

# Atracurium Intravenous Infusion for Ventilated Adult Patients

## Who can administer

Administration RESTRICTED - see [Appendix 1](#)

## Important information

- **SAFETY:** Must be segregated from other drugs in fridge to avoid inadvertent drug selection errors<sup>(ref 1)</sup>
  - Section in fridge must have adequate warning labels
- To be used only in a critical care setting for ventilated patients
- Consideration should be given to dosing obese patients based on Ideal body weight, or an adjusted body weight<sup>(ref 2)</sup>
- All patients on NMBA infusions should be administered regular lubricating eye care and eyelids should remain closed to protect against corneal injury<sup>(ref 2)</sup>
- For Y-site compatibility [see below](#)

## Available preparations

Atracurium (Tracrium) 25mg in 2.5ml ampoules

Atracurium (Kalceks) 50mg in 5ml ampoules

## Reconstitution

Already in solution

**Draw up using a 5 micron filter needle**

## Infusion fluids

Sodium chloride 0.9% or Glucose 5% (if required)

## Methods of intravenous administration

### **Bolus intravenous injection**

- Administer by rapid intravenous injection
- Administer over 1 minute or more for patients with significant cardiovascular disease, hypovolaemia or elderly patients

### **Continuous Intravenous Infusion**

- Use undiluted - 500mg in 50ml via a syringe pump

## Dose in adults

### **Mechanically ventilated patients in the ICU, neuromuscular blockade**<sup>(ref 2)</sup>

- Initial bolus of 0.4 to 0.6mg/kg, followed by continuous IV infusion of 4 to 12 mcg/kg/minute

- Usual dose range is 2 to 20 mcg/kg/**minute** (0.12 to 1.2 mg/kg/**hour**)
- Note however: maximum **licensed** dose is 0.6mg/kg/hour
- Titrate every 5 to 10 minutes based upon clinical response and neuromuscular monitoring
- See table below for quick reference

Â	40kg	50kg	60kg	70kg	80kg	90kg	100kg	110kg	120kg
<b>Loading dose 0.5mg/kg</b>	Â 20mg	25mg	30mgÂ	35mgÂ	40mgÂ	45mgÂ	50mgÂ	55mgÂ	60mgÂ
<b>Maintenance dose</b>	<b>Using undiluted injection solution 500mg in 50ml- rate in ml/hour</b>								
<b>Â 4mcg/kg/min (0.24mg/kg/hour)</b>	0.96	1.2	1.4	1.7Â	1.9Â	Â 2.2	2.4	Â 2.6	2.9
<b>Â 6.6mcg/kg/min (0.4mg/kg/hour)</b>	1.6	2	2.4Â	2.8	3.2	Â 3.6	4	Â 4.4	4.8
<b>Â 10mcg/kg/min (0.6mg/kg/hour)</b>	2.4	3	3.6Â	4.2	4.8	Â 5.4	6	Â 6.6	7.2Â
<b>Â 20mcg/kg/min (1.2mg/kg/hour) (unlicensed dose once over 0.6mg/kg/hour)</b>	4.8	6Â	7.2	8.4Â	9.6	10.8	12	Â 13.2	14.4

## Storage

- Store in a refrigerator at 2-8°C
- See Important Information re segregation of storage

## References

Tracrium SPC September 2023

Atracurium (Kalceks) SPC September 2022

1:ISMP Targeted Medication Safety Best Practices for Hospitals 2020-2021. Accessed 27/01/2025

2. Uptodate- accessed online 27/01/2025

3. Medusa NHS Injectable medicines accessed online 27/01/20251

## Therapeutic classification

Neuromuscular blocking agent

**BNF**

Anaesthesia