

OBJECTIVES: To estimate the cost-effectiveness of maintenance therapy with oral erlotinib (150mg/day) and BSC compared with BSC, in patients with advanced non-small-cell lung cancer (NSCLC) EGFR WT and stable disease after completing four cycles of first-line platinum-based chemotherapy. **METHODS:** A Markov model including three health states (progression free survival, progression and death) was developed to evaluate the cost per life year gained (LYG) of maintenance treatment with erlotinib vs BSC from the Spanish National Healthcare System perspective. Clinical data inputs were based on the SATURN trial results. Resource utilization related to each health state was estimated by a Spanish Expert Panel. Drug and unitary costs were obtained from a Spanish database (€ 2012). The annual discount rate applied was 3.0% for cost and outcomes. The simulation was carried out over a 5 year time horizon and one-way deterministic and probabilistic sensitivity analyses were conducted to assess the uncertainty around key input values. **RESULTS:** In the prespecified subset of patients with EGFR WT and stable disease, the annual cost per patient of erlotinib and placebo, including supportive care and adverse events costs, was 23,912€ and 13,969€, respectively. Erlotinib also achieved a mean gain of 1.40 life-years compared with the 1.12 LYG with placebo. The incremental cost-effectiveness ratio of erlotinib relative to placebo was calculated to be 35,265 € per LYG. Sensitivity analyses confirmed the robustness of the results. **CONCLUSIONS:** In patients with advanced NSCLC EGFR WT and stable disease after 4 cycles of chemotherapy, maintenance treatment with erlotinib is a therapeutic option that increases survival of patients and may be cost-effective vs BSC in Spain.

PCN77

COST EFFECTIVENESS ANALYSIS IN THE VENETO REGION OF NAB-PACLITAXEL MONOTHERAPY II LINE VERSUS CONVENTIONAL PACLITAXEL IN PATIENTS WITH BREAST CANCER AND FOR WHOM ANTHRACYCLINES ARE NOT INDICATED

Maran PR¹, Aiello A¹, Magni MR¹, Alberti C¹, Visentin E¹, Venturini F², Scroccaro G³
¹UVEF Regional Drug Coordination Centre, Verona, Italy, ²Azienda Ospedaliera Universitaria Integrata di Verona, Verona, Italy, ³Regione del Veneto, Venezia, Italy

OBJECTIVES: Metastatic breast cancer remains an incurable disease with a median survival of about 2 years and essentially palliative treatment. Nab-paclitaxel is a new formulation of paclitaxel, that is reduced at nano-scale level, in order to solve its solubility problem without using organic solvents. It is indicated in the second line of treatment for those patients for whom anthracyclines are contraindicated. Although in Italy an official cost-effectiveness threshold value is not identified, the Italian Association of Health Economics (AIES) identifies a range from € 25.000 to € 40.000/QALY or LYG. The objective of the study is to evaluate the cost-effectiveness of Nab-paclitaxel versus conventional paclitaxel in the Regional Health Service (RHS) in second-line patients. **METHODS:** Survival data from the pivotal study were used to calculate the Incremental cost-effectiveness Ratio (ICER). Both drugs were administered every 3 weeks (Nab-paclitaxel=300mg/m², paclitaxel=175mg/m²). The maximum hospital wholesale price allowable for Nab-paclitaxel and regional tender price for conventional paclitaxel were considered to calculate costs of treatment. The analysis evaluated them from the perspective of the RHS, quantifying only costs of chemotherapy, as other direct costs (i.e. staff, premedication, managing adverse events) were not quantifiable or highly variable (conservative analysis). The cost of drug administration was not considered, since it was the same for both drugs (6 administration). **RESULTS:** Therapy with Nab-paclitaxel versus paclitaxel leads to an increase of the survival (+0.186/years) and an increase of costs (+ €6.525). The ICER is €35.077/LYG. **CONCLUSIONS:** Nab-paclitaxel versus conventional paclitaxel showed an ICER = €35.077/LYG. The limit of the analysis is related to the choice of the comparator, that may not be the best therapeutic alternative. Other alternatives could be weekly paclitaxel, vinorelbine, capecitabine and docetaxel, for which, however, there are no clinical data emerging from direct comparisons.

PCN78

COST-EFFECTIVENESS OF PLERIXAFOR PLUS GCSF FOR MOBILIZATION OF PERIPHERAL BLOOD STEM CELLS IN PATIENTS WITH MYELOMA AND LYMPHOMA IN SPAIN

Duarte RE¹, Pérez-Simón JA², Martín G³, de la Rubia J⁴, Marín P⁵, Álvarez MA⁶, Espinós B⁷, Roset M⁷

¹Institut Català D'Oncologia - Hospital Duran i Reynals, L'Hospitalet de Llobregat, Spain, ²Hospital Universitario Virgen del Rocío, Sevilla, Spain, ³Banc de Sang i Teixits, Barcelona, Spain, ⁴Hospital Universitario La Fe de Valencia, Valencia, Spain, ⁵Hospital Clinic, Barcelona, Spain, ⁶Hospital Reina Sofia, Córdoba, Spain, ⁷IMS Health, Barcelona, Spain

OBJECTIVES: Autologous peripheral blood stem cell (aPBSC) transplant is the standard of care for patients with multiple myeloma (MM) or non-Hodgkin's lymphoma (NHL) beyond first remission in Spain. Patients with peripheral blood CD34+ <10 cells/ μ L are considered as poor mobilisers, and require alternative mobilisation regimens to achieve a sufficient number of CD34+ cells to undergo transplantation. Those patients who collect 2x10⁶ CD34+ cell/kg will proceed to transplant. The most common mobilisation treatments currently used are GCSF alone or GCSF + chemotherapy. The aim is to assess the cost-effectiveness of plerixafor + GCSF compared to GCSF alone or GCSF + chemotherapy, for mobilisation of CD34+ cells in patients with MM or NHL whose cells mobilise poorly from the perspective of the Spanish National Healthcare System (NHS). **METHODS:** A cost-effectiveness analysis was performed using a semi-Markov process that embedded two decision trees for aPBSC and continuation of care, from the NHS perspective. The Markov model used three health states: well, remission and death and annual cycles in a time horizon of 10 years. The mobilisation decision tree includes the preapheresis, apheresis and transplantation pathways. The continuation of care includes the

most frequent therapies used after failing mobilisation or relapsing. The probabilistic sensitivity analysis was conducted to incorporate parameter uncertainties. Outcomes were quality-adjusted life years (QALY) and costs expressed in € in 2012. **RESULTS:** The base case analysis resulted in an incremental cost-effectiveness ratio (ICER) for plerixafor + GCSF versus GCSF alone of €19,787 for NHL and €30,476 for MM patients. When compared to GCSF + chemo, the ICER was €18,975 for NHL and €27,718 for MM patients. Probabilistic sensitivity analysis on the key parameters confirmed the robustness of the base case. **CONCLUSIONS:** Plerixafor + GCSF, used in poor mobilisers patients, is a cost-effective strategy for both NHL and MM patients in Spain.

PCN79

PHARMACOECONOMIC EVALUATION OF ACUTE MYELOID LEUKEMIA AND MDS SYNDROMES (INTERMEDIATE AND HIGH RISK) TREATMENT WITH AZACITIDINE IN THE RUSSIAN FEDERATION

Kulikova A, Yagudina R, Misikova B

I.M. Sechenov First Moscow State Medical University, Moscow, Russia

OBJECTIVES: To assess the cost-effectiveness of azacitidine in treatment of acute myeloid leukemia and MDS syndromes in the Russian Federation. **METHODS:** To conduct the cost-effectiveness analysis of acute myeloid leukemia and MDS syndromes treatment we evaluated costs of diagnostics, treatment of the disease, side effects and blood transfusions for azacitidine and low dose cytarabine. The efficacy data of drugs (median survival-MS) was obtained from clinical trial AZA-001. MS for azacitidine was 2,04 years and for low dose cytarabine - 1,28 years. Medical care costs were estimated from the national standard of myeloid leukemia treatment, which was developed and published by Russian Ministry of public health. At the last stage sensitivity analysis was conducted. Exchange rate 1€ = 42 RUB. **RESULTS:** The cost of pharmacotherapy with azacitidine was 1 197 157 RUB (28 503€) and with low dose cytarabine 22 841,51 RUB (544€). Total costs of treatment were 2 658 703RUB (63302 €) for azacitidine and 1 749 130 RUB (41646€) for low dose cytarabine. Side effects treatment costs were about 40% of total costs for cytarabine, while for azacitidine only about 14% of total costs. A cost-effectiveness ratio (cost per 1 year gained) of azacitidine was 1 303 286 RUB (31030€) which is lower than the use of cytarabine 1 366 507,73 RUB (32536€). Sensitivity analysis demonstrated stability of results. **CONCLUSIONS:** Application of azacitidine for the therapy of acute myeloid leukemia and MDS syndromes is dominant alternative of treatment from the pharmacoeconomic perspective.

PCN80

MODELLING THE COST-EFFECTIVENESS OF IPIILIMUMAB FOR PREVIOUSLY-TREATED, METASTATIC MELANOMA

Lee D¹, Winn B¹, Lehmeier M², Batty A¹

¹BresMed, Sheffield, UK, ²Bristol-Myers Squibb Company, Uxbridge, Middlesex, UK

OBJECTIVES: Melanoma is a particularly aggressive form of skin cancer, the incidence of which continues to increase. Whilst no new therapies had been developed for approximately 25 years, new treatments – including the immunotherapy ipilimumab – have been licensed. The objective of this study was to assess the cost-effectiveness of ipilimumab in previously treated metastatic melanoma. **METHODS:** A semi-Markov model, based around survival curves from the MDX-010-20 trial, was constructed. Because of the unusual shape of the survival curve (exhibiting a plateau of survival at around 15% of patients after an initial steep fall), the survival data was split in to three sections, modelled using Kaplan-Meier data (0-18 months), parametric curve fits (18-60 months) and registry data (>60 months). Utility, drug dosage and patient weight data were taken from the trial, while costs were taken from published sources and NHS Reference Costs. **RESULTS:** Ipilimumab was projected to result in a substantial increase to life when compared to best supportive care (2.77 vs 1.07 life years), with a correspondingly large increase in quality-adjusted life years (2.06 vs 0.82). As a result of drug therapy, costs also increased from £11,747 to £89,607, giving ipilimumab an incremental cost-effectiveness ratio of £65,303 (excluding any vial sharing). Sensitivity analysis indicated the greatest areas of uncertainty were the methods used to extrapolate survival curves beyond the 56-month trial data and the utility values used. **CONCLUSIONS:** The modelling of survival curves should be tailored depending on the shape of the data – parametric survival curve fitting may not always be appropriate. The results of the model showed that ipilimumab has the potential to lengthen life substantially (40.1 vs 11.4 months). From this, the degree of innovation (extent of survival gain) is such that ipilimumab could be considered cost-effective under the NICE End of Life guidance and Kennedy report as a 'step-change'.

PCN81

COST EFFECTIVENESS OF PAZOPANIB IN SOFT TISSUE SARCOMA

Amdahl J¹, Manson S², Isbell R², Chit AN³, Diaz JR⁴, Lewis L⁵, Delea TE⁶
¹PAI, Brookline, MA, USA, ²GlaxoSmithKline, Uxbridge, UK, ³GlaxoSmithKline, Mississauga, ON, Canada, ⁴GlaxoSmithKline, London, UK, ⁵University of York, York, UK, ⁶Policy Analysis Inc. (PAI), Brookline, MA, USA

OBJECTIVES: PALETTE was a phase III, randomized controlled trial of pazopanib versus placebo in 369 patients with advanced/metastatic soft tissue sarcoma (STS) who had received prior treatment with chemotherapy. Pazopanib improved progression free survival (PFS) vs. placebo (4.6 vs. 1.5 months, hazard ratio [HR]=0.39, p<0.0001). Median overall survival (OS) was 12.6 vs. 10.7 months with pazopanib vs. placebo (HR = 0.87, p=0.256). As PALETTE did not assess cost-effectiveness, the objective of this evaluation was to assess the cost-effectiveness of pazopanib from a UK health care system perspective. **METHODS:** A partitioned survival analysis model was developed to estimate expected PFS, OS, lifetime costs of STS treatment, and quality adjusted life years (QALYs) for patients receiving pazopanib, placebo, trabectedin, or ifosfamide. Estimates of PFS/OS, incidence of adverse events, and