

NCC 'FUTURE GENERATION 2024' POSTER Abstracts SCIENTIFIC SESSION IN COOPERATION WITH THE BCLA

NCC 'Future generation 2024' Organization Section: NCC/ BCLA POSTER Abstracts

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Clinical Performance Comparison of Commercially Available Verofilcon A and Somofilcon A Daily Disposable Soft Contact Lenses

Lakshman Subbaraman, Katherine Bickle, Selena Chan, Colton Heinrich, Gina Wesley, Bradley Giedd Purpose: To evaluate objective and subjective clinical performance of two daily disposable soft contact lenses (SCLs), verofilcon A and somofilcon A. Method: In this prospective, controlled, double-masked, crossover study, habitual spherical SCLs wearers were randomized (1:1) to wear verofilcon A or somofilcon A SCLs bilaterally (8-11 days), and crossedover to alternate SCLs. Primary endpoint: distance visual acuity (VA) at week 1. Other endpoints at week 1: visual analog scale (VAS) ratings for comfort after insertion and at 12 and 16 hours, overall impression at 16 hours; Likert ratings for comfort, vision, freshness at 16 hours; overall preference at study end; lens fit and surface characteristics. Safety was assessed.

<u>Results</u>: Overall, 167 subjects were randomized, with mean±SD age 31.4±8.2 years. At week 1, verofilcon A was noninferior to somofilcon A for distance VA (mean±SD: -0.12±0.08 vs -0.12±0.08 logMAR). Verofilcon A comfort at 12 hours was non-inferior to somofilcon A after insertion (VAS ratings: 84.9±14.9 vs 86.5±16.5). Verofilcon A had significantly higher ratings than somofilcon A for comfort (75.7±20.0 vs 65.7±25.4) and overall impression (80.7±17.1 vs 69.5±24.1) at 16 hours (all p<0.0001). More wearers of verofilcon A than somofilcon A provided strongly agreed/agreed responses for comfort (62.6% vs 41.7%), vision (84.7% vs 69.9%), and freshness (52.1% vs 40.5%) with SCLs at 16 hours (p≤0.0051). Among subjects reporting preference, 64.9% preferred verofilcon A (p=0.0001). All verofilcon A (vs 99.4% somofilcon A) had optimal/acceptable fit. Most SCLs had grade 0 front surface wettability (verofilcon A: 93.3%; somofilcon A: 90.9%) and surface deposits (verofilcon A: front/back 91.2%/93.0%; somofilcon A: front/back 86.9%/95.1%). No serious adverse events were reported. Conclusions: Verofilcon A was noninferior to somofilcon A for distance VA. Subjective performance of verofilcon A was better than somofilcon A for comfort, vision, freshness, and overall impression. Both lenses had optimal/acceptable fit, wettable/clean surface, and similar safety. Research funding received: This study was funded by Alcon.

