

## KETAMINE

For resistant status epilepticus only. For acute pain see "[guideline for ketamine subcutaneous infusion for acute pain](#)"

PRESENTATION:	Vial containing 500mg in 10ml, 50mg/ml of ketamine.																																																					
INDICATION:	Resistant status epilepticus (unlicensed use).																																																					
DOSE AND ADMINISTRATION:	<p>The evidence on the use of ketamine is mostly based on isolated case reports. From the information available: Intravenous loading dose of 3mg/kg, using ideal body weight. Maintenance intravenous infusion of 1-5mg/kg/hr, using ideal body weight.</p> <p><b>ICU STANDARD INFUSION</b></p> <p><b>Loading dose:</b> 3mg/kg intravenously, over at least one minute, then,</p> <p><b>Continuous infusion:</b> 2500mg in 50ml undiluted.</p> <table><tr><th rowspan="2">IBW</th><th colspan="5">Infusion rate (ml/hr)</th></tr><tr><th>1mg/kg/hr</th><th>2mg/kg/hr</th><th>3mg/kg/hr</th><th>4mg/kg/hr</th><th>5mg/kg/hr</th></tr><tr><td>40kg</td><td>0.8ml/hr</td><td>1.6ml/hr</td><td>2.4ml/hr</td><td>3.2ml/hr</td><td>4.0ml/hr</td></tr><tr><td>50kg</td><td>1.0ml/hr</td><td>2.0ml/hr</td><td>3.0ml/hr</td><td>4.0ml/hr</td><td>5.0ml/hr</td></tr><tr><td>60kg</td><td>1.2ml/hr</td><td>2.4ml/hr</td><td>3.6ml/hr</td><td>4.8ml/hr</td><td>6.0ml/hr</td></tr><tr><td>70kg</td><td>1.4ml/hr</td><td>2.8ml/hr</td><td>4.2ml/hr</td><td>5.6ml/hr</td><td>7.0ml/hr</td></tr><tr><td>80kg</td><td>1.6ml/hr</td><td>3.2ml/hr</td><td>4.8ml/hr</td><td>6.4ml/hr</td><td>8.0ml/hr</td></tr><tr><td>90kg</td><td>1.8ml/hr</td><td>3.6ml/hr</td><td>5.4ml/hr</td><td>7.2ml/hr</td><td>9.0ml/hr</td></tr><tr><td>100kg</td><td>2.0ml/hr</td><td>4.0ml/hr</td><td>6.0ml/hr</td><td>8.0ml/hr</td><td>10.0ml/hr</td></tr></table> <p>Administer intravenously via a central access device. Commence intravenous infusion at 1mg/kg/hr and titrate according to response (i.e achievement of burst suppression on the EEG).</p> <p>Ketamine has a low pH and may cause venous irritation and tissue damage in cases of extravasation.</p> <p>Ketamine does <b>not</b> need to be administered in a locked syringe in intensive care.</p>	IBW	Infusion rate (ml/hr)					1mg/kg/hr	2mg/kg/hr	3mg/kg/hr	4mg/kg/hr	5mg/kg/hr	40kg	0.8ml/hr	1.6ml/hr	2.4ml/hr	3.2ml/hr	4.0ml/hr	50kg	1.0ml/hr	2.0ml/hr	3.0ml/hr	4.0ml/hr	5.0ml/hr	60kg	1.2ml/hr	2.4ml/hr	3.6ml/hr	4.8ml/hr	6.0ml/hr	70kg	1.4ml/hr	2.8ml/hr	4.2ml/hr	5.6ml/hr	7.0ml/hr	80kg	1.6ml/hr	3.2ml/hr	4.8ml/hr	6.4ml/hr	8.0ml/hr	90kg	1.8ml/hr	3.6ml/hr	5.4ml/hr	7.2ml/hr	9.0ml/hr	100kg	2.0ml/hr	4.0ml/hr	6.0ml/hr	8.0ml/hr	10.0ml/hr
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CONCENTRATION:	50mg/ml																																																					
STABILITY:	Physically and chemically stable for 24 hours at room temperature.																																																					

**References:**

1. Kramer A.H. Early ketamine to treat refractory status epilepticus. Neurocrit Care (2012) 16: 299-305.
2. Shorvon S, Ferlisi M. The treatment of super-refractory status epilepticus. Brain. 2011; 134(10):2802-2818.
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9. Summary of Product Characteristics. Ketamine 50mg/ml Injection. Hameln pharmaceuticals. Last updated 26/06/20.

**Critical Care Guidelines  
FOR CRITICAL CARE USE ONLY**

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