

was designed to assess efficacy and safety of teriflunomide, a novel oral disease modifier, in RMS patients. The utility score, a measure of health-related quality of life, was calculated via the EQ-5D questionnaire assessed alongside the trial. Using baseline data, a cross-sectional analysis was performed to identify factors associated with utility scores using a multivariate regression linear model. This model includes the following factors; expanded disability status scale (EDSS) score, type of multiple sclerosis (relapsing remitting (RRMS) versus progressive relapsing (PRMS), region, number or relapses within the past 2 years, previous MS medication, gender, time (years) since first diagnosis of MS and burden of disease defined by magnetic resonance imaging. **RESULTS:** Three variables demonstrated a significant negative impact on utility values: the functional disability level as assessed by EDSS score (when EDSS score increases), PRMS versus RRMS and Eastern European countries versus North American countries. The major influencing factor, consistent with other analyses, was the EDSS score with the following disutility estimates: EDSS[1-2]= -0.021, $p=0.52$; EDSS[2-3]= -0.081, $p=0.0128$; EDSS[3-4]= -0.176, $p<0.0001$; EDSS[4-5]= -0.237, $p<0.0001$; EDSS[5-6]= -0.231, $p<0.0001$; EDSS[6-7]= -0.257, $p<0.0001$. In addition, disutilities associated with PRMS versus RRMS and Eastern Europe region versus North American were respectively -0.073 ($p=0.0028$) and -0.038 ($p=0.0361$). **CONCLUSIONS:** In RMS patients, these results confirm the major impact of functional disability on patients' utility. These analyses also provided disutility estimates per EDSS score, disutilities for PRMS versus RRMS and for Eastern Europe versus North American region. The later probably reflecting cultural differences in health status perception.

PND37

AN EXAMINATION OF RESOURCE UTILIZATION AMONG PATIENTS WITH PARKINSON'S DISEASE TREATED WITH RASAGILINE OR SELEGILINE

Grubb E¹, Castelli-Haley J¹, Lage M²

¹Teva Pharmaceuticals, Kansas City, MO, USA, ²HealthMetrics Outcomes Research, Groton, CT, USA

OBJECTIVES: To examine resource utilization associated with the use of Rasagiline or Selegiline, two commonly prescribed MAOB inhibitors for the treatment of Parkinson's Disease (PD). **METHODS:** Data for this retrospective study were obtained from the US i3 LabRx database over the time period from January 1, 2006 through December 30, 2010. Patients were included in the analysis if they were prescribed Rasagiline or Selegiline (with first such date identified as the index date), were diagnosed with PD (ICD-9 code 332.0), and had continuous insurance coverage from 6 months prior through 12 months post index date. Analyses are primarily descriptive in nature, with differences in categorical variables analyzed using chi-square statistics and differences in continuous variables analyzed using t-statistics. **RESULTS:** There were 1242 individuals included in the study - 926 initiated on Rasagiline and 316 initiated on Selegiline. Patients initiated on Rasagiline, compared to those initiated on Selegiline, were significantly younger (63.2 years vs. 65.4 years; $P=0.0020$). Patients initiated on Rasagiline were significantly less likely to be diagnosed with chest pain (16.41% vs. 21.52%; $P=0.0402$) or headaches (4.97% vs. 9.49%; $P=0.0037$). Patients who initiated on Rasagiline were significantly more likely to visit a neurologist (93.63% vs. 89.24%; $P=0.0105$). Compared with Selegiline use, initiation on Rasagiline was associated with significantly fewer inpatient visits (1.58 vs. 2.94; $P=0.0236$) and significantly shorter hospital length of stay (4.71 days vs. 8.78 days; $P=0.0216$). **CONCLUSIONS:** Results from this retrospective study indicate that, patients who initiated therapy with Selegiline, compared to Rasagiline were more likely to experience side effects of chest pain or headaches. In addition, these patients were more likely to have a greater resource utilization due to the number and significantly longer lengths of hospitalizations.

PND38

INTERNATIONAL COMPARISON OF HUNTINGTON DISEASE (HD) BURDEN

Dorey J¹, De Nicola N², Tedroff J³, Squitieri F², Clay E⁴, Verry C⁵, Zielonka D⁶, Cohen J⁷, Aballea S⁸, Lamure M⁹, Toumi M¹⁰

¹Creativ Ceutical, Paris, France, ²Neurogenetics and Rare Disease Centre, Pozzi, Italy, ³NEUROSEARCH, Ballerup, Denmark, ⁴Creativ Research, Paris, France, ⁵Centre national de référence des maladies neurogénéétiques, Angers, France, ⁶Poznan University of Medical Sciences, Poznan, Poland, ⁷Tufts University Center for the Study of Drug Development, Boston, MA, USA, ⁸Creativ Ceutical, Paris, Ile de France, France, ⁹University of Lyon I, Villeurbanne Cedex, France, ¹⁰University Claude Bernard Lyon1, Lyon, France

OBJECTIVES: This study aimed to identify the socioeconomic burden of HD in five European countries. **METHODS:** The survey was conducted in Germany, Italy, France, Poland and the USA. The following patient data were collected: clinical symptoms (motor, behavioral and psychiatric), functional/independence score, QoL (H-QoLI, SF-36, EQ-5D), resource utilization, GP and specialist visits, other healthcare professional visits, hospitalization, nursing home, social services, allowance, medical device and daily out of pocket expenses. The following data were collected from caregivers: time spent and working days lost caring for the patient, out of pocket expenditure, caregiver quality of life. **RESULTS:** To date, 175, 124, 44, 60 and 134 patients were included in respectively France, Italy, Germany, Poland and US. The populations were reasonably homogeneous regarding sociodemographic characteristics and severity such as age (48-56) and disease duration (6-10 years except for the Poland: 4 years). The average number of monthly visits to GP was 0.76-1.32, to neurologist 0.49-1.12, to physiotherapist 0.09-5.59. The percentage of patients admitted to hospital during the last 6 months was between 1% (USA) and 19% (France). The mean (\pm SD) health utility (EQ-5D) ranged from 0.25 (0.46) in France to 0.47 (0.37) in Germany. Caregivers spent between 6 (USA) and 22 hours/day (Italy, Poland) caring for patients and their monthly expenses amounted to €295 (Poland) to \$2391 (USA). Caregivers also had reduced QoL. **CONCLUSIONS:** The initial results indicated significant differences in access to health care and resource use. France has the largest health care resource consumer by far. Countries that

use little health care resources compensate by a significantly larger caregiver involvement. More data will be presented.

Neurological Disorders – Patient-Reported Outcomes & Preference-Based Studies

PND39

HEREDITARY ANGIOEDEMA HEALTH STATE UTILITY VALUATION STUDY FROM THE PERSPECTIVE OF A REPRESENTATIVE SAMPLE OF THE AUSTRALIAN GENERAL PUBLIC

Cottrell S¹, Tilden D¹, Jayaram N², Sinani R², Barnes D²

¹Thema Consulting Pty Ltd, Pyrmont, NSW, Australia, ²Shire Australia Pty Limited, North Ryde, NSW, Australia

OBJECTIVES: The impact of hereditary angioedema (HAE) on patients' health related quality of life (QoL) extends beyond the acute attack period. This study was to value the disutility of living with HAE outside of the acute attack period, according to different emergency treatments available to the patient. **METHODS:** The study used a vignette/health state scenario based approach and standard gamble methodology. The health states described three different circumstances faced by patients with HAE in terms of availability of emergency medications should they suffer a swelling attack: Scenario A: HAE without any effective emergency medication; Scenario B: HAE with effective emergency medication available in hospital; Scenario C: HAE with effective emergency medication available for self-administration. The health state descriptions were based evidence from on relevant clinical trials, burden of disease and QoL studies and HAE treatment guidelines, supported by clinical expert opinion. The standard gamble survey was web based/administered online. Respondents were recruited from an existing consumer research panel. **RESULTS:** A total of 201 respondents completed the survey; 91% were prepared to gamble with death to achieve perfect health in at least one of the three health states. The mean utility weighting elicited for health state C was significantly higher than either weightings elicited for health state B (0.75 [95%CI. 0.71, 0.79] versus 0.64 [95% CI 0.60, 0.69]; $p<0.001$), or for health state A (0.75 [95%CI. 0.71, 0.79] versus 0.62 [95% CI 0.58, 0.67]; $p<0.001$). There was no statistical difference between the utilities elicited for health states B and A. **CONCLUSIONS:** The results demonstrate the recognition of and value placed on the QoL benefits provided by the availability of and immediate access to a self-administered emergency medication for HAE over that provided by treatment available only in the hospital accident and emergency treatment setting.

PND40

A STUDY TO ESTIMATE UTILITY VALUES FOR DIFFERENT LEVELS OF SEVERITY OF MIGRAINE PAIN

Hareendran A¹, Ng-Mak DS², Stafford MR¹, Insigna RP³, Reifung X³

¹United BioSource Corporation, London, UK, ²Merck & Co., Inc, West Point, PA, USA, ³Merck & Co., Inc, North Wales, PA, USA

OBJECTIVES: Health state utility values are the metric preferred by health care decision makers to examine the relative value of various treatments to treat migraine, including those that reduce the severity of migraine pain. This cross-sectional, observational study aimed to estimate utility values for different levels of migraine pain severity. **METHODS:** One hundred six participants from the UK (UK), diagnosed with migraine, completed the EQ-5D™ to evaluate their health status for mild, moderate, and severe levels of migraine pain severity for a recent migraine attack and for current health (without migraine) defined as health status within 7 days post-attack, with no residual migraine symptoms. T-tests were used to compare mean utility values between each level of severity to evaluate whether there were significant differences in mean utility scores by migraine severity; Wilcoxon signed rank test was also performed. **RESULTS:** Utility scores for each health state were found to be significantly different from perfect health ($p<0.0001$) and one another ($p<0.0001$). As severity worsened, utility decreased and the lowest mean utility, -0.20 (95% confidence interval [CI]: -0.27--0.13), was for severe migraine pain. Compared to current health (without migraine), utility decrements were 0.21, 0.34, and 1.07 for mild, moderate, and severe migraine pain states respectively. The smallest difference in mean utility scores was between mild and moderate migraine pain (0.13) and the largest difference in mean utility scores was between current health (without migraine) and severe migraine pain (1.07). **CONCLUSIONS:** Migraine pain severity was associated with significantly lower utility compared with perfect health, with higher levels of pain severity associated with lower utility. Severe migraine pain was considered a health state worse than death. Our results can be used in cost-utility models examining the relative economic value of therapeutic strategies for migraine in the UK.

PND41

PREDICTING EQ-5D UTILITY SCORES FROM THE HUNTINGTON QUALITY OF LIFE INSTRUMENT (H-QoL-I)

Clay E¹, Briquet B², Aballea S³, Maman K⁴, Toumi M⁵

¹Creativ Research, Paris, France, ²ISUP, Paris, France, ³Creativ Ceutical, Paris, Ile de France, France, ⁴Creativ-Ceutical, Paris, France, ⁵University Claude Bernard Lyon1, Lyon, France

OBJECTIVES: H-QoL-I is a quality-of-life indicator specific to the Huntington's Disease (HD), with 3 dimensions: motor function, psychology and socializing. It has been validated in several countries (France, Italy, Poland, Germany and United States). We compared several methods for mapping H-QoL-I onto EQ-5D and thus derive utility values from H-QoL-I. **METHODS:** This analysis was based on a sample of 315 HD patients who participated in an international survey on the burden of HD, and completed H-QoL-I and EQ-5D, with help from caregivers if necessary. EQ-5D index scores were calculated based on UK time trade-off tariff. The sample was divided into 70% derivation and 30% validation sets. We compared three methods to estimate patient's utility as a function of 11 H-QoL-I items: ordinary least-