between treatment groups. Differences reflected the known efficacy and safety profile of BRV. Where reported for other AEDs, changes from baseline and treatment group differences are similarly small, raising questions about the appropriateness of short-term fixed-dose trials as a source of HRQoL data for adjunctive AEDs in refractory patients. Long-term assessments may be more informative. Supported by UCB.

NEUROLOGICAL DISORDERS – Health Care Use & Policy Studies

PND81

DOES CRGS PROVIDE PROPER GUIDES FOR AN EFFICIENT PHARMACEUTICAL PRESCRIPTION IN ALZHEIMER PATIENTS?

Caballer-Tarazona M[1], Vivas-Consuelo D[2], Escudero-Torrella J[3], Macián-Izquierdo C[1]
[1]*University of Valencia, Valencia, Spain,* [2]*Politecnic University of Valencia, Valencia, Spain,* [3]*Hospital General, Valencia, Spain*

OBJECTIVES: The aim of this paper is to analyze pharmaceutical expenditure in Alzheimer patients from a Europe southeastern region (Valencian Region (Spain)), by using the clustering patients system Clinical Risk Group (CRGs). We focused on obtaining more information about Alzheimer patients, stablishing a more accurate prediction of their resources consumption and individuating patterns of pharmaceutical consumption. **METHODS:** A cross-sectional study of the inhabitants of Valencian region with a population of 5,000,000 was carried out, using data extracted from Electronic Health Records for 2013. A sample of 24641 Alzheimer individuals were identified. **RESULTS:** From our sample 29.4% men and 70.6% women were found. The annual average cost per Alzheimer patient is € 1709.051. By gender, women average cost is 1718,66 € while men average consumption is 1685,97 €. Age is the variable which most affect pharmaceutical cost variability, while severity levels are not capable to explain cost variability. **CONCLUSIONS:** Valuable information about pharmaceutical cost of Alzheimer patients was found. In contradiction to other diseases, for the Alzheimer case, levels of severity does not provide a clear explanation of pharmaceutical cost variability.

PND82

DEVELOPMENT OF A SCREENING TOOL TO SUPPORT IDENTIFICATION OF PATIENTS WITH SECONDARY PROGRESSIVE MULTIPLE SCLEROSIS (SPMS)

Ziemssen T[1], Simsek D[2], Lahoz R[2], Verdun di Cantogno E[2]
[1]*University Clinic Carl Gustav Carus, Dresden, Germany,* [2]*Novartis Pharma AG, Basel, Switzerland*

OBJECTIVES: Transition from RRMS to SPMS is difficult to diagnose. Here, we describe methodology for developing a screening tool that can help physicians to diagnose SPMS early. **METHODS:** Tool will be developed along 3 steps: Quantitative research: A retrospective cross-sectional study to describe differentiating characteristics between SPMS and late RRMS patients using Adelphi Real World database. 2791 MS patient record forms from 125 neurologists (US) are available. Key variables will include demographics, MS history, treatment history, daily activities, symptoms and clinical characteristics including MRI activity. Patients will be stratified based on EDSS and disease duration into: Early RRMS (control group), Late RRMS and Early SPMS. A multivariate regression analysis will identify the significant predictors of patient classification as 'Late RRMS' or 'Early SPMS' by physician. Qualitative research: (1) Open-ended qualitative interviews of patients (16 each in the US and Germany—8 RRMS and 8 SPMS/country) and treating clinicians (8/country) to identify and characterize key differentiating features of these two MS phenotypes. (2) Integrating interviews with quantitative research to draft the tool. (3) Use of draft version by physicians treating SPMS patients. (4) Cognitive debriefing with physician. Tool validation: Sensitivity and specificity will be validated against reference tests in a 12Month prospective observational study in patients with late RRMS and SPMS after the implementation of the tool. **RESULTS:** Data collected will be used to generate a paper version of the tool that will track the disease experience of late RRMS patients periodically (relapse and recovery, symptoms, quality of life). After validating the paper version, an electronic version will be considered. A calculator will be added to the tool to predict likelihood of patient progression to SPMS. **CONCLUSIONS:** Such a validated tool is expected to support physicians in more accurate and timely identification of SPMS patients to provide optimized clinical intervention.

PND83

QUANTIFYING THE IMPACT OF TREATMENT ON THE PUBLIC HEALTH BURDEN OF ADPKD: A UK CASE STUDY USING THE ADPKD OUTCOMES MODEL

McEwan P[1], Bennett H[2], O'Reilly K[3], Robinson P[3]
[1]*Health Economics and Outcomes Research Ltd, Monmouth, UK,* [2]*Health Economics and Outcomes Research Ltd, Cardiff, UK,* [3]*Otsuka Pharmaceutical Europe Ltd, Wexham, UK*

OBJECTIVES: Autosomal dominant polycystic kidney disease (ADPKD) is characterised by enlarged kidneys, declining renal function and ultimately progression towards end-stage renal disease (ESRD), with significant mortality, co-morbidity and resource implications. This study aimed to quantify the humanistic and health system burden of ADPKD in the UK, and the potential impact of ADPKD treatment that may delay progression to ESRD. **METHODS:** ADPKD progression was predicted over a 50-year horizon using the ADPKD Outcomes Model. Patient profiles consistent with the CRISP longitudinal ADPKD outcomes trial were modelled using regression equations for renal decline derived from the TEMPO 3:4 study placebo arm. ESRD rates were drawn from UK published sources. Treatment-related reduction in the rate of renal decline was based on TEMPO 3:4 (tolvaptan: 31.6%). ESRD outcomes, quality-adjusted life-years (QALYs) and life-years accumulated were reported per 1,000 patients, and scaled to the UK population. **RESULTS:** Without treatment, 927 incident ESRD events were predicted per 1,000 patients; corresponding to 372 incident transplants, 435 dialysis access procedures and 4,707 dialysis years. Treatment was estimated to prevent 61 ESRD events per 1,000 patients, thereby avoiding 82 transplants, 39 access procedures and 707 dialysis years, and accruing an additional 2,788 QALYs and 3,075 life-years (undiscounted). Delay of ESRD beyond retirement age (65 years) was predicted in 16.6% of treated patients with 3,356 additional working years per 1,000 patients. Predicted UK-wide benefits included the avoidance of 2,097 transplants, 994 access procedures, approximately 2.5 million haemodialysis sessions and more than 900,000 peritoneal dialysis days, with gains of 71,500 QALYs, 78,800 life years and 86,045 working years. **CONCLUSIONS:** ADPKD-associated ESRD represents a significant burden to both patients and healthcare systems. Delaying disease progression through treatment could meaningfully impact this burden, reducing healthcare resource use, requirement for donor organs and the negative impact upon quality-of-life, life-expectancy and productivity.

PND84

MUSCULAR DYSTROPHY PATIENTS WITH SEVERE RENAL DYSFUNCTION: ANALYSIS OF ACE-INHIBITOR USE

Vlahiotis A[1], Stott-Miller M[1], Palmer LA[2]
[1]*Truven Health Analytics, Cambridge, MA, USA,* [2]*Truven Health Analytics, Bethesda, MD, USA*

OBJECTIVES: Cardiovascular deterioration and renal dysfunction are significant complications for some muscular dystrophy (MD) patients. Although MD patients with cardiovascular problems may benefit from ACE-inhibitor treatment, there is some debate about whether this therapy is safe for use in patients with renal dysfunction. The objective of this study was to describe ACE-inhibitor treatment among MD patients with severe renal dysfunction, as they may be the most likely candidates for contraindication. **METHODS:** We identified two cohorts of individuals aged 0-64 with a muscular dystrophy diagnosis between 1/1/2009 and 10/31/2013 or 1/01/2009 and 10/31/2011 from an administrative claims database. Patients were continuously enrolled with benefits for 12 and 36 months, respectively, after the index date, defined as the first date of evidence of severe renal dysfunction--chronic kidney disease, renal failure or end stage renal disease. Subsequent ACE-inhibitor use was evaluated in the 12 and 36 months after index date. **RESULTS:** A total of 11,515 MD patients with 12 months continuous enrollment, and 4,547 individuals with MD and 36 months continuous enrollment were identified, of which 14 -20% filled at least one prescription for an ACE-inhibitor. There were 340 (3%) patients with 12 months enrollment who had evidence of severe renal dysfunction, and 127 (37%) of those filled a subsequent prescription for an ACE-inhibitor. There were 94 (2%) patients with 36 months enrollment who had evidence of severe renal dysfunction, of which 50 (53%) filled at least one subsequent prescription for an ACE-inhibitor. **CONCLUSIONS:** Cardio-protective treatment with ACE-inhibitors among MD patients is significant. Although severe renal dysfunction is not highly prevalent in this population, 36%-49% with the condition were treated with an ACE-inhibitor, despite a possible contraindication, especially in patients with severe disease. New therapies in development which address underlying disease rather than complications may enable patients to avoid potential contraindications.

PND85

COSTS ASSOCIATED WITH PATIENTS DIAGNOSED WITH RELAPSING REMITTING MULTIPLE SCLEROSIS TAKING ONCE DAILY FINGOLIMOD CAPSULES IN THE UNITED STATES

Greene N[1], Greene M[2]
[1]*MCPHS University, Medford, MA, USA,* [2]*Georgia State University, Medford, MA, USA*

OBJECTIVES: Fingolimod oral tablets were approved in the United States (US) in September 2010 for the treatment of relapsing remitting multiple sclerosis (RRMS). The objective of this study is to assess the costs associated with Fingolimod treatment for patients diagnosed with RRMS in the US. **METHODS:** A large US administrative retrospective claims database was used to identify patients diagnosed with RRMS and were prescribed Fingolimod between January 2010 to December 2012 were included in the study. All patients were $\geq$ 18 years of age and continuously enrolled in the same health plan for a year. Descriptive statistics and chi-square tests were performed on the data. **RESULTS:** There were a total of 28,477 patients that met the study inclusion criteria. Patients on average were charged $5270.93 ± 2760.33 for their treatment with Fingolimod during the study period. However, the allowed amount by the health plan was $4624.41 ± 2070.65 and the actual paid amount was $4529.98 ± 2074.58. On average, patient's deductible was $13.64 ± 186.88 and patient co-payment was $86.33 ± 316.10. For patients whose prescription was on their health plans formulary paid on average higher costs compared to patients who were not (paid amount $4679 vs $4317). Even though most of the patients were females, but they had overall lower costs compared to males (amount charged $4513 vs $4582, $p>0.05$; co-payment $79 vs $106, $p<0.05$). Patients who received treatment in the Midwest region of the USA had a higher costs compared to east, west and south regions (paid amount $4618 vs $4608 vs $4370 vs $4405). **CONCLUSIONS:** The cost of Fingolimod treatment for RRMS patients is higher and costing the health plan around $3552 for 3 months. The cost of the drug treatment was higher in southern of the USA and males were paying more in general.

PND86

OVER-PRESCRIPTION OF FINGOLIMOD IN GERMANY

Schoch G, Steimle T, Tamminga M, Blank S, Würdemann E
Techniker Krankenkasse, Hamburg, Germany

OBJECTIVES: Fingolimod is an orally available immune-modulatory drug for treating relapsing-remitting Multiple Sclerosis (RRMS). It was approved by the European Medicines Agency (EMA) in March 2011. Some urgent safety warnings (e.g. progressive multifocal leukoencephalopathy (PML) and cardiovascular events) have been reported in the meantime. Early benefit assessment by the Federal Joint Committee (G-BA) in 2012 and 2013 showed only additional benefit for a certain subgroup of patients. Therefore the use of Fingolimod has widely been discussed in Germany. We analyzed prescriptions of Fingolimod and the impact of Health Technology Assessment (HTA) and drug safety warnings. **METHODS:** We used routine data of the Techniker Krankenkasse (TK), a large German sickness fund with more than 8.2 million insured, from 2012 to 2014. We looked for prescriptions of disease-modifying therapies (DMT) for patients with Multiple Sclerosis (MS). Diagnosis of MS was identified by G35 according to ICD-10. Considered DMT were Fingolimod, Glatiramer Acetate, Alemtuzumab, Natalizumab, Interferon beta-1a, Interferon beta-