

# Primary trabeculectomy versus primary glaucoma eye drops for newly diagnosed advanced glaucoma: TAGS RCT

Anthony J King,<sup>1\*</sup> Gordon Fernie,<sup>2</sup> Jemma Hudson,<sup>2</sup>  
Ashleigh Kernohan,<sup>3</sup> Augusto Azuara-Blanco,<sup>4</sup>  
Jennifer Burr,<sup>5</sup> Tara Homer,<sup>3</sup> Hosein Shabaninejad,<sup>3</sup>  
John M Sparrow,<sup>6</sup> David Garway-Heath,<sup>7,8</sup>  
Keith Barton,<sup>7,8</sup> John Norrie,<sup>9</sup> Alison McDonald,<sup>2</sup>  
Luke Vale<sup>3</sup> and Graeme MacLennan<sup>2</sup>

<sup>1</sup>Department of Ophthalmology, Nottingham University Hospital, Nottingham, UK

<sup>2</sup>Centre for Healthcare Randomised Trials (CHaRT), Health Services Research Unit, University of Aberdeen, Aberdeen, UK

<sup>3</sup>Health Economics Group, Population Health Sciences Institute, Newcastle University, Newcastle upon Tyne, UK

<sup>4</sup>Centre for Public Health, Queen's University Belfast, Belfast, UK

<sup>5</sup>School of Medicine, Medical and Biological Sciences, University of St Andrews, St Andrews, UK

<sup>6</sup>Bristol Eye Hospital, University Hospitals Bristol NHS Foundation Trust, Bristol, UK

<sup>7</sup>Institute of Ophthalmology, University College London, London, UK

<sup>8</sup>Moorfields Eye Hospital NHS Foundation Trust, London, UK

<sup>9</sup>Edinburgh Clinical Trials Unit, Usher Institute, University of Edinburgh, Edinburgh, UK

\*Corresponding author [anthony.king@nottingham.ac.uk](mailto:anthony.king@nottingham.ac.uk)

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## Plain English summary

### TAGS RCT

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## Plain English summary

**G**laucoma is an eye condition in which the intraocular pressure is too high, causing damage to the optic nerve and loss of vision. Patients with severe vision loss at diagnosis are the most at risk of blindness in their lifetime.

Lowering pressure in the eye is the only way to prevent further vision loss. Two treatments to lower pressure are commonly used: using eye drops or having an operation known as a trabeculectomy. In England, Wales and Northern Ireland, the National Institute for Health and Care Excellence recommends surgery as the first treatment. However, we do not know which treatment is best for preventing vision loss or which is safest, has the best patient experience or provides the best value for money for the NHS. Therefore, surgery is not usually carried out in the first instance and patients start with eye drops instead.

This study compared whether starting treatment with eye drops affected the quality of life of patients with advanced glaucoma more or less than starting treatment with trabeculectomy. We also investigated if initial treatment with surgery and initial treatment with eye drops were equally good at controlling pressure and were equally safe, and how much each treatment cost the NHS. Every patient had an equal chance of starting treatment with surgery or eye drops and they participated in the study for 2 years.

We found that quality of life was similar regardless of treatment. Those starting with surgery had lower pressure and needed far fewer types of eye drops than those starting with eye drops. Thirty-nine patients in the eye drop arm required surgery to control their glaucoma. Initial treatment with eye drops was cheaper over 2 years' follow-up.

Our study suggests that, over a 2-year period, having surgery in the first instance lowers intraocular pressure more than eye drops and is equally as safe as eye drops. Although eye drops are a cheaper treatment option for the NHS, if the effects of surgery on intraocular pressure are lasting, then the increased cost may be justified.



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## This report

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