

## PERSISTENCE WITH MIRABEGRON THERAPY FOR OVERACTIVE BLADDER: A REAL LIFE EXPERIENCE

### Hypothesis / aims of study

Long-term persistence rates with anticholinergic therapy for overactive bladder (OAB) are poor. Mirabegron is an alternative pharmacotherapeutic approach which has demonstrated good tolerability and efficacy. Whether this translates into improved persistence rates within a real-life clinical setting remains undetermined and is the focus of our study.

### Study design, materials and methods

Hospital prescription data was analysed to identify all patients prescribed mirabegron in our institution. Case notes were retrospectively reviewed to obtain demographic data, previous treatments for OAB, reasons for discontinuation of previous treatments and duration of mirabegron treatment. Overall satisfaction with treatment was assessed using the OAB Satisfaction with Treatment Questionnaire (OAB-SAT-q).

### Results

204 patients were prescribed mirabegron. Of these, 81% previously discontinued anticholinergic therapy, 16% had previously received intravesical botulinum toxin A therapy and 19% were prescribed mirabegron first-line. At three months 71% persisted with treatment which fell to 49% by six months. The commonest reason for discontinuation was lack of efficacy, followed by adverse effects. Overall 32% of patients preferred mirabegron over previous treatments and 39% were satisfied with mirabegron therapy.

### Interpretation of results

Persistence rates with mirabegron at six months suggest that the theorised benefits of a reduced side effect burden and early onset of action have not translated into increased persistence. However, our data represent a group of patients with refractory OAB and so the persistence rates reported are not comparable to a population of treatment-naïve patients. Sub-analysis of determinants of early discontinuation with mirabegron illustrate treatment outcomes are incongruous with patient expectations leading to early discontinuation in a significant proportion of the patient cohort. Furthermore, these findings are analogous to studies exploring reasons for discontinuing antimuscarinic agents, where the majority of respondents report unmet treatment expectations and treatment emergent side effects (1). Overall, satisfaction with mirabegron is poor. However, satisfaction with therapy may not be associated with persistence but rather with treatment outcomes, such that a robust improvement in symptomatic control correlates to an improvement in satisfaction but not necessarily persistence, illustrating the complexity of factors predisposing to poor persistence.

### Concluding message

Persistence rates with mirabegron in this group of patients with refractory OAB are satisfactory. The commonest reasons for discontinuation are unmet treatment expectations and adverse effects. We had very few treatment-naïve patients and so further studies are required to assess mirabegron persistence rates with longer term follow up, as first-line treatment and in different groups of OAB severity.

### References

1. Benner JS, Nichol MB, Rovner ES et al. Patient-reported reasons for discontinuing overactive bladder medication. *BJU Int* 2010; 105: 1276.

### Disclosures

**Funding:** NONE **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Guy's and St. Thomas' research and development department **Helsinki:** Yes **Informed Consent:** Yes