44mcg was chosen as comparator since it is the most widely prescribed disease modifying therapy in Brazil and not available in the Brazilian public system. We developed a Markov model with 20-year time horizon comparing natalizumab to IFNB1a 44mcg. Health states were based on EDSS and relapses (moderate or severe). Since there are no published data evaluating long-term course specifically in HARRMS, we assumed transition probabilities on EDSS states based on natural history studies on unselected RRMS patients, and relapse probabilities based on a post-hoc analysis of the pivotal natalizumab AFFIRM trial. This is a rather conservative approach, since disability progression may be slower in this proposed target population than in MS patients. We assumed that treatment, remain stable, progress to higher EDSS state, experience Progressive Multifocal Leukoencephalopathy or die. Patients with EDSS score 7.5 receive best supportive care. Resource use and costs were validated by an expert’s panel and valued using Brazilian public official lists (DATASUS and BPS). Costs and outcomes were discounted (5%). Probabilistic sensitivity analyses (PSA) covered variability in efficacy and costs. RESULTS: Use of natalizumab was associated with slower EDSS progression and reduced relapse burden. Life years gained with natalizumab and IFNB1a 44mcg were 10.90 and 10.54, and costs were USD191,977 and USD132,446, respectively. In the base-case, natalizumab was dominant versus IFNB1a 44mcg. PSA has confirmed the consistency of results. CONCLUSIONS: For a patient with HARRMS, the model shows that natalizumab was dominant when compared to IFNB1a 44mcg in the Brazilian Public Health Care System.

NEUROLOGICAL DISORDERS – Patient-Reported Outcomes & Patient Preference Studies

PND14
WHICH CYSTIC FIBROSION INHALATED ANTIBIOTIC MEDICINE FEATURES MATTER MOST TO ADULT PATIENTS AND PARENTS OF PEDIATRIC PATIENTS? Mohamed AD, Johnson PR B, Balin MMF, Calado F1
1RTH Health Solutions, Research Triangle Park, NC, USA, 2Novartis Pharma AG, Basel, Switzerland OBJECTIVE: To quantify patient and parent preferences and adherence for different administration features of inhaled antibiotic medicines for cystic fibrosis (CF). METHODS: Adult patients with a self-reported physician diagnosis of CF and parents of pediatric CF patients (6 to 17 years) who had Pseudomonas aeruginosa in their sputum culture at least twice in one year completed a web-enabled, discrete-choice experiment survey in the United States. Respondents answered 5 treatment-choice questions with known statistical properties. Each question required evaluating a pair of hypothetical CF treatment profiles defined by disease type (obstructive, dry powder inhaler (DPI), total daily administration and cleaning time, dosing frequency, dry cough side effect, and personal cost per cycle. Lung function measured as forced expiratory volume in one second (FEV1) was held constant between the between-choice treatment profiles. Respondents were presented with randomly selected treatment-choice questions. Random-parameters logit models were used to estimate preference weights for all feature levels and the mean relative importance of each feature for both samples. RESULTS: A total of 209 adult patients and 271 parents completed the survey. Mean age of adult patients was 32 years, and mean age of pediatric patients was 12 years. Among all respondents, the average time spent taking inhaled antibiotics was approximately 2 minutes. Respondents were asked to estimate the impact of their DPI on treatment adherence, with possible answers ranging from a 30-minute Nebulizer twice daily to a 10-minute DPI twice daily. It was 6.3 times more important for adult patients and 2.0 times more important for parents than an improvement in dry cough from moderate to mild. Stated adherence for adult and pediatric patients was 20-30% higher for DPIs versus nebulizers. CONCLUSIONS: Preferences for adult and pediatric patients differed from those of their caregivers, emphasizing the importance of each feature for both samples. The findings can be useful to better understand MS patients’ needs in terms of comprehensive care.

PND15
BURDEN OF MULTIPLE SCLEROSIS AND UNMET NEEDS IN BRAZIL: MEASUREMENT OF FATIGUE USING MODIFIED FATIGUE IMPACT SCALE Silva NL1, Takemoto M2, Damasceno B1, Fragoso YD1, Finkelsztejn A1, Gomes M1
1Novartis Bioclinicas S.A., Sao Paulo, Brazil, 2ANOPA - Knowledge Translation, Rio de Janeiro, Brazil, 3UNICAMP - Hospital de Clinicas, Campinas, Brazil, 4UNIMES - Universidade Metropolitana de Santos, Santos, Brazil, 5Hospital de Clinicas de Porto Alegre, Porto Alegre, Brazil OBJECTIVES: Fatigue is one of the most frequent symptoms in patients with multiple sclerosis. This study aimed to evaluate the severity and impact of fatigue in MS Brazilian patients. METHODS: This was a cross-sectional, multicenter study conducted in 8 Brazilian major MS treatment sites. Fatigue was assessed using the Modified Fatigue Impact Scale (MFIS), which evaluates the impact of fatigue on 3 dimensions of patients’ daily life: physical, cognitive and psychosocial. The patient scores 0 (lower impact) to 4 points (higher impact). The final score was calculated according to the level of severity and impact of each dimension. RESULTS: Among 210 MS patients, of which the mean age was 40.7 [standard deviation = 11.5] years and 70.7% were females. Patients with mild disability (according to self-reported Expanded Disability Status Scale [EDSS]) represented 40.4% of patients, 43.7% had moderate disability and 15.9% had severe disability. In the overall sample, the impact of fatigue was considered absent, low and high in 49%, 32% and 19% of patients, respectively. Any impact (both low and high summed) was reported by 33%, 63% and 66% of patients with mild, moderate and severe disability, respectively. The mean MFIS total score for mild, moderate and severe patients was 29.3, 45.0, and 45.4 [36.6 in the total sample]. The mean impact scores for each fatigue dimension in the total sample were 20.0 (physical), range 0–30, 14.7 (cognitive, range 0–40), and 3.9 (psychosocial, range 0–8), meaning that fatigue has a proportionally higher impact in the physical than the cognitive or psychosocial dimension. CONCLUSIONS: There is a strong indication that fatigue is a major issue for Brazilian patients, who notice some adverse impact of fatigue in their daily lives, particularly related to the physical domain.

PND16
BURDEN OF MULTIPLE SCLEROSIS AND UNMET NEEDS IN BRAZIL: MEASUREMENT OF HEALTH-RELATED QUALITY OF LIFE USING EQ-SD Silva NL1, Takemoto M2, Damasceno B1, Fragoso YD1, Finkelsztejn A1, Gomes M1
1Novartis Bioclinicas S.A., Sao Paulo, Brazil, 2ANOPA - Knowledge Translation, Rio de Janeiro, Brazil, 3UNICAMP - Hospital de Clinicas, Campinas, Brazil, 4UNIMES - Universidade Metropolitana de Santos, Santos, Brazil, 5Hospital de Clinicas de Porto Alegre, Porto Alegre, Brazil OBJECTIVES: This was a cross-sectional, multicenter study conducted in 8 Brazilian major MS treatment sites. HRQOL was assessed using the Brazilian version of the EQ-SD and patients self-evaluated their HRQOL and health status using five dimensions (mobility, self-care, usual activities, pain/discomfort and anxiety/depression) and a visual analog scale (VAS). The EQ-SD index was calculated based on the value set derived from the UK population, since the Brazilian value set is not available. RESULTS: The study enrolled 210 MS patients, of which the mean age (standard deviation [SD]) was 40.7 [11.5] years and 70.7% were females. Patients with mild disability (according to self-reported Expanded Disability Status Scale [EDSS]) represented 40.4% of patients, 43.7% had moderate disability and 15.9% had severe disability. Among the 5 assessed HRQL dimensions, physical domain had proportionally higher impact in the physical than the cognitive or psychosocial dimension. CONCLUSIONS: There is a strong indication that fatigue is a major issue for Brazilian patients, who notice some adverse impact of fatigue in their daily lives, particularly related to the physical domain.

NEUROLOGICAL DISORDERS – Health Care Use & Policy Studies

PND17
EVALUATION OF TREATMENT PATTERNS AND CLINICAL TRIALS PUBLISHED ON PATIENTS DIAGNOSED WITH INSOMNIA: A LITERATURE UPDATE Greene M1,2, Greene M1,2
1Massachusetts College of Pharmacy and Health Sciences, Boston, MA, USA, 2Georgia State University, Atlanta, MA, USA OBJECTIVE: To develop a systematic review of literature in peer-reviewed journals on real world treatment patterns and clinical trials on patients diagnosed with Insomnia. METHODS: A comprehensive literature search was performed in Medline, Embase, CENTRAL, CINAHL, and PubMed databases. The search strategy aimed to identify all relevant articles published from 2000 to 2019. RESULTS: Our search yielded 1,153 articles for treatment patterns and clinical trials on patients diagnosed with insomnia from PubMed/Medline/Embase/Cochrane Databases. After removing duplicates and articles about insomnia, 65 articles were included for final review. A total of 16 studies had some focus on real world treatment patterns and clinical trials on patients diagnosed with Insomnia.