Conclusions Biofeedback is associated with significant improvement in the quality of life as well as possible improvements in symptoms related to both incontinence and evacuatory disorders. It is probably an underused service. Further larger prospective studies are required to assess the efficacy of biofeedback in pouch related dysfunction.

**IDDF2018-ABS-0059**  
**IMMUNOGENICITY OF QUADRIVALENT INFLUENZA VACCINE FOR PATIENTS WITH INFLAMMATORY BOWEL DISEASE**  
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**Background** No reports have described the immunogenicity and boosting effect of the quadrivalent influenza vaccine in adults-patients with inflammatory bowel disease (IBD).

**Methods** Adults with Crohn’s disease or ulcerative colitis were randomly assigned to a single vaccination group or booster group, and a quadrivalent influenza vaccine was administered subcutaneously. Serum samples were collected before vaccination, 4 weeks after vaccination and after the influenza season in the single vaccination group and before vaccination, 4 weeks after the first vaccination, 4 weeks after the second vaccination, and after the influenza season in the booster group. We measured hemagglutination inhibition antibody titer and calculated the geometric mean titer ratio, seroprotection rate, and seroconversion rate.

**Results** Totally, 132 patients were enrolled. Twenty-two patients received immunomodulatory monotherapy and 16 received anti-TNF-α single-agent therapy. Fifteen patients received combination therapy comprising an immunosuppressant and anti-TNF-α agent. Each vaccine strain showed immunogenicity satisfying the European Medicines Agency criteria with a single inoculation. The booster influenza vaccination did not induce an additional response. In patients administered infliximab, the seroprotection rate and seroconversion rate tended to be lower in patients who maintained blood concentrations (seroprotection rate: H1N1: OR, 0.37 (95% CI, 0.11–1.21); H3N2: 0.22 (0.07–0.68); seroconversion rate: H1N1: 0.23 (0.06–0.91); H3N2: 0.19 (0.06–0.56)).

**Conclusions** Although single-dose quadrivalent influenza vaccine showed sufficient immunogenicity in the patients with inflammatory bowel disease, the immunogenicity of patients receiving infliximab therapy was low.

**IDDF2018-ABS-0061**  
**RISK OF TUBERCULOSIS IN INFLAMMATORY BOWEL DISEASE AND OTHER IMMUNE-MEDIATED DISEASES ON BIOLOGICAL THERAPY: A POPULATION-BASED STUDY IN HONG KONG**  
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**Background** Biological therapies are increasingly used to treat inflammatory bowel disease (IBD) and other immune-mediated diseases. However, real-world epidemiological data on the risk of tuberculosis (TB) in these patients are scarce. We investigated the incidence of TB in patients with immune-mediated diseases in a population-based setting and stratified the risk of TB among different biologics.

**Methods** Data on patient demographics, disease diagnosis, types of biologics and TB infections were collected from a territory-wide computerised database of patient records managed by the Hong Kong Hospital Authority. We calculated the incidence rates (IRs) of TB infections in subjects treated with different biologics between 2006 and 2015, and reported in addition to the treatment of peptic ulcer. This study aimed to clarify the status of use of PPIs in hospitalised patients with Diagnosis Procedure Combination (DPC) data.

**IDDF2018-ABS-0060**  
**A STUDY ON THE STATUS OF PROTON PUMP INHIBITOR PRESCRIBED FOR HOSPITAL INPATIENTS IN JAPAN**  
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**Background** In Japan, the amount of usage of proton pump inhibitors (PPIs) has been increasing as the indications extended to maintenance treatment of reflux esophagitis and prevention of ulcer recurrence in patients receiving non-steroidal anti-inflammatory agents (NSAIDs) and low-dose aspirins, the amount of usage of proton pump inhibitors subjected to the survey are omeprazole, esomeprazole, lansoprazole, rabeprazole and vonoprazan. We identified 11,009 patients using PPIs throughout the study period. Prevalence of PPI use was higher among male than female, approximately 1.3 times. The average age of PPI users was 67.8 years. The number of PPI users increased 1.5 times during the study period, from 1071 (10.5% of inpatients) in 2009 to 1581 (12.3% of inpatients) in 2016. Lansoprazole was the most commonly used agent (30.7%–50.5%) during the study period, followed by rabeprazole (29.3%–48.6%) and esomeprazole. A newer agent, vonoprazan exhibited substantial growth in prescription rates (2.4% in 2015 and 13.8% in 2016). In most of the clinical departments, especially emergency and critical care medicine, neurology, cardiovascular surgery and nephrology, the number of patients prescribed PPIs was up to 3 times higher in the second half of the period (2013–2016) than in the first half of the period (2009–2012). Patients received PPIs concomitantly with NSAIDs and antithrombotic agents has been increased.

**Conclusions** The use of PPIs, as well as the approved indications for PPIs, has increased substantially in hospitalised patients. The prevalence of PPI prescription by doctors other than gastroenterologists also increased.
standardised incidence ratio (SIR) by comparing with the general population. Subgroup analyses were performed based on the types of immune-mediated diseases and biologic drugs.

**Results** A total of 2485 patients with immune-mediated diseases were identified (10.6% IBD, 77.7% rheumatology, and 11.8% dermatology). 54 subjects developed active TB during 6921 person-years of follow-up. The mean age was 43 years, and the median follow-up duration was 748 days. The overall SIR for TB in patients with included immune-mediated disease was 10.91. Patients with IBD had an over 17-fold increased risk of TB compared to the general population (SIR, 17.53), and patients on infliximab had a nearly 26-fold increased risk of TB compared to the general population (SIR, 25.95). Risk of TB was highest in the age group 50–59 years (SIR, 15.72). The risk of TB with infliximab was higher than etanercept (hazard ratio [HR], 4.10) and adalimumab (HR 2.08). No significant difference in the risk of TB was observed among the subgroups of IBD, rheumatoid arthritis, and dermatology.

**Conclusions** In the population-based study, biological therapy is associated with higher risk of TB in patients with immune-mediated diseases compared with the general population, and infliximab is associated with the highest risk of TB amongst all biologics. This study suggests patient and biologic selection may be important in balancing the benefit and risk of TB when treating patients with immune-mediated diseases.

**IDDF2018-ABS-0062**

**FUNCTIONAL OUTCOME OF HIRSCHSPRUNG’S DISEASE, POSTSURGICAL TRANSANAL ENODORECTAL PULLTHROUGH AT NATIONAL CHILDREN’S HOSPITAL**

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**Background** Hirschsprung’s Disease is a congenital illness secondary to lack of ganglion cells in the intestinal tract leading to mechanical obstruction. In the Philippines, Hirschsprung’s Disease ranks 9th over the top 10 cases causing morbidity to Filipino children and the mortality rate can reach up to 50%. The treatment is still surgery, such as Soave procedure.

**Design** Descriptive cross-sectional study.

**Subjects** The participants of the study were followed up patients at the Surgery Out Patient Department from March 2016 to August 2017, ages 0–7 years old, diagnosed with Hirschsprung’s Disease, post Transanal endorectal pull-through.

**Methodology** Purposive sampling was used to select participants. The sample size was 40 based on the proportion of good functional outcome among patients who underwent transanal endorectal pull through.

**Statistical Analysis** Descriptive Analysis using proportion and percentages were used to present the results in all the variables.

**Results** Out of the 40, 82% were diagnosed with the disease as early as the newborn period, and 55% of the patients were operated at an age from 1 to 3 years old, and about 80% were males. It also showed that postoperatively, 60% had normal z scores, and 65% of the population still had an abnormal stool. Moreover, the study showed that 95% of the subjects returned to schooling or playing post surgery.

**Conclusions** Comparing it to the 96% result of Dela Merced 2003, this study had 95% of patients who were able to achieve a good functional outcome, 4–6 weeks post-surgery.

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**HERBAL MEDICINE PRESCRIPTION PRACTICE FOR DYSPEPSIA IN THAI PUBLIC HOSPITALS**

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**Background** Herbal medicine have been endorsed by policymaker as the first line treatment for common conditions. This study was aimed to comparatively assess the prescription practice of herbal and non-herbal medicine for dyspepsia in Thailand.

**Methods** Prescription data of 15 hospitals Surat Thani province during 2014–2016 was extracted from the electronic database by using the ICD-10 code K30. The drug names and quantity were checked for accuracy and completeness. Descriptive statistics were used for data analysis.

**Results** A total of 1 05 921 dyspepsia visits by 63 249 outpatients were analysed. There were 3 45 489 drugs prescribed for dyspepsia, of which only 4.52% were herbal medicine (4.68% in 2014, 4.84% in 2015, 4.11% in 2016). The top three drugs were omeprazole (21.79%), antacid (18.51%), and simethicone (12.62%) whereas Curcumin capsule ranked ninth (3.54%). For comparison, Curcumin capsule was prescribed for 3.71% in 2014, 3.86% in 2015, and 3.12% in 2016, respectively. Most physicians prescribed only non-herbal medicine (83.57%) while combined herbal and non-herbal drugs were prescribed in only 14.43%, regardless of hospital size.

**Conclusions** Use of Thai herbal medicine for dyspepsia slightly increased despite the national policy endorsement.