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## **Potentially Inappropriate Prescribing of Proton Pump Inhibitors Among Older Patients in the US**

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Potentially Inappropriate Prescribing of Proton Pump Inhibitors Among Older Patients in the US  
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The American Geriatrics Society list of Potentially Inappropriate Medication (Beers Criteria) use in older adults (>64-years) includes Proton Pump Inhibitors (PPIs), and specifically cautions against their use for >8 weeks. PPIs are prescribed to reduce the production of stomach acid, however there is strong evidence older adults are at risk of infection and bone loss from prolonged exposure to PPIs. This study used data from the 2017 Medical Expenditure Panel Survey (MEPS) and the FDA Adverse Event Report System (FAERS, as of June 30, 2019) to characterize the current prescribing practices of PPIs to older adults and the risks those patients may face. 4,288 patients >64-years were included in this study, weighted to represent over 46 million Americans. Of these, 19.6% had been prescribed a PPI in 2017, and 10.05% had a long-term (>8 week) prescription. Results from a generalized linear model using a quasibinomial link function demonstrated that patients with arthritis (adjusted-OR: 1.52, 95% CI: 1.17-1.98) and asthma (adjusted-OR: 1.73, 95% CI: 1.24-2.41) were more likely to have long-term PPI use, as were patients with 5+ other prescriptions (adjusted-OR: 4.31, 95% CI: 2.71-6.85). The adjusted odds ratios (OR) did not differ by age, gender, income, or education-level. For all PPIs, 28,031 (age>64) adverse event (AE) cases were found in FAERS. The most commonly reported AEs were gastrointestinal disorders, and renal or urinary disorders, which appeared in 50% of included cases. Overall, our study reported current risks from and potential predictors of long-term PPI use among older adults.