Clinical Optometry

Dovepress
Taylor & Francis Group

Open Access Full Text Article

ORIGINAL RESEARCH

Satisfaction of Biweekly Senofilcon A Toric Contact Lens Wearers Who Were Refit Into Weekly Serafilcon A Toric Contact Lenses

Chris Lievens[1,2,*], Andrew D Pucker[3,*], Bradley S Giedd[2,4], Shane R Kannarr[2,5], Morgan Bromley[1], Gina Wesley[2,6], Quentin X Franklin[7], Nate Hopkins[8], Robert J Fick[1]

[1]Southern College of Optometry, Memphis, TN, USA; [2]Eye Research Associates, LLC, Pittsburg, KS, USA; [3]Eminent Ophthalmic Services, Milledgeville, GA, USA; [4]Maitland Vision, Maitland, FL, USA; [5]Kannarr Eye Care, Pittsburg, KS, USA; [6]Complete Eye Care of Medina, Minneapolis, MN, USA; [7]Department of Pediatrics, University of Alabama at Birmingham, Birmingham, AL, USA; [8]Wofford College, Spartanburg, SC, USA

*These authors contributed equally to this work

Correspondence: Chris Lievens, Southern College of Optometry, 1245 Madison Avenue, Memphis, TN, 38104, USA, Email clievens@sco.edu

Introduction: The purpose of this study was to determine whether satisfied wearers of biweekly contact lenses (CL) for astigmatism can be refitted with weekly CL for astigmatism and remain satisfied wearers.

Methods: Satisfied, asymptomatic senofilcon A CL wearers aged 18–40 years were enrolled. Visits 1 and 2 confirmed senofilcon A CL satisfaction and fit. After a week of washout, serafilcon A CLs were dispensed at visit 3, and participants were asked to wear them for 2 weeks. At visit 4, CLs were evaluated using the CLDEQ-8, visual analog scale (VAS), an investigator-designed questionnaire, and the Impact of Dry Eye on Everyday Life (IDEEL) QoL module.

Results: Forty-seven participants (70.2% female) were enrolled. A total of 81% of the participants wearing serafilcon A CLs had asymptomatic CLDEQ-8 scores at visit 4. Serafilcon A CLs wearers had mean VAS scores of 72.1 ± 27.2 for end of day eye comfort, 63.6 ± 34.2 for eye dryness, and 79.6 ± 23.8 for clarity of vision. Serafilcon A CLs wearers had good mean daily activities (96.1 ± 5.3), feelings (97.8 ± 3.2), and work domain (95.7 ± 5.9) IDEEL questionnaire scores, and 65.8% of the participants indicated that they were satisfied with their CLs.

Conclusion: According to patient reported outcome results, most participants were satisfied with their CLs after switching from senofilcon A to serafilcon A CLs, suggesting that it is feasible to switch a satisfied biweekly CL wearer to a weekly CL brand when needed as a result of newer materials, a different replacement schedule, patient preference, costs, or other necessities.

Keywords: contact lens, acuvue oasys, senofilcon A, precision 7, serafilcon A

Introduction

Despite advances in contact lens (CL) technology, the frequency of CL dropout remains relatively high, with about 20% of all experienced CL wearers dropping out of CLs each year; the majority drop out because of discomfort issues.[1,2] The seriousness of CL discomfort is further highlighted by Begley et al, who found that most CL wearers at least occasionally notice CL discomfort. The literature suggests that CL discomfort tends to be worse at the end of the day for most people.[3–5] It is also worth noting that patients who wear toric CLs for astigmatic correction are more likely to drop out of CLs compared to spherical CL wearers.[6] This is further supported by the fact that patients who are recent CL wearers are most likely to abandon them because of vision-related issues.[7,8] These factors overall limit patients from wearing their CLs as desired, and these dissatisfied patients ultimately result in economic damage to an ophthalmic practice.[1] For these reasons, the authors became interested in understanding if CL discomfort develops in patients who are happy with their current CLs, yet are refit into another, similar CL. This situation might occur if a patient's current CLs are discontinued, if the cost becomes an issue because of compliance issues, or if the patient is simply interested in trying the newest

https://doi.org/10.2147/OPTO.S565479
Received: 18 October 2025
Accepted: 27 January 2026
Published: 5 February 2026

technology.[9] The authors evaluated this question by refitting patients who were happily wearing senofilcon A CLs for astigmatism into serafilcon A CLs for astigmatism.

PRECISION7 for Astigmatism CLs (serafilcon A; Alcon, Fort Worth, TX, USA) are 1-week silicone hydrogels, reusable for 7 days of daily wear, or 6 continuous nights of extended wear. They are made of a novel material that incorporates the Activ-Flo System. The Activ-Flo System has a moisturizing agent permanently bound to the CL matrix, containing a replenishing agent that releases continuously from the core of the CL to the surface over a 7-day period.[10] PRECISION7 for Astigmatism CLs were selected because they are an innovative CL that utilizes a 1-week replacement schedule, which is atypical for the category. Serafilcon A has a water content of 55% and an oxygen transmissibility of 119. Acuvue Oasys for Astigmatism (Senofilcon A; Johnson & Johnson Vision Care, Inc., Jacksonville, FL, USA) is a well-tolerated, commonly prescribed biweekly CL with a water content of 38% and an oxygen transmissibility of 129. Senofilcon A has extended wear approval. Senofilcon A CLs contain hydraclear plus technology and an eyelid stabilized design. Senofilcon A and serafilcon A were furthermore selected by the authors because these two CL materials might be prescribed under similar situations. Thus, this study aimed to determine the success rate of refitting current, satisfied senofilcon A for astigmatism CL wearers into serafilcon A for astigmatism CLs to better understand how satisfied, reusable, daily wear, toric, and soft CL wearers respond to being refitted into an alternative CL brand. This information is not only valuable for patient educational purposes but also has the potential to provide clinicians with much-needed information related to when they need to transition a satisfied CL wearer to another brand, whether due to cost considerations, compliance reasons, discontinuation of a CL material, or other factors.

Methods

Participants

This roughly 1-month long study involved 4 clinical visits and was conducted at the Southern College of Optometry (Memphis, TN, USA), Maitland Vision (Maitland, FL, USA), Kannarr Eye Care (Pittsburg, KS, USA), and Complete Eye Care of Medina (Minneapolis, MN, USA). This study was approved by the Institutional Review Board (IRB) of the Southern College of Optometry (IRB approval: IRB00006733) and was conducted in accordance with the Declaration of Helsinki. This study was registered at ClinicalTrials.gov (NCT06955403) and conforms to the protocol. Participants were adults aged 18–40 years. They were required to be currently wearing the senofilcon A for astigmatism CLs and to have been wearing CLs for at least three months in the past year. Participants were required to have a best-corrected visual acuity of 20/20 (0.00 logarithm of the minimum angle of resolution [logMAR]) or better in both eyes, and normal Contact Lens Dry Eye Questionnaire (CLDEQ)-8 scores (<12 units) and be satisfied with the comfort of their habitual CLs. Participants with presbyopia were excluded from this study. Table 1 provides a full list of study inclusion and exclusion criteria.

Clinical Testing

The baseline visit was initiated by confirming eligibility for the initial study. Participants were required to wear their habitual CLs (senofilcon A for astigmatism CLs) at the baseline visit and to have a normal CLDEQ-8 (<12 units) score,[11,12] which was verified in the office. No coaching was allowed when the CLDEQ-8 or other patient reported outcome instruments were administered. Participants were also asked the following question: "Are you currently satisfied with the comfort of your contact lenses?" and were required to answer "yes" to this question in order to continue the study. All relevant demographic data were collected using a questionnaire developed by the investigators. Non-eligible participants were dismissed, and eligible participants were enrolled, consented to participate, and asked to sign an IRB-approved privacy document. The consent process included informing the participants about the purpose and risks of the trial.

Visual acuity was then measured with a high-contrast logMAR chart (Bailey-Lovie), and manifest refraction was completed with a phoropter according to the investigator's standard method. A slit-lamp biomicroscope examination was performed using the investigator's standard method to document normal and/or remarkable findings of the anterior eye structures. With the manifest refraction and slit-lamp biomicroscope examination, the investigator was required to use the same approach with each individual participant. The participant's fit of their senofilcon A CLs for astigmatism was confirmed. All CLs were evaluated for centration, movement, coverage, and axis, and CL power adjustments were made only if visual

Table 1 Study Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
• Adults, 18–40 years of age, AOA contact lens wearers with best-corrected 20/20 visual acuity or better. • Participants were required to have worn AOA CLs for at least 3 months in the past year and to currently be wearing these contact lenses. • All participants were required to have a Contact Lens Dry Eye Questionnaire (CLDEQ)-8 score of <12 while wearing their habitual CLs (AOA contact lenses) and to indicate that they are satisfied with AOA contact lenses (yes/no). • Participants were required to be able to wear P7A contact lenses (astigmatism ≥0.75D in each eye). • Astigmatism ranging from 0.75 D to 2.50 D in each eye. • Participants were required to wear the study contact lenses for ≥13 hours with no overnight wear. • Participants were required to wear the contact lenses every day of the week, except during the washout period. • Participants were required to provide a glasses prescription that is less than 3 years old.	• Have presbyopia and/or need a reading aid as determined during their initial manifest refraction. • Have worn P7A in the past. • Are past rigid contact lens wearers. • Previous diagnosis of dry eye or ocular allergies. • Have known systemic health conditions that are thought to alter tear film physiology. • Have a history of viral eye disease. • Have a history of ocular surgery. • Have a history of severe ocular trauma. • Have a history of corneal dystrophies or degenerations. • Have active ocular infection or inflammation. • Are currently using isotretinoin derivatives or ocular medications. • Are pregnant or breastfeeding.

Abbreviations: AOA, ACUVUE OASYS for Astigmatism; P7A, PRECISION7 for Astigmatism.

acuity was improved by one or more lines. Participants were dispensed with a new pair of senofilcon A CLs for astigmatism. The participants were then given a CLEAR CARE CL solution (Alcon; Fort Worth, TX, USA). Participants were educated on how to use the care system and given take-home instructions. Participants were asked to use CLEAR CARE for the duration of the study.

Participants returned one week later to evaluate their visual acuity while wearing the senofilcon A CLs for astigmatism. Participants were again asked whether they were currently satisfied with the comfort of their senofilcon A CLs for astigmatiism. Participants were required to answer "yes" to continue the study. The eyes of the participants were evaluated using a slit-lamp biomicroscope to document normal and/or remarkable findings in the anterior eye structures and their CLs were evaluated as described above. The participants were then fitted with the serafilcon A CLs for astigmatism. CLs were evaluated for centration, movement, coverage, and axis, and CL power adjustments were made only if visual acuity was improved by one or more lines. The participants were instructed to stop wearing the senofilcon A CLs for astigmatism and to not wear any CLs for a 1-week period (wash-out period). Participants returned 1 week later, were dispensed with two pairs of serafilcon A CLs for astigmatism, and asked to wear them for the next 2 weeks. Visual acuity and slit-lamp biomicroscope examinations were again completed to document ocular health, and CL fit was confirmed before releasing the CLs. Participants were reminded to continue using CLEAR CARE for the duration of the study.

Participants returned about 2 weeks later for their outcome visit. This visit started by completing visual acuity and slit-lamp biomicroscopy evaluations, as described above. The serafilcon A CLs for astigmatism was evaluated in terms of centration, movement, coverage, axis, and power. If the CL fit was not optimal, it was noted in the study record. The CLDEQ-8 questionnaire was repeated, the participants were asked to complete a series of visual analog scale (VAS) questions (0–100 scale, with 100 being best), and they were asked to complete an investigator-designed questionnaire that probed topics such as vision, ocular dryness, comfortable CL wear time, willingness to continue wearing the CLs, digital device usage, and lifestyle.[13] The Impact of Dry Eye on Everyday Life (IDEEL) quality of life (QoL) domains (daily activities, feels, work) were performed last just before participants completed the study.[14]

Sample Size and Statistical Analysis

This was a prospective study to understand whether satisfactory senofilcon A CLs for astigmatism CL wearers could be successfully refitted into serafilcon A CLs for astigmatism. The primary endpoint of this study was the proportion of participants with CLDEQ-8 scores of <12 at the end of the study; thus, no comparison occurred with the primary endpoint, and no formal sample size calculation was required. Nevertheless, the authors estimated that 40 participants

were sufficient to gain a general understanding of CL performance after refitting, based on their past work, which enrolled 40 CL-wearing participants to evaluate CL-related patient reported outcomes.[15,16]

Deidentified data were collected and stored using Research Electronic Data Capture (REDCap; Vanderbilt, Nashville, TN, USA),[17,18] and analyzed using Stata/BE 18 (StataCorp LLC, College Station, TX, USA). The primary endpoint was the proportion of participants who had CLDEQ-8 score (<12). Participant characteristics (age, sex, refractive error, CL power, visual acuity, and adverse events) are presented using descriptive statistics (mean, standard deviation [SD]). The IDEEL and Likert questionnaire results, as well as the VAS scores, were presented with descriptive statistics, given that they were only evaluated at the final visit. Paired *t*-tests were used to determine if there was a change in CLDEQ-8 scores between baseline and the final visit. Statistical significance was set at $p < 0.05$.

Results

A total of 47 participants completed this study (70.2% female), and 80.9, 10.6, 6.4, and 2.1% of participants were identified as White, Asian, Black or African American, or unknown or not reported, respectively and only one (2.1%) identified as Hispanic (Figure 1). Participants had a mean ± SD sphere and cylinder manifest refraction of −2.65 ± 1.92 D and −1.39 ± 0.61 D in their right eyes, respectively, and had a mean ± SD sphere and cylinder manifest refraction of −2.74 ± 1.82 D and −1.33 ± 0.58 D in their left eye, respectively, at visit 1. The participants had excellent entering best corrected visual acuities (Table 2). The participants had no self-reported adverse events, and no clinician detected any adverse events during the study period.

The participants reported to visit 1 while wearing their habitual senofilcon A CLs for astigmatism. The habitual CL fit and power of the participants were confirmed at visits 1 and 2 (Table 2). All participants confirmed that they were satisfied with the comfort of their senofilcon A CLs for astigmatism at visits 1 and 2. The participants were then fitted in serafilcon A CLs for astigmatism at visit 2 (Table 2), and they waited to start wearing these CLs until at visit 3 to allow for a washout period. All dispensed CLs (senofilcon A CLs for astigmatism and serafilcon A CLs for astigmatism) were deemed to have an acceptable fit as all dispensed CLs were judged to have good coverage, centration, movement, and axis (Table 2). No right or left eye senofilcon A CLs for astigmatism required fit or power optimization at one week (visit 2), likely because these were the participants' habitual CLs. No right-eye serafilcon A CLs for astigmatism required fit or power optimization at visit 3, whereas two left-eye serafilcon A CLs for astigmatism required power optimization before the CLs were dispensed at visit 3. All right eye serafilcon A CLs for astigmatism had optimized visual acuity at the final visit, which was 2 weeks after wearing the CLs (visit 4), while one left eye wearing serafilcon A CLs for

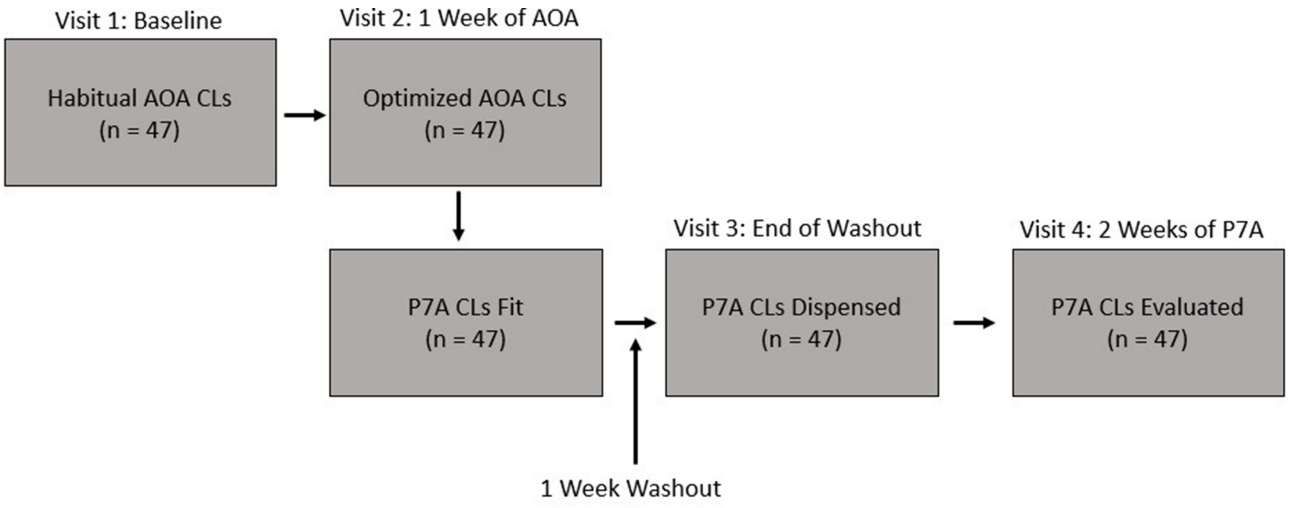


Figure 1 Study Flow Diagram.
Abbreviations: AOA, ACUVUE OASYS for Astigmatism; P7A, PRECISION7 for Astigmatism.

Table 2 Description of Refractive Error Data by Visit and Type of Correction

	Right Eye: Sphere (D)	Right Eye: Cylinder (D)	Right Eye: Visual Acuity (LogMAR)	Left Eye: Sphere (D)	Left Eye: Cylinder (D)	Left Eye: Visual Acuity (LogMAR)
Manifest Refraction						
Visit 1	−2.65 ± 1.92	−1.39 ± 0.61	−0.08 ± 0.07	−2.74 ± 1.82	−1.33 ± 0.58	−0.06 ± 0.07
Senofilcon A Contact Lenses for Astigmatism						
Visit 1	−2.71 ± 1.73	−1.26 ± 0.50	−0.09 ± 0.07	−2.75 ± 1.76	−1.24 ± 0.57	−0.05 ± 0.07
Serafilcon A Contact Lenses for Astigmatism						
Visit 2	−2.74 ± 1.73	−1.23 ± 0.49	−0.06 ± 0.06	−2.80 ± 1.72	−1.23 ± 0.52	−0.07 ± 0.06

astigmatism required power optimalization at visit 4, which resulted in a 1-line improvement in distance visual acuity (0.1 to 0.0 logMAR).

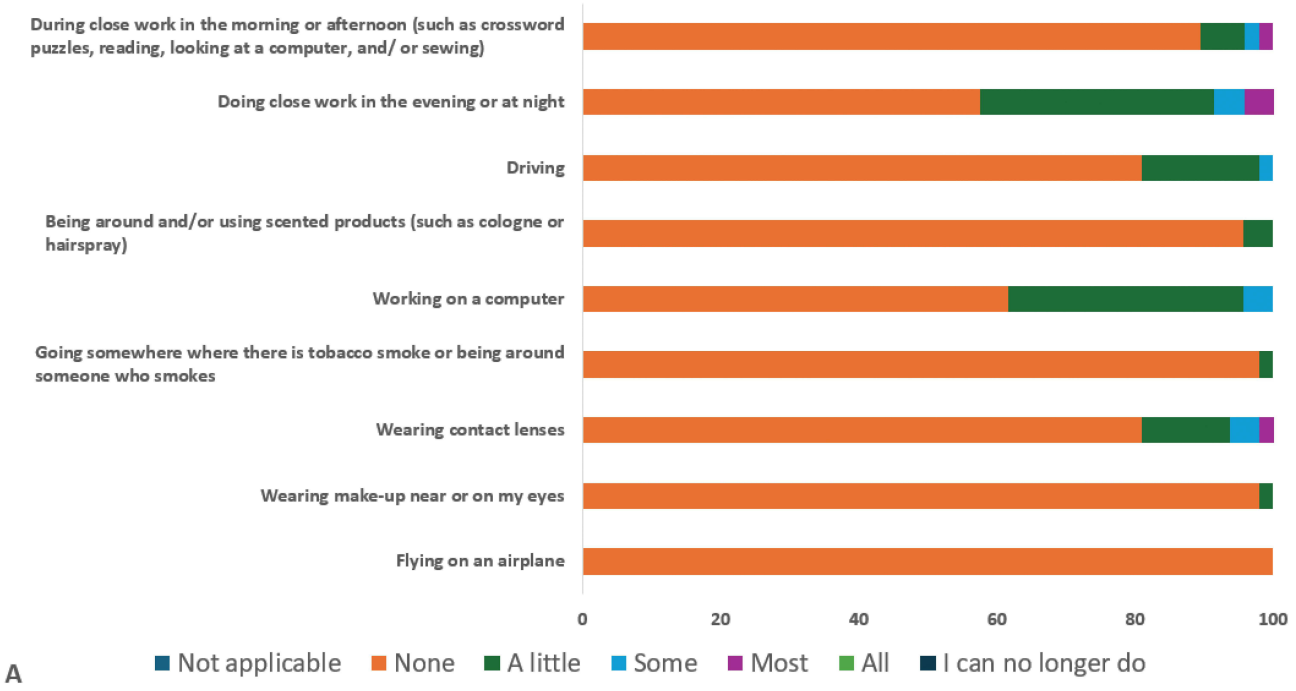
The overarching goal of this study was to understand whether a participant satisfied with the comfort of their reusable, astigmatic, 2-week replacement, soft CLs could be comfortably refit into a different weekly CL brand and remain subjectively satisfied with the comfort and vision of their CLs. This was first evaluated using CLDEQ-8 scores. The mean CLDEQ-8 score at visit 1 while wearing senofilcon A CLs for astigmatism was 6.30 ± 3.00 while the mean CLDEQ-8 score at visit 4 while wearing serafilcon A CLs for astigmatism was 8.30 ± 6.02 units ($p = 0.98$). When evaluating participants at visit 4 while wearing serafilcon A CLs for astigmatism, 81% of participants had asymptomatic CLDEQ-8 scores, that is, <12. The participants furthermore indicated that they had experienced a mean of 11.2 ± 2.9 hours of daily comfortable CL wear over the past week, and they also indicated that they had used a digital device for a mean of 7.0 ± 2.7 hours per day over the previous week. When evaluating the serafilcon A CLs for astigmatism with a VAS at visit 4, the participants indicated that they had a mean end of day eye comfort score after wearing the serafilcon A CLs for astigmatism of 72.1 ± 27.2, a mean eye dryness score after wearing the CLs of 63.6 ± 34.2, and a mean clarity of vision score after wearing the CLs of 79.6 ± 23.8. When evaluating the composite IDEEL questionnaire scores at visit 4, the participants had overwhelmingly positive mean daily activities (96.1 ± 5.3), feelings (97.8 ± 3.2), and work domain (95.7 ± 5.9) scores. Figure 2 lists individual IDEEL responses by question.[19]

When evaluating the investigator-designed Likert questionnaire administered at visit 4 (Table 3), serafilcon A CLs for astigmatism wearers indicated that they strongly agreed or agreed that they were likely to continue to wear the CLs after the study ended (46.8%), with 14.9% of them selecting neither agree nor disagree. They also indicated that they were very satisfied or satisfied with wearing the CLs (65.8%), with their vision while wearing the CLs (70.2%), with their end-of-day eye comfort while wearing the CLs (66.0%), with their end-of-day vision while wearing the CLs (61.7%), with their overall eye comfort while wearing CLs (76.6%), with their ability to play sports and perform fitness activities while wearing the CLs (78.6%), with their ability to use digital devices while wearing the CLs (74.5%), and that they would recommend the CLs to a friend (61.7%). The proportion of neutral responses ranged from 12.8% to 25.5%.

Discussion

This study evaluated participants who were currently satisfied with the comfort of their habitual 2-week replacement, senofilcon A CLs for astigmatism and who were refitted into 1-week replacement serafilcon A CLs for astigmatism, to determine whether refitting this participant group into an alternative technology with a more frequent replacement wear schedule would result in the participants having continued satisfaction with their CLs. This study determined that 87.2% of participants who were refit into serafilcon A CLs for astigmatism were either satisfied or indifferent with regard to being refit into a different CL, and it was determined that 81% of participants had asymptomatic CLDEQ-8 scores after being refit. This study furthermore determined that these participants were able to comfortably wear their CLs for an average of 11.2 ± 2.9 hour per day and that they had a high visual quality of life as determined by IDEEL scores and Likert responses.

The primary outcome of this study was the percentage of participants who remained satisfied with the comfort of their CLs after being refitted with serafilcon A CLs for astigmatism. While there is limited data on this topic in the literature, Lievens et al (n =36) recently evaluated this question in spherical, daily disposable CL wearers.[13] The authors specifically refit spherical Acuvue Oasys MAX CL (senofilcon A; Johnson & Johnson Vision Care, Inc; Jacksonville,



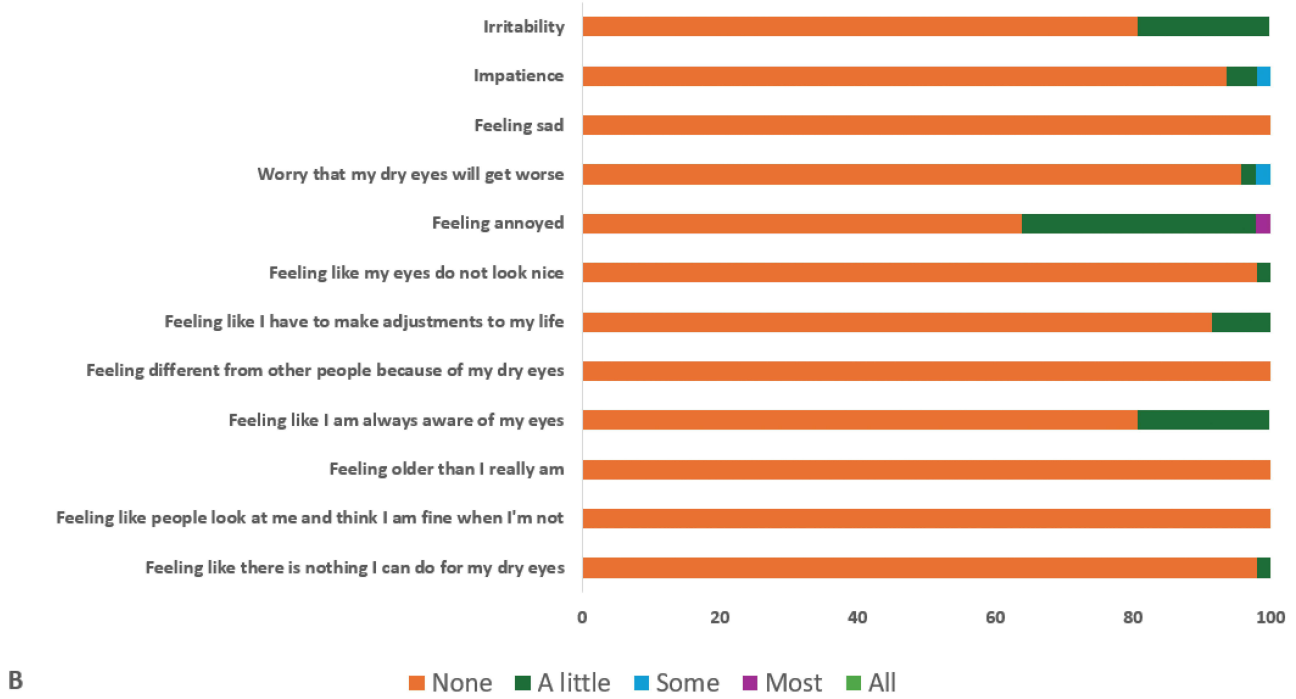


Figure 2 Continued.

https://doi.org/10.2147/OPTO.S565479

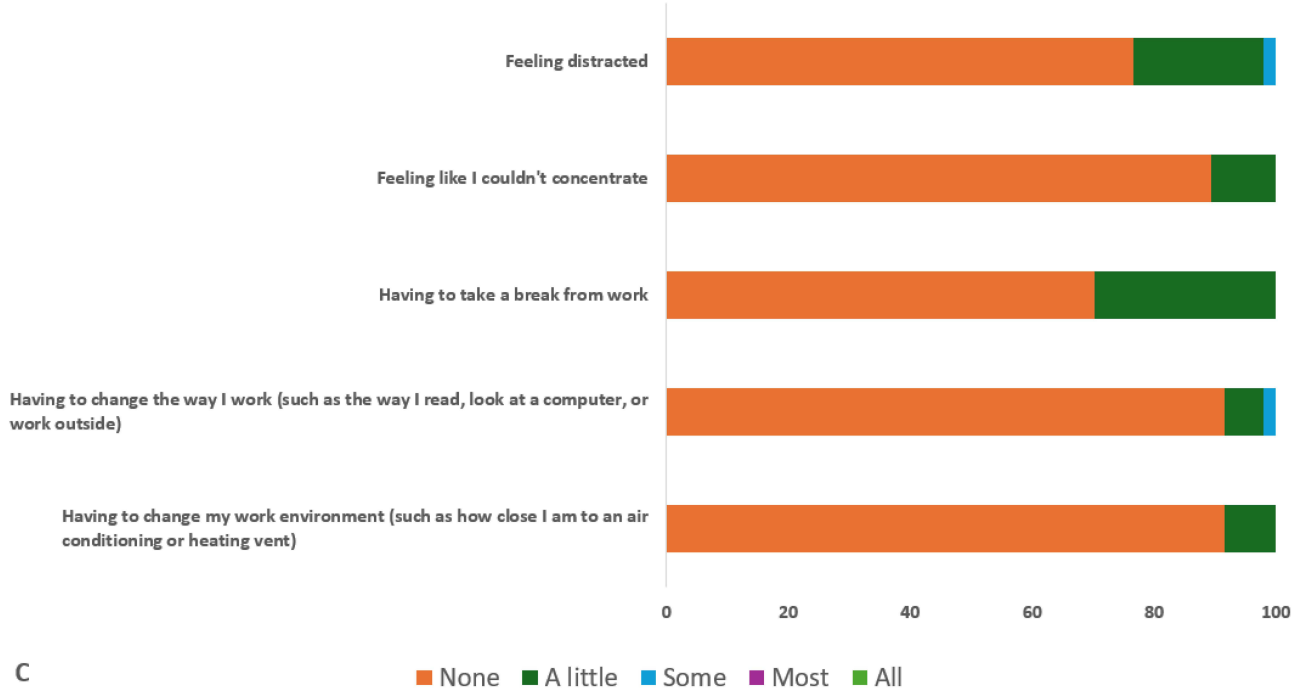


Figure 2 Impact of Dry Eye on Everyday Life (IDEEL) quality of life (QoL) data by individual question. Responses by question are listed for daily activities (**A**), feelings (**B**), and work (**C**) domains. Note that the not applicable category represents participants who did not do this activity for reasons *other* than my dry eyes or this activity was not applicable.

FL, USA) wearers into spherical Dailies Total1 (delefilcon A; Alcon; Fort Worth, TX, USA), and found that participants had median baseline CLDEQ-8 scores of 8.0 and CLDEQ-8 scores of 8.5 at the primary outcome visit.[13] These values are similar to the current study, which found a mean CLDEQ-8 score of 6.30 at the baseline visit, and a score of 8.30 at the primary outcome visit. The differences between the baseline and final visit in each study are unlikely to be clinically meaningful, given that the published value for a clinically meaningful difference for the CLDEQ-8 is ± 3 units.[12]

Table 3 Investigator-Designed Likert Questionnaire Responses

Question	Response
I am likely to continue wearing the study contact lenses after the study ends.	Strongly agree: 25.5% Agree: 21.3% Neither agree nor disagree: 14.9% Disagree: 29.8% Strongly disagree: 8.5%
I am satisfied with wearing the study contact lenses.	Very satisfied: 40.3% Satisfied: 25.5% Indifferent: 21.3% Unsatisfied: 8.5% Very unsatisfied: 4.3%
I am satisfied with my vision while wearing the study contact lenses.	Very satisfied: 38.3% Satisfied: 31.9% Indifferent: 14.9% Unsatisfied: 14.9% Very Uunsatisfied: 0.0%

(*Continued*)

https://doi.org/10.2147/OPTO.S565479

Table 3 (Continued).

Question	Response
I am satisfied with my end-of-day eye comfort while wearing the study contact lenses.	Very satisfied: 27.7% Satisfied: 38.3% Indifferent: 12.8% Unsatisfied: 17.0% Very unsatisfied: 4.3%
I am satisfied with my end-of-day vision while wearing the study contact lenses.	Very satisfied: 31.9% Satisfied: 29.8% Indifferent: 19.2% Unsatisfied: 17.0% Very unsatisfied: 2.1%
I am satisfied with my overall eye comfort while wearing the study contact lenses.	Very satisfied: 34.0% Satisfied: 42.6% Indifferent: 12.8% Unsatisfied: 8.5% Very unsatisfied: 2.1%
I am satisfied with my ability to play sports and perform fitness activities while wearing the study contact lenses.	Very satisfied: 40.3% Satisfied: 38.3% Indifferent: 17.0% Unsatisfied: 4.3% Very unsatisfied: 0.0%
I am satisfied with my ability to use digital devices (eg, smartphones, computers) while wearing the study contact lenses.	Very satisfied: 36.2% Satisfied: 38.3% Indifferent: 17.0% Unsatisfied: 8.5% Very unsatisfied: 0.0%
I would recommend the study contact lenses to a friend.	Strongly agree: 34.0% Agree: 27.7% Neither agree nor disagree: 25.5% Disagree: 6.4% Strongly disagree: 6.4%

An ancillary topic of this study was to evaluate the quality of life and likelihood of study participants continuing to wear the CLs with which they were refitted in order to participate. This topic was likewise evaluated by Lievens et al, who, as described above, refit spherical Acuvue Oasys MAX CL wearers into spherical Dailies Total1 CLs.[13] Lievens et al found that Dailies Total1 CL wearers had median IDEEL questionnaire scores of 97.8, 97.9, and 100 for daily activities, feelings, and work domains, respectively, while the current study found scores of 96.1, 97.8, and 95.7 for daily activities, feelings, and work domains, respectively. Regarding the Likert questionnaire, Lievens et al found that 58.3% of participants indicated that they would continue to wear the study CLs after the end of the study, 69.4% indicated that they were satisfied with wearing the CLs, and 61.1% indicated that they were satisfied with their end-of-day CL comfort. These findings are in line with our results, that is, 46.8% of participants indicated that they would continue to wear the study CLs after the end of the study, 65.8% indicated that they were satisfied with wearing the CLs, and 66.0% indicated that they were satisfied with their end-of-day CL comfort. While these between-study values are similar, the desire to continue wearing CLs and their satisfaction with wearing CLs were slightly lower in the current study than in Lievens et al's study. The most likely reason for the differences between the two studies is that Lievens et al evaluated spherical daily disposable CL wearers, whereas the current study evaluated reusable toric CL wearers. It is also worth noting that, despite the majority of participants being satisfied with wearing the CLs, the likelihood of wanting to continue wearing

them after the study was relatively low, with close to 15% of neutral/indifferent responses, which is higher than that observed in another study. This result most likely occurred because the participants enrolled in the current study were all highly satisfied with their habitual CLs, which subsequently meant that they had low motivation to make a change. Participants may also consider the cost factors associated with a more frequent replacement schedule, which may impact their willingness to switch.

Although this study has several strengths, including optimizing the fit of participants' habitual CLs and verifying that their habitual CLs were truly optimized at a subsequent follow-up visit, it also has a few limitations. The primary limitation is that the study only evaluated a single situation, which was refitting participants who were satisfied with the comfort of their habitual senofilcon A CLs for astigmatism with serafilcon A CLs for astigmatism. While this feature of the study results in limited generalizability to other CL brands and types of refractive error outside astigmatic patients, the implemented study design can likewise be seen as a strength, given that the utilized approach limited variability within the study and made the data more easily interpreted. This study is likewise limited by duration, as it only evaluated participants during the first 2 weeks of wearing CLs. Thus, these participants should ideally be evaluated over longer periods to determine their overall retention rate. Nevertheless, long-term success was outside the scope of the current study.

Conclusion

This project described the likelihood of success for a 2-week replacement, senofilcon A for astigmatism CL wearers who could comfortably wear 1-week replacement serafilcon A for astigmatism CLs. Overall, 81% of participants were asymptomatic, as judged by CLDEQ-8 score after wearing serafilcon A CLs for astigmatism for two weeks. Similarly, this study found that participants reported an overall high quality of life and good CL usability as judged by the IDEEL and investigator-designed questionnaires, respectively. These data are important because they provide credence for fitting successful patients with serafilcon A CLs for astigmatism in potential situations, such as when a patient's current CL brand is discontinued or when they may simply want to try the latest technology. The work presented here is limited in its direct generalizability beyond that of refitting a patient who is currently in senofilcon A for astigmatism CLs to serafilcon A for astigmatism CLs. Therefore, additional studies are required to test other CL-switching iterations. Nevertheless, the data presented in this article are promising given that most of the participants in this study were still satisfied with their level of comfort after switching to a different astigmatic CL that is replaced weekly, a topic that has yet to be fully explored in the literature for any type of CL brand combination.

Data Sharing Statement

The authors do not intend to share participant data beyond that presented in this article and the ClinicalTrials.gov registration (NCT06955403). Nevertheless, specific inquires can be made by contacting the corresponding author.

Funding

This work was supported by an investigator-initiated trial grant from Alcon Research, LLC.

Disclosure

Chris Lievens and Andrew D. Pucker are co-first authors for this study. The authors received research support from Abbvie Pharmaceuticals (ADP, CL), Alcon Research, LLC (All), Allergan (CL), Bausch + Lomb (ADP, CL), Orasis Pharmaceuticals (ADP, CL) and Topcon (ADP, CL). The authors have served as consultants for CooperVision (SK, KM), Bausch + Lomb (ADP, CL, SK), Essilor (CL), HanAll Biopharma (ADP), Luxottica (CL), Mintra Health (ADP), RVL Pharmaceuticals, Inc. (CL), and Transitions (CL). Dr. Pucker was an employee of Lexitas Pharma Services during this study, and he is the owner of Eminent Ophthalmic Services, LLC; these companies neither makes nor markets ophthalmic products. Mr Nate Hopkins reports scholarship grants for undergraduate research from Wofford College, outside the submitted work. The authors report no other conflicts of interest in this work.

References

1. Pucker AD, Tichenor AA. A review of contact lens dropout. *Clin Optom*. 2020;12:85–94. doi:10.2147/OPTO.S198637
2. Young G, Veys J, Pritchard N, Coleman S. A multi-centre study of lapsed contact lens wearers. *Ophthalmic Physiol Opt*. 2002;22:516–527. doi:10.1046/j.1475-1313.2002.00066.x
3. Begley CG, Chalmers RL, Mitchell GL, et al. Characterization of ocular surface symptoms from optometric practices in North America. *Cornea*. 2001;20:610–618. doi:10.1097/00003226-200108000-00011
4. Dumbleton K, Caffery B, Dogru M, et al. The TFOS international workshop on contact lens discomfort: report of the subcommittee on epidemiology. *Invest Ophthalmol Vis Sci*. 2013;54:TFOS20–36. doi:10.1167/iovs.13-13125
5. Call T, Pucker AD, McGwin Jr G Jr, Franklin QX, Logan A. Real-time ocular comfort reporting in monthly replacement contact lens wearers. *Clin Optom*. 2023;15:97–103. doi:10.2147/OPTO.S403319
6. Pucker AD, Lievens C, Wesley G, et al. A comparison of contact lens dropouts who are refit into daily disposable or monthly contact lenses. *Cont Lens Anterior Eye*. 2025;48(4):102541. [BCLA Abstract]. doi:10.1016/j.clae.2025.102541
7. Sulley A, Young G, Hunt C. Factors in the success of new contact lens wearers. *Cont Lens Anterior Eye*. 2017;40:15–24. doi:10.1016/j.clae.2016.10.002
8. Sulley A, Young G, Hunt C, McCready S, Targett MT, Craven R. Retention rates in new contact lens wearers. *Eye Contact Lens*. 2018;44(Suppl 1):S273–S282. doi:10.1097/ICL.0000000000000402
9. Dumbleton K, Woods C, Jones L, Fonn D, Sarwer DB. Patient and practitioner compliance with silicone hydrogel and daily disposable lens replacement in the United States. *Eye Contact Lens*. 2009;35:164–171. doi:10.1097/ICL.0b013e3181ac4a8d
10. Zheng Y, Dou J, Wang Y, et al. Sustained release of a polymeric wetting agent from a silicone-hydrogel contact lens material. *ACS Omega*. 2022;7:29223–29230. doi:10.1021/acsomega.2c03310
11. Chalmers RL, Begley CG, Moody K, Hickson-Curran SB. Contact Lens Dry Eye Questionnaire-8 (CLDEQ-8) and opinion of contact lens performance. *Optom Vis Sci*. 2012;89:1435–1442. doi:10.1097/OPX.0b013e318269c90d
12. Chalmers RL, Keay L, Hickson-Curran SB, Gleason WJ. Cutoff score and responsiveness of the 8-item Contact Lens Dry Eye Questionnaire (CLDEQ-8) in a large daily disposable contact lens registry. *Cont Lens Anterior Eye*. 2016;39:342–352. doi:10.1016/j.clae.2016.04.005
13. Lievens C, Pucker AD, Bromley M, et al. A clinical study evaluating how delefilcon a contact lenses perform in satisfied senofilcon a contact lens wearers. *Open J Ophthalmol*. 2025;19:1–7. doi:10.2174/0118743641409827250717043212
14. Abetz L, Rajagopalan K, Mertzanis P, et al. Development and validation of the impact of dry eye on everyday life (IDEEL) questionnaire, a patient-reported outcomes (PRO) measure for the assessment of the burden of dry eye on patients. *Health Qual Life Outcomes*. 2011;9:111. doi:10.1186/1477-7525-9-111
15. Duong K, Pucker AD, McGwin G Jr, Franklin QX, Cox J. Established soft contact lens wearers' awareness of and initial experiences with orthokeratology. *Ophthalmic Physiol Opt*. 2021;41:673–682. doi:10.1111/opo.12828
16. Duong K, McGwin G Jr, Franklin QX, Cox J, Pucker AD. Treating uncomfortable contact lens wear with orthokeratology. *Eye Contact Lens*. 2021;47:74–80. doi:10.1097/ICL.0000000000000690
17. Harris PA, Taylor R, Minor BL, et al. The REDCap consortium: building an international community of software platform partners. *J Biomed Inform*. 2019;95:103208. doi:10.1016/j.jbi.2019.103208
18. Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. Research electronic data capture (REDCap)--a metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inform*. 2009;42:377–381. doi:10.1016/j.jbi.2008.08.010
19. Pucker AD, Lievens C, McGwin Jr G Jr, Franklin QX, Logan A, Wolfe GS. Quality of life in digital device users who are treated with systane hydration PF. *Clin Optom*. 2023;15:45–54. doi:10.2147/OPTO.S398496