

Keep a Pulse on Landiolol for Arrhythmias

You'll hear **buzz about landiolol (Rapiblyk)**...a new IV beta-blocker for specific arrhythmias.

Landiolol is given as a fast-acting continuous infusion, similar to esmolol...and it's been used in Japan and Europe for years.

Expect it to be marketed for reducing heart rate in adults with atrial tachyarrhythmias...atrial fibrillation, atrial flutter, etc.

But don't expect this med to be added to your formulary right away.

Be aware that landiolol is similar to existing beta-blockers in terms of possible adverse effects (hypotension, bradycardia, etc) and contraindications, such as decompensated heart failure.

Know that landiolol is more beta-1 selective than esmolol with less effect on cardiac output and BP. Its "ultrapid" half-life (4 minutes) is also about half of esmolol's.

But point out that even though data show this may help control rhythms faster in some cases (post-cardiac surgery atrial fib, etc), it's unclear whether it changes other outcomes, such as mortality.

Share that landiolol is only indicated to be used for less than 24 hours...plus landiolol vials cost about 10 times more than esmolol.

If landiolol is added to your formulary, reserve it for ICU, ED, or surgery patients who aren't achieving cardiac goals or have side effects with typical meds (esmolol, diltiazem, etc).

When cardiac function is normal, feel comfortable starting landiolol at 9 mcg/kg/min...and titrate by 9 mcg/kg/min every 10 minutes to get to a goal heart rate (under 110 bpm for atrial fib, etc).

On the other hand, start low at 1 mcg/kg/min if there's poor cardiac function (heart failure, etc)...and titrate by 1 mcg/kg/min every 15 minutes. Don't exceed 36 mcg/kg/min...regardless of cardiac status.

Standardize your pharmacy's dispensing workflow for landiolol.

During prep, reconstitute each vial using 50 mL of normal saline or dextrose 5%...ideally from a 50 mL bag...to make a 5.6 mg/mL solution.

Then transfer the med back to the 50 mL bag OR an empty syringe. You can also hang and infuse the vial itself...but you need to dispense it with a hanging device that is NOT included.

Note its stability is only 4 hrs with NS versus 48 hrs with D5W.

Be prepared to transition patients off landiolol to a po beta-blocker using tips in our Atrial Fibrillation Pharmacotherapy chart.

Then check out and share our landiolol quick skim graphic for a snapshot view of dosing, administration, side effects, and more.

Key References:

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