

Subspecialty – Glaucoma



Prof Mingguang He (China)

- **Update of EAGLE trial**

Prof He is Deputy Director and Professor of the Zhongshan Ophthalmic Center, Sun Yat-sen University in Guangzhou, China. His area of research interest is angle closure glaucoma.

On behalf of his team, Prof He will update and discuss the rationale, study design and preliminary results of the EAGLE trial – the “effectiveness of early lens extraction with intraocular lens implantation for the treatment of primary angle closure glaucoma trial”.

“EAGLE trial is an international, multi-centre, randomised controlled trial to assess the effectiveness of lens removal for newly diagnosed primary angle closure glaucoma cases (PACG). Laser peripheral iridotomy followed by medical therapy, laser iridoplasty and trabeculectomy is the routine treatment regime for PACG. However, lens extraction by phacoemulsification as a first treatment for PACG is a new approach. The EAGLE trial aims to answer whether this new treatment is better in terms of patient reported health, vision, lower intraocular pressure and other outcomes. The study participants are recruited from 20 centres in Europe and seven centres in Asia.”



A/Prof Christopher Leung (Hong Kong)

- **In Vivo Imaging of Sick and Dying Retinal Ganglion Cells**

A/Prof Leung is Associate Professor, Department of Ophthalmology and Visual Sciences, The Chinese University of Hong Kong. He will speak on the topic of neuroprotection and regenerative medicine.

“Investigation of neuronal degeneration has been hampered by the lack of an efficient model that allows long-term, in vivo examination of axonal and dendritic arborisations. Using a confocal scanning laser ophthalmoscope to image the retinae of transgenic mice (Thy-1 YFP) that express fluorescent protein in neurons, we characterised the morphology of retinal ganglion cells (RGCs), described the patterns of axonal and dendritic degeneration, identified morphological predictors for cell survival, and estimated the rate of dendritic shrinkage.”

“Retinal ganglion cell damage was observed, prospectively, to begin with progressive dendritic shrinkage, followed by loss of the axon and then the cell body. The rate of dendritic shrinkage after optic nerve injury was variable, with a slower rate in cells with a larger dendritic field. Estimating the probability of RGC survival and the rate of dendritic shrinkage could become a new paradigm to investigate neuronal degeneration and evaluate the response of neuroprotective treatment.”

Note: All effort has been made to check facts with each presenter. The writer accepts responsibility for any inadvertent errors in transcript.