**Ivabradine (Sinoatrial node Inhibitor)**

**INTRODUCTION**

Ivabradine is a new therapeutic agent that selectively inhibits the If current in the sinoatrial node, providing heart rate reduction.

**EXCLUSION CRITERIA/CONTRAINDICATIONS**

- Acute decompensated heart failure;
- Blood pressure less than 90/50 mm Hg;
- Sick sinus syndrome, sinoatrial block, or third-degree atrioventricular (AV) block (unless a functioning demand pacemaker is present);
- Resting heart rate less than 60 bpm prior to treatment;
- Severe hepatic impairment;
- Pacemaker dependence (heart rate maintained exclusively by the pacemaker);
- Concomitant use with strong CYP3A4 inhibitors (i.e. itraconazole, clarithromycin, etc...)

**AVAILABLE AGENTS**

- Corlanor® [Ivabradine] – 5mg, 7.5mg tablets available

**DOSING/ADMINISTRATION & TITRATION ALGORITHM**

- **NOTE:** Given the well-proven mortality benefits of beta-blocker therapy, it is important to initiate and uptitrate these agents to target doses, as tolerated, before assessing the resting heart rate for consideration of Ivabradine initiation.

<table>
<thead>
<tr>
<th>Ivabradine (Corlanor®)</th>
<th>Initial dose: 5 mg orally twice daily</th>
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<tr>
<td><strong>Titratio</strong>n: After 2 weeks, titrate dose based on resting heart rate</td>
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<tr>
<td>a) Resting heart rate greater than 60 beats per minute: Increase dose by 2.5 mg twice daily</td>
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<td>b) Resting heart rate of 50 to 60 beats per minute: Continue current dose</td>
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<td>c) Resting heart rate less than 50 beats per minute or for signs or symptoms of bradycardia: Decrease dose by 2.5 mg twice daily; if dose is currently 2.5 mg twice daily, discontinue use</td>
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| **Maximum dose:** 7.5 mg twice daily |

**RENAL DOSE ADJUSTMENT**

- CrCl greater than 15 mL/min: No adjustment required; no data is available for use with CrCl 15 mL/min or less
HEPATIC DOSE ADJUSTMENT

- Mild-Moderate Impairment (Child-Pugh class A & B): No dose adjustment necessary
- Severe Impairment (Child-Pugh class C): Use is contraindicated

CONSIDERATIONS [1]

- Advise patient to report symptoms of bradycardia or atrial fibrillation
- Recommend female patient avoid pregnancy during therapy
- Warn patient to avoid driving or other activities where sudden changes in light intensity may occur until drug effects are realized, due to potential for luminous phenomena (phosphenes)
  - Warning: Patients may experience and should report visual brightness (phosphenes)
- Instruct patient to take drug with food to increase absorption
- Counsel patient to avoid grapefruit juice

REFERENCES:


