



**OCT measurement of the retinal nerve fibre layer is useful for detecting progression in early glaucoma**

***The Science behind the Tip***

Both visual field testing and optical coherence tomography (OCT) measurements can be used to detect glaucomatous progression. Use of visual field testing is limited by its subjective nature. OCT provides an objective and precise measurement of the optic nerve head, retinal nerve fibre layer (RNFL) and ganglion cell layer.

RNFL OCT is more sensitive for detecting progression in early glaucoma than subjective testing, whereas visual field testing and optic disc photography appears to be more appropriate in advanced disease<sup>1,2</sup>. OCT is less helpful in advanced glaucoma owing to the 'floor effect', where the residual RNFL becomes as thin as anatomically possible<sup>3</sup>.

***References***

- 1) Banegas SA, Anton A, Morilla A, et al. Evaluation of the retinal nerve fibre layer thickness, the mean deviation, and the visual field index in progressive glaucoma. *J Glaucoma*. 2016;25(3):229-235.
- 2) Abe RY, Diniz-Filho A, Zangwill LM, et al. The relative odds of progressing by structural and functional tests in glaucoma. *Invest Ophthalmol Vis Sci*. 2016;57(9):421-428.
- 3) Hood DC, Kardon RH. A framework for comparing structural and functional measures of glaucomatous damage. *Prog Retin Eye Res*. 2007;26(6):688-710.