

Proton Pump Inhibitor (PPI) use in paediatric patients – joint guidance for primary and secondary care.

A. Dosing

Lansoprazole - dosage and administration information.¹ (Refer to BNFC for full information)

Child (body-weight under 30kg): 0.5 to 1 mg/kg (max 15mg) once daily

Child (body-weight over 30kg): 15 to 30 mg once daily

1. For doses of 15mg or 30mg where the child is able to swallow capsules – use the appropriate strength of the capsule.

2. For children with an enteral tube (greater than 8Fr) or children who weigh greater than 3.5kg who are unable to swallow capsules and/or where the dose can be given as a proportion of an orodispersible tablet (by using a tablet cutter) – use lansoprazole orodispersible tablets.

Lansoprazole orodispersible tablets do not form an even suspension in water so cannot be “part dosed” by dissolving in water and giving an aliquot, nor are they scored.

Dose schedules are as follows:

- o Children >30kg – 15mg to 30mg DAILY orodispersible tablet
 - o Children 15 to 30kg – 15mg DAILY orodispersible tablet
 - o Children 7.5 to 15kg – 7.5mg DAILY (use half of a 15mg orodispersible tablet)
 - o Children 3.5kg to 7.5kg – 3.75mg DAILY (use quarter of a 15mg orodispersible tablet)
- For **oral administration**, lansoprazole orodispersible tablets can either be placed on the tongue, allowed to disperse and swallowed, or may be swallowed whole with a glass of water. Alternatively, some children prefer to have their dose dispersed in small amount of water and administered orally using an oral/enteral syringe.
 - For administration of lansoprazole orodispersible tablets via **enteral tubes (greater than 8Fr)**. Enteral feeds should be stopped 30 minutes before administration and tubes flushed well. Mix the whole, halved, or quartered tablet with 10ml water (25ml for 30mg Mylan generic). Administer all the solution to ensure that all the microgranules which appear are administered. Do not crush the microgranules. Ensure the tube is flushed well with water and the enteral feed is not restarted until 30 minutes following administration.²

Note: If only a portion of a tablet is administered do not keep the remainder of the tablet to use for the next dose. A new tablet should be used for each dose.

3. Children with an enteral tube (equal to or less than 8Fr) or children who weigh less than 3.5kg

These are specials (unlicensed medicinal products). Use most appropriate strength based on dose:

Lansoprazole 30mg/5ml oral suspension (alcohol-free and sugar-free) or Lansoprazole 5mg/5ml oral suspension (alcohol-free and sugar-free).

As an expensive and unlicensed formulation, lansoprazole oral suspension must be reviewed regularly for appropriateness, particularly on discharge. Guidance will be reviewed in light of price changes.

Once a baby weighs 3.5kg, or is switched to an enteral tube greater than 8Fr and PPI therapy is still warranted, therapy should be changed to lansoprazole orodispersible tablets (see A2).

If there are stock issues with the liquid special, refer to appendix 1.

B. Additional information

Please note: intravenous omeprazole will continue to be stocked at the trusts since there is no comparative intravenous lansoprazole product.

1. Interactions

The intake of food with lansoprazole slows down the absorption and decreases the bioavailability by about 50%; it is, therefore recommended that lansoprazole is taken 30 minutes before meals.³

2. On discharge

Where appropriate, tablet cutters should be provided by the trust and an appropriate treatment plan communicated to the GP including formulation and dose of proton-pump inhibitor.

References

1. BNF for Children - <https://www.medicinescomplete.com> Accessed November 2021
2. NEWT guidelines – Lansoprazole (2018) - <http://newtguidelines.com/> Accessed November 2021
3. Summary of Product Characteristics – Lansoprazole 15mg Orodispersible Tablets (Mylan) (2018) - <https://www.medicines.org.uk/emc/product/4395/smpc#POSODOLOGY>. Accessed November 2021

Appendix 1

- If there are stock issues with the lansoprazole liquid use **lansoprazole capsules**. The following generic brands, **Consilient Health, Actavis, Mylan** and **Teva** may be used. Do NOT use orodispersible tablets.
- Open the capsules and disperse the contents in sodium bicarbonate 420mg/5ml (1mmol/ml) oral solution to avoid blocking the tube. Shake well.
 - 15mg capsules disperse in 5ml sodium bicarbonate 420mg/5ml (1mmol/ml) oral solution
 - 30mg capsules disperse in 10ml sodium bicarbonate 420mg/5ml (1mmol/ml) oral solution
- Doses should be rounded (usually to the nearest 0.1ml) so that they are measurable in an oral syringe, i.e., 15mg dispersed in 5ml of sodium bicarbonate oral solution will provide a 3mg/ml solution. Doses should be calculated accordingly.
- **Note:** the orodispersible tablets **do not** dissolve properly in sodium bicarbonate 420mg/5ml (1mmol/mol) oral solution. Different generic brands of the capsule take different amounts of time to disperse, however they may still require up to 30 minutes to disperse. Leave to stand for about 30 minutes to allow the contents of the capsule to disperse. Mix well and give either all or part of the volume depending on the dose prescribed.

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Version	2.0 Harmonisation of West Essex guidance and HMMC guidance, updates include: <ul style="list-style-type: none"> • Rebadged from HVCCG, ENHCCG and WECCG to HWE ICB • Increase font size of decimal point. • Replace ‘-’ with ‘to’ in dosing advice
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