Supplement 1

In this supplement, survival analysis model outcomes stratified by OHTS endpoint committee POAG outcome modality are shown. In the 20 year OHTS follow-up period, 84 eyes were diagnosed using visual field alone, 118 eyes were diagnosed using fundus photo alone, and 198 eyes were diagnosed bimodally. AUC(t) plots are not included in this analysis due to severe truncation of follow-up time in cross-validation folds in this subset analysis (for example, only 8-9 eyes in each fold for VF-modality analysis).

All analysis methodology is kept the same as the primary analysis. Cox proportional hazards models are implemented to perform survival regression analysis, with inclusion of age, intraocular pressure, vertical cup-disc ratio, central corneal thickness, and randomization status as covariates. Ten-fold cross validation is performed to generate mean and 95% confidence interval performance statistics: concordance-index and log-likelihood ratio.

A. In the subset, diagnosed by fundus photography alone, the PSD model yields a C-index 0.72, CI = [0.57-0.86] and log-likelihood of 73.35, CI = [62.69-84.00]. The AT model produces a C-index of 0.71, CI = [0.57-0.85] and log-likelihood of 88.98, CI = [78.12-99.83].

B. In the subset, diagnosed by visual field alone, the PSD model yields a C-index of 0.75, CI = [0.51-0.99] and log-likelihood of 68.75, CI = [210.61-253.47]. The AT model produces a C-index of 0.75, CI = [0.51-0.99] and log-likelihood of 90.02, CI = [72.05-107.99].

C. Lastly, in the subset, diagnosed bimodally, the PSD model yields a C-index of 0.80, CI = [0.70-0.90] and log-likelihood of 232.04, CI = [210.61-253.47]. The AT model produces a C-index of 0.80, CI = [0.69-0.91] and log-likelihood of 237.58, CI = [215.27-259.89].