

## ADENOSINE

### ACTION and USES

Management of paroxysmal supraventricular tachycardia that has failed to respond to vagal stimulation. (Use under cardiologist advice).

### DOSAGE

Start with a rapid dose of 150microgram/kg IV while monitoring the ECG continuously.

Further bolus doses can be given if necessary every 1- 2 minutes increasing dose by 50-100micrograms/kg until tachycardia terminated or a maximum single dose of 300microgram/kg given.

### ADMINISTRATION

By rapid IV bolus over < 2 seconds into central or large peripheral vein, followed by a rapid flush. The solution MUST be clear at the time of use.

### RECONSTITUTION

Adenosine is available in a 2ml vial containing 3mg/ml. **It must be diluted further before use.**

Adenosine 1mg/ml=1000microgram/ml

Add 1ml of adenosine 3mg/ml to 2ml of sodium chloride 0.9%. Shake well to mix.

### INCOMPATIBILITIES

Do not mix with any other drugs or diluent (no data available).

### STORAGE

The vials contain no preservative so must be discarded after opening. Store unopened vials at room temperature. DO NOT REFRIGERATE because crystallisation will occur.

### MONITORING

Continuous ECG, BP, heart rate and respiratory rate. It can cause heart block and bradycardia but these are transient as its half-life is short (< 10 seconds). It is contra-indicated in reversible airway obstruction caused by asthma or BPD. Caffeine and theophylline can reduce its activity. The injection is painful so administer by central line where possible. Transient flushing can occur.

### Main Author

Jenny Carson, Lead Directorate Pharmacist

Sherry Wright, Lead Directorate Pharmacist

### Other Professionals Consulted

Local Pharmacy meeting

**Guideline Title**

SCRH\_Adenosine\_Neonates\_30 05 13

**Implementation / Review Dates**

Implementation date – 12/06/13

Next Review – 12/06/16