

00005      **Appropriateness of Proton Pump Inhibitor Use Among Discharged Patients:  
A Retrospective Chart Review**

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**Aims:** Proton pump inhibitors (PPIs) are the most widely prescribed drugs in the United States. However, published studies have shown that the indications and duration for PPIs prescribed have not always been appropriate. This exposes patients to an increased risk of adverse drug reactions. This study examined the appropriateness of PPIs used in patients discharged from a general hospital and the factors that may be associated with the inappropriate use of PPIs.

**Methodology:** This is a retrospective chart review of 500 randomly selected patients who were discharged with PPIs (omeprazole, esomeprazole, rabeprazole) over a 2 month period from 1 November 2015 to 31 December 2015. The primary outcome was appropriateness of PPI used: categorised as appropriate (based on labelled indication/international guidelines), possibly appropriate (based on expert opinion) and inappropriate (not based on labelled indications, international guidelines or expert opinion).

**Result:** 60% of the patients studied were male and 60.4% were Chinese, mean age was 62 years old (range: 16 to 98 years old). 93% of the PPIs prescribed were omeprazole. PPI use was appropriate in 24.8%, possibly appropriate in 49.2% and inappropriate in 26% of the patients. PPIs were most commonly prescribed in patients on single antiplatelet therapy ( $\geq 1$  risk factor), however, among these patients, only 58.6% were prescribed with the appropriate dose. Younger age [OR=0.719 (95% CI -0.047 to -0.024)  $p < 0.001$ ] and lack of history of prior PPI use [OR=2.034 (95% CI 0.324 to 1.096),  $p < 0.001$ ] were associated with inappropriate use. Males [OR=0.623 (95% CI -0.843 to -0.105),  $p = 0.012$ ] were less likely to be associated with inappropriately prescribed PPIs.

**Conclusion:** Greater consideration regarding the dose and indication of PPIs to be prescribed should be exercised for younger patients and patients who had not been on PPIs.