



### **Be aware of obstructive sleep apnoea as a risk factor for the development or progression of glaucoma**

#### ***The Science behind the Tip***

Obstructive sleep apnoea (OSA) affects almost 1 billion people aged 30-69 years worldwide, of which 425 million have a moderate to severe OSA<sup>1</sup>. Patients with OSA have been shown to have a 30-40% increased risk of developing glaucoma compared to non-OSA subjects<sup>2</sup> and severe OSA results in an 8.5-fold higher risk of progressive retinal nerve fibre layer (RNFL) loss in glaucoma patients<sup>3</sup>.

It is therefore important to ask your glaucoma patients directly about their sleep habits and whether they might have OSA-related symptoms (loud snoring, tiredness, observed apnoea). Even if there are only few OSA symptoms (e.g. snoring) and no other obvious reasons for glaucoma disease progression, an OSA screening would be beneficial, as the potential treatment of this common disorder, which can have a major neurocognitive and cardiovascular impact, is highly recommended.

#### ***References***

- 1) Benjafeld AV et al: Estimation of the global prevalence and burden of obstructive sleep apnoea: a literature-based analysis. *Lancet Respir Med* (2019) 7(8): 687-698.
- 2) Han X et al: Associations of sleep apnoea with glaucoma and age-related macular degeneration: an analysis in the United Kingdom Biobank and the Canadian Longitudinal Study on Aging. *BMC Medicine* (2021) 19:104.
- 3) Fan YY et al: Correlation between structural progression in glaucoma and obstructive sleep apnea. *Eye* (2019) 33:1459–1465.