ing ponatinib provided more than double (2.2-fold) the MCyR months at 36% higher cost compared to the 2G TKI strategy. The average cost/MCyR month with ponatinib was lower than the average cost/MCyR month with 2G TKIs. While there are limitations with the methology and assumptions of the model, this analysis suggests treatment with ponatinib may provide good value for ponatinib-eligible Italian patients.

PSY31

EVALUATION OF THE COST-EFFECTIVENESS OF THE CAPSAICIN PATCH QUTENZATM FOR THE TREATMENT OF PERIPHERAL NEUROPATHIC PAIN IN THE UNITED KINGDOM

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OBJECTIVES: To estimate the cost-effectiveness of using the capsaicin patch QUTENZATM prior to use of more costly neuropathic pain medications for individuals with peripheral neuropathic pain (PnP). **METHODS:** A decision tree and Markov model was developed using inputs from a prospective, observational study. This study provided estimates of clinical efficacy, health utility and resource use. The model considered two treatment strategies: 1. a capsaicin patch followed by pregabalin and then a subsequent last-line therapy, and 2. no exposure to a capsaicin patch. A systematic review and meta-analysis were used to estimate the effectiveness of pregabalin. Response was defined as a ≥50% reduction in pain at week-8. Patients who responded were assumed to experience pain relief and increase in health-related quality of life until the resolution of pain (or death). Non-responders were assumed to switch therapy, and individual's that failed last-line therapy were assumed to experience baseline pain (unless resolution of pain or death). Costs were based on published sources. The primary outcome was the incremental cost-effectiveness ratio (ICER). The perspective was the UK National Health Service and personal social services. **RESULTS:** Key parameter estimates derived from the observational study were: the probability of response for capsaicin patch (29.5%), the mean number of patches per application (1.5), the mean time to retreatment (218 days), The baseline EQ-5D score was 0.370; response was associated with an increase in EQ-5D utility of 0.353 from baseline. The base-case ICER was £2,292 per quality-adjusted life-year (QALY). This varied by time horizon. Probabilistic sensitivity analysis suggested that over a lifetime horizon, a treatment strategy placing capsaicin patches before pregabalin had a 99.9% probability of being cost effective at a willingness-to-pay threshold of £20,000. **CONCLUSIONS:** The capsaicin patch used before pregabalin was a highly cost-effective treatment in the management of peripheral neuropathic pain.

PSY32

COST EFFECTIVENESS OF INDUCTION ANESTHETIC AGENTS

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OBJECTIVES: To evaluate the cost effectivenss of Thiopentone and Propofol for over night induction anesthesia in a tertiary care hospital. **METHODS:** A prospective observational study in which the patients scheduled for general anaesthesia were adminsitred EQ5D 5L(Qol question aire) after six hour and 24 hours of administering Induction Aneasthesia. Kuppuswamy scale was applied to asses the socioeconomic status along with the demographic detials **RESULTS:** The average of EQ5D5L scores for Propofal was 14.2 and for Thiopentone 16.0. The cost of the Propofol brand used in hospital were 250INR and 260INR. Thiopentone , only one brand was avialable costing 62 INR. The Propofol was the most commonly used induction anesthetic and it costs more than 4 times of Thipentone. The patients socioeconomic categorization based on Kuppuswmy Scale revealed nearly 50% of patients belonged to lower middle class and 35% middle class and rest of the patients to Upper class. Incremental cost effectivness ratio for Thiopentone agianst Propofol was found to be -110; **CONCLUSIONS:** The Propofol although expensive does not offer any advantage over the Thiopentone as for quality of life among patients who under went induction anethesia

PSY33

COST-EFFECTIVENESS ANALYSIS OF CYSTEAMINE IN THE TREATMENT OF PATIENTS WITH CYSTINOSIS – A RARE DISEASE

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OBJECTIVES: To perform a cost-effectiveness analysis (CEA) of cysteamine in the treatment of infantile cystinosis vs. control group consisting of patients who had been given only conservative and symptomatic treatment (CaST). **METHODS:** Markov model was developed in TreeAge Pro 2009. The model evaluated the costs and health outcomes of cysteamine treatment at a dose of 1.30 g/m^2/day compared with the use of CaST. The model distinguished two populations, depending on the time of initiation of the treatment (before the age of two – P1 and after the age of two – P2, which implies worse prognosis for the time of occurrence of end stage renal disease (ESRD)). The CEA was conducted from both a common payer perspective (a patient and a public payer) and a public payer perspective. The time horizon of the analysis covered the period from the age of one or four (depending on the start of cysteamine therapy) to fifty (currently, the oldest living patients with cystinosis reach the fifth decade of life). The main measures of the outcomes in the CEA were life-years gained (LYG) and life-years gained to the onset of ESRD. **RESULTS:** From the common payer perspective the cost per LYG was PLN 95,337 and PLN 192,272, respectively for the population P1 and P2. Cost of LYG to the onset of ESRD was PLN 33,317 and PLN 64,163, respectively for populations P1 and P2. The results obtained from the public payer perspective did not differ significantly from the results obtained from the common payer perspective. **CONCLUSIONS:** Cysteamine treatment of patients with cystinosis vs. therapy involving only CaST is more expensive, however produces better health outcomes. Regarding the acceptability threshold in Poland cysteamine therapy can be considered a cost-effective technology compared with CaST in patients who began treatment before the age of two.

PSY34

COST-EFFECTIVENESS OF SUGAMMADEX FOR ROUTINE REVERSAL OF NEUROMUSCULAR BLOCKADE, WITH EXTUBATION AT A TOF RATIO OF 0.9, IN ANAESTHETISED PATIENTS UNDERGOING ELECTIVE SURGERY IN ENGLAND AND WALES

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OBJECTIVES: To assess the cost-effectiveness of sugammadex compared with neostigmine + glycopyrrolate as a reversal agent for moderate and deep rocuronium or vecuronium-induced neuromuscular blockade (NMB) in the elective setting in England and Wales, when extubation occurs at a train-of-four (TOF) ratio of 0.9. **METHODS:** A decision tree comparing the cost-effectiveness of sugammadex versus neostigmine + glycopyrrolate when reversing moderate or deep NMB induced by commonly used neuromuscular blocking agents (NMBAs) (atracurium/rocuronium/vecuronium) was developed. Extubation was modelled to occur at a TOF ratio of 0.9, as may happen when using objective NMB monitoring to determine when to safely extubate. Time to recovery was used to calculate the cost of patients recovering in theatre based on both the average cost per minute of theatre time, and operating room (OR) staff costs per minute. Effectiveness was measured by the number of prolonged paralysis cases prevented by each treatment regimen. **RESULTS:** Reversal of moderate NMB: when considering average cost per minute of theatre time, results show that sugammadex strategies are dominant compared with all assessed comparators. When considering OR staff cost per minute, results show that rocuronium with sugammadex is dominant over all assessed comparators, with the exception of atracurium with neostigmine + glycopyrrolate (ICER< £100). Reversal of deep NMB: when considering either costing scenario, results show that sugammadex strategies are dominant over all assessed comparators, with the exception of atracurium with neostigmine + glycopyrrolate (ICER < £330). **CONCLUSIONS:** In clinical settings where extubation occurs at a TOF ratio of 0.9, and time savings may be realized for all OR staff, under both moderate and deep NMB scenarios in the elective surgery setting, sugammadex is either dominant or shows reasonable levels of cost-effectiveness (with low ICERs <£330 when not dominant against neostigmine+ glycopyrrolate), whilst also filling an unmet need for deep NMB reversal.

PSY35

COST-EFFECTIVENESS ANALYSIS OF A VACCINATION PROGRAMME FOR THE PREVENTION OF HERPES ZOSTER AND POST-HERPETIC NEURALGIA IN ADULTS AGED 50 AND OVER IN GERMANY

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OBJECTIVES: A vaccine is licensed in Europe for the prevention of Herpes Zoster (HZ) and postherpetic neuralgia (PHN) in adults aged ≥50 years. The objective of this study was to assess the cost-effectiveness of a vaccination programme in Germany in this population. **METHODS:** An existing European Markov Model was adapted to the German health care setting and cost-effectiveness outcomes were assessed from the statutory health insurance (SHI) and from the societal perspective. The Markov Model compares a HZ vaccination policy for adults aged ≥50 years with a no vaccination policy. Health states considered are healthy, HZ, PHN, healthy post-HZ and death. HZ and PHN states are further split by pain severity (mild, moderate or severe). Model outcomes include cost/HZ case avoided, cost/PHN case avoided and cost/quality-adjusted life year (QALY) gained. Additionally we assessed the number needed to vaccinate (NNV) to avoid one case of HZ or PHN. Input data were obtained from German data sources, international and German study results as well as published literature. Discounting was done in accordance to guidelines from the German Institute for Quality and Efficiency in Health Care (IQWiG). **RESULTS:** Preliminary results of the base-case analysis show incremental cost-effectiveness and cost-utility ratios (ICER) in amount of € 2,223 per HZ case avoided and € 22,923 per QALY gained from a payer perspective. In sensitivity analyses discount rates, vaccine prices and no hospitalization assumption showed a major impact on the results. **CONCLUSIONS:** Our cost-effectiveness analysis shows that a HZ vaccination policy for adults aged ≥50 years in Germany could provide public health and economic effects in the German health care system.

PSY36

THE POTENTIAL OF A REDUCTION IN THE RISK OF OPIOID-RELATED FRACTURES TO DRIVE THE COST-EFFECTIVNESS OF AN ANALGESIC

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OBJECTIVES: An increased risk for fractures has been observed in patients treated with opiates, possibly resulting from falls related to central nervous system effects, such as dizziness. Observational data suggest that the semisynthetic opioid, buprenorphine, may be associated with a lower fracture risk than some other opiates such as tramadol. Our objective was to perform a preliminary analysis to explore whether a buprenorphine-class drug has the potential to be cost-effective due to a reduced risk for fracture. **METHODS:** Decision-analytic modeling was used to project fracture-related outcomes and costs over 1 year. Quality-adjusted life-years (QALYs) and costs (in 2012 pounds sterling) were estimated from a health service perspective. Odds ratios for forearm, hip, and spine fractures, by drug, estimated from real-world hospital discharge data (Vestergaard et al., 2006), were applied to the risk for fracture in the general population.