**AMIODARONE - PRESCRIBING AND ADMINISTRATION OF INTRAVENOUS AMIODARONE IN CRITICAL CARE AREAS, ST GEORGE HOSPITAL**

This clinical business rule is **NOT** a standing order.

*Only applies in the following units/departments – Intensive Care Units 1 and 2 (ICU and ICU2), Cardiothoracic Intensive Care Unit (CICU) Coronary Care Unit (CCU) and Emergency (ED).*

| Cross references | NSW Health Medication Handling in NSW Public Hospitals PD2013_043  
Australian Commission on Safety and Quality in Healthcare  
Guidelines for using the National Inpatient Medication Chart 7/2009  
Medications_Intravenous_SGS_HHS_CLIN115  
Labelling injectable medications SGSHHS_CLIN191 |
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1. Accreditation requirements</td>
<td>Amiodarone must be prescribed by a Medical Officer and be prepared and administered by a Registered Nurse or Medical officer</td>
</tr>
<tr>
<td>2. Risk rating</td>
<td>Medium</td>
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</tbody>
</table>
| 3. Description Presentation | Amiodarone is a class III antiarrhythmic  
It decreases sinus node and junctional automaticity, slows atrioventricular (AV) and bypass tract conduction and prolongs refractory period of myocardial tissues (atria, ventricles, AV node and bypass tract).  
150mg / 3mL. ampoules  
Store below 25deg. C. Do not refrigerate. Protect from light |
| 4. Indications | • Supraventricular and ventricular tachycardia  
• Recurrent ventricular fibrillation  
• Atrial fibrillation  
• Atrial Flutter  
• Wolff-Parkinson-White syndrome |
| 5. Contraindications / Precautions | **CONTRAINDICATIONS** see product information  
• Hypersensitivity to amiodarone or iodine  
• Sinus bradycardia or SA block  
• Cardiogenic shock (unless artificial pacemaker present)  
• Second or third degree AV block (unless artificial pacemaker present)  
**PRECAUTIONS** see product information  
• Patients receiving other antiarrhythmics  
• Pulmonary disease Thyroid dysfunction Hepatic dysfunction  
• Heart failure  
• Concomitant therapy with beta blockers may potentiate bradyarrhythmias  
• Concomitant therapy with digoxin may elevate serum digoxin levels  
**ADVERSE REACTIONS** see product information  
Prolongation of QT interval and polymorphic ventricular tachycardia  
torsades de pointes, bradycardia, photosensitivity, nausea, hyperthyroidism and hypothyroidism, elevations of hepatic enzymes, tremor, insomnia, headaches, dizziness, vertigo, fatigue, sleep disorders, vivid dreams,
nightmares, paraesthesiae, gait abnormalities, abnormal nerve conduction, corneal microdeposits, pulmonary toxicity, skin rashes increases plasma digoxin concentrations, increase effects of warfarin.

6. Process

6.1 Introduction
- IV Amiodarone may only be administered in a critical care area with ECG monitoring.

6.2 Clinical Considerations
- ECG monitoring in a critical care area
- Concomitant therapy with digoxin may elevate serum digoxin levels
- Baseline 12 lead ECG
- Baseline troponin, electrolytes, LFTs and thyroid function

6.3 Preparation and Administration Guidelines
- Administration of Amiodarone through a peripheral vein is associated with a very high incidence of thrombophlebitis. A central line should be used when high concentrations (greater than 2mg/ml) are administered or rapid infusion rates anticipated.
- If using peripheral line: use 18gauge cannula in large vein – observe cannula site and document patency, appearance etc each shift.
- Amiodarone is absorbed onto PVC - solutions for continuous infusion that will exceed 2 hours must be prepared in glass bottles, rigid PVC or non-PVC burettes.
- Amiodarone requires a dedicated infusion line and must not be administered with other drugs
- Amiodarone does not contain any preservative and should be prepared immediately prior to use and used within 12 hours
- Use of an inline 0.2 micron filter is recommended

**IV FLUID COMPATABILITY:** Dextrose 5% ✓ **NOT COMPATABLE** with Sodium chloride 0.9% X
### ADMINISTRATION

#### PERIPHERAL line administration - Amiodarone

<table>
<thead>
<tr>
<th></th>
<th>Preparation</th>
<th>Administration</th>
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<tbody>
<tr>
<td>1. Loading Dose</td>
<td>Amiodarone 300mg made up to 150mls with 5% Glucose</td>
<td>Infuse over 1 hour</td>
</tr>
<tr>
<td>(use burette)</td>
<td></td>
<td></td>
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<tr>
<td>2. Continuous infusion</td>
<td>Amiodarone 450mg made up to 250mls with 5% Glucose</td>
<td>Infuse at 21mls /hour</td>
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<tr>
<td>(use glass bottle)</td>
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**Important Notes**
- A glass bottle (for continuous infusion only) and PVC free tubing with 0.2 micron in line filter to be used
- Maximum dose is 1200mg over 24 hours
- Solution stable for 12 hours only
- Peripheral line administration of intravenous amiodarone is associated with a high incidence of thrombophlebitis. To minimise risk, use 18 gauge cannula in large vein - observe & document each shift.

#### CENTRAL line administration - Amiodarone

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<tr>
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<th>Preparation</th>
<th>Administration</th>
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<tbody>
<tr>
<td>3. Loading Dose</td>
<td>Amiodarone 300mg made up to 50mls with 5% Glucose</td>
<td>Infuse over 30 minutes</td>
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<tr>
<td>use syringe driver</td>
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<tr>
<td>4. Continuous infusion</td>
<td>Amiodarone 450mg made up to 50mls with 5% Glucose</td>
<td>Infuse at 4.2mls /hour</td>
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<tr>
<td>use syringe driver</td>
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**Important Notes**
- PVC free tubing to be used with 0.2 micron in line filter
- Maximum dose is 1200mg over 24 hours
- Solution stable for 12 hours only
- Delivered via syringe driver
7. Keywords | Amiodarone, class III antiarrhythmic,

8. Functional Group | ICU

eMIMS, March 2011. CMP Medica Australia Pty Ltd, Sydney

10. Consumer Advisor Group (CAG) approval of patient information brochure (or related material) | N/A

11. Implementation and Evaluation plan | In-service
 SGSHHS intranet page

12. Knowledge evaluation | Q1. Amiodarone administration is associated with a high incidence of thrombophlebitis. What measures reduce this risk?
- A central line should be used when high concentrations (greater than 2mg/ml) are administered or rapid infusion rates anticipated.
- If using peripheral line: use 18gauge cannula in large vein – observe cannula site and document each shift.
- Use of 0.2 micron in line filter

Q2. What are the contraindications to administering intravenous Amiodarone?
- Hypersensitivity to Amiodarone or iodine
- Sinus bradycardia or SA block
- Cardiogenic shock (unless artificial pacemaker present)
- Second or third degree AV block (unless artificial pacemaker present)

Q3. What are the CLINICAL CONSIDERATIONS when administering intravenous Amiodarone?
- ECG monitoring essential.
- Can only be administered in a critical care area
- Initial 12 lead ECG needs to be attended prior to commencing infusion
- Blood levels need to be assessed including electrolytes, LFTs and Thyroid function levels prior to commencement of the infusion and regularly while the infusion is in progress.
### Approval for (Insert Clinical Business Rule Title) * N/A where appropriate

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Name/position</th>
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<tbody>
<tr>
<td>*Nursing/Midwifery Co-Director</td>
<td>J. Cosgrove, NCD Critical Care</td>
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<tr>
<td>*Nursing/Midwifery Co-Director</td>
<td>C. Day, NCD Medicine</td>
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<tr>
<td>*Medical Co-Director approval</td>
<td>Dr Kush Deshpande, Deputy Director ICU, SGH</td>
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<tr>
<td>*Medical Co-Director approval</td>
<td>Trevor Chan, Director of Emergency, SGH</td>
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<tr>
<td>*Drug and Therapeutics Committee (SGH)</td>
<td>A/Prof W. Liauw, Chair</td>
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<tr>
<td>Executive Sponsor</td>
<td>D. Fowler, Clinical Group Manager, Critical Care</td>
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### Contributors to CIBR development

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
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<tbody>
<tr>
<td>Sarah Jones</td>
<td>ICU CNC</td>
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<td>Glenn Paull</td>
<td>Cardiology CNC</td>
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<tr>
<td>Bernadette Romero</td>
<td>ED CNC</td>
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<td>Alana Clements</td>
<td>ED CNC</td>
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### Revision and approval history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision number</th>
<th>Author (Position)</th>
<th>Revision due</th>
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<tr>
<td>06/2012</td>
<td>0</td>
<td>Jocelyn Allen</td>
<td>2014</td>
</tr>
<tr>
<td>Dec 2013</td>
<td>1</td>
<td>Sarah Jones CNC ICU</td>
<td>December 2016</td>
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### Director of Operations Ratification

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<thead>
<tr>
<th>Name</th>
<th>Signature</th>
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<tbody>
<tr>
<td>Cath Whitehurst</td>
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