

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

NCC 'Future generation 2024'

Organization Section: NCC/ BCLA

POSTER Abstracts

Sunday, March 10 2024

Netherlands, Veldhoven,

NH De Koningshof, Baroniezaal

**Clinical Performance of Verofilcon A
Versus Nesofilcon A Daily Disposable Soft
Contact Lenses**

*Lakshman Subbaraman, Katherine Bickle,
John Capellani, Brenda Edwards, Bradley
Giedd, Colton Heinrich, Gina Wesley,
Susan Whaley*

Purpose: To evaluate objective and subjective clinical performance of commercially available verofilcon A and nesofilcon A soft contact lenses (SCLs).

Method: A prospective, randomized, controlled, double-masked, daily wear, multicenter study conducted in the US. Eligible subjects were randomized to wear verofilcon A or nesofilcon A SCLs bilaterally (≥ 10 hours/day, 8-11 days), and crossed-over to alternate lens. Primary endpoint: distance visual acuity (VA; non-inferiority margin=0.05 logMAR) at week 1. Other endpoints: subjective visual analog scale (VAS) ratings for comfort, vision, and overall impression at 16 hours; Likert ratings for lens comfort, vision, and moistness at 16 hours, and freedom to enjoy activities at 12 and 16 hours; and lens fit and surface characteristics at week 1. Overall preference evaluated at study end.

Results: Overall, 126 subjects completed the study (mean \pm SD age: 32.4 \pm 7.8 years; female: 66.7%). Verofilcon A was noninferior to nesofilcon A for distance VA at week 1 (mean \pm SD logMAR: -0.13 \pm 0.08 vs -0.13 \pm 0.07). Verofilcon A had significantly higher VAS ratings than nesofilcon A for comfort (77.9 \pm 18.7 vs 63.7 \pm 26.8), vision (84.1 \pm 15.6 vs 76.4 \pm 21.4) and overall impression

(80.5 \pm 17.3 vs 68.9 \pm 24.9) at 16 hours (all $p \leq 0.0001$). More subjects with verofilcon A than nesofilcon A provided strongly agreed/agreed responses for comfort, vision, and moistness with SCLs at 16 hours (all $p \leq 0.0051$). Subjects with verofilcon A strongly agreed/agreed that "lenses comfortably gave them freedom to enjoy activities all day" at 12 hours (83.3%) and 16 hours (77.6%). Most lenses had optimal movement and centration, and grade 0 surface wettability/deposits at week 1. Among subjects reporting preference, 73% preferred verofilcon A ($p < 0.0001$).

Conclusions: Verofilcon A was noninferior to nesofilcon A for distance VA at week 1. Verofilcon A had higher subjective ratings than nesofilcon A for comfort, vision, moistness, and overall impression over 16 hours. Most lenses had optimal fit, and clean wettable surface at week 1.

Research funding received: This study was funded by Alcon.