Critical Care Guidelines FOR CRITICAL CARE USE ONLY



DOBUTAMINE

PRESENTATION:	Vials containing 250mg in 50ml (5mg/ml) dobutamine
INDICATION:	Inotropic support in severe heart failure, cardiogenic shock and septic shock
DOSE & ADMINISTRATION:	ICU STANDARD INTRAVENOUS INFUSION
	50ml of ready to use (UNDILUTED) dobutamine 250mg in 50ml. Draw up into a syringe and administer via a syringe pump (perfusor).
	Initially, 2.5microgram/kg/min (2.1ml/hour for a 70kg patient) titrated to required level. Tachycardia may limit therapy.
	Doses up to 40microgram/kg/min (33.6ml/hr for a 70kg patient) have been used. Infuse through a central venous catheter.

Example calculation table using a 250mg in 50ml (5mg in 1ml) dobutamine dilution: the following table gives examples of the infusion rate (ml per hour) required for different doses and patient weights.

Dosage	Patient's body weight					
(microgram/kg/minute)	40kg	60kg	80kg	100kg	120kg	140kg
2.5	1.2ml/hr	1.8ml/hr	2.4ml/hr	3ml/hr	3.6ml/hr	4.2ml/hr
5	2.4ml/hr	3.6ml/hr	4.8ml/hr	6ml/hr	7.2ml/hr	8.4ml/hr
7.5	3.6ml/hr	5.4ml/hr	7.2ml/hr	9ml/hr	10.8ml/hr	12.6ml/hr
10	4.8ml/hr	7.2ml/hr	9.6ml/hr	12ml/hr	14.4ml/hr	16.8ml/hr
15	7.2ml/hr	10.8ml/hr	14.4ml/hr	18ml/hr	21.6ml/hr	25.2ml/hr

NB: If the rate includes a 0.05 figure, the rate should be rounded UP to the next decimal place when setting the infusion pump, e.g. 5.25ml/hour should be rounded up to 5.3ml/hour

CONCENTRATION:	5mg/ml
STABILITY:	Physically and chemically stable for 24hours at room temperature
ADDITIONAL INFORMATION:	Do NOT dilute
	Dose should be gradually decreased when discontinuing therapy. Do not allow the infusion to run out. A new infusion should be prepared promptly when the previous one is due to finish.
	Tolerance may develop if continues longer than 72 hours, requiring an increase in doses.

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Solutions may have a pink colouration which may become darker with time, resulting from a slight oxidation of the drug. There is no significant loss of drug potency within the recommended storage time for solution of the drug.
Protect ampoules and vials from light in the outer container.

References:

- **1.** Dobutamine 5mg/ml solution for infusion. Hameln. Summary of Product Characteristics. https://www.medicines.org.uk/emc/product/6462/smpc Accessed 08/09/2022
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- 3. Dobutamine, The UK Injectable Medicine Guide, Adopted for use in NHS Lothian, Updated April 2019, Accessed February 2020.
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