as a combination of two analytical tools, to produce a budget optimising management system.

Material and methods Dispensing data for the first 6 months of 2019 from the haematology, oncology and chemotherapy departments were collected. ABC analysis was performed: class A accounted for 72% of total expenditure, class B for 23% and class C for 5%. The VEN tool was further extended to a score index (summarising the characteristics of the health impact of the medicines) grouped into three classes: class V for vital, class E for essential and class N for non-essential medicines. Crosstab ABC-VEN analysis resulted in three major categories: I (AV, BV, CV, AE), II (BE, CE) and III (AN, BN, CN).

Result Fifty-seven CA-MtADR were analysed. Expenditure for CA-MtADR was 40% of the total expenditure for medicines in the hospital. According to the ABC analysis, 7 medicines (12%) were class A, 12 medicines (21%) class B, and 38 (67%) class C. According to the VEN analysis, 9 medicines (16%) were characterised as V, 43 (75%) as E and 5 (9%) as N. According to the ABC-VEN crosstab analysis, category I (eg, daratumumab (ATC L01XC24)) included 16 medicines (28%), category II (eg, trastuzumab emtansine (ATC L01XC14)) 36 medicines (63%) and category III (eg, pantoprazole (ATC A02BC02)) 5 medicines (9%).

Conclusion and relevance ABC-VEN crosstab analysis revealed three categories of corresponding priority: CA-MtADR category I, including expensive and/or vital medicines which need patient oriented personalised stock management; CA-MtADR category II, medicines which should be monitored with special consideration to ensure availability (because they are essential); and CA-MtADR category III, medicines where stock is according to demand (due to low price). ABC, VEN and ABC-VEN analysis can assist in developing a robust approach to improve budgetary planning in hospitals.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

1ISG-006 EFFECTIVENESS EVALUATION OF HIGH COST DRUGS FOR ADVANCED NON-SMALL-CELL LUNG CANCER: REAL WORLD EVIDENCE, COMPLIANCE WITH CLINICAL PRACTICE GUIDELINES AND ECONOMIC EVALUATION

A Isoardo*, E Grande, MM Ferrero, C Fruttero. *Ao S Croce E Carle, SC Farmacia Ospedaliera, Cuneo, Italy*

10.1136/ejhpharm-2020-eahpconf.6

Background and importance Lung cancer has a poor prognosis and is the most common cause of cancer death. In Italy, lung cancer is the third most common cancer. Treatment decisions are based on the histology and molecular characteristics of the tumour. Treatment options for non-small-cell lung cancer (NSCLC) are targeted therapies (tyrosine kinase inhibitors (TKIs)), immunotherapy or chemotherapy.

Aim and objectives To analyse drug effectiveness for advanced NSCLC in our hospital, to assess compliance with clinical practice guidelines and to perform an economic evaluation.

Material and methods We identified all patients with advanced NSCLC treated with high cost drugs (pemetrexed, erlotinib, gefitinib, afatinib, osimertinib, crizotinib, pembrolizumab and nivolumab) from 1 May 2016 to 30 April 2018. Patients were stratified by age, gender, therapy, ECOG (Eastern Cooperative Oncology Group) performance status (PS) and type of cancer treatment (targeted therapy, immunotherapy or the historical standard of care, pemetrexed). We assessed progression free survival (PFS) and overall survival (OS) with the Kaplan–Meier method. We assessed compliance with Italian clinical practice guidelines and we analysed drug costs.

Results We found 92 cases of NSCLC; 70% were men and mean age was 65 years. We found that 50% were treated with pemetrexed, 30% with immunotherapy and 20% with targeted therapy; 61% were firstline treatments. Median PFS was 4.3 months and median OS was 8.6 months. Targeted therapy was most likely to improve PFS (5.9 months), followed by pemetrexed (4.3 months) and immunotherapy (2,9 months). Targeted therapy was similarly best for OS outcome (15.3 months), followed by immunotherapy (11 months) and pemetrexed (8.6 months). After patient stratification, there was no statistically significant difference between age, gender or therapy groups. PS was an indicator of better prognosis: cases with a baseline PS score of 0 (75%) were associated with longer PFS (5.5 months) and OS (11 months). Compliance with clinical practice guidelines was high. Afatinib and gefitinib were the least expensive TKIs. Nivolumab was less expensive than pembrolizumab.

Conclusion and relevance TKIs for the management of NSCLC are cost effective. Afatinib is an important firstline option for EGFR mutation positive NSCLC. Gefitinib can be an effective secondline therapy. Pemetrexed can still be recommended for EGFR and ALK wild-type non-squamous advanced NSCLC. However, our analysis suggests a limited effectiveness of immunotherapy.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

1ISG-007 NEW CANCER DRUG APPROVALS IN PORTUGAL

A Alcobia*, A Soares. *Hospital Garcia De Orta, Pharmacy Department, Almada, Portugal*

10.1136/ejhpharm-2020-eahpconf.7

Background and importance In Portugal, all new drugs, after EMA approval, undergo a national health technology assessment process to decide their reimbursement status, by the SNS (Portuguese National Health System).

Aim and objectives The objective of this study was characterisation of the drug approval processes for cancer drugs by the INFARMED (Portuguese Regulatory Agency).

Material and methods The 10 latest drugs approved for different types of cancer were analysed, considering their therapeutic indication, type of economic analysis performed and efficacy outcome.

Results This analysis was performed in October 2019. The 10 latest cancer drugs approved (midostaurin, olaparib, brentuximab vedotin, pomalidomide, durvalumab, venetoclax, ixazomib, alectinib, atezolizumab and cabozantinib) are for use in refractory disease (60%), firstline treatment of metastatic disease (20%) and maintenance therapy in patients who have not progressed after firstline therapy (20%). A cost utility analysis was made for seven drugs, cost efficacy for two drugs and a cost minimisation analysis for two drugs (one of the drugs had two types of analysis as there were two different groups of patients). The efficacy outcome considered was overall survival in 60% and progression free survival in 30%. One evaluation considered overall response. The average HR for the

efficacy outcome versus comparators was 0.74 for firstline or refractory disease therapies and 0.42 for drugs used in maintenance therapy when patients had not progressed after firstline therapy.

Conclusion and relevance The health technology assessment processes analysed were heterogeneous. Drug approvals must be balanced between clinical trials and real world evidence. For innovative drugs, clinical trial extensions must be published promptly after efficacy outcome modifications, leading to review of the reimbursement evaluations.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

1ISG-008 COST EFFICACY ANALYSIS OF ABIRATERONE IN NEWLY DIAGNOSED HIGH RISK METASTATIC CASTRATION SENSITIVE PROSTATE CANCER

A Soares, A Alcobia*. *Hospital Garcia De Orta, Pharmacy Department, Almada, Portugal*

10.1136/ejhpharm-2020-eahpconf.8

Background and importance Abiraterone was recently proved by the EMA for addition to androgen deprivation therapy (ADT), associated with prednisone (P), in metastatic castration sensitive prostate cancer. The economic impact could be important.

Aim and objectives The aim of this study was to evaluate the cost efficacy of abiraterone in newly diagnosed high risk metastatic castration sensitive prostate cancer.

Material and methods Abiraterone efficacy outcomes are based on the LATITUDE[1 2] trial. Treatment costs were calculated based on the direct costs of the drugs in 2019. This study was conducted from an institutional perspective—the hospital perspective.

Results Based on the LATITUDE trial,[1 2] the overall survival for the abiraterone+P+ADT group was 53.3 versus 36.5 months in the ADT group. Median treatment duration was 24 months for the abiraterone+P+ADT group and 14 months for the ADT group. Adding abiraterone+P to ADT resulted in a marginal efficacy of 1,4 years compared with ADT alone. The marginal costs associated were 70.163€ . The incremental cost efficacy ratio calculated for abiraterone+P was 50.116€ .

Conclusion and relevance Based on this analysis, the incremental cost efficacy ratio calculated for abiraterone in metastatic castration sensitive prostate cancer setting was increased, considering the potential number of patients. With limited budgets, cost efficacy analyses are useful tools for the pharmacy and for decisions by therapeutics committees on drug selection.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Fizazi K, *et al*. *N Engl J Med* 2017;**377**:352–60.
2. Fizazi K, *et al*. *Lancet Oncol* 2019;**20**:686–700.

No conflict of interest.

1ISG-009 BUDGET IMPACT ANALYSIS OF A NATALIZUMAB EXTENDED INTERVAL DOSING REGIMEN

E Pierobon, A Mastrogiacomo, F Capano*, D Ielo. *AOU San Luigi Gonzaga, Pharmacy, Turin, Italy*

10.1136/ejhpharm-2020-eahpconf.9

Background and importance Natalizumab is a monoclonal antibody that blocks the immune reaction evoked during multiple sclerosis (MS) attacks but it could also weaken immunosurveillance, leading to an increased risk of developing progressive multifocal leucoencephalopathy (PML).

Many studies have demonstrated that extended interval dosing (EID) of natalizaumab 300 mg every 6 weeks has the same efficacy as standard interval dosing (SID) every 4 weeks, but with a lower risk of PML.

Aim and objectives To compare the costs of SID and EID administration of natalizumab and to estimate the savings associated with EID.

Material and methods The analysis was carried out adopting a 3 year time horizon, the hospital perspective (corresponding to the National Health Service) and considering only the direct costs of the drug's purchase price. The population was patients diagnosed with MS and already being treated with the SID regimen at our hospital. The model used was based on real clinical data: patients were selected from September 2016 to September 2019.

The annual cost considered 12 infusions for SID and 8 for EID of natalizumab, according to the actual regional public tender, which is mandatory (no possibility of further paybacks or discounts, or planned changes to the purchase agreement in the next 3 years).

Three different scenarios were considered: 75%, 85% and 95% of patients on the EID regimen and the remaining on the SID regimen, based on the clinical judgment that almost all patients could benefit from an EID regimen, but the possibility should also be foreseen that a patient could not wait more than 4 weeks between infusions.

Results In the first scenario, there were 512 patients receiving EID and 171 SID, corresponding to a total cost of € 10 490 101, or € 13 986 802 if all patients were receiving SID. Treating 75% of patients with EID could reach a saving of € 3 496 700.

The second scenario (581 vs 102) generated a cost of € 10 023 875 and a saving of € 3 962 927, and the third scenario (649 vs 34) a total cost of € 9 557 648 with a saving of € 4 429 154.

Conclusion and relevance The analysis underlines the large savings in direct costs if most patients are infused every 6 weeks. This also corresponds to lower administration related costs (indirect costs) that could be calculated in a future analysis.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

1ISG-010 INTRODUCTION OF RITUXIMAB BIOSIMILAR: AN OPPORTUNITY TO IMPROVE HEALTH SYSTEM EFFICIENCY?

C Panciroli*, L Cervi, D Mazza, G Mangoni, M Dall'aglio, F Ruggiero, ML Medaglia. *Asst Grande Ospedale Metropolitano Niguarda, SC Farmacia, Milan, Italy*

10.1136/ejhpharm-2020-eahpconf.10

Background and importance The introduction of a biosimilar drug represents similar efficacy at a lower cost, providing savings without compromising patient treatment. Moreover, their quality is certified by regulatory agencies and high quality clinical trials. In 2017, rituximab biosimilar (RB) was approved in Italy. At the end of 2017, our hospital implemented a new policy for using biologics, and decided to