

Initial Date: 07/19/2023

Revised Date:

Section: 9-11R

## **Adenosine**

**Pharmacological Category:** Antiarrhythmic Agent, Miscellaneous; Diagnostic Agent

**Routes:** IV rapid push

### **Indications:**

1. Stable but symptomatic supraventricular tachycardia that is a regular and narrow rhythm (i.e., SVT, A-Flutter) that does not convert with approved vagal maneuver.

### **Contraindications:**

1. Patients with diagnosed sinus node dysfunction (e.g., sick sinus syndrome, WPW syndrome) unless pacemaker is present and functioning
2. Patients with diagnosed or observed high-grade AV block (i.e., 2<sup>nd</sup> or 3<sup>rd</sup> degree heart block) unless pacemaker is present and functioning
3. Patients with diagnosed asthma

### **Precautions:**

1. Be prepared for fluid resuscitation if required
2. Monitor for polymorphic V-Tach
3. Be prepared for full resuscitation efforts.

### **Expected effects:**

1. Slowed conduction through the AV node
2. Conversion to NSR

### **Side effects:**

1. Hypotension – may produce profound vasodilation
2. Flushing
3. Dyspnea
4. Light-headedness
5. Nausea
6. Feeling of impending doom
7. Seizures

### **Notes:**

1. Use most proximal injection site
2. Follow immediately with NS flush
3. Record using cardiac monitor during and after administration

*Michigan*  
**MEDICATION SECTION**  
ADENOSINE

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**Dosing: TACHYCARDIA (Adult)**

Indication: Symptomatic SVT

Adults administer:

1. Adenosine 6 mg rapid IV push followed immediately with 20 mL NS flush
2. If conversion does not occur, and the rhythm persists, administer adenosine 12 mg rapid IV push followed immediately with 20 mL NS flush

**Dosing: PEDIATRIC TACHYCARDIA**

Indication: Symptomatic SVT

Pediatrics administer:

1. According to MI MEDIC cards
2. If MI MEDIC cards are not available administer:
  - a. Adenosine 0.1 mg/kg (max dose 6 mg) rapid IV push immediately followed by 10 mL flush
  - b. If conversion does not occur, and the rhythm persists administer 0.2 mg/kg \_\_\_\_  
\_\_\_\_(max of 12 mg) rapid IV push immediately followed by 10 mL NS flush

Used in the Following Protocols

Tachycardia (Section 5 Adult Cardiac)

Pediatric Tachycardia (Section 6 Pediatric Cardiac)