

Assessment of Proton Pump Inhibitors (PPIs)

Risks

PPIs have proven a remarkable tolerability profile in adults, but recent studies have shown that long-term use of PPIs can increase the risk for the serious side effects listed below.

Long-term use of PPIs have been associated with an increased risk for:

- Clostridium difficile (C.DIFF.)
- Clostridium difficile–associated diarrhea (CDAD)
- Hospital and community acquired pneumonia
- Recurrent infections
- Fracture/Osteoporosis
- Dementia
- Decreased absorption of vitamins and minerals
- Drug interactions
- Reduced renal function

Assessment Questions

To help reduce the occurrence of PPIs being prescribed excessively, please make sure you are considering the following assessment questions before prescribing:

- Was therapy initiated during a hospitalization to prevent a stress ulcer? If yes, consider discontinuation unless there was an additional diagnosis for the drug.
- What is the PPI being used for?
- When was the last time a dose reduction was tried?
- Is it appropriate to transition to an H2 antagonist (if acid reduction is appropriate)?

Concurrent Use with Nonsteroidal Anti-Inflammatory Drugs (NSAID)

PPIs have shown a reduction in risk for NSAID induced ulcers. Please assess the NSAID, alternatives and dosing before changing the PPI.

Short-Term Indications	Appropriate Long-Term Use
Helicobacter pylori (H. pylori) eradication to reduce the risk of duodenal ulcer (DU) recurrence, in combination with antibiotics.	Healing of or maintenance of healed erosive esophagitis (EE).
Short-term and maintenance treatment for an ulcer.	Treatment of gastroesophageal reflux disease (GERD).
	Risk reduction of gastric ulcer (GU) associated with NSAID use.
	Pathological hypersecretory conditions, including Zollinger-Ellison (ZE) syndrome.

Lower risks and medical costs are associated with lowering PPI overutilization. PPI use beyond eight (8) weeks without justification should be avoided¹.

Assessment of Proton Pump Inhibitors (PPIs) *(continued)*

Please direct any questions to the Superior Pharmacy department at 1-800-218-7453, ext. 22080 or 22272.

Sources Cited

- 1 Various. (2015). American Geriatrics Society 2015 Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults [Abstract]. The American Geriatrics Society, 15. Retrieved February 24, 2016, from <http://geriatricscareonline.org/toc/american-geriatrics-society-updated-beers-criteria-for-potentially-inappropriate-medication-use-in-older-adults/CL001>

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