multiple sclerosis heading term or by using quality of life and multiple sclerosis as separate MeSH terms. Urinary bladder was entered as a heading term, and all associated subheadings were included in the search box. Studies were included if a HRQOL instrument measuring bladder function or urinary incontinence was administered to a sample of MS patients. References in these studies were searched for and additional studies that met inclusion criteria. RESULTS: Six articles initially met inclusion criteria. An additional 2 articles were found from their references. A total of 8 different instruments were used ranging from 6 to 30 items and tested across 2 to 10 different domains. Articles varied in terms of sample size (30 to 9,688 participants) design (cross-sectional vs. prospective cohort), and objectives (HRQOL impact vs. instrument validation). Six disease-specific HRQOL instruments were originally designed for use in other populations, and 3 were gender specific. Moderate to severe bladder dysfunction in patients with MS was prevalent in 49% to 79% of the study samples and the urinary symptoms negatively impacted HRQOL in all the studies. CONCLUSIONS: The use of HRQOL instruments specific to bladder dysfunction in patients with MS is limited. Study design variability made it difficult to assess overall impact of lower urinary symptoms on HRQOL. Further validation of existing instruments that include both sexes and whose bladder dysfunction is of neurogenic origin is needed.

**PND10**

**NATALIZUMAB TREATMENT IS ASSOCIATED WITH AN IMPROVEMENT IN PATIENT-REPORTED FATIGUE AND COGNITIVE FUNCTION OVER TIME**

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**OBJECTIVES:** To evaluate changes in patient-reported fatigue and cognitive function after one year of natalizumab treatment in MS patients. **METHODS:** The study population consists of MS patients initiating natalizumab treatment who agreed to participate in a 12-month longitudinal study. The study assessed patient experiences with natalizumab using validated patient-reported outcome (PRO) measures prior to treatment initiation and after 3rd, 6th and 12th infusions. The current analysis reports change in fatigue and cognitive functioning from baseline through the 12th natalizumab infusion. **RESULTS:** Fatigue is measured by the Multiple Sclerosis Impact Scale-5 (MSIS-5; score range 0–20) with lower scores indicating lower impact of fatigue on physical, cognitive, and psychosocial functioning; cognitive function is measured by the 6-questions Medical Outcomes Study Cognitive Functioning Scale (MOS-Cog Scale, score range 0–20) with lower scores indicating better cognitive functioning. About one-third of duloxetine treated fibromyalgia patients experienced any dosage change. Duloxetine adherence and ADR, and health care costs differ by duloxetine index dosage.

**PND11**

**IMPROVEMENT IN HEALTH-RELATED QUALITY OF LIFE IN MULTIPLE SCLEROSIS PATIENTS RECEIVING NATALIZUMAB IN THE UNITED STATES**

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**OBJECTIVES:** To assess the change in general health-related quality of life (HRQoL) of multiple sclerosis (MS) patients after one year of natalizumab treatment. **METHODS:** MS patients, newly starting natalizumab, were recruited to participate in a longitudinal observational study to assess general health-related quality of life using the SF-12v2 prior to natalizumab initiation and after the 3rd, 6th and 12th infusions. Higher physical component summary scores (PCS) and mental component summary scores (MCS) on the SF-12v2 indicate better HRQoL. Statistical regression models were used to evaluate changes in PCS and MCS scores from baseline through the 12th infusion after controlling for baseline patient-level and treatment characteristics. **RESULTS:** Data for 192 patients who had completed the baseline through 12th infusion follow-up surveys are presented for 192 patients completing the BL through 12th infusion follow-up surveys. The mean number of years since MS diagnosis was 10.16 (SD = 8.23). Most patients were female (78%) and the mean age was 46.09 (SD = 10.78). On average, SF-12v2 scores decreased significantly (BL: 12.23 ± 2.2, 12th infusion score 10.97 ± 2.2, p < 0.001) and MOS-Cog scores increased significantly over time (BL: 25.8 ± 1.4, 12th infusion score 26.91 ± 1.4, p < 0.001) after controlling for covariates. **CONCLUSIONS:** MS patients reported improvements in the impact of fatigue and overall cognitive function after one year of natalizumab treatment.

**PND12**

**ANALYSIS OF DULOXETINE UTILIZATION AMONG COMMERCIALLY-INSURED FIBROMYALGIA PATIENTS**

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**OBJECTIVES:** To assess duloxetine utilization among commercially-insured fibromyalgia patients. **METHODS:** This study analyzed administrative claims for fibromyalgia patients aged 18–64 who initiated duloxetine in 2006. Initiation was defined as no duloxetine coverage in the prior 90 days, with the first duloxetine prescription dispense date set as the “index date.” Patients were excluded if they had less than 30 duloxetine supply days in the 12-months post-index period, or diagnosis of diabetic peripheral neuropathic pain or depression in the 12 months pre-index period. All duloxetine patients were classified in five cohorts based on index dosage: <30 mg, 30 mg, 60 mg, 90 mg, and >60 mg. Changes in dosage, average daily dosage (ADD), and adherence to duloxetine (medication possession ratio ≥0.8 as high adherence) were compared across cohorts. Multivariate regression models were performed to examine the association between index dosage and health care costs, controlling for demographics and clinical characteristics. **RESULTS:** Of 4,869 fibromyalgia patients identified, 4.4% had an index dosage of <30 mg, 22.4% of 30 mg, 5.9% of 31–59 mg, 60.4% of 60 mg, and 7.0% of >60 mg, 28% of total patients experienced any increase in dosage, while 15.9% experienced any decrease. Among those with any dosage change (n = 1,651), patients with an index dosage of 31–59 mg had the shortest duration before any dosage change (89 days), followed by those in the <30 mg, >60 mg, 30 mg, and 60 mg (95, 100, 104, and 139 days, respectively) cohorts. ADD increased with index dosage. Patients with <60 mg index dosage were less likely to be adherent than those in the 60 mg cohort (odds ratios ranged 0.61 to 0.78, all p < 0.05). Patients who had higher total health care costs compared with those in the 60 mg cohort (adjusted difference: $3,747, p < 0.05). **CONCLUSIONS:** About one-third of duloxetine treated fibromyalgia patients experienced any dosage change. Duloxetine adherence and ADD, and health care costs differ by duloxetine index dosage.