**INTRODUCTION**

- Antimuscarinics (AMs) and mirabegron are both recommended as second-line therapy in OAB.\(^1\)
  - AMs are typically used prior to mirabegron, which is often prescribed to patients who fail or are intolerant to AMs.\(^1\)
- Real-world comparative effectiveness data of mirabegron and AMs for OAB are lacking; but the validity of comparisons rests on the comparability of treated populations.
- The objective was to describe baseline differences in characteristics between OAB patients initiating either AM or mirabegron.

**METHODS**

- **PERSPECTIVE** is a prospective, non-interventional, one-year registry of adult OAB patients initiating a new AM or mirabegron in the US and Canada (NCT02386072).
  - Baseline data included demographics and clinical characteristics (including the Charlson Comorbidity Index [CCI]) collected at enrollment.
  - Patient-reported outcomes (PRO) characterizing OAB symptom bother and health-related quality-of-life (HRQoL) from the OAB-Q-SF and Patient Perception of Bladder Condition (PPBC) measures were emailed to the patients to be completed within 7 days of enrollment.
  - The registry was designed to achieve a 3:2 distribution of enrollment.

**RESULTS**

- 1,519 patients from 17 Canadian and 91 US sites were included (Table 1).
  - 901 (59.3%) received AMs and 618 (40.7%) received mirabegron.
  - The three most frequent AMs were oxybutynin [46.8%], solifenacin [33.2%], and tolterodine [10.0%].
  - 70.5% of Canadian and 32.8% of US patients initiated mirabegron.
  - In the US, 43.3% of mirabegron and 46.3% of AM patients had Medicare coverage.
  - Compared to AM patients, mirabegron patients were more likely to have private insurance (42.3% versus 27.6%).
  - 47.2% of Canadian patients had private drug coverage, and this was similar across treatment groups.

**OAB History and Diagnosis**

- Compared to AM patients, mirabegron patients (Table 2):
  - Had a longer median time since diagnosis;
  - Were more likely to be diagnosed by a urologist.
  - The likelihood of treatment for OAB in the prior year was higher among mirabegron than AM patients.

**Baseline PRO Scores**

- Baseline PROs were available for 937 (61.7%) patients.
  - The percent with missing data varied by both treatment type (33.2% AM to 45.3% mirabegron) and country (49.7% Canada vs 35.3% US).
  - Symptom bother scores were lower among mirabegron patients (58.9) compared with AM patients (63.0) (Fig 1).
  - Total HRQoL scores were higher (better quality of life) among mirabegron patients (score: 49.9 mirabegron versus 43.4 AM) (Fig 1).
  - Mirabegron patients were more likely to report many severe problems, and AM patients more likely to report severe problems, by PPBC (Fig 2).

**Figure 1: Select OAB-Q-SF baseline scores, by treatment group**

**Figure 2: PPBC scores, by treatment group**

<table>
<thead>
<tr>
<th>Table 2: Selected clinical characteristics</th>
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<tbody>
<tr>
<td>Depression, %</td>
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<tr>
<td>CCI, mean (SD)</td>
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<tr>
<td>Median months since OAB diagnosis</td>
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<tr>
<td>HCP specialty making OAB diagnosis, n (%)</td>
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<tr>
<td>Primary care</td>
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<tr>
<td>Urology</td>
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<tr>
<td>Other</td>
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<td>OAB treatment in the prior year, n (%)</td>
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**Conclusions**

- Baseline data analyses suggest that important demographic, clinical and HRQoL differences exist between AM- and mirabegron-treated populations:
  - Among mirabegron-treated patients, time since diagnosis was longer, previous treatment for OAB in the prior year was higher, and diagnosis by a urologist was more frequent.
  - The distribution of treatment in Canada may have been affected by a voucher program for mirabegron available in all but two Canadian provinces.
  - These findings highlight the importance of identifying and understanding differences prior to OAB treatment that may be critical determinants of outcome.