Adenosine Intravenous for Adults

Who can administer

Administration RESTRICTED - see Appendix 1

Important information

- See monitoring requirements (below and overleaf)
- AdenoSCAN is only to be used in the Cardiac Angio laboratory
- While both preparations (AdenoCOR and AdenoSCAN) contain the same concentration of drug, they are licensed for different indications. See under ' dose' for more information
- Adenoscan is an unlicensed preparation in Ireland

Available preparations

AdenoCOR 6mg per 2mL vial

Adenosine 6mg per 2mL vial (Focus pharmaceuticals) - unlicensed preparation- stocked while licensed (AdenoCOR) version is in short supply (June 2023)

AdenoSCAN 30mg per 10mL vial

Reconstitution

Already in solution

Infusion fluids

Not required - product ready for use

Methods of intravenous administration

Intravenous bolus (for all uses except for cardiac angio)

- **Using AdenoCOR,** give as a rapid IV bolus over 2 seconds
- Inject as proximally as possible and follow with a rapid flush of Sodium chloride 0.9%

Intermittent intravenous infusion (in cardiac angio only)(administer using an electronically controlled infusion device)

- **Using AdenoSCAN,** administer undiluted, at a rate of 140microgram/kg/minute for six minutes.
- Give the radionuclide into a separate venous site, after the first 3 minutes of the Adenoscan infusion

Dose in adults

AdenoCOR

First dose

- Give 3mg, over two seconds, directly into a vein or an IV line, using the most proximal line available.
- Inject as proximally as possible and follow with a rapid flush of Sodium chloride 0.9%
- See under 'Further information' overleaf re dose adjustments required if patient is on dipyridamole

Subsequent doses

- If first dose of 3mg is ineffective within one to two minutes, a further 6mg dose should be given as a rapid IV bolus
- If the second dose is ineffective within one to two minutes, a further 12mg dose should be given as a rapid IV bolus
- Additional or higher doses are not recommended
- Patients who develop high-level AV block at a particular dose should not be given further dosage increments

AdenoSCAN for Cardiac Angio only (use undiluted)

- Administer 140microgram/kg/minute for six minutes using an infusion pump (give the radionuclide into a separate venous site, after the first three minutes of the Adenoscan infusion)
- Care should be taken if the patient is currently receiving dipyridamole - see under 'further information' overleaf

Dose of 140mcg/kg/MINUTE using Adenoscan 30mg/10ml solution- rate in ml/HOUR																
Weight	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125
Rate (ml/HOUR)	140	154	168	182	196	210	224	238	252	266	280	294	308	322	336	350

Monitoring

- Heart rate and blood pressure should be monitored very closely
- Monitor respiratory rate
- For AdenoSCAN: to avoid an adenosine bolus effect, blood pressure should be measured in arm opposite infusion
- Continuous ECG monitoring is essential during adenosine administration
- Cardiorespiratory resuscitation equipment must be available for immediate use

Further information

- Dipyridamole may markedly potentiate the action of adenosine, and therefore concomitant use should be avoided if possible
- If dipyridamole cannot be discontinued at least 24 hours before the adenosine (longer for Dipyridamole Slow Release formulations), the initial adenosine dose should be greatly reduced. (reduced two to four-fold)[(ref 1)]
- Aminophylline, theophylline and other xanthines can inhibit the effect of adenosine and should be avoided for 24 hours prior to use of adenosine
- Food and drinks containing xanthines (tea, coffee, chocolate and cola) should be avoided for at least 12 hours prior to use of Adenosine.

Storage

- Store below 25^{0}C
- Do not refrigerate

References

Adenocor SPC October 2023

Adenoscan UK SPC 18/08/2023

1. Stockley's Drug interactions - checked online 30/01/2025

Therapeutic classification

Drugs for arrhythmias

BNF
Arrythmias