**Background**

Dry eye disease (DED) is characterized by a loss of tear film homeostasis and affects approximately 8.3% of people in the United States (over 27 million individuals in 2024). DED is a multifactorial disease of the tear film and ocular surface characterized by symptoms of discomfort, visual disturbance and tear film instability, with potential damage to the ocular surface leading to redness, burning, stinging and irritation. Visual discomfort and inconsistency from DED may interfere with activities of everyday living ultimately impacting the quality of life and well-being of the individual. Standard of care is determined by severity of symptoms, beginning with lifestyle modifications, moving to topical treatments and in rare circumstances, surgery.

**Methods**

A retrospective, observational cohort study of de-identified data from the Veradigm Network EHR (VNEHR) Database (September 15, 2023 – January 15, 2024) linked to administrative claims database was conducted. The purpose of this study was to:

1. (i) describe early treatment patterns among patients with DED and patients starting other DED medications, and
2. (ii) describe demographic and clinical characteristics of early adopters of PFHO and other DED medications.

**Results**

- A total of 11,366 patients met the study criteria and were included in the analysis: PFHO (n = 2,132), LFT (n = 2,488) LCY-C-E (n = 1,017), and CYC-S (n = 5,729).
- Analysis was conducted comparing early adoption of PFHO to all other DED medications and to CYC-S.

**Figure 1. Patient Selection**

**Figure 2. Baseline Clinical Characteristics: Dry Eye-Related Treatment and Diagnosis**

- The majority (79.3%) of patients were female with a mean age of 61.4 years. (Table 2)
- The most common ocular comorbidities in patients were cataract (20.2-24.6% across cohorts) and ocular hypertension/glaucoma (4.5-6.6% across cohorts).

**Table 1. Study Selection Criteria**

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Exclusion</th>
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</thead>
<tbody>
<tr>
<td>Patients in VNEHR initiating DED treatment between Sep 15, 2023 – Nov 30, 2023 with either perfluorohexyloctane (PFHO), lifitegrast (LFT), cyclosporine ophthalmic emulsion 0.05% (CYC-E) or cyclosporine ophthalmic solution 0.09% (CYC-S); date of first prescription = index date</td>
<td>DED index medication use in the 12-months prior to index date</td>
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**Table 2. Demographic Characteristics, Index Date**

**CONCLUSIONS**

Early adopters of PFHO were slightly younger and had a higher proportion of patients with a DED diagnosis compared to other agents. PFHO tended to have more treatment-experienced patients potentially highlighting a subgroup of the patient population who were waiting for a new treatment option for evaporative DED in addition to inflammation.

**References**


**Authors**

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