Real-World Assessment of Clinical Outcomes in Lower-Risk Myelofibrosis Patients Receiving Treatment With Ruxolitinib

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INTRODUCTION

The study discusses use of ruxolitinib in patients with lower-risk (IPSS 0 or 1) MF in real-world practice; currently, ruxolitinib is a product indicated for use in lower-risk and intermediate-1–risk MF patients treated with ruxolitinib.

METHODS

Pilot study design: retrospective review of an electronic medical record data collected in January 2014 to September 2015 in 20 hematology/oncology practices in the United States

Patient inclusion criteria:
1. Diagnosed with lower-risk MF (IPSS Prognostic Scoring System (IPSS) score of 0 or 1)
2. First treated with ruxolitinib ≥3 months before the medical record abstraction date
3. ≥1 year of age at ruxolitinib initiation

The medical record history was used for the medical record abstraction data.

RESULTS

Patient Characteristics

A total of 108 patients were included in the study (25 with low-risk MF and 83 with intermediate-1–risk MF). The majority of patients in both risk groups (60% and 69%, respectively) were male. Symptoms of interest included those captured in the Myeloproliferative Neoplasm Research Consortium (MPNRC) symptom assessment.

Table 1. Patient Characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Low-Risk MF (N = 25)</th>
<th>Intermediate-1 Risk (N = 83)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>58.1 (12.7)</td>
<td>68.0 (13.4)</td>
</tr>
<tr>
<td>Sex (male)</td>
<td>15 (60.0)</td>
<td>64 (77.1)</td>
</tr>
<tr>
<td>Race (African American)</td>
<td>0 (0.0)</td>
<td>5 (6.0)</td>
</tr>
<tr>
<td>Diagnosis (10-20 cm palpated), or severe splenomegaly (&gt; 20 cm palpated)</td>
<td>0.0%</td>
<td>16.8%</td>
</tr>
<tr>
<td>Charlson comorbidities at ruxolitinib initiation</td>
<td>0.0%</td>
<td>16.8%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>35 (32.4)</td>
<td>34 (41.0)</td>
</tr>
<tr>
<td>Ulcer disease</td>
<td>1 (0.9)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>HIV immunodeficiency</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Cytopenia</td>
<td>9 (8.3)</td>
<td>10 (12.1)</td>
</tr>
<tr>
<td>Thrombocytopenia</td>
<td>4 (3.6)</td>
<td>3 (3.6)</td>
</tr>
<tr>
<td>Myelodysplasia</td>
<td>3 (2.8)</td>
<td>1 (1.2)</td>
</tr>
<tr>
<td>MDS-AML</td>
<td>2 (1.9)</td>
<td>1 (1.2)</td>
</tr>
<tr>
<td>Lymphoma</td>
<td>1 (0.9)</td>
<td>0 (0.0)</td>
</tr>
<tr>
<td>Other</td>
<td>36 (33.3)</td>
<td>18 (21.7)</td>
</tr>
</tbody>
</table>

Figure 1. Spleen Size Distribution

DISCUSSION AND CONCLUSIONS

The study findings are consistent with the results of clinical trials in lower-risk MF patients treated with ruxolitinib.

REFERENCES


Limitations

The study was conducted in a real-world setting; however, the data were collected from a single institution.

DISCLOSURES

The study was funded by Novartis Pharmaceuticals Corporation.

AUTHOR DISCLOSURES

Keith L. Davis: Employee of RTI Health Solutions, which received research funding for this work from Novartis Pharmaceuticals Corporation.

Isabelle Côté: Employee of RTI Health Solutions.

James A. Kaye: Employee of RTI Health Solutions.

Haitao Gao: Employee of RTI Health Solutions.

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Estella Mendelson: Employee of RTI Health Solutions.

NOVARTIS DISCLOSURES

Novartis: Employment.

Seifeldin: Employment.

Gao: Employment.

Côté: Employment.

Kaye: Employment.

Davis: Employment.