EFFECTS OF PATIENT-REPORTED NON-SEVERE HYPOGLYCAEMIA ON HEALTH

difficult to quantify factors notwithstanding, our analysis suggests that in the last reduction (3965 less episodes in 2009) and hospital costs would have suffered a 5.3% increase by one year, the number of admissions would have had a 3.8% hospital costs (p<0.007). According to the model, if the average “vintage” of OADs had increased by one year, the number of admissions would have had a 3.8% reduction (3965 less episodes in 2009) hospital costs would have suffered a 5.3% increase. CONCLUSIONS: The possible influence of other differences in prescription patterns, and in the type of patients admitted to hospital would have been limited to 10% in patients treated by an endocrinologist, or a diagnosis of pituitary adenoma, or a transsphenoidal surgery (TSS) or medical therapy.

CONCLUSIONS: To estimate the health care resource utilization and costs associated with Cushing’s disease (CD) in Quebec. METHODS: A retrospective cohort study was conducted using data from the Quebec public health insurance (RAMQ) from January 2001 to June 2011. Patients with at least two diagnoses (CD) were initially selected. CD was further confirmed with at least 2 diagnoses of CD reported by an endocrinologist, or a diagnosis of pituitary adenoma, or a transsphenoidal surgery (TSS) or medical therapy.

CONCLUSIONS: To estimate the health care resource utilization and costs associated with Cushing’s disease (CD) in Quebec. RESULTS: A total of 25 patients with two diagnoses of CD, 322 were considered confirmed cases of endogenous CD. The average age was 48.0 yrs (SD=16.8) and 72.0% were females. During the study period, TSS and BLA were performed for 23% and 21% of patients respectively while 11.8% had a medical treatment to control hypercortisolism. Among these patients 5% had two interventions and 0.9% had the three interventions. Annual costs for all patients were $14,451, $5,737 and $5,679 respectively for each of the three year following initial CD diagnosis. For patients who had a TSS, or a BLA, or a medical treatment, or a combination of these, the total cost in the first year following the initial intervention varied from $12,258 to $28,888.

CONCLUSIONS: Results of this retrospective analysis of RAMQ database illustrate the significant economic burden of acromegaly and of its comorbidities.

OBJECTIVES: To estimate the demographic and clinical characteristics in patients with Cushing’s disease (CD) and to estimate the health care resource utilization associated in these patients in Ontario. METHODS: Retrospective analysis of resource use captured in the Southwestern Ontario Database from 2001 to June 2011. A total of 86 patients (72% females) were analyzed based on diagnosis, out of a total population of 523,718 patients. A matched control group (CG) (N=86) was also included from the general population. RESULTS: Age of patients at the time of diagnosis was 43±24.5 years (mean±SD). Baseline co-morbidities (CM) included hypertension (67.4%), dyslipidemia (25%), diabetes (23%), renal calcui (17.4%), visual disturbance (20.9%), carpal tunnel syndrome (19.8%) and osteoporosis (11.6%). Distribution of co-morbidities was statistically significantly higher than general population (p-value <0.05); 27% had 2 CM and 35% had 3 or more CM. Baseline Urinary Free Cortisol (UFC) level was 207.7±118.3 nmol/day (UFC ULN=110). Primary treatment options included transsphenoidal surgery (TSS), bilateral adrenalectomy (BLA), radiosurgery and medical therapy, used in 79%, 6% and 12% of patients respectively. Secondary treatment was surgical in 37% of patients: consisting of repeat TSS in 21%, BLA in 10% and RS in 6%; while the majority received medical therapy (62%). Average length of stay was 6 days (SD=4) and 9 days (SD=7) for TSS and BLA respectively. Medical therapy, prescribed as monotherapy, included ketoconazole (38%), cabergoline (21%), bromocriptine (20%) and mitotane (15%). Health care provider interactions per year for CD post intervention compared to CG were: Emergency Room visit: 1.01 vs. 0.66; clinic visits: 4.86 vs. 1.89; specialist clinic visits: 5.57 vs. 0.92; and hospitalizations: 0.34 vs. 0.15. CONCLUSIONS: This retrospective analysis of patients diagnosed with Cushing’s disease indicates that they require substantially higher resource use and experience a high burden of comorbidities.

OBJECTIVES: To estimate the demographic and clinical characteristics in patients with Cushing’s disease (CD) and to estimate the health care resource utilization associated in these patients in Ontario. METHODS: Retrospective analysis of resource use captured in the Southwestern Ontario Database from 2001 to June 2011. A total of 86 patients (72% females) were analyzed based on diagnosis, out of a total population of 523,718 patients. A matched control group (CG) (N=86) was also included from the general population. RESULTS: Age of patients at the time of diagnosis was 43±24.5 years (mean±SD). Baseline co-morbidities (CM) included hypertension (67.4%), dyslipidemia (25%), diabetes (23%), renal calcui (17.4%), visual disturbance (20.9%), carpal tunnel syndrome (19.8%) and osteoporosis (11.6%). Distribution of co-morbidities was statistically significantly higher than general population (p-value <0.05); 27% had 2 CM and 35% had 3 or more CM. Baseline Urinary Free Cortisol (UFC) level was 207.7±118.3 nmol/day (UFC ULN=110). Primary treatment options included transsphenoidal surgery (TSS), bilateral adrenalectomy (BLA), radiosurgery and medical therapy, used in 79%, 6% and 12% of patients respectively. Secondary treatment was surgical in 37% of patients: consisting of repeat TSS in 21%, BLA in 10% and RS in 6%; while the majority received medical therapy (62%). Average length of stay was 6 days (SD=4) and 9 days (SD=7) for TSS and BLA respectively. Medical therapy, prescribed as monotherapy, included ketoconazole (38%), cabergoline (21%), bromocriptine (20%) and mitotane (15%). Health care provider interactions per year for CD post intervention compared to CG were: Emergency Room visit: 1.01 vs. 0.66; clinic visits: 4.86 vs. 1.89; specialist clinic visits: 5.57 vs. 0.92; and hospitalizations: 0.34 vs. 0.15. CONCLUSIONS: This retrospective analysis of patients diagnosed with Cushing’s disease indicates that they require substantially higher resource use and experience a high burden of comorbidities.
pegsomovan (13%) and bromocromine (7%). Baseline co-morbidities (CM) included hypertension (66%), carpal tunnel syndrome (23%), osteoporosis (16%), dyslipidemia (12%), visual disturbance (12%), sleep apnea (2%), myocardial infarction (2%) and renal calculi (2%). Distribution of co-morbidities was statistically significantly higher than general population (p-value < 0.05), specifically those with 1 CM (41%) or 3 CM (19%) or more. Longitudinal assessment of co-morbidities reported no statistically significant change prior and post therapy. CONCLUSIONS: This retrospective analysis of patients diagnosed with acromegaly indicates that they require substantially higher resource use and experience a high burden of comorbidities.

DIABETES/ENDOCRINE DISORDERS - Patient-Reported Outcomes & Patient Preference Studies

PD852
ADHERENCE: A REAL WORLD RETROSPECTIVE DATABASE STUDY AMONG TYPE 2 DIABETES PATIENTS TREATED WITH LIRAGLU意识形态 UNEXENATIDE Maria A1, Carigraviot P1, Langer J3, Bouchard J3
OBJECTIVES: An important factor to take into account when evaluating the effectiveness of a drug is adherence. Adherence describes the degree to which a patient correctly follows medical advice. The objective of this study was to evaluate the factors that determine adherence of adult patients with type 2 diabetes treated with once-daily injectable liraglutide 1.8mg or twice-daily injectable exenatide 10µg. METHODS: A retrospective study was conducted employing US data from the IMS PharMetrics claims database. The index period ranged from January 2010 to December 2010 and patients needed to be continuously enrolled 12 months before and after the index date. Patients were treatment naive to liraglutide and exenatide but not previously treated with any insulin. Baseline data was not part of the patient selection exclusion criteria, which may have impacted the outcomes as a limitation of the study. Adherence was measured by continuous Medication Possession Ratio (MPR) as well as a categorical response using MPR (MPR <80%=high adherence, MPR ≥80%= low adherence). The determinants of adherence were identified through a model-building approach was used. RESULTS: Data from 3623 patients (2036 liraglutide; 1587 exenatide 10µg) were used in the analyses. When adjusting for confounding effects, patients treated with exenatide 10µg were approximately 11% (p<0.001) less adherent than patients treated with liraglutide 1.8mg assessed by the continuous MPR measure. The odds ratio (OR) for achieving a high categorical MPR for liraglutide 1.8mg compared to exenatide 10µg was 1.33 in favor of liraglutide 1.8mg (p<0.001). Variables found to impact the level of adherence were age, gender, the geographic region, treatment, and percentage co-payment from the claimant. CONCLUSIONS: The analysis showed that once-daily liraglutide 1.8mg is associated with better adherence than twice-daily exenatide 10µg.

PD853
PRELIMINARY RESULTS OF A MULTICENTER OBSERVATIONAL STUDY OF TREATMENT COMPLIANCE WITH FREE-COMBINATION VERSUS FIXED COMBINATION TREATMENT IN TYPE 2 DIABETES MELLITUS PATIENTS IN GREECE (LESS STUDY)
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OBJECTIVES: To assess the differences in the compliance of patients with diabetes suffering from type 2 diabetes mellitus who received free combination therapy of metformin and vildagliptin compared to the diabetic patients who received fixed combination therapy of metformin/vildagliptin. METHODS: Eight hundred adult patients inadequately controlled on twice daily 850mg metformin monotherapy who were recently added vildagliptin treatment as add on to metformin (fixed dose combination or free combination) were enrolled in the study. The observation period was 6 months. Upon treatment initiation each patient received a diary, in which they had to record their treatment on a daily basis. The diary then was conducted in 100 subjects to assess the psychometric properties of the D-MIQ and supported the conceptual framework developed from previous qualitative and quantitative research. Although IPAQ subscales did not consistently meet acceptable internal consistency reliability for some group level comparisons, the total IPAQ score showed high internal consistency reliability (Cronbach’s alpha = 0.77 – 0.86). In general, the construct validation (predictive validity) findings were consistent across norms and across subject groups and generally consistent with those from the US trial. CONCLUSIONS: The IPAQ total score for ease of use demonstrated good internal consistency reliability and good construct validity in measuring ease of use with injection pens to administer rhGH. Findings from this research are consistent with those from the US-based study, supporting the usefulness of the IPAQ total score in evaluating ease of use and preference for injection pens in clinical trials and in practice.

PD854
SYSTEMATIC LITERATURE REVIEW OF UTILITY VALUES ASSOCIATED WITH TYPE 2 DIABETES-RELATED COMPLICATIONS
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OBJECTIVES: Cost-utility analysis of type 2 diabetes mellitus (T2DM) interventions require estimation of health outcomes associated with T2DM-related complications. The objective of this study was to increase the robustness of such estimates in line with the National Institute for Health and Clinical Excellence (NICE) requirements a systematic literature review of utility values associated with T2DM-related complications was performed. METHODS: The review was performed according to NICE methodology recommendations using Medline, Embase, EcomLIT and the NHS Economic Evaluation Database in May 2012. Health utilities selected were based on the NICE reference case, including a preference for EQ-5D and UK population. Landmark study articles reporting multiple utility values were identified. RESULTS: A total of 16,578 records were identified and 61 full text articles were included in the qualitative synthesis. T2DM without complication values ranged from 0.690 to 0.970. The proposed utility set primarily consisted of utility values extracted from Clarke 2002 (T2DM without complication: 0.785, myocardi- a failure: 0.005, angina: 0.180, heart failure: 0.020, severe vision loss: -0.074, amputation: -0.28) and Bagust 2005 (peripheral vascular disease: -0.061, proteinuria: -0.048, neuropathy: -0.084, foot ulcer: -0.170 and overweight: -0.0061 per BMI unit above 25 kg/m2). These values were supplemented by Was-serfallen 2004 (haemodialysis: 0.621, peritoneal dialysis: 0.581); Kiberd and Jidal 1995 (renal transplant: 0.762); Fernd (mid-non-porative diabetic retinopathy or macular oedema: 0.760, vision threatening diabetic retinopathy: 0.730) as well as Currie 2006 (major hypoglycaemia: -0.270, minor hypoglycaemia: -0.070). Limita- tions included the partial lack of studies in a diabetic- or UK-specific population, the variability in reporting media, mean or values adjusted for confounding factors. CONCLUSIONS: This set of values should improve the robustness of T2DM modelling outcomes in line with NICE requirements. Future research could focus on eliciting a coherent set of values for T2DM-related complications in line with the NICE reference case to be able to define the variance around the utility value point estimates.

PD855
THE ADAPTATION OF THE INJECTION PEN ASSESSMENT QUESTIONNAIRE FOR USE IN EUROPE – VALIDATION RESULTS FROM A LARGE MULTICENTER STUDY OF RECOMBINANT HUMAN GROWTH HORMONE TREATMENT NAÏVE CHILDREN AND ADULTS
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1Pfizer, Inc., San Diego, CA, USA, 2United BioSource Corporation, Bethesda, MD, USA, 3Pfizer, Ltd, Walton Oak, UK
OBJECTIVES: To examine the reliability and validity of the Injection Pen Assessment Questionnaire (IPAQ) in a European population. METHODS: The IPAQ is a 29-item measure of objective and comparative ease of use and preference for recombinant human growth hormone (rhGH) injection devices based on content elicited from focus groups and one-on-one interviews of device users. The IPAQ was included in a Phase 3, open-label, multicenter trial in 316 experienced rhGH subjects (parent-child dyads) in the United States to test the ease of use and preference for a new Genotropin® disposable pen (NCT00965484). IPAQ content was adapted for use in adults and translated into seven languages. Data from a Phase 3, open-label, multicenter, crossover study (NCT01112865; N=120) was used to evaluate the psychometric properties of the IPAQ in a mixed sample of dyadic pairs, adult subjects and caregivers of pediatric subjects. Analyses were conducted by group and total sample. RESULTS: Confirmatory factor analysis provided evidence for a 4-factor solution for four subscales (ease of use, preference, self-efficacy and T2). The IPAQ supported the conceptual framework developed from previous qualitative and quantitative research. Although IPAQ subscales did not consistently meet acceptable internal consistency reliability for some group level comparisons, the total IPAQ score showed high internal consistency reliability (Cronbach’s alpha = 0.77 – 0.86). In general, the construct validation (predictive validity) findings were consistent across norms and across subject groups and generally consistent with those from the US trial. CONCLUSIONS: The IPAQ total score for ease of use demonstrated good internal consistency reliability and good construct validity in measuring ease of use with injection pens to administer rhGH. Findings from this research are consistent with those from the US-based study, supporting the usefulness of the IPAQ total score in evaluating ease of use and preference for injection pens in clinical trials and in practice.