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OBJECTIVES: To assess cost-effectiveness of rituximab (RTX) 1st line maintenance treatment compared to observation (O) in patients with follicular lymphoma (FL) from the Polish public payer perspective. **METHODS:** Efficacy and safety of rituximab 1st line maintenance therapy was assessed based on the results of systematic review and the PRIMA clinical trial. Direct medical costs were assessed based on the data regarding clinical practice of FL treatment and medical resources use gathered in 5 oncology centers. The following costs were calculated and included: drugs, drug administration, treatment-related adverse events, lymphoma relapse treatment, patient health monitoring. A life-time horizon (25 years) and public payer perspective were assumed. Costs were discounted at 5% and effects at 3.5%. A four health state Markov model (progression-free 1st line, progression-free subsequent line, progression and death) was used. Sensitivity analysis was performed testing the influence of various critical parameters such as utilities values, different costs categories, length of time horizon and patient's body surface. **RESULTS:** Introduction of 1st line maintenance therapy with RTX resulted in gain of 1.4 life years and 1.3 quality adjusted life years compared to observation. The total incremental costs were 60,707 PLN (1 EURO=3.96 PLN) which corresponded to an incremental cost-effectiveness ratio (ICER) of 43,348 PLN and an incremental cost-utility ratio (ICUR) of 47,357 PLN. Both values were below 110 000 PLN cost-effectiveness threshold assumed by the Polish public payer. The results were sensitive to discount rates, utilities values applied to the specific health states, length of time horizon. None of the tested scenarios resulted in values of ICUR and ICER exceeding the 110,000PLN threshold, providing evidence that rituximab treatment is cost-effective from public payer perspective. **CONCLUSIONS:** Rituximab in 1st line maintenance treatment of FL is an effective, safe and cost -effective therapeutic option.

PCN87

THE COST EFFECTIVENESS OF CETUXIMAB (ERBITUX) IN THE THIRD LINE TREATMENT OF METASTATIC COLORECTAL CANCER IN THE UK

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OBJECTIVES: To estimate the cost-effectiveness of cetuximab plus best supportive care (BSC) or cetuximab plus chemotherapy in patients with EGFR-expressing KRAS wild-type metastatic colorectal cancer who have failed at least two previous chemotherapeutic regimens in the metastatic setting from the UK NHS perspective. **METHODS:** A Markov model was developed to inform the cost-effectiveness (CE) of cetuximab plus BSC and cetuximab plus chemotherapy both versus BSC, and additionally the CE of cetuximab plus BSC and cetuximab plus chemotherapy both versus panitumumab plus BSC. Progression-free survival and overall survival data were collected from the following clinical trials: Karapetis et al. 2008, De Roock et al. 2007 and 2010, and Amado et al. 2008. These three clinical studies were relevant to perform indirect treatment comparisons. **RESULTS:** In the base-case analysis, treatments with cetuximab resulted in additional QALY as follows: cetuximab plus BSC versus BSC (0.303), cetuximab plus chemotherapy versus BSC (0.668), cetuximab plus BSC versus panitumumab plus BSC (0.193), and cetuximab plus chemotherapy versus panitumumab plus BSC (0.616). The base-case incremental cost effectiveness ratios (ICER) for cetuximab plus BSC and cetuximab plus chemotherapy, both compared to BSC are in the region of £50,000 per QALY. Compared to panitumumab plus BSC, the ICERs are below the NICE's £30,000 willingness-to-pay threshold. **CONCLUSIONS:** Weighting the QALYs gained with the NICE supplementary advice, suggests that cetuximab plus BSC or cetuximab plus chemotherapy is potentially a cost-effective use of NHS resources in this setting.

PCN88

ECONOMIC MODEL OF GRANULOCYTE-COLONY STIMULATING FACTOR (G-CSF) IN PRIMARY (PP) AND SECONDARY PROPHYLAXIS (SP) OF FEBRILE NEUTROPENIA (FN) IN NON-HODGKIN'S LYMPHOMA (NHL) PATIENTS UNDERGOING CHEMOTHERAPY IN FRANCE

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OBJECTIVES: To assess the cost-effectiveness in France of current G-CSF strategies as PP (from first cycle and before an FN event) and SP (after an FN event) for NHL patients receiving cytotoxic chemotherapy. **METHODS:** A Markov model was developed to calculate cost per FN events avoided, life-year saved (LYS), and quality adjusted life year (QALY); results were expressed as incremental cost-effectiveness ratios (ICERs). ICERs for 9 prophylaxis strategies were evaluated for three NHL chemotherapies (CHOP, CHOP-R and ACVBP): PP or SP with pegfilgrastim (Neulasta®), 6-day filgrastim (Neupogen®), 11-day filgrastim, 6-day lenograstim; and no prophylaxis. All strategies were compared to no prophylaxis. FN-related outcomes including FN-hospitalizations, FN-mortality and RDI were assessed using epidemiologic data, utility and chemotherapy-related FN-risk (21% for CHOP-21, 19% for RCHOP-21, 52% for ACVBP). Direct healthcare costs (G-CSF, administration, and FN-related events) were calculated from French Health insurance perspective. Costs and outcomes were discounted (4%/year). Based on international guidelines, PP should be given to high-risk patients (FN risk320%). **RESULTS:** In the high chemotherapy FN-risk population, pegfilgrastim was the most cost-effective G-CSF compared to SP-pegfilgratim. For instance, in patients undergoing ACVBP chemotherapy, ICERs with PP-pegfilgrastim were €2,019 per FN avoided, €10,194 per QALY gained and €8,632 per LYS versus SP-pegfilgrastim. In RCHOP-21 and without considering patient risk factors, if SP was considered instead of no prophylaxis, pegfilgrastim was the dominant G-CSF with ICERs of €2,112 per FN avoided, €14,703 per QALY gained and €11,940 per LYS versus no prophylaxis. **CONCLUSIONS:** With French settings, pegfilgrastim is the most cost-effective PP-G-CSF in high chemotherapy FN-risk patients versus SP-pegfilgrastim. After an FN event, pegfilgrastim is the most cost-effective SP-G-CSF versus no prophylaxis.

PCN89

PUBLIC HEALTH IMPACT OF QUADRIVALENT HPV TYPES 6, 11, 16, 18 VACCINE IN SAO PAULO, BRAZIL USING A TRANSMISSION DYNAMIC MODEL

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OBJECTIVES: To assess the public health impact of the quadrivalent (6,11,16,18) HPV vaccination program for São Paulo, Brazil. **METHODS:** A published mathematical model of the transmission dynamics of HPV infection and disease was adapted for São Paulo, Brazil. The model captured direct protective effects of vaccination and indirect effects (herd immunity). Model inputs were used from Brazil or the Latin/America region when available; otherwise, the default values in the original model were used. Maintaining current cervical cancer screening practices in Brazil, we evaluated two strategies: routine vaccination of females by age 12 (S1), and S1 combined with a temporary (5 years) female catch-up program for age 12–24 years (S2). The vaccine coverage rates were 85% for the routine and 95% by age 26 years for the catch-up vaccination programs. **RESULTS:** Comparing S1 to no vaccination, we estimated the cumulative percent (absolute cases) reduction in HPV 6/11/16/18-related incident genital warts-female, genital warts-male, cervical intraepithelial neoplasia (CIN) grade 1, CIN 2/3, cervical cancer cases, and cervical cancer deaths would be 78% (2,488,240), 67% (2,166,770), 68% (360,235), 65% (1,154,566), 47% (135,810), and 44% (39,147), respectively, over 100 years. Compared to S1, S2 provided additional cumulative percent (absolute cases) reduction of 9% (273,866), 11% (357,728), 7% (39,455), 7% (131,861), 7% (19,620), and 7% (6,009) in HPV 6/11/16/18-related incident genital warts-female, genital warts-male, CIN 1, CIN 2/3, cervical cancer cases, cervical cancer deaths. **CONCLUSIONS:** A prophylactic quadrivalent HPV vaccination program for females in Sao Paulo, Brazil can substantially reduce the incidence of cervical cancer, CIN, and genital warts. Female catch up vaccination may provide greater reductions in HPV-related diseases.

PCN90

COST-EFFECTIVENESS ANALYSIS OF ERLOTINIB VERSUS DOCETAXEL, PEMETREXED FOR SECOND-LINE TREATMENT OF ADVANCED NON-SMALL-CELL LUNG CANCER IN RUSSIA

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OBJECTIVES: Evaluate the cost-effectiveness analysis of erlotinib compared with docetaxel and pemetrexed in the second-line treatment of advanced non-small-cell-lung cancer (NSCLC) from a societal perspective in a Russian setting. **METHODS:** A Markov state transition model, based on two randomized phase III studies of erlotinib versus pemetrexed (HORTC) and pemetrexed versus docetaxel (Nasse H. et al 2005), was used to estimate total direct costs and quality-adjusted life years (QALYs). Data about cost of medical services and drugs are received from the price-list of out-patient medical aid in clinic MMA of I.M.Sechenov 01.02.2011, site minzdravsoc.ru//medicine and other accessible electronic resources. Costs, effectivenesses, utilities were discounted at 3%. Sensitivity analysis for key parameters in the model was conducted. **RESULTS:** Erlotinib was associated with a reduction in total costs (1 179 452 roubles versus 1 260 607 roubles and 1 769 367 roubles) and improved outcomes (total QALYs of 0.299 versus 0.248 and 0.271) in comparison with docetaxel and pemetrexed, respectively. Sensitivity analysis showed that major factors influencing cost-effectiveness and cost-utility ratios are survival gain, price of drugs, discount rates. **CONCLUSIONS:** In summary erlotinib is more cost-effective in comparison with docetaxel and pemetrexed for second-line treatment of advanced NSCLC due to lower adverse event and drug administration costs.

PCN91

PHARMACOECONOMIC ANALYSIS OF MCRC THERAPY WITH XELOX/FOLFOX4 REGIMES WITH BEVACIZUMAB OR CETUXIMAB AS THE FIRST LINE TREATMENT IN RUSSIA

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OBJECTIVES: This study is devoted on a comparative pharmacoeconomic analysis regimes XELOX + BV (bevacizumab) versus XELOX + CET (cetuximab) treatment (q3w); FOLFOX4 + BV and FOLFOX4 + CET (q2w) in the treatment of mCRC. The efficacy and safety of combined treatment regimens based on the data of international clinical trials. **METHODS:** Medical services were taken from the standards of medical care for patients with ŇRC and their costs were based on the price-list of Cancer Research Center. The cost analysis of anticancer and related drugs were based on the information about limit selling/import prices of vital and essential drugs. The main characteristics for Markov's model were: the Markov states (without progression, progression, death); a Markov's cycle (1 month); the time horizon (5 years). **RESULTS:** The cost of diagnosis was 16757 rubles, the medical services – 222802 rubles. The mCRC therapy as a first line by XELOX in combination with BV was 1029694 rubles or with CET–1899867 ruble; FOLFOX4 in combination with BV–1109402 rubles or with CET–2026917 rubles. The highest CER was for mode XELOX+CET-263870 rubles. The Markov's model shows that the COST/QALY and COST/LYG will above with each year, but in comparing groups with BV or CET therapy in the next 5 years, it was shown a tendency of the increase in cost per