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stratification to mono- or adjunct therapy. Outcome variables were patient- and physician-reported treatment SEU ratings at weeks 4 and 12. Predictors included change from baseline in the bradykinesia subscale of the Unified Parkinson's Disease Rating Scale, change from baseline in patient- and physician-reported Activities of Daily Living (ADL), and patient- and physician-reported Clinical Global Impression (CGI). Data were analyzed using linear regression. RESULTS: SEU ratings with rasagiline were positive at all visits. Complete data were available for 109 monotherapy and 131 adjunct therapy patients at week 12. Patient- and physician-reported CGI were positively related to SEU ratings reported by the same individual at the same visit (p < 0.05); patient-reported CGI was positively related to physician-reported SEU ratings at week 4 (p < 0.05). Bradykinesia improvement from baseline predicted physician-reported SEU ratings at week 4 for monotherapy (p < 0.01). Patient-reported ADL improvement from baseline predicted patient-reported SEU ratings at week 12 for adjunct therapy (p < 0.01). CONCLUSIONS: Patient- and physician-reported CGI were consistently related to patient- and physician-reported SEU ratings with rasagiline. Furthermore, improvement in bradykinesia symptoms and patient-reported ADL predicted subsequent ratings of treatment SEU in some cases. Additional research on patient- and physician-reported treatment SEU scales in PD populations is needed to refine this important endpoint.

#### NEUROLOGICAL DISORDERS - Health Care Use & Policy Studies

#### PND33

PND34

## EPIDEMIOLOGIC CHARACTERISTICS AND HEALTH RESOURCE USE IN A MULTIPLE SCLEROSIS CENTER IN SAO PAULO, BRAZIL

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OBJECTIVES: Multiple Sclerosis (MS) is an immunomediated, highly disabling disease affecting young adults. The demographic characteristics, disease modifying therapies and health resources utilization by patients followed at a MS reference center in Sao Paulo, Brazil are presented. METHODS: Patient's charts were reviewed from a retrospective cohort of 353 MS patients. Patients were selected by attendance to outpatient visits at Hospital das Clínicas, Faculty of Medicine - University of Sao Paulo from March to May 2008. RESULTS: From 353 patients, 74% were female and 86% were white-Caucasians. A positive family history was identified in five patients. Sixty-eight percent had relapsing-remitting MS, 13% secondary progressive MS and 10% primary progressive MS. Half of the patients had MS diagnosis for less than 5 years. At the last interview, 226 patients (64%) were on immunomodulatory agents. From these, 59 patients were using glatiramer acetate and 167 were using beta-interferons. The immunomodulatory drug was changed in 11 patients. Sixty-one patients (17%) were on immunossupressants, with 31% using azathioprine. Average EDSS score at last visit was 4.2. Approximately 24% of patients had at least one relapse requiring treatment and 5% were hospitalized in the last 12 months. CON-CLUSIONS: There are few data on epidemiology and health resource use published in Latin-American countries, while many countries like Brazil provide high-cost treatments at public health system. In our study, the current approved MS therapies were widely used. Therefore, the understanding of local patients' characteristics and health resources use can provide data for an optimized, tailored disease management solutions in these countries.

## DISEASE BURDEN AND TREATMENT PATTERNS OF PARKINSON'S DISEASE IN A LONG TERM CARE SETTING

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OBJECTIVES: Examine the patient characteristics, treatment patterns and cost of care among Parkinson's Disease (PD) residents in a long term care (LTC) setting, specifically, skilled nursing facilities (SNFs) in the US. PD is a progressive neurodegenerative disorder that produces considerable morbidity. The prevalence and incidence of PD increase with age. PD affects more than 3% of individuals over 65 years old. METHODS: Retrospective analysis of PD patients in SNFs from June 2004-2008. Using a large provider database, 7885 PD patients were identified. Patient demographics, comorbidities, treatment patterns and costs were assessed using administrative and clinical databases at baseline and one year (1 year). RESULTS: A total of 4150 PD patients with baseline and 1 year data constituted the analysis cohort, mean age of 82 years, 46% male and 57% admitted from an acute care hospital. At baseline, 43% had fallen in the past 30 days, 94% reported bathing assistance; 24% and 38% were bladder and bowel continent; 71% and 44% suffered short and long-term memory loss. Patients received speech, occupational and physical therapy for 68, 153 and 157 minutes per week. The average patient had 6 comorbid conditions: hypertension (64%), depression (46%), dementia (43%) and diabetes (31%) were common. 83% were diagnosed with PD before or at SNF admission. At baseline, 79% were PD medication-free; 49% remained PD medication-free over 1y. Patients averaged 11 medications. Concomitant medication use of analgesics, antihypertensives and antidepressants were the most common. Direct LTC monthly medical costs were \$5355 and \$6097 at baseline and 1 year. CONCLUSIONS: PD patients have physical and cognitive impairment, combined with debilitating comorbidities. Falls, incontinence, memory loss, hypertension, depression, dementia and diabetes complicate PD treatment in LTC. Concomitant medication burden further complicates treatment. Ongoing examination into treatment needs and barriers to PD medication use is needed to alleviate PD burden in LTC.

## Abstracts

# SOCIOECONOMIC FACTORS OF INSOMNIA PRESCRIPTION IN A NATIONAL DATABASE

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OBJECTIVES: Our study aims to identify socioeconomic factors related to insomnia prescription patterns in US outpatient settings. METHODS: This project proposes a secondary data analysis using a national longitudinal database from 2004 National Ambulatory Medical Care Survey (NAMCS). Study subjects were derived from outpatient visits in which at least one insomnia drug was prescribed. A series of weighted chi-square statistics were performed to compare insomnia drug uses across various physician and patient characteristics. All analyses used SAS statistical software and incorporated sample weights and standard errors correction. RESULTS: Among the 910 million outpatient visits that took place in the US in 2004, an estimated 24. 98 million visits included at least one insomnia drug prescription. The majority of prescriptions were allocated to antidepressants (52.3%), which were more frequently prescribed than non-benzodiazepines (34.1%) and benzodiazepines (13.6%). Differences in drug pricing may explain these findings: the average wholesale price (AWP) for antidepressants is lower (\$0.31) than non-benzodiazepine hypnotics (\$2.52). Patient comparisons by insurance type revealed that Medicaid patients were less likely to receive the relatively expensive non-benzodiazepines (27.55%) than Medicare (32,53%), self-pay (33,39%), and private insurance (35,03%) patients. Prescribing patterns were significantly influenced by physician specialty (P = 0.0001), with general/ family physicians contributing the greatest frequency of insomnia prescriptions (36.1%). Females received significantly more insomnia prescriptions than males (16.4 mil. vs. 8.58 mil.; P < 0.0001) and Black/Hispanics received significantly fewer insomnia prescriptions than did white patients (10.78% vs. 87.13%, P < 0.0001).CONCLUSIONS: Our findings indicate significant socioeconomic disparities in the use of insomnia prescriptions. While drug pricing might account for some of our results, marketing-particularly the sociodemographic and physician characteristics toward which such efforts are targeted-provides another strong explanation for prescription pattern disparities. Further evaluation of current practice guidelines and development of more manageable regulations might ensure greater consistency in treatment patterns.

PND36

### DRUG UTILISATION AND EXPENDITURE ASSOCIATED WITH TREATMENTS OF NEUROLOGICAL DISORDERS Tesar T, Foltan V, Binder R

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OBJECTIVES: To analyse the utilisation of drugs for treatment of neurological disorder (ATC group: N01-N07) within Slovakia between 1999 and 2007 and to asses the economic consequences of the medications. METHODS: For 1999-2007, the data about consumption of drugs for treatment of neurological disorder were collected following ATC/DDD methodology. Data of wholesalers, who are legally obliged provide this information to the Slovak Institute for Drug Control, was used for the analysis. The results were expressed in the numbers of the packages, finance units (€) and defined daily doses per 1000 inhabitants per day (DID). RESULTS: The collected data showed a significant increases in consumption of drugs for treatment of neurological disorder from 1999 to 2007 in term of DID (in 1999 (108.92), in 2003 (119.46) and in 2007 (142.57). A large increase in consumption of psychoanaleptics (in 1999 (16.00), in 2003 (33.22) and in 2007 (44.84) and a stable consumption of psycholeptics in 1999 (40.88), in 2003 (38.33) and in 2007 (41.34) in term of DID can be seen from this analysis. We can see a slight increase in consumption of drugs in term of DID within the group of antiepileptics (in 1999 (4.60), in 2003 (5.25) and in 2007 (6.86) and anti-parkinson drugs (in 1999 (3.19), in 2003 (3.81) and in 2007 (3.92). Financial expenditures for psychoanaleptics (in 1999 (€16,613,000), in 2003 (€40,572,000) and in 2007 (€30,382,000), for psycholeptics (in 1999 (€10,504,000), in 2003 (€24,603,000) and in 2007 (€36,502,000) can be seen from this study. CON-CLUSIONS: Inseparable components of the Slovak drug policy must be viewed realistically with regard to the consumption of drugs for neurological disorder. Adherence to principles of neurological treatment's guidelines lead to fundamental short and long term financial savings within health care systems.

## PND37

## ANTIPSYCHOTIC DRUG USE IN PATIENTS WITH ALZHEIMER'S DISEASE TREATED WITH RIVASTIGMINE VERSUS DONEPEZIL: EVIDENCE FROM HEALTH CLAIMS DATA

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OBJECTIVES: Cholinesterase (ChE) inhibitors, including donepezil and rivastigmine, are standard of care for mild to moderate cognitive impairment due to Alzheimer's disease (AD). The current study investigates whether treatment with rivastigmine is associated with less use of antipsychotics compared to treatment with donepezil. METHODS: A claims analysis was conducted from 01/2004 through 12/2006 using the MedStat MarketScan database. Patients included had continuous insurance coverage, had at least 1 diagnosis of AD, and were newly initiated on either rivastigmine or donepezil after the first AD claim. Patients using memantine or receiving antipsychotics in the time interval of ≥180 days before and 14 days after the first rivastigmine or donepezil drug dispensing were excluded. Both Kaplan-Meier and multivariate Cox