outcomes and costs was not conducted because the time horizon of the analysis did not represent the overall system lifetime. The tax rate for disability was set at 57% for the United States and 52% for the United Kingdom. The cost of the first year of therapy of compared drugs was: 28,822, 20,810, 57,449, and 54,332 rubles for piribedil CR, pramipexole ER, ropinirole ER and rasagiline, respectively. Total therapy cost was estimated by summarizing the cost of therapy and associated activity impairment. The costs per patient using the simplified Markov model (incobotulinumtoxin-A) was 1,783,292, 1,885,574, 1,827,412, and 2,581,435 rubles for piribedil CR, pramipexole ER, ropinirole ER and rasagiline, respectively. Utility effect of the comparison drug was: -0.1, -0.5, -0.7, and -0.8 for piribedil CR, pramipexole ER, ropinirole ER and rasagiline, respectively. In the analysis was found that pramipexole ER has the lowest cost-utility ratio (CUR) (2.562 rubles for 1 point reduction of daytime activity disruption and severity of motor impairment as indicated by UPDRS scale). CONCLUSIONS: Pramipexole ER has the lowest CUR. SA confirmed these results. Pramipexole ER was the dominant strategy for PD treatment demonstrating higher utility rate at lower costs.

PND60

COST-EFFECTIVENESS OF INCOBOTULINUMTOXIN-A WITH FLEXIBLE TREATMENT INTERVALS COMPARED TO ONABOTULINUMTOXIN-A IN THE MANAGEMENT OF BLEPHAROSPASM AND CERVICAL DYSTONIA

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OBJECTIVES: Incobotulinumtoxin-A is a formulation of botulinum neurotoxin type A (BoNT/A) that is free of complexing proteins. The advantages of incobotulinumtoxin-A include flexible treatment intervals determined by clinical need. The objective of this study was to assess the cost-effectiveness of incobotulinumtoxin-A administration with flexible treatment intervals compared to onabotulinumtoxin-A (BOTOX®) in the management of blepharospasm (BLEPH) and cervical dystonia (CD) from the Australian healthcare providers’ perspective.

METHODS: A Markov state transition model was developed to perform cost-utility analysis (CUA) comparing the cost and health benefits of incobotulinumtoxin-A with onabotulinumtoxin-A. The CUA compared incobotulinumtoxin-A treatment, given at minimum intervals of 6 weeks and maximum intervals of 1 year, with onabotulinumtoxin-A treatment at fixed intervals of 12 weeks. The model consisted of three health states and followed patients in weekly cycles for one year. Only direct healthcare costs associated with the acquisition and administration of BotNT/A were included. Utility values were derived from a previous CUA. The primary outcome measure was the incremental cost per quality-adjusted life year (QALY). Univariate and probabilistic sensitivity analyses were conducted.

RESULTS: Incobotulinumtoxin-A administration was associated with a QALY gain compared to onabotulinumtoxin-A across both CUA and CLEFID. The incremental cost-effectiveness ratio was £10,358, QALYs: 0.74) and £11,449 per QALY using the CEA (incremental cost: £12.97, QALYs: 0.76). With a 73% and 72% chance of being cost-effective at a willingness-to-pay threshold of £30,000/QALY, respectively. Both models were most sensitive to changes in health state transition probabilities and costs of adverse treatment effects.

CONCLUSIONS: Incobotulinumtoxin-A administration offers lower costs and better health outcomes, compared with onabotulinumtoxin-A in the Australian healthcare system (CITATION).}

PND61

COST-UTILITY OF FINGOLIMOD COMPARED WITH DIMETHYL FUMARATE (DMF) IN HIGHLY ACTIVE RELAPSING REMITTING MULTIPLE SCLEROSIS (RRMS) IN ENGLAND:

COMPARISON OF A MARKOV AND DISCRETE EVENT SIMULATION MODEL

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OBJECTIVES: A cohort Markov model based on disability scores was originally developed to assess the cost-effectiveness of fingolimod vs. dimethyl fumarate in the treatment of patients with RRMS. The same inputs were used in both models, except that the methods for determining transition probabilities were different. RESULTS: The Markov model consisted of three health states and followed patients in weekly cycles for one year. Only direct healthcare costs associated with the acquisition and administration of fingolimod were included. Utility values were derived from previous studies. The primary outcome measure was the incremental cost per quality-adjusted life year (QALY). Univariate and probabilistic sensitivity analyses were conducted.

RESULTS: Fingolimod was associated with a cost saving compared to dimethyl fumarate across both CUA and CLEFID. The incremental cost-effectiveness ratio was £10,358, QALYs: 0.74) and £11,449 per QALY using the CEA (incremental cost: £12.97, QALYs: 0.76). With a 73% and 72% chance of being cost-effective at a willingness-to-pay threshold of £30,000/QALY, respectively. Both models were most sensitive to changes in health state transition probabilities and costs of adverse treatment effects.

CONCLUSIONS: Fingolimod administration offers lower costs and better health outcomes, compared with dimethyl fumarate in the English healthcare system (CITATION).

PND62

DIFFERENCES IN WORK PRODUCTIVITY IMPAIRMENT IN RRMS PATIENTS INITIATED ON ORAL DMF OR PLATFORM THERAPIES IN EUROPE AND US

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BACKGROUND: Multiple sclerosis (MS) is a chronic and debilitating disease of the central nervous system, affecting approximately 5-7 people per 1,000 people in the United States and 2.3 million worldwide. As most individuals experience initial symptoms between the ages of 20 and 40 years, MS can have a significant impact on health care consumption, productivity, and employment. OBJECTIVES: To compare the work productivity and activity impairment (WPAI) of patients with relapsing-remitting multiple sclerosis (RRMS) treated with oral dimethyl fumarate (DMF, also known as gastro-resistant DMF) and prior approved interferon beta-1a/b or glatiramer acetate (ABCRRX) therapies. METHODS: Data were identified from the Adelphi MS Disease Special Programme 5/005 sectional study of MS patients in five EU countries and US. Relapsing Remitting MS (RRMS) patients were identified, receiving DMF or ABCRRX therapies with treatment duration greater than 12 months. Inverse-probability-weighted regression-adjustment estimated average year working loss (AYE) and ATE. RESULTS: The results showed that DMF and ABCRRX cohort, utilizing the WPAI score generated from age, gender, EDSS score at current treatment initiation, BMI, duration of current treatment, line of therapy, time since MS diagnosis, and number and type of comorbid conditions. Work productivity and daily activity impairment due to MS, as measured by the Work Productivity and Activity Impairment (WPAI)MS questionnaire, were compared across treatment arms. RESULTS: Work productivity and activity impairment data was available for 160 and 243 patients, respectively. Overall, patients on ABCRRX reported lower WPAI scores than the DMF cohort (ATE – 12.99, p < 0.001, vs. 20.92%). Similarly, impairment while working (presenteeism) due to MS was significantly lower in the DMF cohort (ATE = 12.99, p < 0.001, vs. 19.45%). No percent of work missed (absenteeism) was observed in the DMF cohort (ATE = 2.06%, p < 0.012, vs. 2.06%). Daily activity impairment was significantly lower in the DMF cohort (ATE = 17.26%, p < 0.001, vs. 25.31%). CONCLUSIONS: Compared with ABCRRX patients, patients on DMF had a significantly lower work productivity loss as measured by WPAI-MS.