

## MIDAZOLAM

### PRESENTATION:

Ampoules containing 10mg in 2ml of midazolam (5mg/ml)  
Ampoules containing 10mg in 5ml of midazolam (2mg/ml)  
Ampoules containing 50mg in 10ml of midazolam (5mg/ml)

Prefilled syringe containing 50mg in 50mL of midazolam (1mg/ml)

### INDICATION:

Sedation  
Treatment of status epilepticus

### DOSE AND ADMINISTRATION:

#### ICU STANDARD INFUSION

##### Single strength

Preparation available	Amount to be diluted with glucose 5%	Final volume	Final concentration
10mg in 2ml	60mg (12ml)	60ml	1mg/ml
10mg in 5ml	60mg (30ml)	60ml	1mg/ml
50mg in 10ml	50mg(10ml)	50ml*	1mg/ml
50mg in 50ml PFS	No dilution required		

##### Double strength

Preparation available	Amount to be diluted with glucose 5%	Final Volume	Final concentration
10mg in 2ml	120mg (24ml)	60ml	2mg/ml
10mg in 5ml	120mg (60ml)	60ml	2mg/ml
50mg in 10ml	100mg(20ml)	50ml*	2mg/ml
50mg in 50ml PFS	Not suitable		

*\*note when using preparations with a final volume of 50ml these will not be compatible with the drug library (DERS)*

**Sedation:** Initially 2-5mg/hour titrated to the required level.  
BNF recommended dose of 0.03-0.2mg/kg/hr

**Status epilepticus:** Maintenance infusion 0.05-0.4mg/kg/hr.  
i.e. for 70kg patient 3.5- 28mg/hr.  
Use double strength midazolam.

Critical Care Guidelines: MIDAZOLAM SOLUTION FOR INJECTION	
Authors: Fiona Clarke, Updated by Laura Kirkpatrick	
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### **Bolus doses**

Sedation bolus doses of 500micrograms to 2 mg may be given. Bolus doses are generally given via the infusion pump. If the patient is not prescribed a continuous infusion prepare as below:

Preparation available	Amount to be diluted with glucose 5%	Final Volume	Final concentration
10mg in 2ml	10mg (2ml)	10ml	1mg/ml
10mg in 5ml	10mg (5ml)	10ml	1mg/ml
50mg in 10ml	10mg(2ml)	10ml	1mg/ml

Using the 10mg/2ml or 10mg/5ml preparation for bolus doses is preferred to prevent wastage but the 50mg/10ml preparation may be used if there are supply issues with the 10mg/2ml or 10mg/5ml preparation.

**CONCENTRATION:**                      **Single strength** :1mg/ml  
                                                 **Double strength**:2mg/ml

**STABILITY:**                                      Physically and chemically stable for 24 hours at room temperature.  
                                                            Also stable in sodium chloride 0.9%.  
                                                            Prefilled syringe should not be mixed with any other medicinal products

### **References:**

1. Summary of Product Characteristics, Midazolam 5mg/ml solution for injection/infusion, .Hameln pharmaceuticals ltd, [www.medicines.org.uk/emc/product/6420/smpc](http://www.medicines.org.uk/emc/product/6420/smpc) last reviewed 06/03/2023.
2. Injectable Medicines Guide accessed online at [www.injguide.nhs.uk](http://www.injguide.nhs.uk) on 06/03/2023.
3. NHS Lothian Critical Care Guideline of Treatment of status epilepticus, reviewed March 2023.
4. Summary of Product Characteristics, Midazolam 1mg/ml solution for injection/infusion in a prefilled syringe, Ranbaxy UK, <https://www.medicines.org.uk/emc/product/10967/smpc> last reviewed 06/03/2023

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