Introduction:
Stress ulcer prophylaxis has become a standard of care in Intensive Care Unit (ICU). However, it has been proposed that enteral nutrition (EN) could play a preventive role for gastrointestinal bleeding and some studies revealed no added benefit of acid suppressive drugs to patients on EN. Based on these backgrounds, we use proton pump inhibitor (PPI) as stress ulcer prophylaxis during starvation period, and discontinue it within 24 hours after commencing meals or EN. The aim of this study is to evaluate the applicability of our protocol by reviewing the incidence of upper gastrointestinal bleeding (UGIB) in our ICU.

Methods:
We conducted a retrospective observational study. All consecutive patients admitted to our ICU between April 2016 and March 2017 were reviewed. Patients who had UGIB within 24 hours after admission, had previous total gastrectomy, or underwent upper gastrointestinal surgery were excluded. The primary outcome was the incidence of overt or clinically important UGIB, and the secondary outcome was protocol adherence. We presented descriptive data as number (percentage) and median (interquartile range).

Results:
A total of 521 patients were included. Of those, 315 (60.5%) were male, median age was 73 (57-81), and median SOFA score was 5 (2-8). Of all 521 patients, 16 (3.37%) had overt bleeding, and 2 (0.38%) had clinically important bleeding. Both 2 patients who developed clinically important bleeding had respiratory failure and coagulopathy which had been identified as risk factors for UGIB from previous studies. Three hundred sixty two patients had commenced meals or EN during their ICU stay, and median duration of starvation period was 25.5 (17-41) hours. Among these 362 patients, 264 patients discontinued PPI within 24 hours after initiation of feeding resulting in 73.4% for the protocol adherence.

Conclusion:
Termination of PPI within 24 hours after commencing nutrition can be feasible management due to its low incidence of clinically important UGIB event.