

OBJECTIVES: American Diabetes Association and European Association for the Study of Diabetes recommend HbA1c levels $\leq 7\%$, and emphasize initial therapy with lifestyle interventions and metformin, addition of medications and transition to new regimens within 3-6 months when glycemic goals are not achieved, and addition of insulin in patients who remain uncontrolled. This study examines real-world practice in T2DM patients among US commercially insured patients as it relates to guideline recommendations. **METHODS:** A retrospective analysis using Truven Health MarketScan® Research Database identified adult T2DM patients from 2006-2012 with a minimum follow-up of one year. Patients were categorized based on initial therapy: cohort 1 (n=597,664) - newly diagnosed without treatment in the year prior to or following diagnosis; cohort 2 (n=342,511) - oral anti-diabetic drug (OAD) initiators; cohort 3 (n=99,578) - basal insulin initiators, and cohort 4 (n=62,876) - prandial/mixed insulin initiators. Patients were followed for up to 4 years and transitioned out of a cohort once they met the criteria for the next cohort. All data were summarized using descriptive statistics. **RESULTS:** Mean age in cohorts 1-4 were 59.1, 56.2, 57.8, and 59.1 years, with approximately equal gender distribution. In cohort 1, average HbA1c remained stable, 6.3%, during follow-up. 9% of patients initiated treatment with OADs by year 2, and 19% by year 4. Those in cohort 2 not achieving HbA1c $\leq 7\%$, insulin was infrequently initiated; approximately 1% transitioned from OADs to insulin. In cohorts 3 and 4, despite elevated HbA1c values $\geq 8\%$, the majority of patients were extensively treated with OADs prior to insulin initiation. In cohort 4, 69% of patients were using basal insulin at year 1, decreasing to 54% by year 4. **CONCLUSIONS:** Findings indicate discrepancies in regimens prescribed to T2DM patients in a real-world setting despite guideline recommendations to intensify treatment if patients fail to achieve glycemic targets.

PDB140

QUALITY OF CARE FOR PATIENTS WITH DIABETES MELLITUS (DM) IN CANADA: FINDINGS FROM A NATIONAL POPULATION-BASED SURVEY

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OBJECTIVES: As effective management of DM improves clinical outcomes, quality of care initiatives are being undertaken in many jurisdictions. In the 2012 Canadian Community Health Survey (CCHS), data were collected on healthcare received by those with DM. The objective was to characterize the demographics of, and care received by, a contemporary population of adult Canadians with DM; and assess whether care quality varied according to age or sex. **METHODS:** Data from the subset of 2012 CCHS adult respondents (n=61,707) asked about diabetes care were analyzed. Demographic and clinical characteristics were tabulated, and respondents classified as receiving quality diabetic care if they had HbA1c or foot exams during the past year, and retinal exams within two years. Predictors of receiving quality care were explored using logistic regression, and the frequency of physician visits and hospitalizations compared between those receiving, or not receiving, quality care. **RESULTS:** Of the diabetes care cohort (n=2,458), 48% were male, and 75.1% were ≥ 60 years. Eighty percent had a recent HbA1c test, and 69.2% and 55.2% had a recent eye or foot exam, respectively. Thirty-eight percent reported receiving quality diabetes care. While results were similar by sex, some variability was observed by age. The percentage receiving quality care ranged from 30.4% (≥ 80 years), to 40.1% (60-80 years). Age was the only significant predictor; the odds of receiving quality care were lower among those aged ≥ 80 years. The frequency of physician visits and hospitalizations did not vary according to receipt of quality care. **CONCLUSIONS:** While some guideline monitoring was conducted for most respondents, less than half reported receiving all aspects of recommended diabetes care. Because these data were self-reported, respondents may have received recommended evaluations but been unaware. Opportunities may therefore exist for improving the diabetic care of patients, and their awareness of that care.

GASTROINTESTINAL DISORDERS – Clinical Outcomes Studies

PGI1

SYSTEMATIC REVIEW OF ESOMEPRAZOLE FOR THE TREATMENT OF GASTROESOPHAGEAL REFLUX DISEASE

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OBJECTIVES: An 8-week course of proton pump inhibitors (PPIs) is the therapy of choice for the treatment of gastroesophageal reflux disease (GERD). Esomeprazole, the S-isomer of omeprazole, seems to have more potent acid suppression compared to other PPIs due to improved pharmacokinetic profile. The aim of the current systematic review was to identify consistent evidence of differences in efficacy between esomeprazole and the other available PPIs. **METHODS:** A literature search of Medline, Embase and Cochrane Library was conducted (last search 8/2014) to identify randomized clinical trials comparing rates of endoscopic healing and heartburn resolution with esomeprazole versus other PPIs (i.e. lansoprazole, omeprazole and pantoprazole) in the treatment of GERD. Search and selection of the studies was performed independently by two researchers. Only intention-to-treat population reported data were analyzed. **RESULTS:** Twelve RCT studies (3 vs omeprazole, 3 vs lansoprazole and 6 vs pantoprazole) met the inclusion criteria and were included in the systematic review. Almost all identified studies had low or moderate risk of bias (Jadad scale ranging 3-5). One study had high risk of bias. The analysis comparing esomeprazole 40 mg with lansoprazole 30 mg showed a significant difference in endoscopic healing rate in favor of esomeprazole at 4 weeks (OR=1.25; 95%CI: 1.12-1.40) and 8 weeks (OR=1.29; 95%CI: 1.13-1.48). Similarly, esomeprazole 40 mg demonstrated significantly higher healing rate when compared with pantoprazole 40 mg at 4 weeks (OR=1.33; 95%CI: 1.15-1.52) and with omeprazole 20 mg at 8 weeks (OR=1.56; 95%CI: 1.08-2.25). Data from meta-analysis indicated that esomeprazole 40 mg provided also

a greater proportion of patients with sustained resolution of heartburn for up to 4 weeks than omeprazole 20 mg (OR=1.34; 95%CI: 1.09-1.65). The tolerability and safety of esomeprazole were comparable to that of other PPIs. **CONCLUSIONS:** Esomeprazole proved to be more effective in healing of erosive GERD than the other available PPIs.

PGI2

EFFECTS OF NUTRITIONAL SUPPLEMENT USAGE ON MORTALITY IN PATIENT UNDERWENT ABDOMINAL RESECTION SURGERY FOR NON-ONCOLOGICAL CONDITIONS

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OBJECTIVES: Effects of malnutrition in patients underwent abdominal resection surgery (ARS) are often disregarded. This abstract aims to report nutritional supplement (NS) usage in patients underwent abdominal resection surgery (ARS) for non-oncological conditions in Turkey using general health insurance (GHI) reimbursement database of Social Security Institute. **METHODS:** Turkish GHI system has covered 98% of total population of Turkey. Therefore statistics obtained via the GHI database are highly representative of the population of Turkey. From GHI database, patients who underwent any kind of ARS for non-oncological conditions between 1 January 2009 and 31 December 2013 were included to analysis. **RESULTS:** In GHI database, 5,787 patients (mean age: 55.0 years, 45.6% female) met selection criteria of this abstract. NS was used for 6.6% of the patients during hospitalization (median 12.0 days) and NS was used median 2.0 days during hospitalization. Mortality rate was 24.2% during hospitalization. Of the 4,384 discharged patients, 1.2% used NS during outpatient follow-up duration and 0.8% used NS more than 30 days based on prescribing data. Moreover 97.6% of patients who received NS during hospitalization did not continue NS usage during outpatient follow-up duration. Median survival durations were 60.0 and 25.1 months in patients not used NS and used NS, and 12-month survival rates were 65.0% and 51.0%, respectively. **CONCLUSIONS:** The abstract showed NS usage patterns in patients who underwent ARS for non-oncological conditions in Turkey. Malnutrition risk increased with ARS due to type of intervention, but ratio of NS usage in daily practice is low and usage duration is relatively short. Moreover survival analyses revealed that NS seems to be preferred for complicated patients. In conclusion all patients underwent ARS should be evaluated for malnutrition and treated accordingly to avoid medical and economic burden.

PGI3

HEALTHCARE PATHWAYS AND BURDEN OF DISEASE OF PATIENTS WITH INFLAMMATORY BOWEL DISEASES (IBD)

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OBJECTIVES: Inflammatory Bowel Diseases (IBD), which include Crohn's disease and Ulcerative Colitis, are chronic and life-long conditions. Only symptomatic reliefs exist, because the exact cause is not entirely understood. The aim of this study was to analyze the healthcare profile and the overall cost of patients with IBD in the real clinical practice. **METHODS:** From ARNO Observatory database we carried out a record linkage analysis of disease exemptions, drug prescriptions and hospital discharges on 2.664.778 subjects, with available, complete and good quality data. Hospitalizations and specialist services of every single patient with IBD were followed up to 3 years after the accrual (from 01/01/2009 to 31/12/2009), while pharmaceutical data were collected up to 4 years. All pharmaceutical prescriptions, hospital care (re-hospitalizations, gastro-intestinal surgery, in-hospital mortality), diagnostic procedures and their costs (mean patient/year) were analyzed. **RESULTS:** 25.427 patients with IBD (50.5% female, mean 56.7 \pm 18.7 y.o.) received specific drugs: intestinal anti-inflammatory agents (92.4%), intestinal antineoplastics/antibacterials for systemic use (49.7%) the most prescribed and immunosuppressants the most expensive. As non-specific therapy, patients with IBD received Protonic Pump Inhibitors (62.3%) and antibacterials for systemic use (Penicillins - 58%, Macrolides - 39% and Quinolones - 35.8%) prescriptions. Focus on hospitalizations revealed: cancer chemotherapy was the first cause of day-hospital admissions and the most expensive one; 8.4% of patients had cardiovascular comorbidities; the most frequent re-hospitalizations of men aged 15-44 years; the most prevalent in-hospital mortality of women aged ≥ 80 years. The 1-year follow-up costs analysis provided that hospitalizations were the most expensive (54.4%/total expenditure, mean cost 1.168€/patient) and that specific drugs accounted only for the 9.4%. **CONCLUSIONS:** In-hospital cares are the main cost driver for patients with IBD. This must be considered by LHUs and Physicians when evaluating patient healthcare pathways with chronic disease and estimating costs of illness. ARNO Observatory represents an important tool to support clinical governance.

GASTROINTESTINAL DISORDERS – Cost Studies

PGI4

VEDOLIZUMAB IN ULCERATIVE COLITIS; A BUDGET IMPACT MODEL FOR A NOVEL DRUG IN A RECESSION ENVIRONMENT

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OBJECTIVES: Ulcerative Colitis (UC) exerts significant burden to IBD patients and payers. The aim of this study was to estimate the budget impact of vedolizumab in moderate/severe UC, from the perspective of the Greek healthcare setting. **METHODS:** A Microsoft Excel-based budget impact model was adapted for a hypothetical cohort within the total Greek population of IBD patients with moderate/severe UC. The budget impact was calculated and presented as incremental drug-acquisition and administration costs (input values obtained from National official databases), before and up to three years after the introduction of vedolizumab versus standard of care.