Prescribing Tips and Tools for Bisoprolol

There are many preparations of bisoprolol available. An up-to-date listing is available on the Health Products Regulatory Authority website at www.hpra.ie.

Therapeutic Indications
- Treatment of chronic stable heart failure with reduced systolic left ventricular function in addition to ACE inhibitors and diuretics and optionally cardiac glycosides.
- Treatment of chronic stable angina pectoris.
- Treatment of hypertension.

Dosing and Administration
Full prescribing information is available in Summary of Product Characteristics (SmPC) which may be accessed freely online at www.medicines.ie or www.hpra.ie. Please consult the SmPC for guidance on prescribing in special patient populations e.g. asthma, COPD, diabetes, renal and hepatic failure.

Table 1: Dose titration for bisoprolol in heart failure (HF)

<table>
<thead>
<tr>
<th>Heart Failure Titration</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Weeks 4-7</th>
<th>Weeks 8-11</th>
<th>Week 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bisoprolol</td>
<td>1.25mg</td>
<td>2.5mg</td>
<td>3.75mg</td>
<td>5mg</td>
<td>7.5mg</td>
<td>10mg</td>
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<tr>
<td></td>
<td>once daily</td>
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<td>once daily</td>
</tr>
</tbody>
</table>

Cautions
- Mild/moderate airway disease
- Prinzmetal’s angina
- Diabetes mellitus
- First degree AV block
- Psoriasis
- General anaesthesia
- Thyrotoxicosis
- Severe renal impairment
- Severe liver impairment

Contraindications
- Severe bronchial asthma & COPD
- Uncontrolled heart failure
- Sick sinus syndrome
- Second or third degree AV block
- Sinus bradycardia <50bpm
- Severe peripheral arterial disease
- Untreated phaeochromocytoma
- Severe hypotension BP<90mmHg
- SA block

Dose
**Adjunct in heart failure:** initiate at 1.25mg once daily and titrate as directed in Table 1 below to a maximum of 10mg once daily.

**Hypertension & Angina:** 10mg once daily (5mg may be adequate in some patients); max 20mg daily.

Dose titration in heart failure
- Patients should be stable when bisoprolol is initiated.
- Start at a low dose and increase slowly titrating the dose as per Table 1 below.
- Aim for optimal target dose of 10mg or, if not tolerated, the highest tolerated dose.

Bisoprolol interactions for all indications
- **Calcium channel blockers** (e.g. diltiazem) - ↑ risk AV block, bradycardia & hypotension.
- **Calcium channel blockers-dihydropyridines** (e.g. amlodipine) - ↑ risk of hypotension.
- **Cardiac glycosides** (e.g. digoxin) - ↓ in heart rate, ↑ AV conduction time.
- **Class I and class III antiarrhythmics** (e.g. flecainide, amiodarone) - Effect on AV conduction time may be potentiated and negative inotropic effect ↑.
- **Insulin and oral antidiabetic drugs** - Blood sugar lowering effect ↑. Symptoms of hypoglycaemia may be masked.

Monitoring for all indications
- Heart Rate
- Blood Pressure

Additional monitoring in heart failure
- Symptoms of Heart Failure
- Signs of Congestion

Counselling Points
- Take in the MORNING with or without food. Swallow whole with liquid.
- Treatment should not be withdrawn abruptly; The dosage should be reduced slowly by a weekly halving of the dose.
- Transient worsening of heart failure, hypotension or bradycardia may occur during initiation phase and can be resolved by titrating the dose.

AV=Atrioventricular; COPD=Chronic obstructive pulmonary disease; SA=Sinoatrial; HF=Heart failure

References: SmPC & PIL Bisop 5mg®, BNF March 2016.