

Pharmacy Drug Shortage Update & Therapeutic Conversion



A sudden drug shortage has occurred on the market for IV Pantoprazole (Protonix). The current stock at SVMC as of 4/30 is less than 120 vials. The projected end of the shortage is September 2019. The current plan of action to relieve the strain on our supply of IV Proton Pump Inhibitors (PPI) is outlined below. The proposed changes will be effective immediately as of May 1st 2019.

<https://www.ncbi.nlm.nih.gov/pubmed/15087692>

Above article highlights confirmation of efficacy in therapeutic exchange.

Plan of action for Protonix alternative therapy:

1. IV Pantoprazole will be reserved for drips in our GI bleed patients to conserve this stock in our immediate need patients.
2. Addition of Esomeprazole IV (Nexium) to our pharmacy stock has taken place. New orders for IV PPI GI prophylaxis will be auto-switched to IV Nexium at equivalent dosing by pharmacy. (Equivalent dosing chart as per UpToDate below)
3. Patients who require IV GI prophylaxis but do not require PPI may receive IV Famotidine (Pepcid) or IV Ranitidine (Zantac)
4. Pharmacists will work with physicians daily on IV to PO substitutions on all PPI's if patient is deemed a potential candidate for oral therapy to conserve IV PPI medications.
5. Stock of medication will be adjusted in Pyxis to allocate IV Pantoprazole in areas of immediate need ICU/ER in event of need for drips for GI bleeds.

Lexicomp dosing information Esomeprazole (Nexium):

Treatment of GERD (short-term): IV: 20 mg or 40 mg once daily. **Note:** Indicated only in cases where oral therapy is inappropriate or not possible.

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Recommendations for PPI doses in the treatment of acid-related disorders

Drug	Dose (adult) oral
Active and maintenance therapy of gastroduodenal ulcers*	
Dexlansoprazole	30 to 60 mg
Esomeprazole	20 to 40 mg
Lansoprazole	15 to 30 mg
Omeprazole	20 to 40 mg
Pantoprazole	20 to 40 mg
Rabeprazole	20 mg
All administered daily before breakfast	
Primary and secondary prevention of NSAID-induced ulcers	
All PPIs as above	
Treatment of erosive or nonerosive gastroesophageal reflux disease	
Dexlansoprazole	30 mg daily or 30 mg twice daily
Esomeprazole	20 or 40 mg daily
Lansoprazole	30 mg daily or 30 mg twice daily
Omeprazole	20 to 40 mg daily or 20 mg twice daily
Pantoprazole	40 mg daily or 40 mg twice daily
Rabeprazole	20 mg daily or 20 mg twice daily
All administered daily before breakfast, second dose if necessary should be given before evening meal [†]	

PPI: proton pump inhibitor; NSAID: nonsteroidal antiinflammatory drug.

* As a general rule, active duodenal ulcers should be treated for four weeks and gastric ulcers for eight weeks.

† Meals should ideally contain protein to enhance parietal cell stimulation.

Adapted from: Wolfe MM, Sachs G. Acid suppression: Optimizing therapy for gastroduodenal ulcer healing, gastroesophageal reflux disease, and stress-related erosive syndrome. *Gastroenterology* 2000; 118:S9.