

**Supplementary Table S1. Clinical characteristics of the normal and glaucoma subjects participating in the main experiment.**

| Subject | Age | Sex    | Right eye  |                    |         | Left eye     |                    |         |
|---------|-----|--------|------------|--------------------|---------|--------------|--------------------|---------|
|         |     |        | Diagnosis* | HFA Mean Deviation | HFA PSD | Diagnosis*   | HFA Mean deviation | HFA PSD |
| G01     | 69  | female | POAG       | -7.92              | 8.96    | POAG         | -6.05              | 6.91    |
| G02     | 48  | male   | POAG       | -3.68              | 8.05    | suspect disk | 0.57               | 1.07    |
| G03     | 54  | female | POAG       | -2.59              | 3.44    | POAG         | -17.65             | 12.66   |
| G04     | 57  | male   | POAG       | -10.4              | 14.08   | POAG         | -7.88              | 12.38   |
| G05     | 67  | male   | SOAG       | -24.69             | 9.49    | normal       | 0.03               | 1.22    |
| G06     | 55  | female | POAG       | -1.54              | 1.78    | POAG         | -6.75              | 9.55    |
| G07     | 53  | male   | NTG        | -5.55              | 7.72    | NTG          | -3.25              | 4.7     |
| G08     | 67  | male   | POAG       | 0                  | 1.31    | POAG         | -1.27              | 2.2     |
| G09     | 67  | female | POAG       | -3.17              | 8.84    | normal       | -1.06              | 1.68    |
| G10     | 62  | female | NTG        | -0.63              | 1.9     | NTG          | -3.82              | 7.66    |
| G11     | 59  | male   | POAG       | -6.25              | 9.62    | POAG         | -3.15              | 2.65    |
| G12     | 84  | male   | POAG       | -2.92              | 1.8     | POAG         | -5                 | 2.76    |
| G13     | 58  | female | POAG       | -2.35              | 2.03    | POAG         | -4.85              | 3.78    |
| G14     | 75  | male   | NTG        | -9.74              | 10.09   | NTG          | -16.96             | 12.77   |
| G15     | 53  | male   | POAG       | -3.35              | 1.99    | POAG         | -5.9               | 3.43    |
| G16     | 66  | female | POAG       | -4.3               | 7.01    | POAG         | -6.32              | 9.76    |
| G17     | 71  | female | POAG       | -7.68              | 8.8     | POAG         | -7.65              | 8.19    |
| G18     | 80  | male   | NTG        | -2.13              | 4.42    | NTG          | -3.61              | 3.81    |
| G19     | 72  | female | POAG       | -0.05              | 1.52    | POAG         | -2.62              | 3.87    |
| N01     | 60  | female | normal     | -1.55              | 1.7     | normal       | 1.47               | 1.34    |
| N02     | 62  | male   | normal     | -0.66              | 1.56    | normal       | -1.91              | 1.69    |
| N03     | 62  | male   | normal     | -0.39              | 1.41    | normal       | -0.35              | 1.7     |
| N04     | 57  | male   | normal     | 0.41               | 1.08    | normal       | -0.53              | 1.21    |
| N05     | 61  | female | normal     | 0.71               | 1.01    | normal       | 1.68               | 1.28    |
| N06     | 56  | female | normal     | 0.21               | 1.16    | normal       | 0.1                | 1.2     |
| N07     | 53  | female | normal     | -0.51              | 1.4     | normal       | -0.94              | 1.28    |
| N08     | 47  | male   | normal     | 1.03               | 1.21    | normal       | 0.56               | 1.26    |
| N09     | 63  | female | normal     | -1.61              | 1.66    | normal       | -1.95              | 1.43    |
| N10     | 52  | male   | normal     | -0.34              | 1.29    | normal       | -0.6               | 1.2     |
| N11     | 67  | female | normal     | -2                 | 1.46    | normal       | -1.28              | 1.67    |
| N12     | 64  | female | normal     | -0.78              | 1.37    | normal       | 0.3                | 1.22    |
| N13     | 64  | male   | normal     | -1.11              | 1.46    | normal       | -1.45              | 1.7     |
| N14     | 64  | male   | normal     | -2.81              | 6.21    | normal       | -1.7               | 5.03    |
| N15     | 67  | male   | normal     | -1.44              | 1.42    | normal       | -1.21              | 1.52    |
| N16     | 48  | female | normal     | -1                 | 1.65    | normal       | -0.9               | 1.41    |
| N17     | 67  | female | normal     | -1.32              | 6.28    | normal       | -0.66              | 5.03    |
| N18     | 60  | male   | normal     | 0.29               | 1.13    | normal       | 0.56               | 1.16    |
| N19     | 58  | female | normal     | -1.23              | 1.82    | normal       | -0.55              | 1.32    |
| N20     | 54  | female | normal     | 0.29               | 1.2     | normal       | -0.25              | 1.16    |
| N21     | 75  | female | normal     | 0                  | 1.76    | normal       | 0.38               | 1.27    |
| N22     | 51  | female | normal     | 0.31               | 1.02    | normal       | 0.64               | 1.04    |
| N23     | 51  | male   | normal     | 1.43               | 1.26    | normal       | 1.17               | 1.18    |
| N24     | 71  | female | normal     | -0.16              | 1.34    | normal       | 0.39               | 1.46    |

\* POAG: primary open angle glaucoma, NTG: normal tension glaucoma, SOAG: secondary open angle glaucoma