



NEONATAL Medication Monograph





# FLUMAZENIL

This document should be read in conjunction with this [DISCLAIMER](#)

**Restricted:** Requires Neonatologist review within 24 hours of initiation

<b>Presentation</b>	Ampoule: 500microg/5mL
<b>Description</b>	Benzodiazepine antagonist
<b>Indications</b>	Reversal of the central sedative effects of benzodiazepines
<b>Contraindications</b>	Patients with a known hypersensitivity to flumazenil, benzodiazepines or any components of the formulation
<b>Precautions</b>	Patients with epilepsy who are taking benzodiazepines for a prolonged period to control seizures – may increase risk of seizures
<b>Dosage</b>	<p><b>IV injection:</b> 5 - 10 microgram /kg over 15 to 30 seconds May be repeated every 60 seconds until reversal of sedation is achieved <b>Recommended Maximum</b> 50microgram/ kg</p> <p><b>IV infusion:</b> 2 - 10 microgram/kg/hour, adjusted according to response</p>
<b>Adverse Reactions</b>	<p><b>Common:</b> nausea, vomiting</p> <p>Use cautiously in patients with epilepsy and those who have been treated with high doses of benzodiazepines for the weeks preceding treatment. May cause benzodiazepine withdrawal syndrome; symptoms include tachycardia, agitation and seizures.</p>
<b>Compatible Fluids</b>	Glucose 5%, Sodium Chloride 0.9%

<b>Preparation</b>	<p><b>IV injection:</b> Use undiluted</p> <p><b>IV infusion:</b> Take 1mL (100 micrograms) of flumazenil from ampoule and dilute to 10mL with a compatible fluid.</p> <p><u>Final concentration is 10 microgram/mL</u></p>
<b>Administration</b>	<p>Inject into a free-flowing IV infusion line to minimise pain and phlebitis at the injection site</p> <p><b>IV injection:</b> Inject the dose undiluted over 15 to 30 seconds into a large vein.</p> <p><b>IV infusion:</b> Rate: 2 - 10 microgram/kg/hour, adjusted according to response</p>
<b>Monitoring</b>	<p>Observe patient for at least 4 hours after the last dose for signs of re-sedation</p>
<b>Storage</b>	<p>Store at room temperature, below 25°C</p> <p>Protect from Light</p>
<b>Notes</b>	<p>Multiple doses may be required as flumazenil has a short duration of action</p>
<b>References</b>	<p>Flumazenil. In British national formulary for children Joint Formulary Committee (September 2018-19) BNF 74: September 2018-19. London: Pharmaceutical Press</p> <p>Truven Health Analytics. Flumazenil. In: NeoFax [Internet]. Greenwood Village (CO): Truven Health Analytics; 2019 [cited 2020 Feb 7]. Available from: <a href="https://neofax.micromedexsolutions.com/">https://neofax.micromedexsolutions.com/</a></p> <p>Society of Hospital Pharmacists of Australia. Flumazenil In: Australian Injectable Drugs Handbook [Internet]. [St Leonards, New South Wales]: Health Communication Network; 2019 [cited 2020 Feb 7]. Available from: <a href="http://aidh.hcn.com.au">http://aidh.hcn.com.au</a></p> <p>Takemoto CK, Hodding JH, Kraus DM. Pediatric &amp; neonatal dosage handbook with international trade names index: a universal resource for clinicians treating pediatric and neonatal patients. 24th ed. Hudson (Ohio): Lexicomp; 2017. 861</p>

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