AD shows a potential budget impact of approximately Br23.9 million (US$2.8 million) for 5 consecutive years. CONCLUSIONS: The use of Sourceiva® 1, a new approach in the management of mild AD, can benefit approximately 100,000 patients with AD in 5 years and it is estimated to have a relatively small budget impact to SUS, since the projections of cost for the same period are Br2154 million and potential budget impact of approximately Br23.9 million.

PND15

DIRECT MEDICAL COSTS RELATED TO PARKINSON’S DISEASE

Rigoberto Vidal-Martínez M1, Cervantes Arriaga A2, Soto Molina H1, Díaz Martínez JP1, Pizarro Castellanos M1

1Instituto Nacional de Neurología y Neurocirugía, Mexico City, Mexico, 2University Autónoma Metropolitana, Mexico City, Mexico, 3HRS Emilia Fuentes, Mérida, Yucatán, Mexico, Mexico, 4Hospital Infantil de México Federico Gómez, Mexico City, Mexico

OBJECTIVES: Parkinson’s disease is a neurodegenerative disorder with an estimated incidence of 1-3 new cases per 100,000 habitants per year. In this study, we estimate the direct medical costs of Parkinson’s disease. In addition, direct medical costs according to age, gender, socio-economic level, severity and educational attainment were evaluated. METHODS: A partial economic evaluation was performed in on published articles in both English and Mandarin languages was conducted. Literature search was conducted using PubMed, Cochrane, WAN FANG, and VIB databases. Articles published between 2000 and 2013 were selected. The inclusion criteria included studies on Chinese population based in China only and studies that reported direct or indirect cost of PD treatment, management as well as economic incidence of 40-50 cases per 100,000 habitants per year. In this paper, we set out to review the articles. Subjective quality assessment of the selected articles were reviewed received an average grade in terms of study quality. The average direct and indirect cost of managing PD in China reported ranged from RMB 7,000 (US$1,157) to RMB 15,000 (US$2,879 per year). The reported direct cost of managing PD ranged from RMB 1,600 (US$265) to RMB 13,000 (US$2,149); whereas the indirect cost ranged reported from RMB 2,970 (US$491) to RMB 13,200 (US$2,182). Seven out of 11 articles reported cost-effectiveness results. Three papers from the same authors had reported the main factors affecting the overall economic burden of PD. CONCLUSIONS: Various combination therapy involving levodopa had higher direct costs but reduced indirect costs compared to levodopa monotherapy. In general, the reported indirect cost is higher than direct cost of PD management in China.

PND16

COST OF MANAGING PARKINSON’S DISEASE IN CHINA

Low W1, Azmi S1, Hanssen K2, François C3, Milic D3

1Azbii/Burhani Consulting, Petaling Jaya, Malaysia, 2Lundbeck SAS, France, 3Lundbeck Pte Ltd, Singapore

OBJECTIVES: To review studies that investigated the direct and indirect costs of care for Parkinson’s disease (PD) in China. METHODS: A structured literature review on published articles in both English and Mandarin languages was conducted. Literature search was conducted using PubMed, Cochrane, WAN FANG, and VIB databases. Articles published between 2000 and 2013 were selected. The inclusion criteria included studies on Chinese population based in China only and studies that reported direct or indirect cost of PD treatment, management as well as economic burden of PD. Four reviewers (two for each language) independently selected and reviewed the articles. Subjective quality assessment of the selected articles were performed. Direct and indirect cost (mean age group, gender, socio-economic level and educational attainment were statistically different (p-value < 0.01). Finally, in the generalized linear model analysis, direct medical costs were only predicted by grouped age and educational attainment were statistically different (p-value < 0.05). The proportion of patient and indirect cost for PD treatment and management as well as economic impact of Parkinson’s disease from the INNN provided information on severity, baseline characteristics and socio-demographic characteristics. RESULTS: Mean first semester direct medical costs per patient on Parkinson’s disease in this study were US$2 366 in 2013. Total costs per patient on Parkinson’s disease have a significant impact on the total burden of the disease, due in part to the multiplier effect. This novel approach highlighted the unique characteristics of Alzheimer’s disease with the particular focus on the additional costs and societal impact stemming from caring for a patient with Alzheimer’s. Future cost effective-ness studies need to consider these additional impacts when quantifying their results and potential benefit to the health care system. Approaches to modelling long-term disease impact are necessary to fully understand the wide-reaching societal impact of Alzheimer’s disease to the direct health care costs.

PND18

TRENDS IN ANTI-EPILEPTIC ADJUVANT THERAPY UTILIZATION AND COSTS FROM 2006-2011: AN ANALYSIS OF A LARGE ADMINISTRATIVE CLAIMS DATABASE

McQueen RB1, Nair KV1, Vollmer TL1, Campbell JD2

1University of Colorado Anschutz Medical Campus, Aurora, CO, USA, 2University of Colorado Anschutz Medical Campus, School of Pharmacy, Aurora, CO, USA

OBJECTIVES: To evaluate patterns of adjunctive therapy with anti-epileptic drugs (AED) and AED-specific pharmacy costs among patients with epilepsy over a six-year time period (2006-2011). METHODS: Study patients were identified from the 2006-2011 PharMetrics Plus Database. Separate patient cohorts were created for each year and the number of patients with epilepsy was determined. For each year, patients with epilepsy who were on any adjunctive AED therapy during the year were selected. Overall adjointive AED therapy utilization was further stratified by AED generic/brand status using the following categories: adiuvant therapy with two generic AEDs, two branded AEDs, or one generic and one branded AED identified and not on NDC codes indicative of a generic/branded therapy for each year. RESULTS: Patients meeting cohort selection criteria varied for each year of analysis, ranging from 189,000-287,000 patients. The proportion of patients with adjontive AED therapy decreased over the six-year period (2006: 21.2%, 2007: 21.4%, 2008: 23.9%, 2009: 23.9%, 2010: 24.6%, 2011: 24.2%). The proportion of patients with prior adjuvant AED therapy stayed relatively constant over the analysis period, increasing only slightly over time (2006: 6.3%, 2007: 6.5%, 2008: 6.4%, 2009: 6.7%, 2010: 7.0%, 2011: 6.6%). The utilization of adjuvant AED therapy decreased over the analysis period (2011: 6% vs. 2006: 10% and 2011: 7.5% vs. 2006: 13%). Over the six-year analysis period, the mean AED pharmacy costs among patients with epilepsy on any adjontive AED therapy decreased by 7.6% (2006: $4,090, 2011: $3,778, P<0.01). CONCLUSIONS: In this study, a doubling in the utilization of generic drugs over a six-year period was associated with a 7.6% decrease in pharmacy cost.

PND19

AGGRESSIVE NITALIZUMAB TREATMENT FOR JC VIRUS-NEGATIVE RELAPSING-REMITTING MULTIPLE SCLEROSIS: COST-EFFECTIVENESS OF FIRST-LINE VERSUS SECOND-LINE NITALIZUMAB TREATMENT

McQueen RB1, Nair KV1, Vollmer TL1, Campbell JD2

1University of Colorado Anschutz Medical Campus, Aurora, CO, USA, 2University of Colorado Anschutz Medical Campus, Department of Neurology, Aurora, CO, USA

OBJECTIVES: Because of the risk of progressive multifocal leukoencephalopathy (PML), triple therapy (i.e., use of both natalizumab and glatiramer acetate (GA)) is recommended as second-line total cost for relapsing-remitting multiple sclerosis (RRMS) patients. For those negative for JC-virus antibodies, the natalizumab associated risk of PML is low. The objective was to estimate the cost-effectiveness of first-line natalizumab versus second-line natalizumab treatment (i.e., initiate glatiramer acetate (GA) then switch to natalizumab) for RRMS patients negative for anti-JC virus antibodies. METHODS: We used a cohort sequential model to estimate the costs and the effectiveness of first-line GA treatment followed by natalizumab treatment versus first-line natalizumab treatment. Model inputs included published natural history outcomes for RRMS patients negative for anti-JC virus antibodies. RESULTS: Patients treated with first-line natalizumab had a 7.6% decrease in pharmacy cost.

PND20

COST-EFFECTIVENESS OF FINGOLIMOD, TERIFLUNOMIDE, DIMETHYLFUMARATE AND INTRAMUSCULAR INTERFERON BETA-1A IN RELAPSING-REMITTING MULTIPLE SCLEROSIS

Zhong X, Hay JW

University of Southern California, Los Angeles, CA, USA

OBJECTIVES: To compare the cost-effectiveness of fingolimod, teriflunomide, dimethylfumarate and IM IFN β-1a as first-line therapies in treatment of patients with Relapsing-Remitting Multiple Sclerosis (RRMS). METHODS: A Markov model was developed to simulate the disease progression and to evaluate the cost-effectiveness of disease-modifying drugs from a US societal perspective. The time horizon in base