

DOBUTAMINE

Indication	To increase cardiac output in shock states																										
Dose	2.5-20microgram/kg/minute (Dose range 0.5–40 micrograms/kg/minute has been used) Start at an initial rate of 2.5microgram/kg/min and increase in 2.5microgram/kg/minute increments.																										
Preparation	Each 50ml vial contains 250mg dobutamine (5mg/ml) For peripheral use: 500mg in 250mls 2 milligrams per ml: max concentration peripherally <ul style="list-style-type: none"> • Withdraw 100mls fluid from a 250ml bag of 0.9% sodium chloride or 5% glucose. • Draw up 100mls of dobutamine (250mg in 50mls) and add to bag. • Label bag with contents, date of preparation and initials of staff preparing and checking infusion. FOR CENTRAL USE ONLY: Draw up 250mg (50ml) of Dobutamine into a 50ml syringe																										
Administration	Standard strength solutions may be given via peripheral or central line using the Baxter Colleague program. High Strength solutions must only be infused via a central line.																										
Shelf-life	24 hours at room temperature																										
Additional information	Contact the ward or oncall Pharmacist if unsure of the calculations Glucose 5% can be used as a diluent if hypernatraemia is a problem Tachycardia is the most common adverse reaction																										
Sample Label	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: yellow;"> <th colspan="4" style="text-align: center;">DRUGS ADDED TO THIS INFUSION</th> </tr> </thead> <tbody> <tr> <td colspan="3"> PATIENT <i>A. Patient (A. Number)</i> </td> <td> WARD <i>CCU</i> </td> </tr> <tr> <td> DRUG <i>Dobutamine</i> </td> <td> AMOUNT <i>500mg</i> </td> <td> ADDED BY </td> <td> CHECK BY </td> </tr> <tr> <td colspan="2"> <i>In 250ml sodium chloride 0.9%/glucose 5%</i> </td> <td> <i>2mg/ml</i> </td> <td> </td> </tr> <tr> <td> DATE ADDED TIME ADDED </td> <td colspan="2"> EXP. DATE EXP. TIME </td> <td> BATCH No. </td> </tr> <tr style="background-color: yellow;"> <td colspan="4" style="text-align: center;">DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS</td> </tr> </tbody> </table>			DRUGS ADDED TO THIS INFUSION				PATIENT <i>A. Patient (A. Number)</i>			WARD <i>CCU</i>	DRUG <i>Dobutamine</i>	AMOUNT <i>500mg</i>	ADDED BY	CHECK BY	<i>In 250ml sodium chloride 0.9%/glucose 5%</i>		<i>2mg/ml</i>		DATE ADDED TIME ADDED	EXP. DATE EXP. TIME		BATCH No.	DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS			
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Dobutamine Dose Checker
(Only for use with 2mg per ml Infusions)
 All rates are in ml per hour.

Ideal Body Weight (kg)	Dose of dobutamine in micrograms per kg per minute											
	Increasing inotropic effect →											
	2.5	5	7.5	10	12.5	15	17.5	20	22.5	25	27.5	30
	All rates below in ml per hour (Only valid for 2mg/ml solutions)											
45	3.4	6.8	10.1	13.5	16.9	20.3	23.6	27.0	30.4	33.8	37.1	40.5
50	3.8	7.5	11.3	15.0	18.8	22.5	26.3	30.0	33.8	37.5	41.3	45.0
55	4.1	8.3	12.4	16.5	20.6	24.8	28.9	33.0	37.1	41.3	45.4	49.5
60	4.5	9.0	13.5	18.0	22.5	27.0	31.5	36.0	40.5	45.0	49.5	54.0
65	4.9	9.8	14.6	19.5	24.4	29.3	34.1	39.0	43.9	48.8	53.6	58.5
70	5.3	10.5	15.8	21.0	26.3	31.5	36.8	42.0	47.3	52.5	57.8	63.0
75	5.6	11.3	16.9	22.5	28.1	33.8	39.4	45.0	50.6	56.3	61.9	67.5
80	6.0	12.0	18.0	24.0	30.0	36.0	42.0	48.0	54.0	60.0	66.0	72.0
85	6.4	12.8	19.1	25.5	31.9	38.3	44.6	51.0	57.4	63.8	70.1	76.5
90	6.8	13.5	20.3	27.0	33.8	40.5	47.3	54.0	60.8	67.5	74.3	81.0
95	7.1	14.3	21.4	28.5	35.6	42.8	49.9	57.0	64.1	71.3	78.4	85.5
100	7.5	15.0	22.5	30.0	37.5	45.0	52.5	60.0	67.5	75.0	82.5	90.0
105	7.9	15.8	23.6	31.5	39.4	47.3	55.1	63.0	70.9	78.8	86.6	94.5
110	8.3	16.5	24.8	33.0	41.3	49.5	57.8	66.0	74.3	82.5	90.8	99.0

Written by Dominic Moore (Advanced Pharmacist –Specialist Medicine) August 2016
 Updated by: Dominic Moore (Lead Pharmacist – Commissioning) June 2018
 Reviewed by:
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 Medical Division 15/3/19

For review September 2020

References

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 Trissel L.A. Handbook on Injectable Drugs. 16th Edition. 2010
 UKCPA Minimum infusion volumes document. 2006