

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

**NCC 'Future generation 2024'**

**Organization Section: NCC/ BCLA**

**PAPER Abstracts**

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**Clinical Performance and Fit Success of  
Lehfilcon A and Lotrafilcon B Daily Wear  
Monthly Replacement Multifocal Soft  
Contact Lenses**

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**Purpose:** To evaluate on-eye clinical performance and fitting of lehfilcon A, a new monthly replacement multifocal contact lens (MfSCL) and lotrafilcon B MfSCLs, both with Unique Precision Profile® multifocal design.

**Method:** This was a prospective, randomized, controlled, double-masked, crossover, bilateral, dispensing clinical study (NCT05338333). Eligible habitual MfSCL wearers (age ≥40 years) were fitted with and wore lehfilcon A and lotrafilcon B MfSCLs bilaterally (≥8 hours/day, ≥5 days/week) over 30 days. Endpoints were: binocular visual acuity (VA; logMAR) at distance (4m), intermediate (80 cm), and near (40 cm) at Day 30 (primary endpoint); fit rate success (number of lenses required to achieve final/successful fit) and eye care professional (ECP) rating on ease of fit (10-point scale) at dispense; study lens powered dispensed; and lens movement and position at Day 30.

**Results:** Overall, 101 subjects were enrolled with mean age 50.8±6.5 years. At Day 30, mean±SD logMAR binocular distance, intermediate and near VA were: lehfilcon A: -0.10±0.08, -0.10±0.08 and 0.01±0.12, respectively; lotrafilcon B: -0.09±0.07, -0.11±0.08 and -0.02±0.11, respectively. At screening/fitting visit, most MfSCLs (lehfilcon A: 99.5%,

lotrafilcon B: 100.0%) achieved successful fit with 1-2 lenses/eye. Mean±SD ECP ratings for ease of fit with lehfilcon A was 9.8±0.6, and lotrafilcon B was 9.7±0.6. Majority of subjects (96%) had same sphere (D) power in both eyes, and all subjects (100%) had same ADD power in both eyes for both MfSCLs. At Day 30, 100% lehfilcon A and lotrafilcon B MfSCLs had optimal/acceptable movement and centration.

**Conclusions:** Lehfilcon A MfSCLs demonstrated excellent visual acuity at all distances, with optimal movement and centration over 30 days of daily wear. The new lehfilcon A MfSCLs, with Precision Profile® multifocal design, had high lens fit success rates, and were rated as easy to fit by ECP, similar to lotrafilcon B MfSCLs.

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