**Supplemental Table 1** ICD-10 Codes Used Within This Study

| Diagnosis                                                | ICD-10 code |
|----------------------------------------------------------|-------------|
| Primary angle closure suspect/Anatomical narrow angle    | H40.03x     |
| Primary angle closure without glaucoma damage            | H40.06x     |
| Primary angle closure glaucoma (Acute and Chronic)      | H40.2x      |
| Iritis/Uveitis                                           | H20.x       |
| Pre-existing autoimmune disease                          |             |
| Behcet’s disease                                         | M35.2x      |
| Sjogren’s syndrome                                       | M35.x       |
| Lupus                                                    | M32.x       |
| Psoriasis                                                | L40.x       |
| Rheumatoid arthritis                                     | M05.x       |
| Sarcoidosis                                              | D86.x       |
| Gout                                                     | M10.x       |
| Comorbid conditions                                      |             |
| Diabetes                                                 | E10.x/E11.x |
| Hypertension                                             | I10.x       |

ICD indicates International Classification of Diseases.
## Supplemental Table 2 Risk Factors Associated with Post-LPI IOP Elevation ≥ 8 mmHg from Baseline

| Laser type          | Eyes, with IOP elevation (%) | (n = 2280)* | Univariate Analysis | Multivariate Analysis† |       |       |
|---------------------|------------------------------|------------|---------------------|------------------------|-------|-------|
|                     | Unadjusted Odds Ratio (95% CI) | P value  | Adjusted Odds Ratio (95% CI) | P value |
| Nd:YAG              | 39 (2.3)                     | Reference | -                    | Reference | -     |
| Nd:YAG + Argon      | 14 (2.4)                     | 1.06 (0.55, 2.07) | 0.85 | 0.57 (0.21, 1.57) | 0.31 |
| Race                |                               |           |                     |           |       |
| White               | 16 (1.5)                     | Reference | -                    | Reference | -     |
| Black               | 29 (3)                       | 2.34 (1.15, 4.73) | 0.02 | 2.70 (1.22, 6.01) | 0.01 |
| Asian               | 0 (0)                        | -         | -                    | -         | -     |
| Other‡              | 8 (4.8)                      | 3.48 (1.30, 9.30) | 0.013 | 3.62 (1.25, 10.47) | 0.02 |
| Baseline IOP        | -                            | 1 (0.91, 1.09) | 0.95 | 0.99 (0.90, 1.08) | 0.78 |
| Hypertension        |                               |           |                     |           |       |
| Present             | 37 (2.7)                     | 1.56 (0.83, 2.93) | 0.15 | 2.36 (1.06, 5.24) | 0.04 |
| Absent              | 16 (1.8)                     | Reference | -                    | Reference | -     |
| Total laser energy§ | -                            | 1.01 (1, 1.01) | 0.009 | 1 (1, 1.01) | 0.35 |
| Nd:YAG energy§      | -                            | 1.03 (0.99, 1.06) | 0.19 | - | - |
| Argon energy§       | -                            | 1.01 (1, 1.01) | 0.011 | 1 (1, 1.01) | 0.35 |

LPI indicates laser peripheral iridotomy; Nd:YAG, neodymium-doped yttrium-aluminum-garnet; IOP, intraocular pressure; CI, confidence interval.

* 127 eyes were excluded from the analysis of post-LPI IOP elevation due to lack of baseline IOP measurements.

† Adjusted for age, gender, surgeon, and history of diabetes and hypertension.

‡ Other includes Hispanic individuals and non-specified race.

§ The odds ratios were calculated based on every 100 mJ increase in energy.