

Visual Field Outcomes from the Multicenter, Randomized Controlled Laser in Glaucoma and Ocular Hypertension Trial

David M.Wright (1,2) , Evgenia Konstantakopoulou (3,4,5) , Giovanni Montesano (6) , Neil Nathwani (3) , Anurag Garg (3) , David Garway-Heath (3,4) , David P.Crabb (6) , Gus Gazzard (3,4) on behalf of the LiGHT Trial Study Group

1 Centre for Public Health, Queen's University Belfast, Belfast, UK

2 Health Data Research UK

3 NIHR Biomedical Research Centre at Moorfields Eye Hospital NHS Foundation Trust, London, UK

4 Institute of Ophthalmology, University College London, UK

5 Division of Optics and Optometry, University of West Attica, Greece

6 Optometry and Visual Science, School of Health Science, City, University of London, London, UK

PURPOSE: To compare visual field outcomes of ocular hypertensive and glaucoma patients treated first with medical therapy with those treated first with selective laser trabeculoplasty (SLT) .

DESIGN: Secondary analysis of patients from the Laser in Glaucoma and Ocular Hypertension study, a multicenter randomized controlled trial.

PARTICIPANTS: Three hundred forty-four patients (588 eyes) treated first with medical therapy and 344 patients (590 eyes) treated first with SLT.

METHODS: Visual fields (VFs) were measured using standard automated perimetry and arranged in series (median length and duration, 9 VFs over 48 months) . Hierarchical linear models were used to estimate pointwise VF progression rates, which were then averaged to produce a global progression estimate for each eye. Proportions of points and patients in each treatment group with fast (MAIN OUTCOME MEASURES: Pointwise and global progression rates of total deviation (TD) and pattern deviation (PD) .

RESULTS: A greater proportion of eyes underwent moderate or fast TD progression in the medical therapy group compared with the SLT group (26.2% vs. 16.9%; risk ratio [http://RR](#), 1.55; 95% confidence interval [http://CI](#), 1.23-1.93; P **CONCLUSIONS:** A slightly larger proportion of ocular hypertensive and glaucoma patients treated first with medical therapy underwent rapid VF progression compared with those treated first with SLT.

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