rived from the 3 phase III clinical trials of tapentadol PR in osteoarthritis and lower back pain and published literature. Switch rates to 2nd line therapies and co-medication costs were provided by the National Centre of Pharmacoeconomics based on the GMS database analysis. Costs of physician visits were obtained by applying local costs to the number of physician visits in each therapy line obtained from a retrospective analysis of the UK THIN database of GP patient records. One-way deterministic and probabilistic sensitivity analyses were undertaken to assess the impact of parameter uncertainty. **RESULTS:** Mean annual total costs per patient from GMS Scheme perspective amount to 4,367€ for tapentadol vs. 4,381€ for oxycodone. Tapentadol generates 0.6316 QALYs compared to 0.6122 QALYs for oxycodone, resulting in tapentadol being a dominant treatment. For DP/LTI Scheme, tapentadol had an ICER of 1,662 €/QALY gained. Results were robust in a broad range of sensitivity analyses. Probability that tapentadol is cost-effective vs. oxycodone at threshold of 20,000 €/QALY gained exceeded 95%. **CONCLUSIONS:** Compared to oxycodone CR, the most commonly used oral drug for chronic severe non-cancer pain in Ireland, tapentadol PR appears to be a highly cost-effective treatment option.

PSY32

MODELING COST-EFFECTIVENESS OF DRUG TREATMENTS FOR SEVERE CHRONIC NON-CANCER PAIN IN PORTUGAL

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OBJECTIVES: To assess the cost-effectiveness of tapentadol PR compared to opioids (morphine, oxycodone, transdermal buprenorphine [TDB] and transdermal fentanyl [TDF]) for the treatment of severe chronic non-cancer pain from the societal perspective in Portugal. **METHODS:** A one year Markov transition state model with monthly cycles was built. Four health states were defined: 'no withdrawal and no adverse events treated', 'occurrence of adverse events (AEs) with need for medical treatment', 'withdrawal due to AEs', and 'withdrawal due to lack of efficacy'. If patients did not adequately respond to treatment or withdraw, switching to alternative second line opioid (morphine, hydromorphone, TDB or TDF) was considered. Third line therapy was the absorption state. Data regarding efficacy, tolerability and utility values (EQ-5D) were derived from clinical trials and published literature. Switch rates to subsequent opioid therapies and resource consumption were estimated by clinical experts. Costs were calculated from the societal perspective. Direct costs were calculated based on official Portuguese prices/tariffs, indirect costs derived from the National Health Survey. One-way and probabilistic sensitivity analyses were conducted. **RESULTS:** Mean annual total costs per patient amounted to 3793 € for morphine, 3,804€ for TDF, 3891 € for TDB, 3964 € for oxycodone, and 4117 € for tapentadol. Total QALYs generated were 0.6102 (morphine), 0.6062 (TDF), 0.6026 (TDB), 0.6096 (oxycodone), and 0.6287 (tapentadol). The resulting ICERs (€/QALY gained) for tapentadol yield 7,995 versus oxycodone, 8,685 versus TDB, 13,943 versus TDF, and 17,547 versus morphine. Varying costs, probabilities, and utilities by ±50%, ±10%, and ±10%, respectively, resulted in an ICER range from tapentadol being dominant (vs. oxycodone) to 26,000 €/QALY gained (vs. morphine). **CONCLUSIONS:** To improve pain relief and quality of life in patients with severe chronic pain tapentadol appears to be the favourable and cost-effective treatment option from the societal perspective in Portugal.

PSY33

CLINICAL AND ECONOMIC ANALYSIS OF ELTROMBOPAG IN CHRONIC IDIOPATHIC THROMBOCYTOPENIC PURPURA IN CONTEXT OF RUSSIAN HEALTH CARE SYSTEM

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OBJECTIVES: The emergence of new drugs for the treatment of patients with chronic idiopathic thrombocytopenic purpura (ITP), stimulates the proliferation of megakaryocyte germ (eltrombopag), stresses the need to conduct a comparative analysis in their cost-effectiveness, compared with other modern treatment options. **METHODS:** Markov modeling was used. Markov model, developed by GlaxoSmithKline, was adapted to the context of Russian health care system to assess cost-utility and cost-effectiveness of eltrombopag and romiplostim for treatment of chronic ITP in patients, for whom splenectomy is contradicted. Eltrombopag and romiplostim were used as first-line options. The simulation was performed taking into account the time perspective for 2 years, 10 and 20 years. Data about diagnosis and treatment of ITP in "real world" settings was collected by interviewing 5 expert-hematologists with expertise in the treatment of chronic ITP, working in different health facilities in Russia. Only direct medical costs were calculated. **RESULTS:** Cost-effectiveness ratio for criterion "additional years of life" after 2 years of onset was $27,703 for eltrombopag and $31,988 for romiplastim, after 10 years of onset – $21,758 and $24,700 respectively, after 20 years of onset – $17,257 and $19,577 respectively. Cost of QALY after 2 years of onset was $39,000 for eltrombopag and $45,530 for romiplastim, after 10 years of onset – $35,108 and $40,218 respectively, after 20 years of onset – $32 527 and $37,204 respectively. **CONCLUSIONS:** Eltrombopag is cost-effective compared with romiplostim as a first-line therapy in treatment of chronic idiopathic thrombocytopenic purpura in patients, for whom splenectomy is contradicted.

PSY34

ECONOMIC EVALUATION OF FERINJECT IN THE TREATMENT OF ANEMIA PATIENTS IN THE GREEK HOSPITAL SETTING: A COST MINIMIZATION ANALYSIS

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OBJECTIVES: To conduct an economic evaluation comparing, ferinject (Ferric Carboxymaltose) with Venofer (iron sucrose), iron sucrose similars (ISS-generic forms of iron sucrose) and Cosmofer (low molecular weight-LMW iron dextran) in the management of anaemia patients in Greece. **METHODS:** A cost-minimization analysis, from National Health System (NHS) perspective, was conducted since there are no clear data indicating that one of these regimens is superior to the others in terms of efficacy. Because iron could be administered either to inpatients (i.e., surgical patients or patients hospitalized due to a disease related to chronic or acute blood loss) or to outpatients (i.e. non-dialysis chronic kidney disease patients etc), the economic evaluation was undertaken for these two large categories of patients, separately. Total cost related to each treatment includes the cost of drugs, the cost of disposables for each infusion, the monitoring cost during infusion (salaries of personnel), the cost for management of adverse events, the cost of visits, the productivity loss, and the travelling cost of patients. A supplementary budget impact analysis was also conducted. **RESULTS:** The mean total (direct) cost of therapy with Ferric Carboxymaltose was €216.32, in the iron sucrose arm the cost was €296.34, in the LMW iron dextran arm was €251.12, while in the ISS the cost was estimated at €324.47 for inpatients. In the case of outpatients the cost of ferric carboxymaltose was €152.66, the cost of iron sucrose was €285.10, the cost of LMW iron dextran was €459.88 and the cost of ISS was estimated at €313.13. Various sensitivity analyses showed that the main results were robust, reaching a statistical significant difference in 95% level of significance. **CONCLUSIONS:** Ferric Carboxymaltose represents a cost-saving option compared with other alternative therapies used in the management of anaemia in the National Health Service of Greece.

PSY35

ECONOMIC EVALUATION OF DARBEPOETIN ALFA IN THE MANAGEMENT OF END STAGE RENAL DISEASE (ESRD) PATIENTS WITH ANEMIA IN THE GREEK NHS SETTING

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OBJECTIVES: To conduct an economic evaluation for End Stage Renal Disease (ESRD) diabetic and non diabetic patients treated with Darbepoetin alfa, Epoetin alfa, Epoetin beta and Epoetin Beta (Methoxy polyetylene Glycol). **METHODS:** A cost-minimization analysis was conducted since there are no clear data indicating differences in terms of efficacy. A probabilistic Markov model was constructed to simulate during a 20-year time span the progress of patients through four health states: "dialysis", "transplantation", "dialysis after graft failure" and "death". The dose required to maintain the desirable Hb level (10 – 12 g/dL) was obtained from the literature alongside transition probabilities for the baseline cohort (mean age 65, diabetics 54%). Costs were estimated from the perspective of the healthcare system and reflect the drug administration, the monitoring of patients, transplantations and other resources consumed by patients valued at €2011. A 3.5% discount rate was used for outcomes. **RESULTS:** The mean survival (common for all comparators) expressed in terms of QALY's was 2.16 (95%Uncertainty Interval (UI): 2.11-2.21) overall, and 2.23 (95%UI: 2.18-2.29) and 2.10 (95%UI: 2.05-2.14) for patients without and with diabetes, respectively. The mean total treatment cost for patients on Darbepoetin alfa was 11,505 (95%UI: €11,322-€11,680) for the entire population, €11,103 (95%UI: €10,906-€11,299) for diabetic and €11,976 (95%UI: €11,739-€12,197) for non-diabetic patients. The mean cost of patients on Epoetin alfa was €15,340 (95%UI: €15,118-€15,554), €14,720 (95%UI: €14,466-€14,976), and €16,068 (95%UI: €15,760-€16,343) respectively. The cost of Epoetin beta was €15,038 (95%UI: €14,783-€15,292), €14,435 (95%UI: €14,160-€14,707) and €15,746 (95%UI: €15,434-€16,063) respectively. Finally, for patients on Epoetin Beta (Methoxy polyetylene Glycol), it was €12,057 (95%UI: €11,868-€12,238), €11,624 (95%UI: €11,416-€11,823) and €12,566 (95%UI: €12,320-€12,796) respectively. **CONCLUSIONS:** Darbepoetin alfa (AranespÒ) may represent a cost saving option, compared to other alternative therapies used in the management of ESRD patients in the National Health Service of Greece.

PSY36

MODELLING THE COST-EFFECTIVENESS OF ORLISTAT AS A TREATMENT FOR OBESITY IN PRIMARY CARE

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OBJECTIVES: Obesity represents a considerable and increasing health problem. The objective of this research was to assess the clinical and cost-effectiveness of orlistat in overweight and obese patients in primary care. **METHODS:** A cohort simulation model was built in Simul8 to explore the potential benefits of treatment with orlistat compared with standard care. The model used a lifetime horizon to estimate the incremental cost per quality adjusted life-year (QALY) gained. Clinical effectiveness was modelled using the results of a mixed treatment comparison. Longitudinal analyses of the General Practice Research Database (n=100,000) were used to derive BMI related estimates for times to death, primary myocardial infarction or stroke, onset of type 2 diabetes, and to estimate the natural history of body mass index (BMI) in people who are obese. Annual probabilities of subsequent cardiovascular events were estimated using data from the Nottingham Heart Attack register and South London Stroke register. Health related quality of life values were modelled using a relationship between BMI and EQ-5D data controlling for age an comorbidities. Current event and post-event health states were used to incorporate changes in health related quality of life and costs. **RESULTS:** Deterministic analysis gave a cost per QALY gained (versus placebo) of £1,665, although this figure is sensitive to the baseline BMI, due to the strong correlation of BMI and the risk of