# SOTALOL HYDROCHLORIDE

<table>
<thead>
<tr>
<th>Trade Name</th>
<th>Sotacor® Injection (Aspen)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class</td>
<td>Non-cardioselective beta blocker with class III anti arrhythmic activity</td>
</tr>
<tr>
<td>Mechanism of Action</td>
<td>Sotalol slows the heart rate and prolongs the duration of the cardiac action potential</td>
</tr>
<tr>
<td>Indications</td>
<td>Ventricular tachycardia, supraventricular tachycardia (Initiated under specialist supervision with ECG monitoring and measurement of corrected QT interval)</td>
</tr>
<tr>
<td>Contraindications</td>
<td>Asthma, Cardiac - right ventricular failure secondary to pulmonary hypertension, sinus bradycardia, congenital or acquired QT prolongation, torsades de pointes, Severe renal impairment, Hypokalaemia and/or hypomagnesaemia, Known hypersensitivity to sotalol hydrochloride or its excipients, Use with caution in patients with a history of allergy / bronchospasm</td>
</tr>
<tr>
<td>Supplied As</td>
<td>IV: 10mg/mL 4mL ampoule, Oral: 10mg/mL (repacked by pharmacy)</td>
</tr>
<tr>
<td>Dilution</td>
<td>IV: 0.9% Saline, Total Volume, Concentration</td>
</tr>
<tr>
<td></td>
<td>Vial</td>
</tr>
<tr>
<td></td>
<td>10mg (1mL)</td>
</tr>
<tr>
<td></td>
<td>If the dose volume is &lt;0.5mL then will need to further dilute before infusing via the T34 pump (see T34 protocol)</td>
</tr>
<tr>
<td>Oral: N/A</td>
<td></td>
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<tr>
<td>Dosage</td>
<td>IV: 0.5 to 1.5mg/kg/dose.</td>
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<tr>
<td></td>
<td>Oral: 1 to 2mg/kg/dose up to a max of 4mg/kg/dose if required</td>
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<tr>
<td>Interval</td>
<td>8 hourly</td>
</tr>
<tr>
<td>Administration</td>
<td>IV: Slow IV infusion over 10minutes, Not recommended to be given by IM, Direct IV or Continuous infusion</td>
</tr>
<tr>
<td>Compatible With</td>
<td>Sodium chloride 0.9%, Dextrose 5%</td>
</tr>
<tr>
<td>Incompatible With</td>
<td>Do not mix with any other medications</td>
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</tbody>
</table>
## Interactions

<table>
<thead>
<tr>
<th>Interaction</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amiodarone</td>
<td>Bradycardia and hypotension – mechanism uncertain</td>
</tr>
<tr>
<td>Diuretics</td>
<td>Possible increase in risk of torsades de pointes due to hypomagnesaemia or hypokalaemia.</td>
</tr>
<tr>
<td>Flecainide</td>
<td>Bradycardia, AV block, cardiac arrest.</td>
</tr>
<tr>
<td>Chlorpromazine</td>
<td>Hypotension</td>
</tr>
<tr>
<td>Other drugs</td>
<td>That may increase the risk of side adverse effects if given in combination with sotalol include; other beta blockers, calcium channel blockers, digoxin, other antiarrhythmic drugs and drugs known to cause QTc prolongation eg: erythromycin, lignocaine, salbutamol</td>
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</tbody>
</table>

## Monitoring

<table>
<thead>
<tr>
<th>Method</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECG monitoring</td>
<td></td>
</tr>
</tbody>
</table>

## Stability

<table>
<thead>
<tr>
<th>Route</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>IV</td>
<td>Discard any unused portion of the vial immediately after use.</td>
</tr>
<tr>
<td>Oral</td>
<td>7 days in the fridge at 2-8°C</td>
</tr>
</tbody>
</table>

## Storage

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<thead>
<tr>
<th>Route</th>
<th>Details</th>
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<tbody>
<tr>
<td>Unopened vials</td>
<td>Room temperature,</td>
</tr>
<tr>
<td>Repacked solution for oral use</td>
<td>7 days in the fridge</td>
</tr>
</tbody>
</table>

## Adverse Reactions

<table>
<thead>
<tr>
<th>Reaction</th>
<th>Details</th>
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<tbody>
<tr>
<td>Proarrhythmic effect (incidence ~10%)</td>
<td>SA block, AV block, torsades de pointes, ventricular ectopic activity</td>
</tr>
<tr>
<td>Fatigue, dyspnoea, headache, hypotension, rash, diarrhoea, vomiting</td>
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## Metabolism

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<tbody>
<tr>
<td>Sotalol is minimally metabolised in the liver. It is predominantly (75%) excreted by the kidneys as unchanged drug.</td>
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</table>

## Comments

<table>
<thead>
<tr>
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<th>Details</th>
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<tr>
<td>Excessive bradycardia caused by sotalol infusion can be reversed using Atropine - see profile for Atropine Sulphate for details.</td>
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</tr>
<tr>
<td>If possible oral sotalol should be taken on an empty stomach.</td>
<td></td>
</tr>
</tbody>
</table>

## References

1. BNF for Children 2007
2. ADHB New Born Services Drug Protocol
3. Micromedex
5. NZHPA Notes on Injectable Drugs 5th Edition

## Updated By

A Lynn and B Robertshawe June 2008
A Lynn, B Robertshawe, F Robertson May 2009 (new pumps)
A Lynn, B Robertshawe September 2009, June 2010 Guardrail off
A Lynn, B Robertshawe Dec 2012 (re-order profile)