

## PND8

**COST-EFFECTIVENESS ANALYSIS OF REBIF IN FIRST-LINE RELAPSING REMITTING MULTIPLE SCLEROSIS IN GERMANY**  
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**OBJECTIVES:** To assess the cost-effectiveness of Rebif compared to its comparators in the German health care setting in 2008. **METHODS:** A decision analysis model was used to estimate the cost-effectiveness of Rebif in patients with relapsing-remitting multiple sclerosis (RRMS). The analysis was based on a comparison of treatment with Rebif (44 mcg tiw) versus all other existing disease modifying drug (DMD) treatments from a societal perspective: Avonex (30 mcg qw), Betaferon (8 MIU qd), Copaxone (20 mg qd). Data sources used included published literature, clinical trials, official German price/tariff lists and national population statistics. The time horizon of the model was four years, which is the maximum follow-up of patients in published clinical trials with interferons. **RESULTS:** The cost-effectiveness expressed in cost per relapse avoided is €51,250 for Rebif, which compares favourably with the other comparators. The cost per relapse avoided is €133,770 for Avonex, €71,416 for Copaxone and €54,475 for Betaferon, respectively. When cost of disease progression is excluded, the cost per relapse avoided remains favourable for Rebif (€ 54,292) compared with the other drugs (Avonex €143,186, Copaxone €72,809, Betaferon €56,816). Sensitivity analyses varying the discount rate, frequency of type of relapse, cost of relapse, cost of disease progression and non-compliance have a minor impact on the study outcomes. **CONCLUSIONS:** This study provides evidence on the cost-effectiveness of first-line treatment options for multiple sclerosis in the German setting. In particular, we found that the cost-effectiveness associated with Rebif 44 was favourable compared to other DMDs, providing additional value to payers.

## PND9

**WITHIN-TRIAL COST EFFECTIVENESS ANALYSIS OF ARIPIPRAZOLE COMPARED TO STANDARD-OF-CARE IN THE SCHIZOPHRENIA TRIAL OF ARIPIPRAZOLE (STAR)**

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**OBJECTIVES:** To investigate the cost-effectiveness of aripiprazole compared to standard-of-care (SOC) in the Schizophrenia Trial of Aripiprazole (STAR). **METHODS:** STAR was a multicentre, 26-week, randomised, naturalistic, open-label study comparing aripiprazole with SOC (defined as clinician's choice of olanzapine, quetiapine or risperidone) in the management of community-treated patients with schizophrenia (1). The primary outcome in the cost-effectiveness analysis was the cost per unit of improvement on the main clinical outcome in STAR, the Investigator's Assessment Questionnaire (IAQ) (2). Secondary outcome measures were the cost per additional CGI-I responder and the cost per unit of improvement on the Quality of Life Scale (QLS). Data on service use and employment were collected alongside the trial. Statistical adjustment was made for baseline characteristics on all outcomes. The perspective taken was that of the NHS and social care in the UK. **RESULTS:** Aripiprazole was associated with a significantly better improvement on the IAQ ( $p = 0.0002$ ), the CGI-I response rate ( $p = 0.0080$ ) and the QLS scores ( $p = 0.0003$ ) as compared to SOC. The improvement observed in the QLS scores at six months in this study

approached that of clinical significance at 1 year (3.4). The incremental cost effectiveness ratio (ICER) for the IAQ was £714 per unit of improvement. We estimated that a clinically significant improvement would be an 8 point improvement in the IAQ score. The cost per 1% increase in the number of CGI-I responders was £1413. Thus it would cost £1413 to go from 10 to 11 responders in a sample of 100 patients. The ICER for the QLS suggests a cost of £288 for each unit of improvement gained. **CONCLUSIONS:** Aripiprazole has shown to provide improvements in effectiveness and quality of life at a reasonable cost compared to SOC based on an economic analysis of a naturalistic trial.

## PND10

**BURDEN OF DISEASE IN MODERATE ALZHEIMER DISEASE PATIENTS WITH DEPRESSION IN SPAIN (IDEAL STUDY)**

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**OBJECTIVES:** To assess the economic burden of moderate Alzheimer's Disease (AD) and to analyze the impact of depression, from the societal perspective. **METHODS:** IDEAL is an epidemiological, prospective and multicentric study in which 1,071 patients from 180 investigators in Spain, with moderate AD and available information on resources were assessed. Resources consumption was assessed in a cross-sectional way at the end of the study. The following resources were included in the analysis: health care (medication: anti-Alzheimer, neuroleptics and anti-depressive drugs) and non-health care direct costs (formal care and social services: institutionalization and day care center attendance) and indirect costs (caregivers loss of productivity). Costs are expressed in euros 2007. The cognitive and functional status were measured by the Mini-Mental State Examination (MMSE) and Barthel Index, respectively. Patients were grouped taking into account the score obtained in the depression Cornell Scale (cut-off-point:  $\geq 8$ ). **RESULTS:** Depression was present in 52% of the patients. The average monthly cost per patient was €1043 and €653 in patients with and without depression, respectively. Non-health care direct costs and the caregivers loss of productivity were the most important cost categories. In patients with depression, 56%, 34% and 10% were attributable to non-health care direct costs, productivity loss and drug costs, respectively. In comparison, in patients without depression, the same distribution costs were 61%, 25% and 14%. The cost of productivity loss is more than doubled in the depression patient cohort. Patients with depression showed a higher and significant cognitive impairment, through MMSE scores: 14.7 ( $\pm 4.7$ ) in depressed patients and 15.2 ( $\pm 4.9$ ) in non-depressed patients. The same finding was observed in the daily life activities measured by the Barthel Index: 68.2 ( $\pm 22.7$ ) and 81.1 ( $\pm 19.9$ ) in patients with and without depression. **CONCLUSIONS:** Adequate management of depression in patients with moderate AD would have a positive impact on societal resource consumption.

## PND11

**EPILEPSY COST OF ILLNESS IN THE U.S. PRIVATELY INSURED**  
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**OBJECTIVES:** Compare annual direct costs (both total and epilepsy-related) between privately insured U.S. epilepsy patients and matched controls. **METHODS:** A total of 4323 patients with greater than or equal to 1 epilepsy diagnosis (ICD-9-CM: 345.x),