DOBUTamine

INTRAVENOUS DRUG THERAPY MANUAL

OTHER NAMES	CLASSIFICATION	ALERTS
Dobutrex	Sympathomimetic	HIGH ALERT MEDICATION INDEPENDENT DOUBLE CHECK for continuous infusion

PREPARATION and ADMINISTRATION

Reconstitution
Not applicable

IV Direct	Intermittent Infusion	Continuous Infusion
Not applicable	**IV Bag (large volume pump)**	**IV Bag (large volume pump)**
	Not applicable	**Standard preparation** Diluent: D5W, NS 1 mg/mL (250 mg/250 mL)
	Syringe (syringe pump)	**Syringe (syringe pump)**
	Not applicable	**Standard preparation** Diluent: D5W, NS 8 mg/mL (400 mg/50 mL)
Requirements and Monitoring		
Not applicable	Not applicable	Blood pressure via cuff Cardiac monitor Infusion device Peripheral administration, consistent with guideline, permitted for a maximum of 12 h Peripheral Vasopressor Inotrope Guideline

INDICATIONS

- For the treatment of cardiac decompensation due to depressed contractility because of organic heart disease (e.g., congestive heart failure, cardiogenic shock, cardiomyopathy, etc.) or following cardiac surgical procedures in which parenteral inotropic support is required.

ADVERSE EFFECTS

- Increased systolic blood pressure, tachycardia, premature ventricular contractions (dose related), ectopic beats, ventricular tachycardia (rare), chest pain, palpitations, dyspnea and vasoconstriction (particularly in patients recently treated with beta adrenergic blockers).
- Nausea, vomiting, bad taste.
- Headache, paresthesias.
- Local pain, inflammation, phlebitis (from infiltration). If extravasation occurs, refer to Extravasation Policy Link.
- Hypokalemia.
- Skin rash, fever, eosinophilia, bronchospasm.

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DOSAGE

- Dosage units: continuous infusion–mcg/kg/min.
- Initial dose: 2.5 mcg/kg/minute. Adjust in increments of 2.5–5 mcg/kg/min every 5–10 min to achieve/maintain target cardiac index or mean arterial pressure (MAP). Heart rate, blood pressure, urine output and presence of ectopic activity may also be used to adjust dose.
- Usual dose required to increase cardiac output: 2.5–10 mcg/kg/minute. Doses as low as 0.5 mcg/kg/min have been used. 40 mcg/kg/min is considered the maximum dose.
- Infusion should be discontinued gradually by reducing the rate by 2.5 mcg/kg/min every 20–30 min while assessing patient for hemodynamic stability.
- Excessive dosage results in excessive BP elevation and/or tachycardia. Due to the short half-life of DOBUTamine a reduction in dose, or temporary discontinuation, is usually sufficient to restore parameters to acceptable levels.
- Tolerance to DOBUTamine may develop with prolonged infusions; greater than 72 h.

COMPATIBILITY, STABILITY

- Compatible at Y-site with D5W, NS, dextrose-saline combinations, lactated Ringer's; compatible in concentrations up to 5 mg/mL with Plasma-Lyte A.
- Continuous infusions at a concentration of 1 mg/mL in D5W or NS (IV bag) or 8 mg/mL in D5W or NS (syringe) may be administered for up to 24 h at room temperature.
- Pink colour change may occur due to oxidation but does not result in significant loss of potency over 24 h.
- Single use vial. Discard unused portion.
- Vial contains sodium metabisulfite.

DOSAGE FORMS

- 12.5 mg/mL; 20 mL vial.

MISCELLANEOUS

- Hypovolemia should be corrected prior to use.

LIBRARIES

- Searchable Drug Library Document

REFERENCES

McEvoy GK, editor. AHFS drug information. Bethesda (MD): American Society of Health-System Pharmacists; 2016.
Dobutamine Injection product monograph. Boucherville (QC): Sandoz Canada Inc; 2012 Apr 24.
Cadario BJ, Leathem AM, editors. Drug information reference. Vancouver (BC): BC Drug and Poison Information Centre; 2003.
Trissel LA. Handbook on injectable drugs. Bethesda (MD): American Society of Health-System Pharmacists; 2017.
Lacy CF, Armstrong LL, Goldman MP, et al, editors. Drug information handbook. Hudson (OH): Lexi-Comp Inc; 2017–2018.