Study of the Presence and Extent of Corneal Disturbance Associated With B+L Biotrue MPS Used With B+L PureVision Lenses

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Corneal epithelial disruption, commonly termed "corneal staining" has been frequently associated with contact lens wear. Previous research has demonstrated higher levels of observed corneal staining when certain combinations of contact lenses and lens care products are used, particularly under daily wear regimens. B+L lenses made from Balafilcon (PureVision) have been associated with the highest rates of observed staining. Additionally, polyhexamethylene biguanide (PHMB) based lens care products, specifically B+L ReNu MultiPlus have been implicated in higher rates of staining. In general, many lenses constructed from newer, silicone hydrogel (SiHy) materials appear more susceptible to increased rates and amounts of corneal staining.

Although the clinical significance of staining is debated, most clinicians agree that less staining is preferable to greater amounts of staining. Advances in understanding as well as the specifics of lens care product formulation ideally will have resulted in design of newer products that minimize corneal staining and maximize product performance. This study will examine rates of corneal staining using B+L's recently introduced lens care product: BioTrue with the B+L PureVision lens which has previously been associated with the highest levels of staining.