



DRUG INFORMATION RESOURCE

The table below has been developed to assist clinicians in considering treatment alternatives for discussion with patients/families (specifically neonatal/pediatric and pregnant patients). These options are based on gastroesophageal reflux (GERD) as the primary indication. **We have only provided dosing for the medications currently used within IWK.**

Clinicians should consider each patient situation individually and determine appropriate alternative treatment.

These recommendations are meant to act as guidance only and management will vary on a patient by patient basis.

Options for consideration for GERD management with resources/tools			
1 st line Deprescribe or discontinue +/- incorporation of non-pharmacologic strategies below			
Suggest non-pharmacological strategies Information on non-pharmacologic approaches: About Kids Health : Gastroesophageal Reflux HealthLink BC: Gastroesophageal Reflux Disease During Pregnancy			
2 nd line Suggest alternative pharmacological options			
Antacids/Foaming Barriers <ul style="list-style-type: none"> Calcium carbonate chewable tablets (TUMS or equivalent) <ul style="list-style-type: none"> -“Regular Strength” (200 mg elemental calcium) -“Ultra Strength” (400 mg elemental calcium) Aluminum/Magnesium Hydroxide Oral Suspension (Almagel or other related brands) Sodium Alginate/ Aluminum Hydroxide (Gaviscon) 	<ul style="list-style-type: none"> TUMS likely only a viable option for older children who can chew In pregnant patients: <ul style="list-style-type: none"> TUMS (max 3.2 grams per day or 16 regular strength TUMS tablets) TUMS dosing depends on product used https://www.tums.com/antacid-products/ Antacids containing Mg²⁺, Ca²⁺, and Al²⁺ or alginic acid are safe and effective Almagel Adult Dosing: 30mL (regular strength) PO PRN after meals Gaviscon dosing depends on product used https://www.gaviscon.ca/products Avoid antacids containing sodium bicarbonate because they may cause metabolic alkalosis and fluid overload in mother and fetus 		
Alternative H₂ Blockers Famotidine <ul style="list-style-type: none"> <u>oral</u> 10 and 20 mg strength (non-prescription) <p>Famotidine is associated with QT interval prolongation, caution with other drugs or conditions associated with QT interval prolongation.</p> <p><i>*Note: IWK does not <u>currently</u> have a liquid/suspension master compounding formula for famotidine developed. If the age of the patient and dose is conducive to a chewable tablet, this would be an appropriate option as opposed to a liquid/suspension. Otherwise, depending on the dosage patients may crush tablets or portions of to administer with food if feasible. For very young children, given the dosing and dose forms available they may need to consider alternative oral agents (e.g. lansoprazole)</i></p> Cimetidine <ul style="list-style-type: none"> <u>oral</u> 200, 300, 400, 600 and 800 mg strength (prescription) Safe and effective in pregnancy Potential for many drug-drug interactions May also see this used for patients undergoing C-sections (dosing: 400mg PO night before and 400mg PO 2 hours before surgery) Nizatidine <ul style="list-style-type: none"> <u>oral</u> 150 and 300 mg strength (prescription) Most expensive H₂ Blocker 	Ranitidine	Famotidine	
	150 mg ranitidine is equivalent to 20 mg famotidine		
	<i>IWK GERD PO dosing:</i> <u>Neonates:</u> 2 to 6 mg/kg/24hr PO divided q8-12h <u>Pediatrics:</u> 5 to 10 mg/kg/24hr PO divided q8-12h (max: 300 mg/24h)	<i>Suggested equivalent GERD PO dosing:</i> <u>*Neonates:</u> 0.25 to 0.5 mg/kg/ dose PO once daily <u>*Pediatrics:</u> 0.5 to 1 mg/kg/ dose PO divided q12-24h Max: 40 mg/24h	
	<u>Pregnant patients:</u> Usual adult dosing <u>Pregnant patients-C-section (aspiration prophylaxis):</u> 150 mg PO night before and 2 hours before surgery	<u>Pregnant patients:</u> Usual adult dosing <u>Pregnant patients-C-section (aspiration prophylaxis):</u> PO: 20 mg PO night before and 2 hours before surgery IV: 20 mg as a single dose ~40 to 60 minutes prior to induction of anesthesia	

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Options for consideration for GERD management with resources/tools

Proton Pump Inhibitors (PPIs)

Lansoprazole

- oral 15 and 30 mg strength (FastTabs or caps), [3mg/mL suspension \(prescription\)](#)
- Safe and effective in pregnancy

Dexlansoprazole

- oral 30 and 60 mg strength (prescription)
- Expensive
- Safe and effective in pregnancy

Pantoprazole

- oral 20 and 40 mg strength (prescription)
- Safe and effective in pregnancy

Omeprazole

- oral 20 mg strength (prescription)
- Safe and effective in pregnancy (may have the most evidence for safety)

Esomeprazole

- oral 20 and 40 mg strength (prescription)
- 14 days supply of 20mg strength available OTC
- Safe and effective in pregnancy

Rabeprazole

- oral 10 and 20 mg strength (prescription)
- Safe and effective in pregnancy

Note: Ideally, would avoid all proton pump inhibitors in the first trimester if possible

Lansoprazole

IWK GERD PO dosing:

Neonates:

0.5 - 1.66 mg/kg/24hr PO once daily or divided BID

Pediatrics:

Infants greater than 28 days – less than 1 year: 1-2 mg/kg/24 hours PO once daily or divided BID

Children 1 – 11 years:

30kg or less: 15mg/dose PO daily

over 30kg: 30mg/dose PO daily

Some patients may need to increased doses (up to 30mg PO BID) if still symptomatic

Max: 3mg/kg/24hr or 60mg/day, whichever is less

Children 12 years and older and Adults:

15-30mg/dose PO once daily

Pregnant patients:

Lansoprazole at usual adult dosing

see product monographs for dosing of other PPIs

Other agents (e.g. prokinetics)

Domperidone

Domperidone

IWK GERD PO dosing:

Neonates:

0.1-0.3 mg/kg/dose PO q6-8 hours 15-30 minutes pre feeds

Pediatrics:

Infants older than 1 month and Children: 0.4-0.8 mg/kg/dose PO TID or 0.3-0.6 mg/kg/dose PO QID

Max: 30mg/24hr

Older children and Adolescents: 10 mg/dose PO TID