

## Protocol for the use of Unlicensed Benztropine

### Indication

Benztropine (previously known as bengtropine) is an unlicensed medicine indicated for use as an alternative treatment of hypersalivation secondary to clozapine treatment in patients for whom an adequate trials of hyoscine hydrobromide (both tablets and transdermal patches), trihexiphenidyl and pirenzepine have been ineffective either due to lack of efficacy or side effects. It must not be used first line due to the unlicensed status.

Benztropine was previously licensed for the management of extrapyramidal side effects (EPSE) secondary to antipsychotic treatment. This protocol does not cover the use of benztropine for this indication due to other licensed preparations being available.

### Informed consent

Due to its unlicensed status, informed consent and explanation for the rationale of treatment choice must be obtained prior to treatment initiation.<sup>1</sup> Patient information explaining unlicensed medication in general terms is available via the [Choice and Medication](#) portal, as is a specific benztropine leaflet.<sup>2</sup> Where there is a lack of capacity, adherence to the principles contained in the Adults with Incapacity (Scotland) Act, 2000 is mandatory.

### Documentation

The consultant psychiatrist must make a clear record of the rationale for prescribing an unlicensed medication within the patient's case notes and document the discussion regarding consent.<sup>1</sup>

### In-patient prescribing and administration

Nursing staff in the ward must be informed of the medicine's unlicensed status by the prescriber and ward clinical pharmacists must ensure that staff are aware of the unlicensed status.

When ordering benztropine, the patient's initials and CHI should be included on the requisition as well as the phrase "as per protocol" for the order to be processed. A record of administration of unlicensed medication must be kept (as per unlicensed medication policy).<sup>3</sup> When entering administration on HEPMA, the drug batch number and expiry date should be recorded when prompted. It is the responsibility of the nurse in charge to ensure this occurs.

When supplying benztropine from pharmacy, pharmacy staff must ensure that batch numbers are documented on the prescription or requisition.

### Out-patient prescribing

The clozapine dispensary at Leverndale will supply benztropine prescriptions after discharge to outpatients. The standard clozapine out-patient prescription form will be used to prescribe benztropine in addition to the patient's regular clozapine dose.

### Review

Need for ongoing prescription of an unlicensed medicine should be assessed on a 6 monthly basis

### Monitoring

There is no requirement for any specific monitoring. Close monitoring of bowel function is mandatory with the combination of clozapine and benztropine and should be reflected within the clozapine side effect template on EMIS. Refer to the [Guidelines for assessment and management of clozapine induced constipation](#) for further information.

### Dose range <sup>4,5</sup>

Up to 2mg daily for hypersalivation.

Benztropine was licensed up to 6mg in divided doses for the management of EPSE.

### **Evidence base**

The use of benztropine for clozapine-induced hypersalivation is recommended in the Maudsley Prescribing Guidelines and the UKMi Q&A on drug-induced hypersalivation. These refer to the use of benztropine plus terazosin as being more efficacious than either drug alone. <sup>4,5</sup>

### **Proposed mode of action**

Anticholinergic and antihistamine activity

### **Side effects (incidence not available) <sup>6,7</sup>**

Tachycardia, paralytic ileus, constipation, vomiting, nausea, dry mouth, confusion, memory impairment, visual hallucinations, nervousness, depression, numbness of fingers, blurred vision, dilated pupils, urinary retention, dysuria, skin rash, heat stroke hyperthermia, fever.

### **Contraindications<sup>7</sup>**

- Hypersensitivity to benztropine or any excipients
- Narrow angle glaucoma
- Tardive dyskinesia
- Pregnancy

### **Cautions<sup>7</sup>**

- Renal impairment
- Tachycardia
- Prostatic hypertrophy
- Glaucoma

### **Interactions**

May exacerbate the anticholinergic effects of other drugs including clozapine, especially constipation.

Alcohol can increase the sedative effects of benztropine.

### **References:**

1. GMC Good practice in prescribing and managing medicines and devices. Updated Dec14 [http://www.gmc-uk.org/guidance/ethical\\_guidance/14316.asp](http://www.gmc-uk.org/guidance/ethical_guidance/14316.asp)
2. Choice and Medication. Handy Fact Sheets. Unlicensed medications and benztropine PIL <http://www.choiceandmedication.org/nhs24/>
3. NHS Greater Glasgow and Clyde Area Drug and Therapeutics Committee Policies Relating to the Management of Medicines Section 9.1 [Acute Unlicensed Medicines Policy \(ULM Policy\)](#)
4. Taylor D, Paton C, Kapur S. The Maudsley Prescribing Guidelines in Psychiatry; 13th edition: Wiley Blackwell
5. UKMi Medicines Q&A. Drug-induced hypersalivation- what treatment options are available? May17
6. Martindale. The Complete Drug Reference. <https://www.medicinescomplete.com/mc/martindale/2009/> Accessed 7/8/17
7. Prescribing Information. Benztropine 2mg. Pendopharm. Nov 2014 (obtained from Mawdsleys Brooks & Co)