

## DOXAZOSIN modified release (M/R) tablets (All Brands)

The Pan Mersey Area Prescribing Committee does not recommend the prescribing of DOXAZOSIN modified release (M/R) tablets (All Brands).

### BLACK

The Pan Mersey Area Prescribing Committee (APC) recommends the prescribing of DOXAZOSIN IMMEDIATE RELEASE tablets in patients newly initiated on doxazosin.

The Pan Mersey APC recommends consideration should be given to switching patients currently prescribed DOXAZOSIN MODIFIED RELEASE (M/R) tablets to DOXAZOSIN IMMEDIATE RELEASE tablets where clinically appropriate.

- > Doxazosin is a long acting alpha-1 adrenergic blocker licensed for the treatment of hypertension (and benign prostatic hyperplasia (BPH)) [1].
- > NICE, with the British Hypertension Society, recommends the current place of alpha blockers such as doxazosin in the treatment of hypertension as FOURTH line and does not specify preference over “immediate release” or “modified release” which are both administered ONCE daily [1,2].
- > The half life of both the immediate release and modified release are the same and therefore allow once daily administration.<sup>1</sup>
- > Modified release doxazosin is significantly more expensive than immediate release doxazosin [3].
- > If all patients currently prescribed modified release doxazosin were prescribed immediate release doxazosin, at the same dose (see page two for switching advice), there would be a saving of > £178,000 across the Pan Mersey locality.

**Note:** Patients who are not eligible for treatment under this statement may be considered on an individual basis where their GP or consultant believes exceptional circumstances exist that warrant deviation from the rule of this policy. In this situation, follow locally defined processes.

## DOXAZOSIN modified release (M/R) tablets (All Brands)

### Effectiveness

Doxazosin XL (modified release) is a controlled release gastrointestinal therapeutic system (GITS) [4].

Trials demonstrated that both formulations provided equally effective blood pressure reduction [4].

Both formulations of doxazosin were well tolerated [4].

No titration steps are required when using the GITS formulation compared to the immediate release preparation [4].

No serious adverse events were reported and there was no difference in type or incidence of adverse events between the two formulations [4].

### Safety

Contraindicated if known hypersensitivity to quinazolines (e.g. prazosin, terazosin, doxazosin), history of orthostatic hypotension, BPH and concomitant congestion of the urinary tract, chronic UTI or bladder stones, during lactation and as monotherapy in patients with overflow bladder or anuria with or without progressive renal insufficiency [6].

Common side effects include dizziness and headache [6].

### Cost [3]

Doxazosin immediate release:

1 mg daily £8.71/year

2 mg daily £8.84/year

4mg daily £9.49/year

8 mg daily £18.98/year

Doxazosin modified release:

4 mg daily £65.00/year

8 mg daily £129.74/year

### Patient factors

There are no changes in the pharmacokinetics of doxazosin in patients with impaired renal function; normal adult dosage is recommended. Doxazosin is not dialysable [6].

Up to now no studies have been performed with doxazosin in patients with liver impairment. Since doxazosin is extensively metabolised in the liver, it should be used with caution in such patients [6].

### Prescribing information

Doxazosin is recommended fourth line in the management of hypertension [1,2]. For doxazosin immediate release, initial dose is 1 mg daily for 1 - 2 weeks, then increased to 2mg once daily. If necessary, increase to 4mg once daily, potentially increasing to a maximum dose of 16mg daily. Dose should be adjusted based on patients' response or development of side-effects [5]. The recommendations for patients who are currently taking modified-release doxazosin and are being switched back to standard doxazosin are less clear cut. The dose of standard doxazosin could be initiated at 1mg daily which would comply with the licensed dosing recommendations, or at half the modified-release doxazosin dose. In both instances some patients will need a dose increase. Alternatively, the dose could be initiated at the same as the modified-release doxazosin dose, but some patients may then need a dose reduction [1]. The blood pressure must be monitored until stable after switching.

### Implementation notes

initiation, patients may experience postural hypotension; evidenced by dizziness and weakness, or rarely loss of consciousness (syncope). Therefore, ensure BP is monitored on initiation to minimise potential postural effects. Patients should be cautioned to avoid situations where injury could result should dizziness or weakness occur during initiation of doxazosin therapy.

## References

1. [UKMI Q&A 101.5](#). How should conversion between doxazosin formulations be carried out? Nov 2015.
2. [NICE Clinical Guideline 127](#). Hypertension Clinical management of primary hypertension in adults. Nov 2015 update.
3. National Health Service England and Wales. Drug Tariff. November 2017: page 161, available [here](#).
4. UKMI Q&A 22.6. [What is the evidence comparing doxazosin XL with standard doxazosin?](#) December 2015.
5. British National Formulary online, accessed 31/10/17 available [here](#).
6. SPC for Doxazosin available at <https://www.medicines.org.uk/emc/medicine/26419> accessed 31/10/17.