# Flecainide

## Newborn use only

**2021**

| | |
|---|---|
| **Alert** | Use in consultation with a Paediatric Cardiologist.<br>Contraindicated in infants with reduced myocardial contractility.<br>Use caution in patients with congenital heart disease—increased potential for pro-arrhythmic effects.<br>Intravenous flecainide needs close cardiorespiratory monitoring |
| **Indication** | Treatment of paroxysmal supraventricular tachycardia, paroxysmal atrial fibrillation/flutter and life-threatening ventricular dysrhythmias as a second-line agent where tachycardia has been resistant to first-line agents. |
| **Action** | Decreases intracardiac conduction for all parts of the heart, with the greatest effect in the His-Purkinje system. It acts by blocking fast sodium channels. As a type Ic agent, it slows cardiac conduction and decreases contractility. |
| **Drug type** | Type Ic antiarrhythmic agent. |
| **Trade name** | Flecainide Sandoz Tablets; Flecatab Tablets; Tambocor solution for injection, Tambocor Tablets |
| **Presentation** | **IV**:<br>10 mg/mL injection.<br>**Oral**:<br>20 mg/mL suspension compounded by pharmacy.<br>50 mg, 100 mg tablets. |
| **Dose** | **Oral**:<br>Starting dose: 1 mg/kg/dose 8 or 12 hourly. Increase by 1 mg/kg/dose as necessary to achieve maintenance of sinus rhythm up to the maximum dose.<br>**IV**:<br>2 mg/kg over at least 10 minutes. |
| **Dose adjustment** | No information. |
| **Maximum dose** | 8 mg/kg/day |
| **Total cumulative dose** | |
| **Route** | Oral [preferred route] or IV |
| **Preparation (for IV administration)** | Draw up 1mL (10mg of flecainide) and add 9mL of glucose 5% to make a final volume of 10 mL with a concentration of 1mg/mL.<br>It can also be administered undiluted. |
| **Administration** | **Oral**:<br>Administer between milk feeds. Do not administer with milk. Milk decreases absorption of the drug.<br><br>IV:<br>Infusion over at least 10 minutes. Patient needs to be monitored very closely with the potential for an acute deterioration. |
| **Monitoring** | Initiate treatment in hospital with ECG monitoring in consultation with paediatric cardiologist.<br>When intravenous route is used, continuous ECG monitoring is mandatory.<br>Perform ECG when the dosage is increased – monitor QRS duration and dysrhythmia.<br>Therapeutic trough concentrations are not routinely required (200–1000 microgram/L). |
| **Contraindications** | Cardiogenic shock.<br>Hypersensitivity to flecainide.<br>Significant renal impairment (creatinine clearance < 50 mL/min).<br>Reduced left ventricular ejection fraction. |
| **Precautions** | Use with caution in patients with congenital heart disease or conduction system disease (right bundle branch block, with left hemiblock and without pacemaker; second- or third-degree atrioventricular block, without pacemaker; sick sinus syndrome [bradycardia-tachycardia syndrome]).<br>Milk decreases oral flecainide absorption. Consider decreasing oral dose or dose monitoring if change of milk diet.<br>Dosing adjustments are required in infants with renal impairment because 10% to 50% of a flecainide dose is excreted in the urine.<br>Use with caution in significant hepatic impairment. |
| **Drug interactions** | Use of any of the drugs prolonging QT interval (cisapride, amiodarone, clarithromycin, chloral hydrate, ciprofloxacin, erythromycin, octreotide, sodium phosphate, vasopressin, ketoconazole, fluconazole, |

| | |
|---|---|
| | hydrochlorothiazide, azithromycin, propranolol, digoxin, verapamil) with flecainide can lead to significant increase in QT interval. |
| **Adverse reactions** | **Adults:**<br>**Common**<br>Cardiovascular: Palpitations (6.1%); Gastrointestinal: Nausea (up to 10%); Neurological: Dizziness (18.9% to 30%), Headache (4.5% to 9.6%); Ophthalmological: Blurred vision (10% to 38%), Photopsia (up to 30%); Respiratory: Dyspnoea (up to 10.3%); Other: Fatigue (7.7%).<br>**Serious**<br>Cardiac arrest, cardiac dysrhythmia, cardiogenic shock, disorder of pacing function, electrocardiogram abnormalities, heart block, heart failure (new onset or worsening [up to 25.7%]), prolonged QT interval, sinus node dysfunction (1% to less than 3% ), syncope (1% to less than 3% ), torsades de pointes, ventricular fibrillation, ventricular tachycardia.<br>**Children:**<br>Dizziness, blurred vision and headache have been reported in children. |
| **Compatibility** | 5% glucose |
| **Incompatibility** | Incompatible with alkaline and chloride-containing solutions. |
| **Stability** | Diluted solution stable for 24 hours at 25$^{o}$C.<br>Oral suspension compounded by Pharmacy stable for up to 60 days. |
| **Storage** | |
| **Excipients** | Silicified microcrystalline cellulose, croscarmellose sodium, maize starch, magnesium stearate. |
| **Special comments** | |
| **Evidence** | Refer to full version. |
| **Practice points** | |
| **References** | Refer to full version. |

| **VERSION/NUMBER** | **DATE** |
|---|---|
| **Original 1.0** | **02/03/2017** |
| **Current 2.0** | 12/01/2021 |
| **REVIEW** | 12/01/2026 |

**Authors Contribution**

| | |
|---|---|
| Original author/s | David Osborn, Srinivas Bolisetty |
| Evidence Review | David Osborn |
| Expert review | Stephen Cooper, Jonathan Forsey |
| Nursing Review | Eszter Jozsa |
| Pharmacy Review | Wendy Huynh, Ushma Trivedi |
| ANMF Group contributors | Rajesh Maheshwari, Himanshu Popat, Nilkant Phad, Bhavesh Mehta, John Sinn, Jessica Mehegan, Michelle Jenkins, Thao Tran, Helen Huynh |
| Final editing and review of the original | Ian Whyte |
| Electronic version | Cindy Chen, Ian Callander |
| Facilitator | Srinivas Bolisetty |