Psoriasis is a chronic immune-mediated disease characterized by raised, red, scaly patches on the skin. While psoriasis may appear anywhere on the body, it usually affects the outside of the elbows, knees, or scalp with diagnosis confirmed through physical examination of skin lesions by a dermatologist or other healthcare professional. Place psoriasis (also called psoriasis vulgaris), the most common form of the disease, occurs in approximately 89% of psoriasis patients and appears as raised, red, scaly patches covered with a white or silvery scale which can crack and bleed.1 Currently, there is no known cure for psoriasis. Psoriasis medications are used to reduce inflammation and clear skin lesions. The traditional approach to treating psoriasis is to start with mild treatments and progress to stronger treatments if symptoms do not improve. Topical creams and ointments and corticosteroids, vitamin-D analogues, or topical retinoids are typically used for mild psoriasis. As the disease progresses, light therapy or oral agents, such as methotrexate or cyclosporine, are added to control symptoms. Biologics are also an option as the disease progresses. Biologic medications are administered by injection, and are usually intended for patients who failed to respond to traditional oral medications. Three-generation biologics include adalimumab, brodalumab, ustekinumab, and ixekizumab. The IL-17 inhibitors secukinumab and ixekizumab are IL-17A and IL-17F is a cytokine, which is a protein that targets cells and causes inflammation. People with psoriasis may experience lesions with more IL-17 than people without lesions, and studies show the inhibiting IL-17, or reducing it, can help clear psoriasis.2

OBJECTIVES
To conduct a retrospective analysis studying the factors that lead to patients with psoriasis changing from a psoriasis-indicated biologic medication to secukinumab or ixekizumab.

METHODS
The results of Allergan/Walgreens Prime–Central Specialty Patients who changed from a biologic medication to secukinumab or ixekizumab for the FDA approved indication of psoriasis from 2016 to 2017 were analyzed. The data were acquired from the proprietary clinical management application and the pharmacy dispensing system as part of the standard of care. Collected data included for this analysis were pharmacy fills from Allergan/Walgreens Prime locations (including demographics, and medication adherence rates), and patient reported reasons for switching biologic. Medication adherence was inferred from the outcome of proportion of days covered (PDC) defined by total days of medication was available divided by the total days in the observation period (180 days). Statistical data analysis was completed utilizing SAS® software. Patient exclusions included patients under age 18 who discontinued due to other medication or discontinued for reasons provided by the dispensing pharmacy (e.g., patient refusal). To start a new medication, patients were required to discontinue their prior medication. The study population, 1,596 patients were found to have switched from another biologic medication. Only adalimumab, brodalumab, and ustekinumab, were found to have been used for the patients in the study prior to changing therapy. Table 1 provides a summary of use of biologics prior to switching from 415 patients who obtained their current biologic medication fills from Allergan/Walgreens Prime. The mean proportion of Days Covered (PDC) over a 6-month period for these patients prior to switching medications ranged from 44.4% – 52.8%. The mean PDC over 6 month period for these patients after switching medications ranged from 64% – 84% (Table 1). The available patients for PDC prior to switching was lowered by the washout period of 28 – 31 days. The main patient-reported reason for switching therapy reported by approximately 68.9% of patients was that their prior medication was no longer effective (Figure 2). After switching to either secukinumab or ixekizumab and completing at least 2 assessments, 40% of patients reported that their condition was better before then (Figure 3). Patients reported improvement at a mean of 51.6 days. The data obtained leads to the following conclusions:

• Based on patient reporting, the majority of the patients were started on one of the study IL-7 medications instead of switching biologics (Table 1). This may indicate those patients are being comfortable with prescribing IL-7 biologics as first-line agents for psoriasis.

• The most common patient-reported reason for switching therapy was inefficacy of the prior therapy (Figure 2).

• 40% of the patients completing at least 2 assessments reported experiencing better outcomes after switching to an IL-17 inhibitor. This indicates that there may be a place in therapy for the use of IL-7 biologics after patients have found other psoriasis biologics to be ineffective/Figure 3.

• Limitations of this study include utilisation of patient reported information from those patients participating in the managed program. A washout period is recommended prior to switching from adalimumab and ustekinumab to other biologics, thus patient counts in the evaluation of the PDC prior to switching. In addition, all of the data derived from one national pharmacy, hence data from the 1,281 patients who did not utilize Allergan/Walgreens Prime for switching is not available. Therefore, the data may not be representative of the entire psoriasis population.

REFERENCES