in demographics and clinical characteristics, patients with high adherence had significantly lower total health care costs (–$938, p < 0.05), primarily due to lower inpatient (–$2,057, p < 0.05) and outpatient (–$951, p < 0.05) costs than patients with low adherence. **CONCLUSIONS**: Higher average daily dose of duloxetine appeared to be predictor of high adherence among fibromyalgia patients. High adherence to the duloxetine therapy was associated with lower total health care costs.

PSY10

TREATING FIBROMYALGIA WITH DULOXETINE: WHAT IS THE ASSOCIATION BETWEEN AVERAGE DAILY DOSE, MEDICATION ADHERENCE, AND HEALTH CARE COSTS?

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OBJECTIVES: To examine the relationship between average daily dose (ADD) of duloxetine, medication adherence, and health care costs among fibromyalgia patients. **METHODS**: This study employed a retrospective cohort design to analyze administrative claims database for commercially-insured patients diagnosed with fibromyalgia who initiated duloxetine in 2006, with initiation defined as 90-day medication gap. The dispense date of the first duloxetine prescription filled was defined as the index date. All patients selected were required to have at least 30 days of duloxetine supply in the 12 months follow-up period, and those with diabetic peripheral neuropathic pain or depression diagnosis during the prior 12 months were excluded. Five cohorts were constructed based on ADD: <30 mg, 30 mg, 31–59 mg, 60 mg, and >60 mg. Adherence was measured via medication possession ratio (MPR) of duloxetine over 12-month post-index period, with MPR = 0.8 as high adherence. Multivariate regression models adjusting for differences in demographic and clinical characteristics were used to examine the association between ADD, adherence and health care costs. **RESULTS**: The study sample included 4,869 fibromyalgia patients. Three percent of patients had an ADD of <30 mg, 12% of 30 mg, 21% of 31–59 mg, 46% of 60 mg, and 18% of >60 mg. Approximately one-third of patients had high adherence. Controlling for demographics and clinical characteristics, patients with ADD = 30 mg (31–59 mg, and >60 mg) were less (more) likely to adhere to duloxetine than those with 60 mg (all p < 0.05). Compared with patients maintaining an ADD of 60 mg, those with ADD of 31–59 mg or >60 mg had significantly higher total health care costs ($1835 and $5490, respectively, both p < 0.05), while those with an ADD of 30 mg had significantly lower costs (–$1853, p < 0.05). **CONCLUSIONS**: Fibromyalgia patients with an ADD > 30 mg of duloxetine were more likely to adhere to therapy. Maintaining an ADD of 30 and 60 mg was associated with reduced total health care costs.

PSY11

DEFI (DETERMINATION OF EPIDEMIOLOGY OF FIBROMYALGIA) A FRENCH PREVALENCE STUDY OF FIBROMYALGIA

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OBJECTIVES: To determine fibromyalgia (FM) prevalence in a french general population setting, with a clinical confirmation based on ACR criteria **METHODS**: This cross-sectional survey in a general population setting consisted in two steps: First, a telephone screening among 6,000 households using the French validated version of London Fibromyalgia Epidemiological Study Screening Questionnaire or LFES-SQ [1], then a rheumatologist's confirmation based on ACR criteria [2]. **RESULTS**: Of 3081 polled subjects, 232 (7.5%) were screened positive ; 96 subjects accepted the consultation (41.4%), 70.8% were females. Mean age was 58.2 CI95 [55.2 ; 61.2] years. Finally 20 subjects (20.8%) met the ACR criteria, 17 were females. Mean age was 56.9 CI95 [50.7 ; 63.1]. Thus FM prevalence is estimated to 1.5 % CI 95 [1.1; 2.0] based on the following algorithm : Prevalence (%) = $[N_{diagnosis} + (N_{diagnosis}/Nc_{onsultations} * N_{refusals})] * 100/N_{screened\ patients}$ NRefusals : screened positive patients who refused to consult, Ndiagnosis : confirmed FM patients **CONCLUSIONS**: This 1.5% FM prevalence is consistent with other studies but lower than London Fibromyalgia Epidemiological Study figures (2.7%)[1]. Those discrepancies can be attributable to patient's easier access to specialists and a stricter physician's interpretation of ACR criteria. [1] White KP. J Rheumatol 1999;26:1570–76; [2] Wolfe W. Arthritis & Rheumatism 1990;33:160–72.

SYSTEMIC DISORDERS/CONDITIONS – Cost Studies

PSY12

ECONOMIC AND CLINICAL EFFICACY BENEFITS OF THE USE OF USTEKINUMAB IN THE TREATMENT OF MODERATE TO SEVERE PSORIASIS IN GREECE

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OBJECTIVES: To estimate the annual and per-patient budget impact of the treatment of moderate to severe psoriasis in Greece before and after the introduction of ustekinumab. **METHODS**: A budget impact model was constructed from a National Health System perspective to depict the clinical and economic aspects of psoriasis treatment in a time frame of five years. It included drug acquisition, monitoring and administration costs for both the induction and maintenance years for patients treated with etanercept, adalimumab, infliximab, with or without ustekinumab. It also considered the resource utilisation for non-responders. Greek treatment patterns and resource utilization data were derived from 110 interviews with dermatologists and an expert panel of 18 key opinion leaders of dermatology. Official published sources were used to derive the unit costs. Costs of adverse events and indirect costs were excluded from the analysis. The treatment response was defined as probability of achieving a PASI 50, PASI 75 or PASI 90 response, based on published clinical trial data. **RESULTS**: The inclusion of ustekinumab in the biological treatment mix for moderate to severe psoriasis can lead to total per-patient savings of €481 and €1027 in the first and fifth year of its introduction, respectively. The annual savings just on the hospitalisation costs of non-responders were estimated to be €900,000 in the first year and €3 million in the fifth. The cost savings were attributed to the reduced administration costs, reduced hospitalisations for non-responders, and improved efficacy. In an induction year and maintenance year (2-year period), there are a total of 9 administrations for ustekinumab compared to 116 for etanercept, 54 for adalimumab and 15 for infliximab. **CONCLUSIONS**: The inclusion of ustekinumab in the treatment of moderate to severe psoriasis in Greece is anticipated to have both short- and long-term health and economic benefits both on an annual and per-patient basis.

PSY13

REIMBURSEMENT OF FOODS FOR SPECIAL MEDICAL PURPOSES PRODUCTS FOR PHENYLKETONURIA IN POLAND: A BUDGET IMPACT ANALYSIS

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OBJECTIVES: The aim of the analysis was to estimate the budget impact of including new foods for special medical purposes (FSMP) for phenylketonutria (PKU) on the reimbursement list in Poland. Patients with phenylketonuria must adhere to phenylalanine-restricted diet in order to prevent neurological impairment. **METHODS**: In 2008 the reimbursement list in Poland included several FSMP; however, most of them were relatively old (basic portfolio). On the other hand, there were a lot of new PKU products not yet reimbursed (milupa pku2 prima, milupa pku2 secunda, milupa pku2 shake, milupa pku3 advanta, milupa pku3 shake, milupa pku3 tablets, Minaphlex, Lophlex, Easiphen, XP_Maxamum). This analysis was performed from the public payer's perspective (National Health Fund). A 5-year time horizon was adopted (2009–2013). The prognosis was based on the assumption that the PKU products sales in Poland will increase at the same rate as in the past few years. The market shares of specific PKU products were estimated based on data obtained from other European countries (scenario 1) and a questionnaire survey (scenario 2). The base scenario, assuming no changes on the reimbursement list, was also defined. Total and incremental costs were calculated. Incremental costs were defined as the difference between scenario 1 (or scenario 2) and the base scenario. **RESULTS**: In the base scenario the total cost related to reimbursement of PKU products would amount to 23.95 million PLN in 2009 and 25.82 million PLN in 2013. In scenario 1, the expenditure for PKU products would increase by 0.3 million PLN in 2009 and 1.4 million PLN in 2013. In scenario 2 the expenditure would increase by 0.9 million PLN in 2009 and 2.9 million PLN in 2013. **CONCLUSIONS**: This analysis showed that reimbursement of new PKU products would be associated with an incremental cost of about 3 million PLN.

PSY14

COST-EFFECTIVENESS AND BUDGET IMPACT OF LOW DOSE 7-DAY BUPRENORPHINE PATCH FOR MODERATE TO SEVERE OSTEOARTHRITIS PAIN IN THE CONTEXT OF KOREA NATIONAL HEALTH INSURANCE

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OBJECTIVES: Low dose 7-day buprenorphine transdermal patch (norspan®) is an opioid analgesic indicated in the management of chronic moderate to severe pain not responding to non-opioid analgesics. This patch has been marketed as products not covered by the national health insurance. The purpose of this analysis was to evaluate cost-effectiveness and budget impact of the buprenorphine patch, thereby assessing its eligibility for National Health Insurance coverage. **METHODS**: We carried out a cost-effectiveness analysis of the buprenorphine patches compared to tramadol tablets in patients with chronic, moderate to severe osteoarthritis (OA) pain, using a third-party-payers perspective. The time horizon of analysis was 12-week. During this period, it was assumed that doses of study medication were titrated twice to achieve stable pain control. Patients' global impression of pain relief was used as a clinical outcome variable, based on which we defined good and very good pain relief as controlled pain. Expert survey was conducted to investigate the treatment pattern and the cost of chronic pain. Budget impact analysis was applied to assess the impact of insurance coverage of buprenorphine patches. Sensitivity analysis was performed for major parameters and possible scenarios. **RESULTS**: Buprenorphine patch was dominant compared to its comparator, displaying increased effectiveness and reduced costs. Budget impact analysis for 5 years indicated drug costs might increase by nearly 12.2 billion won upon application of buprenorphine patch for insurance coverage; however, the budget for National Health Insurance including medical cost might decrease by nearly 2.9 billion won mainly due to decrement dispensing fee. Sensitive analysis suggested that the most sensitive variable was the effectiveness of buprenorphine patches. **CONCLUSIONS**: Low dose 7-day buprenorphine patch was a cost-effective and cost-saving alternative in the Korea National Health Insurance context. Study robustness needed more evidences about effectiveness.