cost approach, the estimates were similar when patient demographic and clinical characteristics were controlled for in the incremental cost approach.

PMH30 THE SCIENTIFIC COST OF DEPRESSION: EVIDENCE FROM 10,000 SWEDISH PATIENTS IN PSYCHIATRIC CARE
Ekman M1, Granström O2, Omerov S3, Jacob J4, Lindén M5
1Jonas, Stockholm, Sweden, 2AstraZeneca Nordic MD, Södertälje, Sweden, 3Northern Stockholm, Stockholm, Sweden, 4Northern Stockholm, Stockholm, Sweden, 5Gothenburg University, Göteborg, Sweden

OBJECTIVES: Depression is a major health problem. Previous studies on the cost of depression have mainly taken a primary care perspective. Such studies do not include all patients with depression, and should be completed by cost estimates from psychiatric care. The objectives of this study were to estimate societal cost of depression per patient in psychiatric care in Sweden, and to relate costs to disease severity, depressive episodes, hospitalization, and patient functioning. METHODS: Retrospective resource use data in inpatient and outpa- tient care was collected as ICD-10 diagnoses and Global Assessment of Functioning (GAF), were obtained from Northern Stockholm psychiatric clinic with a catchment area including 47% of the adult inhabitants in Stockholm city. This data set was combined with national register data on prescription pharmaceuticals and sick leave to estimate the societal cost of depression. RESULTS: The study included 10,593 patients (63% women). The average annual societal cost per patient was around USD 21,000 in 2006–2008. The largest cost item was indirect costs due to productivity losses (89%), and the second largest was outpatient care (6%). Patients with mild, moderate or severe depression had an average cost of approximately USD 18,000, USD 21,000, and USD 29,000, respectively. Total costs were significantly higher during depressive episodes, for patients with co-morbid psychosis or anxiety, for hospitalized patients, and for patients with low GAF scores. CONCLUSIONS: The largest share of societal costs for patients with depression in psychiatric care is indirect costs due to productivity losses. They were significantly higher than previously reported from a primary care setting, and strongly related to hospitalization, episodes of active depression, and global functioning. This suggests that effective treatment and rehabilitation that avoid depressive episodes and hospitalization may not only improve patient health, but also reduce the societal cost of depression.

PMH31 THE COST OF A SCHIZOPHRENIA RELAPSE IN THE BRAZILIAN PRIVATE HEALTH CARE SYSTEM
Bahamdouni LSK1, Pereira ML1, Ferreira CN2, Santana CFSD2, Salles GRD2
1USC School of Pharmacy, São Paulo, Brazil, 2ORIZE – Companhia Brasileira de Gestão de Serviços, São Paulo, São Paulo, Brazil

OBJECTIVES: Estimate the cost of a schizophrenia relapse in the Brazilian private healthcare system. METHODS: Using a claims database, 842 patients were classified according to one of the following diagnoses: organic delusional disorder (schizophrenia-like), schizophrenia, schizotypal disorder, persistent delusional disorder or schizoaffective disorder. During 26 months, from August/2009 to September/2011, all patients that first used the private healthcare system were analyzed and followed. All costs associated with the treatment of schizophrenia were considered across seven major categories: hospitalization, medications, procedures, materials, exams, alimentation and hygiene care. RESULTS: Out of the 842 patients that used the private health care system in a period of 26 months, 388 returned to the hospital (“return patients”, 46%) and accounted for 85% (R$ 13,386/patient/26 months). Most costs were accountable to hospitalization (75%), followed by medication (14%). Most frequently used medications by the 842 patients, in units, in decreasing order were: levomepromazine, haloperidol and clozapram. CONCLUSIONS: Although patients with hospitalizations represented 46% of the sample, they accounted for 85% of the costs occurred in the 2 year period. As a result, avoiding hospitalization in psychiatric relapse could be an effective cost-saving investment. Furthermore, the claims database does not consider all outpatient costs incurred by the sample, so these results might be underestimated.

PMH32 IMPACT OF SECOND GENERATION ANTI-PsYCHOTICS IN BIPOLAR PATIENTS AND SCHIZOPHRENIA PATIENTS IN TH CALIFORNIA MEDICAID PROGRAM
McCombo J, Jang Y
USC School of Pharmacy, Los Angeles, CA, USA

OBJECTIVES: Compare the health care utilization achieved by patients with schizophrenia and bipolar disorder using atypical and typical antipsychotics. METHODS: Episodes of antipsychotic therapy were identified using data from California Medicaid claims for the years 2004 and 2005. The first patient was then excluded leaving four types of episodes: restarting therapy using the same drug as the preceding episodes after a discontinuation; switching therapy using a different drug after a break in treatment; switching therapy without a break in treatment and combination therapy. A propensity score was then used to estimate using drug therapy episodes between Oct 1997, the first month that the atypical antipsychotics were available without restrictions, and Dec 2002. A total of 296,284 episodes of atypical antipsychotic therapy were matched with typical antipsychotic drug therapy identified using all restart, switching and aug- mentation episodes identified in the period 1994-2003. The impact of atypical an- tipsychothic use on health care utilization patterns over a one-year post-treatment period were analyzed using OLS regressions. RESULTS: Atypical antipsychotic use increased total one year post-treatment cost by $563 dollars (p<0.0001) for restart episodes, $1860 dollars for delayed switch episodes (p<0.0001) and $1818 dollars (p<0.0001) for switch episodes. The use of atypical antipsychotics was not associ- ated with any statistically significant change in total cost for augmentation epi- sodes. For all four types of episodes, using atypical antipsychotics was associated with significantly higher one year post-treatment drug costs ($375 to $1413) which were partially offset by significant reductions in medical costs for switching, restart and augmentation episodes. Using atypical antipsychotics reduced acute hospital admission but had mixed effects on psychiatric hospital and nursing home ad- missions. CONCLUSIONS: There is some evidence that the in- creased drug costs associated with atypical antipsychotic use are partially offset by decreased costs of other medical services.

PMH33 ECONOMIC EVALUATION OF AGOMELATINE FOR MAJOR DEPRESSIVE DISORDERS IN THE GREEK SETTING
Kotoulia G1, Maniadaki N2, Mougiakos T3, Chatzianastasaki T3, Chatzianastasis T3
1National School of Public Health, Athens, Greece, 2414 Military Hospital, Athens, Greece, 3National and Kapodistrian University of Athens, Athens, Greece

OBJECTIVES: The aim of the present study was to conduct an economic evaluation of Agomelatine with its most common alternatives in daily clinical prac- tice for treating patients with Major depressive disorder (MDD) in Greece. METHODS: An existing Markov model evaluating the 2-year cost-effectiveness of Agomelatine was adapted to the Greek setting. The model consists of six states and 24 distinct episodes. The analysis was conducted by the Greek societal perspective. Input data (i.e. transition probabilities, costs assigned to each health state, utility values and probabilities for adverse events) were obtained from published literature, government sources, and experts’ opinion. Head-to-head clinical comparison of Agomelatine with immediate-release and extended-release trazodone was used, and indirect comparisons were conducted in the absence of directly comparative trials. Both direct and indirect costs were considered in the model. The results were expressed as incremental cost-effectiveness ratios (ICERs) per quality-adjusted-life year (QALY) gained. RESULTS: The Markov model estimated that Agomelatine’s average total cost related to 2-year treatment of MDD with Agomelatine is lower compared to Venlafaxine (€435), Sertraline (£257), Escitalopram (£147) and Fluoxetine (£174) higher compared to Mirtazapine (£304) and Citalopram (£217). Moreover, the average QALYs for Agomelatine-treated patients was found to be higher than for all comparators. In particular, the increase in QALYs varies between 0.015 and 0.088 against Escitalopram and Mirtazapine, respectively. Therefore, Agomelatine is dominant against all comparators with the exception of Mirtazapine and Citalo- pram where it is cost-effective (ICER: €56,662/QALY and €11,551/QALY gained, respectively). Sensitivity analysis revealed that Agomelatine’s cost-effectiveness against all comparators with a probability between 48.9% and 97% at a willingness-to-pay threshold of €50,000/QALY gained. CONCLUSIONS: Using conservative assumptions, the present economic evaluation indicates that Agomelatine may be an even more efficient therapy compared to its alternatives for the manage- ment of patients in Greece.

PMH34 LONG-TERM COST-EFFECTIVENESS OF ATYPICAL ANTIPSYCHOTICS FOR SCHIZOPHRENIA IN THE UNITED STATES
Papagianopoulos K1, O’Day K2, Meyers R3, Pikalov iii AA3, Loebel A4
1Summa Pharmaceuticals, Inc., Mentor, OH USA, 2Konda, Palm Harbor, FL, USA, 3Sunovion Pharmaceuticals, Inc., Fort Lee, NJ, USA

OBJECTIVES: To evaluate long-term cost-effectiveness (including hospitalizations and cardiometabolic consequences) of atypical antipsychotics (AAPs) among patients with schizophrenia. Methods: A 5-year Markov disease model, from a US payer perspective, was developed to compare lurasidone, gener- ic-olanzapine, aripiprazole, quetiapine, and ziprasidone. Health states included in the model were: patients on initial AAP, patients switched to a second AAP, and patients on clozapine after failing a second AAP. Incremental cost-effectiveness ratios (ICERs) assessed incremental cost/hospitalization avoided. Effectiveness in- puts included discontinuations, hospitalizations, weight change, and cholesterol change from comparative clinical trials for lurasidone and for aripiprazole, and CATIE for other comparators. AAP-specific relative risk of diabetes obtained from a retrospective analysis was used to predict cardiometabolic events per the Framing- ham BMI risk equation. Mental health costs (relapsing versus non-relapsing pa- tients) and medical costs associated with cardiometabolic consequences (car- diovascular events and diabetes management) were obtained from published sources. AAP costs were estimated from Redbook prices at dose(s) reported in the clinical data sources used in the model (e.g., weighted average dose of lurasidone and average dose for all other comparators). Costs and outcomes were discounted at 3%, and model robustness was tested using one-way and probabilistic sensitivity analyses. RESULTS: In a 5-year Markov disease model, for generic-olanza- pine, and aripiprazole in terms of incremental cost/hospitalization avoided. Compared with generic-olanzapine ($106,407 and 0.424 hospitalizations), lurasidone patients had an ICER of $16,522/hospitalization avoided ($107,219 and 0.374 hospitalizations). Lurasidone had an 89.5% probability of being cost-effective compared with generic-olanzapine at a willingness-to-pay of $50,000/hospitalization avoided. One-way sensitivity analysis showed the model is sensitive to hospital- ization rates and AAP costs. CONCLUSIONS: Model results show that among adults with schizophrenia, lurasidone is cheaper and more effective versus ziprasidone, quetiapine, and aripiprazole, and would be cost-effective compared with generic-olanzapine, due to differences in hospitalization rates and cardiometabolic profile.