SWITCHING AND CYCLING AMONG PATIENTS WITH RHEUMATOID ARTHRITIS AT AN INTEGRATED HEALTH SYSTEM SPECIALTY PHARMACY

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INTRODUCTION

• Rheumatoid arthritis (RA) “treat to target” guidelines prompt a change in treatment selection after initial biologic disease-modifying antirheumatic drug (bDMARD) failure, with options to either switch mechanism of action (MOA) or cycle to a different medication with the same MOA.
• Medication changes may impact adherence and persistence to treatment due to clinical, financial, logistical and other factors.

OBJECTIVES

1. Assess rates of switching and cycling among patients using an integrated specialty pharmacy
2. Evaluate rates of adherence and persistence in patients with versus without a change in therapy

METHODS

DESIGN
Single center, retrospective review of medical and pharmacy claims from 07/2013 to 06/2017

SAMPLE
• bDMARD treatment-naïve RA adult patients
• Prescribed a bDMARD by a Vanderbilt Rheumatology provider
• Filled ≥2 prescriptions from Vanderbilt Specialty Pharmacy within 12 months of index date

OUTCOMES
• Rate of switching/cycling within 12 months of index date
• Adherence measured by proportion of days covered (PDC) from index to last fill date
• Persistence defined as absence of 60-day treatment gap

ANALYSIS
Data were summarized and presented using descriptive statistics.

RESULTS

Table 1: Sample Demographics (N = 512)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>No Switch or Cycle (N = 430)</th>
<th>Any Switch or Cycle (N = 82)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, years</td>
<td>55 (12)</td>
<td>54 (12)</td>
</tr>
<tr>
<td>Gender (Female)</td>
<td>78% (337)</td>
<td>87% (71)</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>90% (387)</td>
<td>90% (74)</td>
</tr>
<tr>
<td>Black/African American</td>
<td>8% (33)</td>
<td>7% (6)</td>
</tr>
<tr>
<td>Other</td>
<td>2% (10)</td>
<td>2% (2)</td>
</tr>
</tbody>
</table>

80% of patients’ initial bDMARD prescriptions were a Tumor Necrosis Factor inhibitor (TNFI).

Figure 1: Rates of Cycling and/or Switching

- Most patients remained on the primary bDMARD prescribed in the first 12 months
- Rates of switching and cycling were similar
- Few patients had both a switch and cycle

Figure 2: Time to First Switch or Cycle (N = 82)

- Median time to first cycle was 143 days (IQR 91-218)
- Median time to first switch was 186 days (IQR 104-259)

Figure 3: Adherence and Persistence

- Adherence and persistence were similar between patients who remained on initial bDMARD and those who switched or cycled in the first 12 months of therapy
- High rates of adherence and persistence regardless of a change in therapy

CONCLUSION

• Rates of bDMARD discontinuation in the first 12 months were lower than previous reports estimating one-third of patients discontinue initial treatment
• Despite requirements for a new medication, patients who switched or cycled achieved high adherence and persistence
• Specialty pharmacy support enabled streamlined medication changes with minimal gaps in therapy and treatment discontinuation
• Limitations include small sample size from a single center high touch specialty pharmacy program and unknown reasons for medication change

ACKNOWLEDGEMENTS

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