

Alternative parenteral acid suppressants covering main indications of intravenous ranitidine in children

The need for a parenteral treatment should be assessed and if considered necessary the following injectable proton pump inhibitors (PPIs) may be considered to offer a suitable clinical alternative to intravenous ranitidine

Acid suppressant	Gastric acid suppression in surgical procedures	Prophylaxis of stress ulceration	Conditions where acid suppression needed but oral route not available	Comments
<p>Omeprazole 40 mg powder for solution for infusion</p>	<p><i>Not licensed</i></p> <p>Child 1 month–11 years Suggest STAT dose of 0.5 mg/kg to 2 mg/kg (max. 40 mg/dose) given as an IV infusion over 20-30 minutes</p> <p>Child 12–17 years Suggest STAT dose of 40 mg given over 5 minutes as an IV infusion over 20-30 minutes</p>	<p><i>Not licensed</i></p> <p>Child 1 month–11 years Suggest 0.5 mg/kg to 2 mg/kg once daily (max.40 mg/dose) given as an IV infusion over 20-30 minutes</p> <p>Child 12–17 years Suggest 40 mg once daily given over 5 minutes as an IV infusion over 20-30 minutes</p>	<p>Child 1 month–11 years (not licensed) Suggest initially 0.5 mg/kg once daily (max. 20 mg/dose), increased if necessary to 2 mg/kg once daily (max. 40 mg/dose) as an IV infusion over 20-30 minutes</p> <p>Child 12–17 years Suggest 40 mg once daily given as an IV infusion over 20-30 minutes</p>	<p>Not licensed for use in children under 12 years.</p> <p>Contraindicated in patients with previous hypersensitivity reaction to omeprazole or the excipients contained in the injection and in patients taking nelfinavir.</p> <p>For STAT dose – potential for drug interactions not likely to be clinically significant.</p> <p>However, when repeat doses are needed the potential for adverse drug interactions should be assessed. This is especially important for patients taking concomitant clopidogrel or the antiretroviral medicines atazanavir or nelfinavir. In patients taking clopidogrel, pantoprazole may be a better choice of PPI.</p> <p>PPIs cannot be given concomitantly to anyone receiving high dose of methotrexate.</p> <p>Patients treated with a PPI rather than ranitidine may be more likely to develop electrolyte abnormalities such as hyponatraemia or hypomagnesaemia.</p> <p><i>Note:</i> paediatric gastric acid suppression dose in surgical procedures and paediatric dose for prophylaxis in stress ulceration are not documented, therefore information derived from other indications.</p>

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Acid suppressant	Gastric acid suppression in surgical procedures	Prophylaxis of stress ulceration	Conditions where acid suppression needed but oral route not available	Comments
<p>Pantoprazole 40 mg powder for solution for injection</p>	<p>Not licensed</p> <p>Child 2–17 years Suggest STAT dose of 0.8 - 1.6 mg/kg (max. 80 mg/dose)</p>	<p>Not licensed</p> <p>Child 2–17 years Suggest 0.8 or 1.6 mg/kg once daily (max. 80 mg/dose)</p>	<p>Not licensed</p> <p><u>Gastric acid suppression:</u> Child 2–17 years Suggest 0.8 or 1.6 mg/kg once daily (max. 80 mg/dose)</p> <p><u>Severe reflux oesophagitis:</u> 0.5-2 mg/kg once a day up to 40 mg/day as an intermittent IV infusion</p> <p><u>Active GI bleed:</u> 1-2 mg/kg (max 80 mg) as IV bolus then 0.2 mg/kg/hour (max. 8 mg/hour) infused for a max. 3 days</p>	<p>Not licensed for use in patients under 18 years old. No dosage information available in BNFC.</p> <p>Contraindicated in patients with previous hypersensitivity reaction to pantoprazole or the excipients contained in the injection.</p> <p>For STAT dose – potential for drug interactions not likely to be clinically significant.</p> <p>However when repeat doses are needed the potential for adverse drug interactions should be assessed. This is especially important for patients taking the antiretroviral medicines atazanavir or rilpivirine. In patients taking clopidogrel, pantoprazole may be a better choice of PPI.</p> <p>PPIs cannot be given concomitantly to anyone receiving high dose of methotrexate.</p> <p>Patients treated with a PPIs rather than ranitidine may be more likely to develop electrolyte abnormalities such as hyponatraemia or hypomagnesaemia.</p> <p><i>Note:</i> paediatric gastric acid suppression dose in surgical procedures and paediatric dose for prophylaxis in stress ulceration are not documented, therefore information derived from other indications.</p>

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Acid suppressant	Gastric acid suppression in surgical procedures	Prophylaxis of stress ulceration	Conditions where acid suppression needed but oral route not available	Comments
Esomeprazole 40 mg powder for solution for injection / infusion	<p>Neonate <1 month (not licensed) Suggest 0.5 mg/kg STAT as an IV bolus over at least 3 minutes or infused over 10-30 minutes</p> <p>Child 1–11 months (not licensed) Suggest 0.5 mg/kg to 1 mg/kg STAT as an IV bolus over at least 3 minutes or infused over 10-30 minutes</p> <p>Child 1–11 years Suggest STAT dose of 10 mg given as an IV bolus over at least 3 minutes or infused over 10-30 minutes</p> <p>Child 12–17 years Suggest STAT dose of 20 mg given as an IV bolus over at least 3 minutes or infused over 10-30 minutes</p>	<p>Neonate <1 month (not licensed) Suggest 0.5 mg/kg as an IV bolus over at least 3 minutes or infused over 10-30 minutes</p> <p>Child 1–11 months (not licensed) Suggest 0.5 mg/kg to 1 mg/kg as an IV bolus over at least 3 minutes or infused over 10-30 minutes</p> <p>Child 1–11 years Suggest 10 mg once daily given as an IV bolus over at least 3 minutes or infused over 10-30 minutes</p> <p>Child 12–17 years Suggest 20 mg once daily given as an IV bolus over at least 3 minutes or infused over 10-30 minutes</p>	<p>Neonate <1 month (not licensed) Suggest 0.5 mg/kg as an IV bolus over at least 3 minutes or infused over 10-30 minutes</p> <p>Child 1–11 months (not licensed) Suggest 0.5 mg/kg to 1 mg/kg as an IV bolus over at least 3 minutes or infused over 10-30 minutes</p> <p>Child 1–11 years Suggest 10 mg once daily given as an IV bolus over at least 3 minutes or infused over 10-30 minutes. Higher doses may be needed in erosive reflux oesophagitis.</p> <p>Child 12–17 years Suggest 20 mg once daily given as an IV bolus over at least 3 minutes or infused over 10-30 minutes. Higher doses may be needed in erosive reflux oesophagitis.</p>	<p>Not licensed for use in children under 1 year old.</p> <p>Contra-indicated in patients with previous hypersensitivity reaction to esomeprazole or the excipients contained in the injection and in patients taking nelfinavir.</p> <p>For STAT dose – potential for drug interactions not likely to be clinically significant.</p> <p>However, when repeat doses are needed the potential for adverse drug interactions should be assessed. This is especially important for patients taking concomitant clopidogrel or the antiretroviral medicines atazanavir or nelfinavir. In patients taking clopidogrel, pantoprazole may be a better choice of PPI.</p> <p>PPIs cannot be given concomitantly to anyone receiving high dose of methotrexate.</p> <p>Patients treated with a PPI rather than ranitidine may be more likely to develop electrolyte abnormalities such as hyponatraemia or hypomagnesaemia.</p> <p><i>Note:</i> paediatric gastric acid suppression dose in surgical procedures and paediatric dose for prophylaxis in stress ulceration are not documented, therefore information derived from other indications.</p>

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