BASELINE CHARACTERISTICS OF PATIENTS INITIATING MIRABEGRON OR ANTIMUSCARINICS TREATMENT FOR OVERACTIVE BLADDER: RESULTS FROM THE PERSPECTIVE REGISTRY

Hypothesis / aims of study
Antimuscarinics (AMs) and mirabegron are both recommended as second line therapy in overactive bladder (OAB). AMs are typically used prior to mirabegron, which is often prescribed to patients who fail or are intolerant to AMs. Both classes are efficacious for managing OAB symptoms although real-world comparative effectiveness data are lacking. The objective was to describe the differences in baseline characteristics between OAB patients initiating either AM or mirabegron treatment from a prospective, multi-center, non-interventional registry in the United States and Canada (PERSPECTIVE, NCT02386072).

Study design, materials and methods
Patients visiting a primary care physician, urologist, or urogynecologist and initiating either a new course of an AM or initiating mirabegron were enrolled and signed an informed consent to be followed for 1 year. Baseline data included demographic information, clinical characteristics and patient reported outcomes (PROs) of OAB symptom bother and total health-related quality of life (HRQoL) from the OAB-Q-SF and Patient Perception of Bladder Condition (PPBC) questionnaires. Both baseline PROs were to be completed within 7 days of study initiation. P-values were not calculated for differences between groups in baseline measures, but will be accounted for in future longitudinal analyses.

Results
1,519 patients (901 AM, 618 mirabegron) were included in the analysis. The average age was 62.2 years (range: 18–93 years), with 87.3% white and the majority female (73.5%). A higher proportion of women initiated AMs compared with mirabegron (76.4% versus 69.3%, respectively). A voucher program for mirabegron in Canada may have skewed treatment distribution, resulting in 70.5% in Canada and 32.8% in the US initiating therapy on mirabegron. The average Charlson Comorbidity Index was 3.4 versus 3.3 for mirabegron and AM patients, respectively. Compared with AM patients, mirabegron patients were less likely to be unemployed (8.4% versus 5.8%, respectively), had less current tobacco use (8.9% versus 7.6%, respectively), and less depression (19.4% versus 18.0%, respectively). US mirabegron patients were less likely to not have private insurance than US AM patients (0.8% versus 7.4%, respectively). Mirabegron patients had a longer time since their OAB diagnosis compared with AM patients (49.7 months versus 40.9 months, respectively) and were more likely to have been diagnosed by a urologist (49.2% versus 39.2%, respectively). Compared with AM patients, mirabegron patients reported a lower frequency of wet OAB (79.7% versus 71.4%, respectively) and less stress incontinence (31.3% versus 27.2%, respectively), and were less likely to be currently using pads (55.7% versus 47.1%, respectively). Baseline PRO data within the first 7 days was missing for 45–46% of mirabegron patients and 33–34% of AM patients, depending on the item. Among patients completing baseline PROs, mirabegron patients reported lower (better) overall PPBC scores (36.5% of mirabegron patients reporting severe or many severe problems; versus 40.9% of AM patients), Mirabegron patients reported lower symptom bother compared with AM patients (score: 58.9 versus 63.0, respectively) and higher total HRQoL (score: 49.9 versus 43.4, respectively).

Interpretation of results
Baseline data from a real world registry of OAB patients initiating mirabegron or AMs suggest that important demographic, clinical and HRQoL differences exist.

Concluding message
When using real world evidence to assess OAB treatment, it is important to understand differences at baseline that may be critical determinants of outcome.

Disclosures
Funding: Funded by Astellas Pharma Global Development Inc Clinical Trial: No Subjects: HUMAN Ethics Committee: Quorum IRB Helsinki: Yes Informed Consent: Yes