



# Proton pump inhibitor guidance

To help reduce medication burden and risk of long-term negative outcomes, it may be beneficial to check in regularly with your patients who have been taking proton pump inhibitors (PPIs) for longer than the recommended 4–8 weeks of treatment.<sup>1</sup> We created this document to help you determine which patients may be candidates for PPI deprescribing, which the College of Family Physicians of Canada (CFPC) defines as “the planned and supervised process of dose reduction or stopping of medication that might be causing harm or might no longer be providing benefit.”<sup>2</sup>

This guidance is a tool to be used alongside consideration of a patient’s personal and medical context. The recommendations in this document are based on **guidance from CFPC** as well as the **American Gastroenterology Association (AGA) Clinical Practice Update on Deprescribing of Proton Pump Inhibitors**.

## Reasons to reduce or discontinue PPIs

### Patient does not have an indication for chronic PPI use<sup>3</sup>

- Medication may no longer be providing a reasonable expectation of benefit
- Deprescribing may reduce pill burden and health care costs

### The use of PPIs for longer than 4 to 12 weeks has been linked to<sup>4</sup>:

- Higher risk of bone fractures
- Higher risk of renal dysfunction
- Infections
- Pneumonia

### Prolonged use can contribute to polypharmacy with associated risks of<sup>5</sup>:

- Nonadherence
- Prescribing cascades
- Adverse reactions
- Medication errors
- Drug interactions
- Increase use of the healthcare system (e.g., emergency department visits, hospitalizations)



## PPI deprescribing protocol

The recommendations apply to adults who have completed a minimum 4-week course of PPIs for upper gastrointestinal (GI) symptoms, such as gastroesophageal reflux disorder (GERD) or esophagitis. These recommendations do not apply to patients who have or have had Barrett's esophagus, severe esophagitis, history of bleeding GI ulcers or other complicated gastroesophageal reflux disease.

For adults with upper GI symptoms who have completed a minimum 4-week course of PPI treatment, resulting in resolution of upper GI symptoms, the following is recommended:

- Decrease the daily dose or stop and change to on-demand use, defined as daily dosing until symptom resolution, followed by discontinuation<sup>6</sup>; or
- Consider a histamine-2 receptor antagonist (H2RA) as an alternative to PPIs



## Tapering PPIs

If a tapering strategy is desired, the PPI dose may be reduced to the lowest effective dose before discontinuation and patients may be provided with on-demand PPIs for symptom management. A gradual dose reduction (e.g., from twice daily to once daily, from high dose to low dose, from daily to every other day) may be an appropriate strategy based on patient specific considerations.



## Resources

To determine if your patient is a candidate for PPI deprescribing, reference the **PPI deprescribing algorithm** developed from the CFPC guidelines referenced in this guidance. You may also find the **PPI consult decision aid** useful when discussing continued use versus deprescribing PPIs with your patients.<sup>7</sup>

1 Katz PO, Gerson LB, Vela MF. Guidelines for the diagnosis and management of gastroesophageal reflux disease. *Am J Gastroenterol* 2013;108(3):308-28. Epub 2013 Feb 19.

2 Farrell B, Pottie K, Thompson W, Boghossian T, Pizzola L, Rashid FJ, et. al. Deprescribing proton pump inhibitors. Evidence-based clinical practice guideline. *Can Fam Physician* 2017;63:354-64 (Eng).

3 Targownik LE, Fisher DA, Saini SD. AGA Clinical Practice Update on De-Prescribing of Proton Pump Inhibitors: Expert Review. *Gastroenterology*. 2022 Feb 16;162:1334-1342.

4 Nehra AK, Alexander JA, Loftus CG, Nehra V. Proton Pump Inhibitors: Review of Emerging Concerns. *Mayo Foundation for Medical Education and Research* 2018;93(2):240-266.

5 Halli-Tierney AD, Scarbrough C, Carroll D. Polypharmacy: Evaluating Risks and Deprescribing. *Am Fam Physician*. 2019 Jul 1;100(1):32-38.

6 Armstrong D, Marshall JK, Chiba N, Enns R, Fallone CA, Fass R, et al. Canadian Consensus Conference on the management of gastroesophageal reflux disease in adults – Update 2004. *Can J Gastroenterol* 2005;19(1):15-35

7 Thompson W, Farrell B, Welch V, Tugwell P, Way C, Richard L, Bjerre L. Continuation or deprescribing of proton pump inhibitors: a consult patient decision aid. *Canadian Pharmacists Journal*. 2018 Dec.