Guidelines for the Pharmacological Management of Overactive Bladder Disease in Adults in Primary Care February 2022
Based on NICE NG123: https://www.nice.org.uk/guidance/ng123

NHS
Bath and North East Somerset, Swindon and Wiltshire
Clinical Commissioning Group

1.) ENSURE DIAGNOSIS IS CORRECT: Initial assessment of patient including PV examination, palpitation of bladder, urine dipstick (to look for blood), urinalysis, medication review, functional ability.

2.) CONSERVATIVE MANAGEMENT:

- Fluid management, bladder retraining, pelvic floor exercises, weight loss if BMI>30, smoking cessation, intravaginal oestrogens (in postmenopausal women with vaginal atrophy, see local BSW formulary HRT guidance).
- Offer trial of supervised pelvic floor muscle training of at least 3 months duration as 1st line treatment to women with stress or mixed urinary incontinence via the continence team.

3.) DRUG OPTIONS; **Before drug treatment starts, discuss:**

- **That there is increasing evidence of long term harm from anticholinergic medicines on cognitive function and therefore a discussion of risks vs benefits for each patient must be undertaken and documented in their notes.**
- If a patient wishes to try an OAB medication, they should be advised to use it for as short a time as possible to reduce likelihood of long-term side-effects. Also supply the patient with an information leaflet so that they can read about the risks.
- The likelihood of success and associated common adverse effects. Note that the side-effects can contribute to falls risk.
- The frequency and route of administration
- That some adverse effects such as dry mouth and constipation indicate that treatment is starting to have an effect
- That they may not see the full benefits until they have been taking the treatment for 4 weeks
- That treatment should be changed or stopped if ineffective after 6-8 weeks.
- Anecdotally, some patients might prefer to use an OAB medication when required (PRN) when going out rather than regularly. This is not evidence-based, but some patients do try this and find a suitable balance between efficacy and side-effects.

4.) Assess patient's anticholinergic burden: http://www.acbcalc.com/

LOW RISK PATIENTS: ANTI-MUSCARINICS

USE THESE DRUGS WITH CAUTION in those with autonomic neuropathy, and in those susceptible to angle-closure glaucoma¥ and in hiatus hernia with reflux oesophagitis.

Anti-muscarinics can worsen hyperthyroidism, coronary artery disease, congestive heart failure, hypertension, arrhythmias and tachycardia.

CONTRA-INDICATIONS: myasthenia gravis, urinary retention, severe ulcerative colitis, toxic megacolon, & in GI obstruction or intestinal atony.

FIRST LINE
SOLIFENACIN
DOSE: ADULT 5mg daily
Consider increase to 10mg daily if tolerated, but looking for greater efficacy.

REVIEW by 8 weeks

SECOND-LINE: TOLTERODINE
DOSE: ADULT 2mg BD (IR) OR 4mg OD if using Tolterodine XL.

SECOND-LINE: TROSPIUM DOSE: ADULT 20mg BD (IR)
(increase to TDS if tolerated, but needing greater efficacy) OR Trospium XL 60mg OD.

REVIEW by 8 weeks

HIGH RISK PATIENTS, FALLS or CONTRA-INDICATIONS to anti-muscarinics

e.g.Elderly /Frail /Dementia/Parkinsons disease/previous delerium/ multiple comorbidities

FIRST LINE
MIRABEGRON (NICE TA290)
DOSE: ADULT 25mg daily, increase to 50mg after 1-2 wks if tolerating (be careful in elderly). Monitor BP. See MHRA safety update Oct 2015 and information below*.

REVIEW by 8 weeks

Review ALL patients who remain on long-term medicine every 12 months, or every 6 months if >75yrs.

If it hasn't worked

THIRD LINE (1st and 2nd line *anti-muscarinics ineffective or not tolerated*):
MIRABEGRON (NICE TA290) DOSE: ADULT 50mg daily (*reduce to 25mg if eGFR 15–29ml/minute/1.73m² and avoid if eGFR < 15 ml/minute/1.73m²*). ***NOTE:*** *25mg and 50mg tablets are the same price, so don't prescribe as 2 x 25mg!*
*Use 25mg once daily in those concomitantly receiving strong CYP3A inhibitors e.g. itraconazole, ketoconazole, ritonavir and clarithromycin. *Cautions* history of QT-interval prolongation; concomitant use with drugs that prolong the QT interval. Regular monitoring of blood pressure is important, especially in patients with pre-existing hypertension. See MHRA drug safety update Oct 2015.

REVIEW by 8 weeks

If INEFFECTIVE or NOT TOLERATED and possible invasive treatment are sought consider referral to urology for treatments such as botulinum toxin (see NHS BSW CCG policy here).

First approved Oct 2020. February 2022 minor update includes MR preps of tolterodine and trospium

COMBINATION USE OF **MIRABEGRON PLUS SOLIFENACIN (AMBER):** This regimen is not licensed in the UK but might be recommended by a urology specialist after a patient has had urodynamics, with proven detrusor over-activity. Such use may be taken on by a GP if they are happy to take on the prescribing responsibility.

A review of the evidence base for such use can be found here: https://remedy.bnssgccg.nhs.uk/media/4432/evidence-review-combination-therapy-in-oab-final.pdf

NOTE: Oxybutynin is not included in this guidance and is only for use as an AMBER drug on the BSW netformulary for specialist initiation, mainly used for paediatric patients and spinal/neurogenic bladder patients.

¥Glaucoma – advice from *Journal of Obstetrics and Gynaecology* 2005; 25(5): 419 – 421 1:

1. Establish whether the patient has glaucoma or a family history of glaucoma.
2. Patients with **open-angle glaucoma** can be treated safely. Patients with **known angle-closure glaucoma** should be under hospital review by an ophthalmologist, and are likely to have been treated by laser or surgery. Such patients are almost certainly safe to treat with anti- cholinergic agents, but liaison with an ophthalmologist is advised.
3. If the patient is **not known to have glaucoma**, determine whether he/she is at significant risk of developing 'angle-closure' as a result of systemic anticholinergic treatment. For practical purposes, this can be achieved by history taking to identify the risk factors such as female sex, being long-sighted, Hispanic or Asian race and having a family history of angle closure glaucoma.

References

1. NICE NG123 Urinary incontinence and pelvic organ prolapse in women: management (Updated June 2019) https://www.nice.org.uk/guidance/ng123
2. NICE TA290 Mirabegron for treating symptoms of overactive bladder (June 2013) https://www.nice.org.uk/guidance/ta290
3. MHRA Drug Safety Update October 2015: Mirabegron (Betmiga▼): risk of severe hypertension and associated cerebrovascular and cardiac events https://www.gov.uk/drug-safety-update/mirabegron-betmiga-risk-of-severe-hypertension-and-associated-cerebrovascular-and-cardiac-events