

# LEVETIRACETAM

BRAND NAME	LEVETIRACETAM AFT, APOTEX, HOSPIRA, SANDOZ
DRUG CLASS	Antiepileptic
AVAILABILITY	Vial contains 500 mg/5 mL of levetiracetam. Also contain sodium acetate trihydrate, sodium chloride and glacial acetic acid. <sup>1</sup> The solution is clear and colourless. <sup>1</sup>
pH	5.5 <sup>2</sup>
PREPARATION	Dilute before use. <sup>1</sup>
STABILITY	Vial: store below 25 °C. <sup>1</sup> Infusion solution: stable for 24 hours at 15 to 30 °C or 2 to 8 °C. <sup>1</sup> Store AFT and Sandoz solutions for not more than 6 hours at 15 to 30 °C. <sup>1</sup>
ADMINISTRATION	
<b>IM injection</b>	Not recommended
<b>SUBCUT injection</b>	Suitable in palliative care patients. <sup>2-4</sup> Dilute the dose in 100 mL of sodium chloride 0.9% and infuse over 30 minutes. <sup>3</sup> Or dilute with sodium chloride 0.9% or water for injections and give as a continuous subcutaneous infusion. <sup>3,4</sup> Maximal dilution is recommended, however 100 mg/mL can be used if necessary. <sup>4</sup>
<b>IV injection</b>	Not recommended. <sup>1</sup> Has been given over 3 to 6 minutes in emergency situations. Dilute the dose with an equal volume of sodium chloride 0.9% or glucose 5% to make a concentration of 50 mg/mL. <sup>5,6</sup> Doses of 1 g to 3 g can be given at a rate of 2–5 mg/kg/minute in status epilepticus. <sup>7</sup>
<b>IV infusion</b>	Dilute the dose in 100 mL of a compatible fluid and infuse over 15 minutes. <sup>1</sup> In the treatment of status epilepticus doses of 60 mg/kg (up to 4.5 g) can be added to 100 mL of sodium chloride 0.9% and given over 10 to 15 minutes. <sup>8</sup>
<b>IV use for infants and children</b>	Dilute the dose to 15 mg/mL or less with a compatible fluid and infuse over 15 minutes. <sup>1,9</sup> Infusion rates of 2–5 mg/kg/minute are used in status epilepticus. <sup>7,9</sup> For status epilepticus in children over 3 months old, dilute the dose to 50 mg/mL (or to at least 10 mL) with sodium chloride 0.9% and infuse over 5 minutes. <sup>10</sup>
COMPATIBILITY	
<b>Fluids</b>	Glucose 5% <sup>1</sup> see SPECIAL NOTES, Hartmann's <sup>1</sup> , sodium chloride 0.9% <sup>1</sup>
<b>Y-site</b>	Insulin (Novorapid) <sup>11</sup>
INCOMPATIBILITY	No information
SPECIAL NOTES	For patients at risk of cerebral oedema, avoid glucose solutions if possible. Excessive glucose can exacerbate cerebral oedema and may worsen brain injury in stroke patients. <sup>12</sup> Use the same dose when converting from oral to the IV or subcutaneous route. <sup>1,2</sup>

## REFERENCES

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