neuroleptic-serotonin syndrome, impulse control disorder, somnolence, sleep attacks, hallucinations, (psychoses) and for all AEs combined. Index dates were assigned as first AEs and costs for cases with first AEs-PD prescription claim for controls. Patients were enrolled pre-index for 6 months and post-index for 12 months. All-cause costs were aggregated over 12 months post-index. Costs (2012 $) were adjusted using GLM models with covariates for demographics and pre-index activity. RESULTS: A total of 763 patients met criteria, 45,719 with ≤1 AE (mean[SD]: age 74.91[1.0] years, 55% male) and 26,164 with no AEs (mean[SD]: age 75.0[1.9] years, 59% male). Among patients with ≤1 AE, mean-cause costs per patient were substantially higher as compared with controls ($23,568 vs $13,633; p<0.001), with the difference driven roughly equally by incremental inpatient and outpatient costs of $4,398 and $5,031, respectively (both p<0.001). For all AEs individually, patients experiencing the AE had substantially higher mean-all-cause costs for corticosteroid use ($9,510 vs $7,717, 26% higher), orthostatic hypotension ($30,551 vs $17,635, 74% higher), hallucinations ($30,822 vs $17,843, 74% higher), and nausea ($12,865 vs $16,456, 29% higher). CONCLUSIONS: PD patients experienced higher formal and informal care costs as compared with controls without AEs. These data may be useful in evaluating the cost-effectiveness of new PD therapies with more favorable AE profiles.

PND22 PREDICTORS OF COSTS IN DEMENTIA IN A LONGITUDINAL PERSPECTIVE
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OBJECTIVES: The current study is a longitudinal analysis of costs in dementia from a societal perspective. The data were collected as part of the AgeCoDe study. The aim of this study is to analyse excess costs of dementia over time while taking into account the initial degree of severity and to investigate potential predictors of costs over time. METHODS: Health care resource use and costs were assessed retrospectively using a questionnaire in four waves at 6-month intervals in a sample of dementia patients (N=175) and a non-demented control sample (N=173) matched for age and gender. Sociodemographic data, dementia severity and comorbidity, costs and baseline cognitive impairment and ADL impairment in activities of daily living (ADL) were also recorded. Statistical analyses were performed by means of the \textit{t}-test or Fisher’s exact test, two-tailed t-tests, \textit{t}-test of a linear mixed regression model with random intercepts for individuals. We used bootstrapped standard errors (based on 4000 replications) in regression analyses to account for the skewness of the cost data. RESULTS: For patients with mild dementia, costs increased by approximately $900 (2012 US-$1250) per six months, while they decreased by $700 (US-$1375) in patients with severe dementia. ADL impairment significantly predicted total costs in dementia patients. Higher age was associated with higher formal care costs, but lower informal care costs. CONCLUSIONS: Older age was associated with higher formal care costs, but lower informal care costs required by severely demented patients prior to transition into a nursing home may result in higher costs than incontinence and lower costs in patients with mild dementia.

PND23 HEALTH CARE RESOURCE UTILIZATION AND COSTS IN PATIENTS INITIATING NATALIZUMAB THERAPY FOR MULTIPLE SCLEROSIS IN THE UNITED STATES
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OBJECTIVES: Patients with multiple sclerosis (MS) who have relapses are treated with corticosteroids and sometimes admitted to the hospital. The objective of this study is to examine changes in corticosteroid utilization, MS-related inpatient hospitalization, and related costs in MS patients before and after initiating natalizumab treatment in a real-world setting. METHODS: Retrospective administrative claims analysis was conducted using a large US commercial and Medicare supplemental database. The study population included adult patients diagnosed with MS who initiated natalizumab treatment between January 1, 2007, and December 31, 2010 (index). Patients were followed for 12 months post-index (posttreatment) natalizumab treatment initiation was analyzed and described using paired statistical tests. RESULTS: Data were from 535 patients: 70.1% females, mean age 45.8 (SD=11.2) years, 96.7% with severe hemophilia A (factor VIII deficiency) has a prevalence of 0.81 per 100,000 in Colombia (96% male). Severe hemophilia is defined as a blood clotting factor level ≤1%. This analysis is aimed to estimate the cost-effectiveness of prophylactic treatment of severe hemophilia A, compared to demand treatment in Colombia. METHODS: A decision tree model was developed using a time horizon of life expectancy. A societal perspective was adopted; annual discount rate of 3% was applied to costs and effectiveness measures. Prophylactic treatment with recombinant factor IX (25 IU/kg 3 times per week) was compared to on demand treatment (50 IU/kg TID for 7 days for each bleeding episode). A cohort of 1,000 patients (0-14 years) with an average weight 40 kg and inhibitors present was simulated. Effectiveness and probabilities of adverse events were taken from the literature. Costs (direct and indirect) were taken from local tariff manuals (SOAT and SISMED). Effectiveness measures were number of cases avoided of bleeding and joint damage. All data were validated with a clinical expert. Univariate sensitivity analysis was done. Costs are presented in 2012 US$. RESULTS: Over the time horizon evaluated, prophylactic treatment avoids 823 cases of bleeding and 292 of joint damage. Total expected costs of treatment with prophylactic treatment were $634,476, compared to on demand treatment US$1.7M. The incremental cost effectiveness ratio (ICER) for prophylactic treatment was US$1,079/avoided bleed, US$3,042/avoided joint damage. CONCLUSIONS: From the societal perspective, prophylactic treatment of severe hemophilia A, with recombinant factor VIII would be a highly cost-effectiveness intervention with strong health benefits in number of cases of bleeding and joint damage avoided (cost-effectiveness threshold: 1 Colombian GDP per capita = US$7,235).

PND25 COST-EFFECTIVENESS ANALYSIS OF DONEZEPIL AND RIVASTIGMINE FOR MILD TO MODERATE ALZHEIMER’S DISEASE IN TAIWAN
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OBJECTIVES: Few studies regarding the head-to-head cost-effectiveness analysis of medications treating for Alzheimer’s Disease have been conducted in Asia. The age and economic status of patients in Asia are different from those in Europe and the USA. METHODS: A four-state Markov model was built to simulate the disease progression of the mild to moderate AD patients’ life span (from sixty five years of age to death). Transition probabilities between states and the cost of medical treatments at different stages derived from the local data in Taiwan. Analyses were run to evaluate outcomes for patients with mild AD from societal perspective. RESULTS: The result of the Markov cohort simulation shows that for the life expectancy in the long-term, rivastigmine treatment is the dominant strategy as it is more effective and economical than the others. Specifically, treating patients with rivastigmine, compared with no treatment, yielded a 0.94 quality-adjusted life years (QALYs) increase per patient over the life time. Furthermore, the average cost savings per patient favored rivastigmine by resulting in US$50.29 from the societal perspective. CONCLUSIONS: The cost-effectiveness analysis showed the cost-effectiveness of donezipel and rivastigmine on the costs and efficacy of mild to moderate AD patients. METHODS: A decision tree model was built to simulate the disease progression of the mild to moderate AD patients’ life span (from sixty five years of age to death). Transition probabilities between states and the cost of medical treatments at different stages derived from the local data in Taiwan. Analyses were run to evaluate outcomes for patients with mild AD from societal perspective. RESULTS: The result of the Markov cohort simulation shows that for the life expectancy in the long-term, rivastigmine treatment is the dominant strategy as it is more effective and economical than the others. Specifically, treating patients with rivastigmine, compared with no treatment, yielded a 0.94 quality-adjusted life years (QALYs) increase per patient over the life time. Furthermore, the average cost savings per patient favored rivastigmine by resulting in US$50.29 from the societal perspective.