



### Avoid the use of monocular prostaglandin analogue medication

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

Where glaucoma predominantly affects one eye, monocular therapy may be used. Prostaglandin analogues are widely used as first line therapy for glaucoma. While they have obvious advantages for compliance and the relative lack of systemic side effects, their use may result in important cosmetic ocular effects.

Prostaglandin analogues can cause eyelash hypertrichosis<sup>1</sup>, darkening of iris colour (particularly in green-brown coloured eyes)<sup>2</sup>, and prostaglandin-associated periorbitopathy (PAP)<sup>3,4</sup>. These ocular effects are more noticeable when prostaglandin analogues are used in one eye only and they may be non-reversible. For this reason, it may be prudent to use an alternative class of medication when monocular therapy is being considered.

#### ***References***

- 1) Bearden W and Anderson R. Trichiasis associated with prostaglandin analog use. *Ophthalmic Plast Reconstr Surg* 2004; 20: 320-2
- 2) Wistrand PJ, Stjernschantz J, Olsson K. The incidence and time-course of latanoprost-induced iridial pigmentation as a function of eye colour. *Surv Ophthalmology* 1997; 41 Suppl 2: S129-38
- 3) Kucukevcilioglu M, Bayer A, Uysal Y et al. Prostaglandin-associated periorbitopathy in patients using bimatoprost, latanoprost and travoprost. *Clin Exp Ophthalmol* 2014; 42: 126-31
- 4) Shah M, Lee G, Lefebvre DR et al. A cross-sectional survey of the association between bilateral topical prostaglandin analogue use and ocular adnexal features. *PLoS One* 2013; 8: e61638