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Paper Abstracts
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A washout period did not prevent a significant carryover effect in a randomized crossover study of two toric lens types containing HEV Filters

Ross Franklin, Giovanna Olivares, Jessica Cannon-Hill, Ryan Sherrill
Affiliation: Johnson & Johnson Vision Care

Purpose: High energy visible (HEV) light filters have been reported to reduce light scatter and the time to recover from glare. Currently, only two daily disposable (DD) toric contact lenses (CL) contain HEV filters. The findings from a randomized crossover study involving these 2 lenses are presented.
Method: 133 myopic astigmatic subjects were enrolled in a 4-visit prospective multi-site randomized double-masked 2X2 crossover study of toric silicone hydrogel CLs in senofilcon A (senA) or delefilcon A (delA) materials. Subjects were randomized to wear one CL pair for 7±2 days, followed by a 7±2 day washout period before wearing the second pair for 7±2 days.. The CLUE™ (Contact Lens User Experience) questionnaire was used to capture subjective feedback at follow-up visits. A generalized linear mixed model with a binary distribution was used, with wear sequence, period and study lens included in the model as fixed effects. Proportion estimates and odds ratio (95% CIs) for top two box (T2B) positive responses were analyzed.
Results: For overall opinion, T2B responses in period 1 were 63.1% (senA) and 43.8% (delA), while in period 2 it was 80.0% (senA) and 33.3% (delA), demonstrating a significant sequence effect (p=0.0198). Subjects who wore the delA lens after the senA had T2B response rate that was 10% lower than subjects who wore the delA lens first. Subjects who wore the senA lens after the delA lens had T2B scores nearly 17% higher than those who wore the senA lens first.
Conclusions: In this 2x2 crossover study, the significant effect of order of wear demonstrated that subject's opinion of the 2nd lens worn depended on their prior experience with the 1st lens, despite the use of a one week washout period between study lenses.

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