Prescribing Tips for Ramipril

There is a range of ramipril preparations available. An up-to-date listing is freely available on the Irish Medicines Board website at www.imb.ie.

Therapeutic Indications
- Hypertension
- Heart failure
- Cardiovascular prevention: reduction of cardiovascular morbidity and mortality in high risk patients, including diabetes
- Renal disease/nephropathy
- Secondary prevention after myocardial infarction

Dosing and Administration
Full prescribing information is available in the Summary of Product Characteristics (SmPC) which may be accessed freely online at www.imb.ie and www.medicines.ie. Please consult the SmPC for guidance on prescribing in special patient populations, e.g. renal impairment, and in conditions other than hypertension and heart failure.

Table 1. Ramipril dosing and administration

<table>
<thead>
<tr>
<th>Indication</th>
<th>Initial Dose</th>
<th>Titration &amp; Maintenance</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td>2.5 mg once daily</td>
<td>Double the dose every 2-4 weeks to max. 10 mg once daily.</td>
<td>Patients with strongly activated RAS may require lower starting does, i.e. 1.25 mg.</td>
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<tr>
<td>Heart failure</td>
<td>1.25 mg once daily</td>
<td>Double the dose every 1-2 weeks to maximum of 10 mg daily in 1-2 doses.</td>
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</tbody>
</table>

DOSE
Prescribe the correct dose and frequency for the patient’s condition – see SmPC for details.
- **Hypertension**: start with 2.5 mg once daily
- **Heart failure**: start with 1.25 mg once daily
- **Up-titrate** by doubling the dose at appropriate intervals

OPTIMISE
Patients benefit from higher doses when tolerated.

MONITOR
- **Renal function** – serum creatinine and electrolytes should be checked before starting treatment, 1-2 weeks after each dose increase and at least annually, thereafter.39
- **BP** – ACE inhibitors can cause profound hypotension, particularly after the first dose. Patients at increased risk include those with heart failure, those taking concomitant diuretics, on a low-sodium diet, on dialysis and suffering from dehydration.
- **Cough** – a persistent dry cough occurs in 10-15% of patients treated with an ACE inhibitor.

TARGET
- In most patients the target **SBP is <140 mmHg**. A DBP target of <90 mmHg is always recommended, except in patients with diabetes, in whom values <85 mmHg are recommended.45
- In elderly patients with an initial SBP >160 mmHg, a reduction to 140-150 mmHg may be considered.

Further advice on BP targets is accessible via NICE (www.nice.org.uk) and through the ESC website (www.escardio.org).