

Atracurium

Indication	Muscle relaxant to facilitate intubation and mechanical ventilation																				
Dose	Initial bolus dose of 0.3-0.6mg/kg followed by an infusion of 5-10mcg/kg/minute (although doses up to 30microgram/kg/minute may be used in ICU) All doses should be based on Ideal body weight.																				
Preparation	Each ampoule contains 250mg in 25ml of atracurium besilate (10mg/ml.) Draw 50ml of atracurium into a 50ml syringe using a filter needle.																				
Administration	Continuous infusion via a peripheral or central line																				
Shelf-life	24 hours in a refrigerator																				
Common Compatibility Issues	Atracurium is considered compatible with fentanyl or midazolam Atracurium is incompatible with aminophylline or propofol. Please see ICU compatibility chart for more information.																				
Additional information	Neostigmine is sometimes used as a reversal agent. This is usually in conjunction with an anticholinergic such as atropine or glycopyronium to avoid the bradycardia caused by neostigmine. Patients must be appropriately sedated before starting an atracurium infusion. Please check sedation guideline. Effects of atracurium wear off after 30-90minutes from cessation of the infusion. The effect can be potentiated by gentamicin, vancomycin and diuretics Atracurium can cause histamine release resulting in bronchospasm for asthmatic patients. Give the dose slowly over 1 to 2 minutes																				
Sample Label	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="4" style="background-color: yellow; text-align: center;">DRUGS ADDED TO THIS INFUSION</th> </tr> <tr> <td colspan="3" style="font-size: small;">PATIENT <i>A. Patient (A. Number)</i></td> <td style="font-size: small;">WARD <i>ICU</i></td> </tr> <tr> <td style="font-size: small;">DRUG <i>Atracurium (50ml Neat)</i></td> <td style="font-size: small;">AMOUNT <i>500mg (10mg/ml)</i></td> <td style="font-size: small;">ADD BY</td> <td style="font-size: small;">CHECKED BY</td> </tr> <tr> <td style="font-size: small;">DATE ADDED TIME ADDED</td> <td style="font-size: small;">EXP. DATE EXP. TIME</td> <td colspan="2" style="font-size: small;">BATCH No.</td> </tr> <tr> <th colspan="4" style="background-color: yellow; text-align: center;">DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS</th> </tr> </table>	DRUGS ADDED TO THIS INFUSION				PATIENT <i>A. Patient (A. Number)</i>			WARD <i>ICU</i>	DRUG <i>Atracurium (50ml Neat)</i>	AMOUNT <i>500mg (10mg/ml)</i>	ADD BY	CHECKED BY	DATE ADDED TIME ADDED	EXP. DATE EXP. TIME	BATCH No.		DISCONTINUE IF CLOUDINESS OR PRECIPITATE DEVELOPS			
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For review JANUARY 2027

Atracurium Dose Checker (Only for use with Neat Infusions)

All rates are ml per hour.

Ideal Body Weight (kg)	Dose of atracurium in microgram per kg per minute						
	Increasing paralysis →						
	5	7.5	10	15	20	25	30
	All rates below in ml per hour (Only valid for 10mg/ml solutions)						
40	1.20	1.80	2.40	3.60	4.80	6.00	7.20
45	1.35	2.03	2.70	4.05	5.40	6.75	8.10
50	1.50	2.25	3.00	4.50	6.00	7.50	9.00
55	1.65	2.48	3.30	4.95	6.60	8.25	9.90
60	1.80	2.70	3.60	5.40	7.20	9.00	10.80
65	1.95	2.93	3.90	5.85	7.80	9.75	11.70
70	2.10	3.15	4.20	6.30	8.40	10.50	12.60
75	2.25	3.38	4.50	6.75	9.00	11.25	13.50
80	2.40	3.60	4.80	7.20	9.60	12.00	14.40
85	2.55	3.83	5.10	7.65	10.20	12.75	15.30
90	2.70	4.05	5.40	8.10	10.80	13.50	16.20
95	2.85	4.28	5.70	8.55	11.40	14.25	17.10
100	3.00	4.50	6.00	9.00	12.00	15.00	18.00
105	3.15	4.73	6.30	9.45	12.60	15.75	18.90
110	3.30	4.95	6.60	9.90	13.20	16.50	19.80

Documentation Controls

Development of Guideline:	Pharmacist – Critical Care & Theatres
Consultation with:	Pharmacy Department
Approved By:	ICU Sister's Meeting: June 2023 ICU Risk & Quality Meeting: August 2023 Surgical Division
Review Date:	January 2027
Key contact:	Pharmacist – Critical Care & Theatres

References

- BMA & Pharmaceutical Press. British National Formulary January 2023.
<https://www.medicinescomplete.com/mc/bnf/current/index.htm> Accessed January 2023.
- Summary of Product Characteristics. <http://www.emc.medicines.org.uk>. Accessed January 2023
- NHS Injectable Medicine Guides. [Injectable Medicines Guide - Display - Atracurium besilate - Intravenous - Version 10 - IVGuideDisplayMain.asp \(wales.nhs.uk\)](http://www.wales.nhs.uk/injectable-medicines-guide) Accessed January 2023
- Brayfield A (ed), Martindale: The Complete Drug Reference. [online] London: Pharmaceutical Press <<http://www.medicinescomplete.com/>> (Accessed January 2023).
- UKCPA. Minimum Infusion Volumes for Fluid Restricted Critically Ill Patients. 4th Edition (December 2012).

*** End of Monograph ***