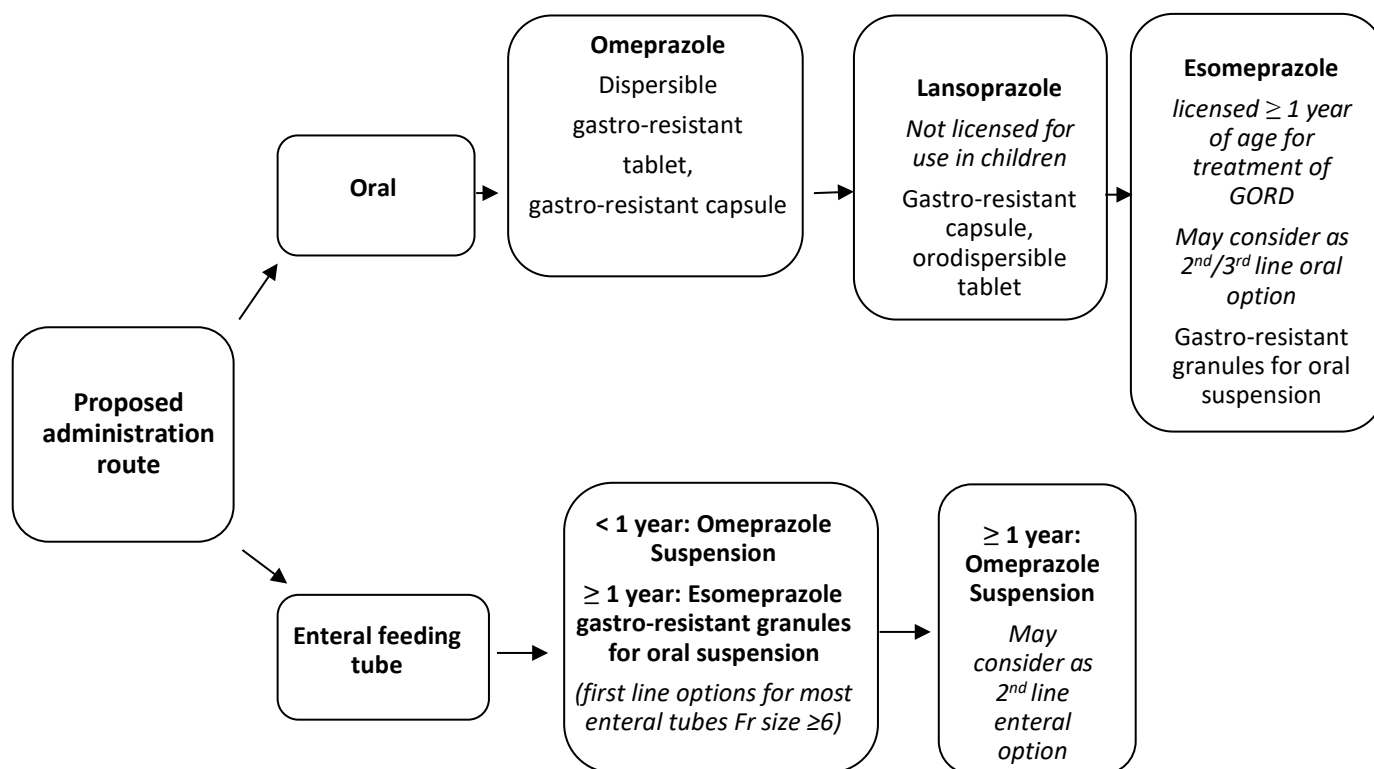


Royal Aberdeen Children's Hospital (RACH) Guidance On Oral/Enteral Proton Pump Inhibitor (PPI) Selection And Administration (For Children)



This guideline covers the use of PPIs in paediatric patients across both primary and secondary care within NHS Grampian, with the aim to standardise prescribing whilst ensuring patients are on the most suitable and effective treatment. The flow chart above is a local guide for which PPI formulation should be prescribed for children within NHS Grampian. Further information on individual product licensing and administration methods are specified in [Table 2](#). As well as this guide, BNFC and product SMPCs should be followed for dosing information. It's important to note that some of these treatment options may be classified as off license use and parents/carers should be appropriately consented and counselled on the medicine that is prescribed and dispensed.

Table 1: Approximate Equivalent Doses Of Proton Pump Inhibitors

Proton Pump Inhibitor	Equivalent Dose
Esomeprazole	20mg
Lansoprazole	30mg
Omeprazole	20mg

(NICE Clinical Knowledge Summary: Dyspepsia – proven GORD: Proton Pump Inhibitors, July 2023)

Updated - J Smith, RACH Pharmacy Department, September 2024 - Reviewed by Paediatric Gastroenterology Team - (Adapted from NHS Tayside Guidance for PPI selection for children with GORD)

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Table 2: PPI Formulation Options

Medicine	Formulation	Licensing/ Local Recommendation	Administration/ Additional Information
Omeprazole	10mg and 20mg Dispersible Tablets	Licensed for children >1 year and >10kg Local Recommendation: 1 st line oral choice for children who cannot swallow capsules. Can be used for children < 1 year and <10kg (off license)	Disperse tablet in 10mL of water, stir and mix gently until a cloudy mixture is created, give resulting solution immediately. Tablets may be split in half using a tablet cutter if dose is half a tablet, or dispersed in 10mL of water and a proportion given if dose is <10mg.
	10mg and 20mg G/R Capsules	Licensed for children >1 year and >10kg Local Recommendation: 1 st line oral choice for children who can swallow capsules. Can be used for children < 1 year and <10kg (off license)	Capsules can be swallowed whole with water or opened and the contents mixed with a small amount of cold, soft food such as yoghurt or fruit puree. Can only be used to administer 10mg and 20mg doses.
	1mg/mL, 10mg/5mL and 20mg/5mL Oral Suspension	Licensed for children >1 month Local Recommendation: Restricted to administration via enteral feeding tube only (1 st line for children < 1 year, 2 nd line for children > 1 year)	**HIGH COST ITEM** 20mg/5mL is locally preferred concentration strength however alternative strengths may be prescribed if more cost effective for individual patient. Review preparation choice after 1 year of age and consider switch to esomeprazole.
	20mg/5mL Oral Solution (Unlicensed)	Unlicensed preparation Local Recommendation: Restricted to initiation by specialist paediatric gastroenterologist under exceptional circumstances	Only to be considered for jejunal administration when patient has not tolerated omeprazole suspension and esomeprazole granule preparation
Lansoprazole	15mg and 30mg Oro-dispersible Tablets	Unlicensed use in children Local Recommendation: Alternative oral option for children who cannot swallow capsules	Dose should be rounded to the nearest whole, ¼, ½, ¾ of a 15 or 30mg tablet. The tablet should be split using a tablet cutter as appropriate for the prescribed dose. Tablet should be placed on the tongue to melt or can be sucked until melted. Alternatively tablet can be dispersed in a small amount of water (5-10mL).
	15mg and 30mg G/R Capsules	Unlicensed use in children Local Recommendation: Alternative oral option for children who can swallow capsules	Capsules may be opened and contents mixed with small amount of water, apple/tomato juice or sprinkled onto small amount of soft food e.g. yoghurt, apple puree.
Esomeprazole	10mg G/R Granules Sachets	Licensed for children > 1 year Local Recommendation: 1 st line choice for enteral feeding tube administration. Oral option when omeprazole or lansoprazole not tolerated	See Appendix 1 for administration guidance May also be used under specialist advice in children < 1 year of age depending on individual patient circumstances

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Appendix 1 : Esomeprazole Gastro-Resistant Granules For Suspension (Nexium®) – Patient/Carer Administration Guidance for Enteral Tubes

1. For a 10mg dose, add the contents of a 10mg sachet into 15mL of water.
2. For a 20mg dose add the contents of two 10mg sachets into 30mL of water.
3. Stir.
- 4. Leave for at least 2 minutes to thicken. This is essential for the granules to disperse fully.**
5. Stir again.
6. Draw the suspension into an enteral syringe.
7. Administer through the enteric tube within 30 minutes after reconstitution.
8. Refill the syringe with a small volume of sterile water and administer (this will rinse the syringe and ensure that the total dose is administered)
9. Shake and flush any remaining contents from the enteric tube

Any unused suspension should be discarded.

Up to a 50mL volume of sterile water is recommended for jejunal tube administration at any one time.

