

## Digoxin (Lanoxin) Considerations for Use

US/FDA Approved Indication: Heart Rate Control for Atrial Fibrillation

<b>Mechanism of Action</b>	Slows cardiac conduction through the AV node; increases force of myocardial contraction
<b>Dosing<sup>†</sup></b>	<p><u>Acute setting for patients with HF and without accessory pathway:</u> 0.25 mg IV every 2 hrs up to 1.5 mg, then 0.125 to 0.375 mg IV or PO daily</p> <p><u>Non-acute setting or maintenance for patients with HF and without accessory pathway:</u> 0.125 to 0.375 mg PO daily.</p> <p><u>Elderly:</u> over 70 years old: 0.125 mg (or less) PO daily</p> <p><u>Hepatic Impairment:</u> No dosage adjustments are recommended</p> <p><u>Renal Impairment:</u> CrCl &lt; 60 ml/min: 0.0625 – 0.125 mg PO daily; titrate based on response; dosage is based on CrCl and lean body weight</p>
<b>Contraindications</b>	<ul style="list-style-type: none"> <li>• acute MI</li> <li>• myocarditis</li> <li>• ventricular fibrillation</li> </ul> <p>Use caution in patients with sinus node disease, AV block, accessory AV pathway, certain HF disorders with preserved LV function, hypermetabolic states, thyroid disease, beri beri heart disease, or planned cardioversion.</p>
<b>Major Side Effects</b>	life threatening arrhythmia, perceived color change, heart block, bronchospasm
<b>Dosage forms and Strengths</b>	<p><u>PO:</u> 0.125 mg and 0.25 mg tablets 0.1 mg and 0.2 mg capsules 0.05 mg/mL elixir</p> <p><u>IV:</u> 0.25 mg/mL, 500 mcg/2 mL, 0.1 mg/mL solution for injection</p>
<b>Special Notes</b>	<p>Other agents (beta blockers, diltiazem, verapamil) are generally more effective in controlling ventricular rate in A-Fib.</p> <p>Provides poor rate control during exertion; may need to be combined with beta-blocker or calcium channel blocker to control heart rate.</p> <p>Reserve for patients with systolic heart failure.</p> <p>Consider patient-specific characteristics (lean/ideal body weight, CrCl, age, concomitant disease states, concomitant medications, drug serum level, and factors likely to alter pharmacokinetics when dosing)</p>
<b>Counseling</b>	<p>Tablets can be crushed and administered with food or fluids</p> <p>Use a calibrated measuring device for liquid preparations</p>

\*Refer to prescribing information for more complete information.

†Dosages given in the table may differ from those recommended by the manufacturers.

### Sources:

1. American College of Cardiology (ACC), American Heart Association (AHA), and the European Society of Cardiology (ESC). *ACC/AHA/ESC 2006 Guidelines for the Management of Patients With Atrial Fibrillation*. Washington, DC: American College of Cardiology.
2. Heart Rhythm Society. *AF360 Pocket Guide: Practical Rate and Rhythm Management of Atrial Fibrillation*. 2010, Washington, DC: Heart Rhythm Society.
3. *Tarascon Pocket Pharmacopoeia*®2012.