

use and costs were obtained from 5000 randomized hospital records from the Social Security Mexican Institute (IMSS) and official institutional databases. Costs include outpatient and inpatient services, drug, procedures, etc. The model was validated according to international guidelines. Probabilistic sensitivity analyses were performed employing bootstrapping techniques and acceptability curves were constructed. **RESULTS:** The highest percentage of patients with no or mild pain during the follow-up period was obtained by pregabalin (44.8%; CI95% 42.8%–48.0%); followed by gabapentin (38.1%; CI95% 33.2%–43.5%); duloxetine (34.2%; CI95% 27.8%–40.6%) and amitriptyline (22.2%; CI95% 21.0%–24.0%). The annual expected mean costs per patient were US\$1503.2 (US\$1472.2–US\$1534.09); US\$1742.7 (US\$1,715.1–US\$1,770.2); US\$2,046.6 (US\$2018.6–US\$2074.7) and US\$643.6 (US\$615.2–US\$673.5), respectively. The ICER of pregabalin vs. amitriptyline (basecase) was US\$3798.9 (US\$3336.1–US\$4,325.9). Other treatments were dominated by pregabalin. Second-order Monte Carlo sensitivity analyses indicated that pregabalin would be a cost-saving strategy in a range of 60%–70% within accepted thresholds ($p < 0.05$). **CONCLUSIONS:** In Mexico, pregabalin showed to be a cost-effective and cost-saving therapy when compared with amitriptyline and other usual treatments in the management of FM.

PSY22

ECONOMIC EVALUATION OF RECOMBINANT FACTOR VIII PRODUCTS IN TREATMENT OF HAEMOPHILIA A. IN KOREAKim JY¹, Lee JH², Heo JH¹, Lee EK¹¹Sook Myung Women's University, Seoul, South Korea, ²Sook Myung Women's University, Seoul, Seoul, South Korea

OBJECTIVES: Haemophilia A is a hereditary genetic disorder with a relatively high burden of disease from the perspective of both society and the individual patient. Kogenate FS is a second-generation full-length recombinant factor VIII (FVIII), produced without the addition of human albumin during formulation. It shows lower incidence of inhibitors compared with other recombinant factor VIII products, which has an impact on economic evaluation because the haemophilia patients with inhibitors have to be treated with a significantly higher dosage or expensive bypassing agents. The main objective of this study is to conduct economic evaluation of Kogenate FS compared with Recombinate in haemophilia A patients in Korea. **METHODS:** A cost-minimization analysis was performed under the assumption that Kogenate FS and Recombinate were clinically equivalent for treating bleeding episodes. A decision-analytic model was developed to estimate the lifetime costs by reflecting each different treatment strategies for haemophilia A patients with inhibitors or not. If patients had inhibitors, it was ramified according to the inhibitor titres into one of three pathways: <5BU, 5–10BU, and >10BU. The analysis was conducted based on the societal perspective, and costs were discounted at 5% annually. Sensitivity analyses were performed on crucial parameters. **RESULTS:** Incidence of inhibitor for Kogenate FS and Recombinate were 8.113% and 16.9% respectively. Using the base case analysis, the expected cost for Kogenate FS was US\$1,979,133 compared with \$2,382,332 for Recombinate. So, Kogenate FS is \$403,199 lower than Recombinate during lifetime. The differences were mainly due to the higher inhibitor treatment costs. One-way sensitivity analysis revealed stable across included parameters. **CONCLUSIONS:** This cost minimization study identified that treatment of Kogenate FS appears to save costs compared with treatment of Recombinate. By initiating and continuing Kogenate FS treatment, the economic burden associated with Haemophilia A can be reduced under Korean health care system.

PSY23

ECONOMIC EVALUATION OF DARBEPOETIN ALFA AND EPOETIN IN HEMODIALYSIS PATIENTS WITH ANEMIA AND CHRONIC KIDNEY DISEASEVorobiev P¹, Lesnicheva M², Avksentieva M³, Nekrasova N¹¹Moscow Medical Academy named after I.M.Sechenov, Moscow, Russia, ²Russian Society For Pharmacoeconomics and Outcomes Research, Moscow, Russia, ³Moscow Medical Academy named after I.M.Sechenov, Moscow, Moscow, Russia

OBJECTIVES: To perform economical evaluation of darbepoetin alfa vs. epoetin alfa in hemodialysis patients with anemia and chronic kidney disease. **METHODS:** The modeled study was performed. Proportion of patients receiving alternative erythropoiesis-stimulating proteins (ESP) dosing regimen, efficacy and safety of drugs were extracted from multicenter randomized study made by Nissenon et al (American Journal of Kidney Diseases 2002; 1:110–8). Cost of treatment with ESPs for 28 weeks and cost-minimization ratio (CMR) were calculated from the Russian reimbursement system point of view. **RESULTS:** According to selected study, the efficacy and safety profile of darbepoetin alfa was similar to that of epoetin alfa. Mean dose decrease from 63.18 µg/wk to 54.18 µg/wk was observed in darbepoetin alfa group, while mean dose increase from 12,706 to 13,639 was registered in epoetin alfa group during 28 weeks. The costs of used medications were the same for darbepoetin alfa and epoetin alfa (RUB230,148.1 vs. RUB 229,427.19 (USD7,292.4 vs. USD7,269.56)). The cost of medical manipulations were less for darbepoetin alfa due to its reduced dosing frequency (RUB2284.8 vs. RUB6854.8 (US\$72.4 vs. USD217.2) accordingly). Cost-minimization analysis showed that cost of treatment with darbepoetin alfa is less than epoetin alfa (CER = RUB3384.7 (US\$107.3)). Sensitivity analysis was made on the basis of model, constructed with data extracted from other study (Molina et al., Nephrologia 2004; 6). It confirmed the results of present work. **CONCLUSIONS:** According to the model darbepoetin alfa seems to be as effective and safe as epoetin alfa, but it takes fewer costs for treatment of anemia in hemodialysis patients with chronic kidney disease due to low dosing frequency and dose saving effect.

THE IMPACT OF OBESITY ON MEDICAL EXPENDITURE AND HEALTH RELATED QUALITY OF LIFE

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OBJECTIVES: To quantify the effect of obesity on the total direct medical expenditure and health related quality of life in the population of the United States. **METHODS:** Data from the MEPS's Household Component (2006), a nationally representative survey of the U.S. civilian non-institutionalized population, was used. Analysis accounted for the survey's clusters, strata and sampling weights. Obesity was defined as body mass index ≥ 30 . Direct medical expenditure attributable to obesity was estimated under diverse econometric models to assess sensitivity to zero-mass, non-negative values and skewed distribution. Models compared were ordinary least-squares (OLS) on raw and log-transformed expenditures (homoskedastic and heteroskedastic re-transformations), and generalized linear models (GLM) with log-link and Gamma/Poisson families, including 2-part variants of these 5 models. Box-Cox test and Modified Park's test determined the link and family in the GLM models. LINK, RESET, Hosmer-Lemeshow and Pearson's correlation test determined model fit, while Copas test was employed for over-fitting and cross validation. Incremental expenditure from the method of recycled predictions summed over population with obesity gave the total expenditure. Impact of obesity on SF12 mental and physical health component was assessed by OLS. Covariates included age, gender, race, ethnicity, income, geographic-location, and comorbidity. **RESULTS:** The 2-part model of OLS on raw expenditure was the only model to pass all the specification and cross-validation tests. Based on this model, annual incremental expenditure of obesity was \$1188.50 (95% CI = \$1183.70 to \$1193.40). Total direct expenditure of obesity was \$72 billion (95% CI = \$68.2 to \$75.8 billion), nearly 3-fold increase compared to 1998 estimates. SF12 physical component score was lower by 3.7 ($p < 0.001$) while the mental component score was lower by 1.2 ($p < 0.001$) for those with obesity. These decrements are similar to those observed for diabetes or hypertension. **CONCLUSIONS:** Obesity exerts an enormous economic and humanistic burden on the U.S. civilian non-institutionalized population.

PSY25

MEDICAL TREATMENT COSTS ATTRIBUTABLE TO OBESITY IN PATIENTS WITH ASTHMA AMONG U.S. ADULTSSuh DC¹, Yang JH¹, Kim CM², Jang SM³, Jung JC⁴, Barone JA¹¹Rutgers University, Piscataway, NJ, USA, ²Catholic University, Seoul, South Korea, ³Health Insurance Review & Assessment Service, Seoul, South Korea, ⁴Korea National Health Insurance Corporation, Mapo-gu, Seoul, South Korea

OBJECTIVES: To estimate the prevalence of asthma with obesity and the annual medical costs attributable to obesity. **METHODS:** The cross-sectional analysis was conducted from adults aged 18–74 who participated in the 2003–2006 Medical Expenditure Panel Survey. Total of 6670 asthma patients were identified based on the self reported diagnosis or ICD-9-CM code of 493 after excluding patients with pregnancy, malignancy, kidney dialysis, immunodeficiency, or body-mass-index (BMI) <18.5. These patients were classified as normal (BMI:18.5–<25) or obese (BMI:≥30). Total medical costs included office based physician/outpatient visits, emergency room visit, or hospitalization except dental problems and injuries. Costs related to respiratory system diseases were costs associated with ICD-9-CM of 460–516. The medical cost attributable to obesity was the difference between the observed cost and the predicted cost which was calculated using the parameters estimated from obese patients. The parameters for obese patients were estimated using a generalized linear model with a log link function and a gamma distribution after adjusting for demographic, social-economic, and co-morbidity variables. All costs were converted to 2006 U.S. dollars using price indices. Data were analyzed using SAS/STATA. **RESULTS:** The age-adjusted prevalence of asthma in total population was 8.2% and that of asthma with obesity was 2.8% respectively. The average total medical treatment costs in obese asthma patients were \$5090 (95%CI:\$4639–\$5540), significantly higher than normal weight patients (\$2,825;95%CI:\$2291–\$3359; $p < 0.001$). After adjustments, the total medical costs attributable to obesity per patient were \$3,960 (95%CI:\$3,693–\$4,228). Of that cost, \$154 was attributable to respiratory system diseases (95%CI:\$48–\$259) with the biggest increment in patients aged 65–74 old. **CONCLUSIONS:** Obesity is prevalent in general population as well as asthma patients. The average medical cost attributable to obesity was significantly higher than normal weight asthma patients. Effective public programs aiming at educating the importance of controlling weight are strongly recommended to diminish the economic burden of obesity.

PSY26

COST OF OPIOID USE IN A COMMERCIALLY INSURED POPULATION OF FIBROMYALGIA PATIENTS

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OBJECTIVES: Although opioids have not demonstrated efficacy in treating fibromyalgia (FM) and pose a risk for addiction, they are commonly used to treat FM patients. This study assesses the mean annual per patient cost of FM-related opioid use in commercially insured FM patients. **METHODS:** Using the Thomson/Medstat MarketScan Commercial Claims Database, we identified all patients aged 18+ years with continuous health plan eligibility in 2006 and ≥ 1 inpatient or ≥ 2 outpatient paid medical claims in calendar year 2006 with ICD-9-CM diagnosis code 729.1 ("FM patients"). Rx medications designated as possibly related to FM treatment ("FM-