Evaluation of Inflammatory Bowel Disease Treatment Discontinuation Rates in Patients within Health System Specialty Pharmacy

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BACKGROUND

- Health system specialty pharmacy (HSSP) embeds pharmacists directly into clinics to ensure patients with chronic and complex diseases receive personalized, high-touch care.[1,2]
- Ulcerative colitis (UC) and Crohn's disease (CD) are subsets of inflammatory bowel disease (IBD) that, if left untreated, pose a significant risk of complications.[3]
- Despite the availability of treatment options, non-adherence and medication discontinuation to IBD treatment remains a challenge that is associated with increased disease activity, hospitalizations, and healthcare costs.[3,4]
- A national finding demonstrated 30% of patients with IBD stopped biologic therapy within 18 months, with loss of response being the most common reason.[5]
- Embedded HSSPs have demonstrated advancement in patient adherence in other disease states, but little is known about their influence on medication persistence in patients diagnosed with IBD.

OBJECTIVES

To determine the discontinuation rates and reasons of specialty therapies used to treat IBD for patients managed within the HSSP

METHODS

This study is a multicenter, retrospective, observational analysis conducted across CPS embedded sites. Patients included were managed by HSSP pharmacists between October 2019 and February 2023, which included patients new to therapy and existing on therapy. Data was collected from Arbor® specialty pharmacy technology platform.

Specialty Therapies Assessed

TNF Inhibitors	IL Inhibitors	IRA	JAK Inhibitors
• Adalimumab (N=1,118)** • Certolizumab pegol (N=31)** • Golimumab (N=13)** • Infliximab-abda (N=5)*** • Infliximab-dyyb (N =19)***	• Risankizumab-rzaa (N=30)** • Ustekinumab (N=700)**	• Vedolizumab (N=27)***	• Tofacitinib (N=44)* • Upadacitinib (N=21)*

* Oral therapy, ** Injectable therapy, *** Infusion therapy

INCLUSION CRITERIA	EXCLUSION CRITERIA
• Patients with UC or CD diagnosis identified by International Classification of Diseases (ICD-10) codes, K50 – K51.919 • Prescriptions for specialty therapies of interest used for treatment of IBD	• Patients < 18 years of age • Patients who declined HSSP services • Patients who discontinued specialty pharmacy services during the study period

DATA ANALYSIS

- Discontinuation rates were assessed by intervals of 3-, 6-, 9-, 12-, 18 months and expressed by count and percentage.
- Discontinuation reasons were categorized and expressed using count and percentage.

RESULTS

- A total of 1,713 patients with 1,909 therapies met this study's inclusion criteria and were evaluated.
- During the study period, 424 (22.2%) therapies were discontinued.
- The median duration of therapy prior to discontinuation across all therapies assessed was 23 months.
- CD and UC were analyzed independently to evaluate specific disease state discontinuation rates.
  - CD 14.5% at 18 months
  - UC 30.3% at 18 months

TABLE 1: Baseline Demographics

BASELINE CHARACTERISTICS	N=1,713
Gender:	
Female, N (%)	905 (53%)
Male, N (%)	808 (47.2%)
Age:	
Mean [SD]	41.7 [17]
Diagnosis:	
Crohn's disease, N (%)	1230 (71.8%)
Ulcerative colitis, N (%)	483 (28.2%)
Race:	
Caucasian, N (%)	841 (49.4%)
Not specified, N (%)	782 (45.9%)
African American, N (%)	68 (3.9%)
Other, N (%)	13 (0.75%)

FIGURE 1: Discontinuation Reasons

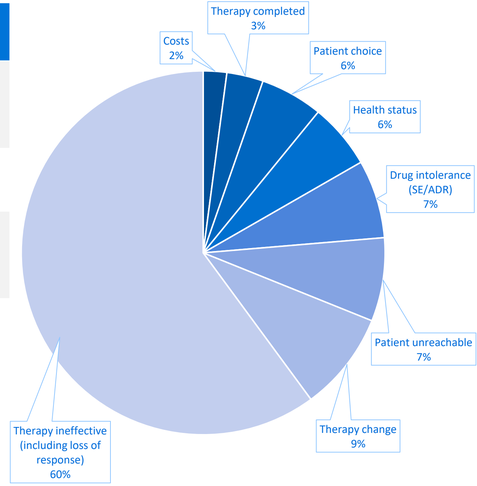
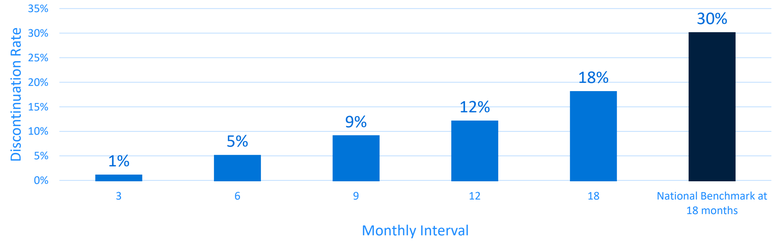


FIGURE 2: Discontinuation Rates



RESULTS

FIGURE 3: Average Time on Therapy

ORAL THERAPY	INJECTABLE THERAPY	INFUSION
11 MONTHS	24 MONTHS	20 MONTHS

DISCUSSION AND CONCLUSION

1. Less than one-fourth of patients diagnosed with IBD within our study discontinued therapy.
2. Patients enrolled in HSSP services persisted on therapy for a longer duration than what was previously documented in the literature as 18% of patients discontinued therapy at 18 months compared to 30%.[5]
3. Embedded HSSP pharmacists have direct communication with prescribers and patients as well as access to a patient's electronic health records where they can preemptively identify factors leading to therapy discontinuation.
4. Pharmacists addressed and mitigated controllable reasons for discontinuations. For example, cost was an insignificant discontinuation reason in this study as pharmacists assisted to overturn prior authorization denials and secured financial assistance for patients with no insurance or financial hardships.
5. Results of this study highlight that embedded HSSP pharmacists are strategically positioned to proactively identify factors leading to therapy discontinuation and offer patient-centered strategies that allow for medication persistence.

LIMITATIONS

1. Insurance formulary restrictions often dictate medication selection and dosing. Although this can be overcome by an appeal process, it may impact therapy decision making.
2. There was limited time on ustekinumab and risankizumab-rzaa due to approval occurring near the end of the study period, impacting the average time on therapy shown in Figure 3.
3. As patients existing on therapy were included in this study, we acknowledge that prior pharmacy management by previous institutions may have contributed to improving persistence to therapy.

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