

Ivabradine



PLAY PICMONIC

Mechanism of Action

Inhibition If-channels (funny channels) in sinus node

[Inhibiting-chains on Funny-Face with Sinus-spark-pug](#)

The effect of Ivabradine is based on the selective and specific inhibition of the so-called funny channels (If channels) in the sinus node, which regulate the heart rate. The blockage causes the heart rate to drop and leads, due to the lengthening of diastole, to an increased oxygen supply, reduction in myocardial oxygen consumption, and an increase in coronary blood flow.

Medical uses

Stable Angina Pectoris

[Stable-ground-Angel](#)

Ivabradine is indicated for the symptomatic treatment of chronic stable angina pectoris in adult patients who have contraindications for beta-blockers.

Heart Failure

[Dead-Heart](#)

In addition, Ivabradine is recommended for the treatment of chronic heart failure NYHA stages II to IV when the left ventricular ejection fraction is \leq 35%. Ivabradine is indicated in patients with intolerance to beta-blockers or is used additively if the heart rate is \geq 75/min. A prerequisite is a stable sinus rhythm.

ADVERSE EFFECTS

Luminous Phenomena, or Visual Brightness

[Bright-Lights](#)

Overall, 14.5% of patients taking Ivabradine experience luminous phenomena (described by patients as sensations of enhanced brightness in a fully maintained visual field).

Bradycardia

[Snail-heart](#)

In a large clinical trial, bradycardia (unusually slow heart rate) occurred in 2% and 5% of patients taking Ivabradine. This occurred at doses of 7.5 and 10 mg, respectively (compared to 4.3% in those taking atenolol).

Headache

Head-egg

2.6–4.8% of patients reported headaches.