

treatment can significantly reduce the number of diabetes and CHD events. As a consequence, it can provide considerable reductions in the health and economic burden to schizophrenia patients and health care services in the Spanish setting due to its favourable metabolic profile.

PMH30

#### ECONOMIC EVALUATION OF AGOMELATINE IN MAJOR DEPRESSIVE DISORDERS IN IRELAND

Alegre P<sup>1</sup>, Lacey L<sup>2</sup>, McAuliffe A<sup>3</sup>

<sup>1</sup>Science Union et cie (Servier), Suresnes, France; <sup>2</sup>Larry Lacey Consultant, Dublin, Ireland; <sup>3</sup>Servier Ireland, Dublin, Ireland

**OBJECTIVES:** A cost-utility analysis of a new antidepressant, agomelatine (Valdoxan®) compared to generic fluoxetine and sertraline in the treatment of adult Major Depressive Disorders (MDD) was performed from the societal perspective and that of the Irish Health Service Executive (HSE). For each of these two perspectives, a separate analysis was performed for two different drug schemes: General Medical Services scheme (GMS) and the Drug Payments scheme (DP). **METHODS:** A Markov model was developed with health states for well, depressive episode, remission and death. The model also incorporated sleep disorders, discontinuation rates, discontinuation symptoms and adverse drug reactions. The time horizon of the analysis was two years. Remission, relapse and discontinuation rates as well as frequencies of the different clinical parameters were obtained from head-to-head comparative trials. Utility/disutility estimates were obtained from the literature. Costs (euros 2009) and effects were discounted at 4% per annum after year 1. **RESULTS:** From the societal perspective, agomelatine was dominant over both generic comparators in both drug schemes. From the HSE perspective, agomelatine was cost-effective compared to the two comparators in both drug schemes. One-way sensitivity analysis showed that the results were robust to uncertainty in model parameters. Probabilistic sensitivity analysis demonstrated that for a willingness-to-pay threshold of €45,000/QALY, agomelatine was cost-effective compared to the two comparators in more than 93% of cases for both drug schemes. **CONCLUSIONS:** From the societal perspective, agomelatine was dominant over generic fluoxetine and sertraline for the treatment of adult MDD in Ireland. From the Irish HSE perspective, agomelatine was cost-effective compared to the two comparators with high probability.

PMH31

#### THE COST-EFFECTIVENESS OF ARIPIPRAZOLE IN PATIENTS WITH BIPOLAR I DISORDER IN THE UK

Lebmeier M<sup>1</sup>, Dudley E<sup>1</sup>, Pericleous L<sup>1</sup>, Treur M<sup>2</sup>

<sup>1</sup>Bristol-Myers Squibb Pharmaceuticals Ltd, Uxbridge, Middlesex, UK; <sup>2</sup>Pharmerit BV, Rotterdam, Amsterdam, The Netherlands

**OBJECTIVES:** To explore the cost-effectiveness of aripiprazole in UK patients with bipolar I disorder (BPD). **METHODS:** A Markov state transition model was developed to estimate the cost-effectiveness of aripiprazole, post-olanzapine, compared with risperidone or quetiapine, the most commonly used atypicals in the UK after olanzapine. Modelling was undertaken from a UK NHS perspective using discount rate of 3.5%. The time horizon of the model was 5 years (NICE BPD Guideline). The model incorporated an acute manic phase and relapse prevention phase. Response to therapy (at least a 50% reduction in Young-Mania Rating Scale) and discontinuation in the acute phase were based on an indirect comparison of trials in acute manic treatment. Probabilities of experiencing a new manic or depressive episode or discontinuing treatment in the relapse prevention phase were informed by a network meta-analysis. Quetiapine (at time of analysis) and risperidone are not indicated for relapse prevention in the UK; those patients were switched to lithium. Outpatient, hospitalization and drug costs were included based on published sources. A probabilistic sensitivity analysis (PSA) was used to examine uncertainty. **RESULTS:** Key drivers in the model are cost and quality-of-life reduction associated with acute mania. Aripiprazole is more effective than quetiapine in the acute phase and than lithium in the relapse prevention phase. Therefore, used post-olanzapine, aripiprazole gains 0.025 quality adjusted life-years (QALYs) and saves £3,995 compared with quetiapine and gains 0.01 QALYs and saves £607 compared with risperidone. Results from the PSA demonstrate 92% confidence that aripiprazole is cost-effective versus quetiapine, and 61% confidence versus risperidone when using a threshold of £30,000 per QALY. **CONCLUSIONS:** Aripiprazole used post-olanzapine in the treatment of BPD is a cost-effective use of NHS resources compared with quetiapine and risperidone.

PMH32

#### ECONOMIC EVALUATION OF AGOMELATINE IN MAJOR DEPRESSIVE DISORDERS IN HUNGARY

Alegre P<sup>1</sup>, Nagy B<sup>2</sup>, Nagy J<sup>2</sup>

<sup>1</sup>Science Union et cie (Servier), Suresnes Cedex, France; <sup>2</sup>GKI-EKI Healthcare Research Institute Ltd, Budapest, Hungary

**OBJECTIVES:** A cost-effectiveness analysis of a new antidepressant, agomelatine (Valdoxan®) compared to duloxetine in the treatment of Major Depressive Disorders (MDD) in adults was performed in a Hungarian setting from a societal perspective and the National Health Insurance Fund (NHIF) perspective. **METHODS:** A Markov model was adapted with health states for well, depressive episode, remission and death. The model also incorporated sleep disorders, discontinuation rates, discontinuation symptoms and adverse drug reactions (incl. constipation, diarrhoea, dyspepsia, headache, nausea, somnolence, and sexual dysfunction). The time horizon was set to two years. An indirect comparison was run based on a meta-analysis of duloxetine

from a literature review to document clinical parameters unavailable from completed trials. A prospective cost of illness study in Hungary implemented in 2009 documented direct and indirect costs of MDD. Utilities for each health state and disutilities for each clinical event were taken from the literature. The discount rate was 5% per year. **RESULTS:** From the societal perspective, agomelatine was cost-saving and more effective than duloxetine. From the NHIF perspective, agomelatine resulted in 0.037 QALYs gained compared to duloxetine with 5073 HUF as additional direct costs. One way sensitivity analyses showed that the results were robust to most parameter changes. From a societal perspective, agomelatine dominates duloxetine in 75% of cases and is cost-effective in 91% of cases at a willingness-to-pay threshold of 7 million HUF/QALY. From the NHIF perspective, agomelatine is cost-effective versus duloxetine in more than 90% of cases. **CONCLUSIONS:** In a Hungarian setting, agomelatine is dominant from a societal perspective and cost-effective from a NHIF perspective versus duloxetine. These results are robust, confirmed by sensitivity analyses.

PMH33

#### ADJUNCTIVE ANTIPSYCHOTICS IN PATIENTS WITH MAJOR DEPRESSIVE DISORDER IN TURKEY: A HEALTH ECONOMIC PERSPECTIVE

Isik E<sup>1</sup>, Dilbaz N<sup>2</sup>, Savas H<sup>3</sup>, Gönül AS<sup>4</sup>, Saylan M<sup>5</sup>, Postema R<sup>6</sup>, Loze JY<sup>7</sup>, Drost P<sup>8</sup>, Treur M<sup>9</sup>

<sup>1</sup>Gazi University Medical Faculty, Ankara, Turkey; <sup>2</sup>Ankara Numune Research & Training Hospital, Ankara, Turkey; <sup>3</sup>Gaziantep University Medical Faculty, Gaziantep, Turkey; <sup>4</sup>Ege University Medical Faculty, Izmir, Turkey; <sup>5</sup>Bristol-Myers Squibb, Istanbul, Turkey; <sup>6</sup>Pharmerit Europe, Rotterdam, The Netherlands; <sup>7</sup>Otsuka Pharmaceutical Co., Ltd., Rueil-Malmaison, France; <sup>8</sup>Bristol-Myers Squibb, Braine-l'Alleud, Belgium

**OBJECTIVES:** Major Depressive Disorder (MDD) is a chronic illness associated with major burden on Quality-of-Life (QoL) and health care resources. A recent study estimated annual cost being €282 per European inhabitant. Adjunctive treatments with aripiprazole, quetiapine and olanzapine have demonstrated efficacy in patients with MDD that respond insufficiently to antidepressant treatment. The objective is to estimate the cost-effectiveness of adjunctive therapies in depressive patients failing to respond to antidepressant therapy in Turkey. **METHODS:** An economic model was built simulating MDD patients between major depressive episodes (MDEs) and remission over lifetime. During MDEs, patients were treated with adjunctive aripiprazole, quetiapine or olanzapine. Patients who did not respond at 6 weeks switched to subsequent treatment lines. Comparative effectiveness between aripiprazole, quetiapine and olanzapine, was imputed using an indirect comparison combining 6-week published studies. Resource use data and unit costs were obtained from Turkish studies. **RESULTS:** Over life-time, aripiprazole patients spent less time in MDEs compared to quetiapine (7,7 weeks) and olanzapine (7,5 weeks). Compared to Quetiapine, patients with aripiprazole showed improvement in QoL (+0.045 QALY) at incremental direct cost of 421TL. Compared to olanzapine, patients with aripiprazole dominated, meaning improvement of QoL (+0.042 QALY) respectively, at lower direct cost (-32 TL), despite higher drug costs. Sensitivity analyses estimated a 87% likelihood that aripiprazole improved QoL at a comparable cost versus quetiapine and 88% versus olanzapine. **CONCLUSIONS:** This is the first lifetime health-economic model in Turkey taking patient heterogeneity into account when assessing QoL and costs of different adjunctive strategies in MDD. These results indicate that adjunctive treatment with aripiprazole provides health benefits at lower costs compared to quetiapine and olanzapine, in patients with MDD.

PMH34

#### COST-EFFECTIVENESS ANALYSIS OF RISPERIDONE LONG-ACTING INJECTION IN SCHIZOPHRENIA: 24-MONTH DATA FROM CZECH REPUBLIC

Skoupá J

Pharma Projects s.r.o., Prague, Czech Republic

**OBJECTIVES:** To evaluate 24 months cost-effectiveness of risperidone long-acting injection (RLAI) in patients with schizophrenia enrolled in the electronic-Schizophrenia Treatment Adherence Registry (e-STAR) from Czech Republic. This evaluation is a follow-up of 12 months data presented at the European ISPOR congress (Athens 2008). **METHODS:** e-STAR is an international 24-month, prospective, observational study in patients with schizophrenia who commenced RLAI treatment (based on SmPC indication). Analyzed data covered one year of retrospective (prior to RLAI initiation) vs. 24 months of prospective observation. A total of 607 patients have completed the 24 months study. Assessed direct costs were: hospitalization (duration and frequency), antipsychotic medication and co-medication all from the payer's perspective in 2009 prices. Efficacy parameters included GAF (Global Assessment of Functioning) and CGI-S (Clinical Global Impression-Severity) scores. **RESULTS:** Mean annual costs/patient increased from €2173 (1 Euro = 26 CZK) in the retrospective period to €4270 during the first and 4453 during the second years of observation. Mean cost drivers were hospitalization (63% of total retrospective costs) and antipsychotic medication (90% and 91% of total prospective costs). Costs of RLAI could not be fully offset by significant reductions in hospitalization (both frequency and duration) and co-medication. Improvements in GAF and CGI scores seen at the first treatment year were maintained during year 2 of assessment. Overall GAF changed from 49.6 (baseline) to 74.6 (at 24 month), CGI decreased from baseline 4.61 to 2.96 (24-month). Cost-effectiveness (costs/clinically relevant change in parameters) could also be maintained. More than one-third of patients achieved disease remission, resulting in acceptable incremental €850/patient in remission. **CONCLUSIONS:** Switching to risperidone long-acting injection in patients with treatment failure, non-compliance or intolerance