% of patients underwent a 360 degree treatment with a 23.6% reduction in IOP (p = 0.0126). 31 eyes from 20 patients underwent SLT. Median age was 70 years (range 53 – 91). Average CCT was 530±28. Mean pre-operative IOP was 20.3±4.7 mmHg with 2.3±1.7 medications. Mean post-operative IOP was 16.3±2.6 mmHg, representing a 17.6% reduction from baseline IOP (p=0.00007). Subgroup analysis demonstrated that 56% of patients underwent a 180 degree treatment with a mean post-operative IOP reduction of 17% (p= 0.06) while 44% of patients underwent a 360 degree treatment with a mean IOP reduction of 17.8% (p = 0.00004). 16 eyes from 10 patients underwent 180 degree MLT and 180 degree SLT. Median age was 73 (range 60 – 83). Average CCT was 526±27. Mean pre-operative IOP was 20.0±4.6 and topical medications was 1.7±1.1. Mean post-operative IOP was 14.9±2.6 mmHg, or a 22.3% reduction in IOP (p = 0.00045). There were no statistically significant differences between the MLT, SLT, or joint MLT-SLT treatment regimen on IOP lowering or on topical medication use.

**Conclusions**
Laser trabeculoplasty, whether MLT, SLT, or a combination thereof, allows for effective lowering of
intraocular pressure from baseline.

Layman Abstract (optional): Provide a 50-200 word description of your work that non-scientists can understand. Describe the big picture and the implications of your findings, not the study itself and the associated details.