

results showed an outstanding implementation in clinical practice since the Cmin quantification technique was used in our hospital, mostly because of newly diagnosed patients. Recording imatinib concentrations during follow-up would help achieve 100% monitored patients. Benefits of dose optimisation include reducing the dose, keeping optimal concentrations, or increasing dose in case of subtherapeutic levels.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

#### 4CPS-087 OPTIMISATION OF RESOURCES IN THE USE OF IMMUNOTHERAPY: NIVOLUMAB AND PEMBROLIZUMAB WEIGHT BASED DOSING INSTEAD OF FLAT DOSE

I Lomares Manzano\*, MJ Martínez Bautista, A Ganfornina Andrades, MV Manzano Martín. *Hospital Universitario Puerta Del Mar, Servicio De Farmacia Hospitalaria, Cádiz, Spain*

10.1136/ejhp-2020-eahpconf.188

**Background and importance** Nivolumab and pembrolizumab are highly selective blockers of anti-programmed death-1 (PD-1). Nivolumab was authorised to be administered in weight based dosing (WBD) schedules at 3 mg/kg every 2 weeks (w) for all indications, and pembrolizumab at 2 mg/kg every 3w in melanoma, urothelial carcinoma, Hodgkin lymphoma and secondline non-small cell lung cancer. In May 2018, the European Commission approved nivolumab 240 mg/2w or 480 mg/4w, and later pembrolizumab 200 mg/2w or 400 mg/8w flat dose (FD) for all indications, replacing WBD with equal efficiency and safety.

**Aim and objectives** To describe the economic impact of nivolumab and pembrolizumab WBD instead of FD.

**Material and methods** An observational, descriptive and retrospective study was performed in patients treated with nivolumab and pembrolizumab in a reference hospital from May 2018 to September 2019. In agreement with oncology, it was decided to prescribe nivolumab WBD for weight <80 kg and FD for weight >80 kg, and pembrolizumab WBD for weight <100 kg and FD for weight >100 kg, for the indications WBD was authorised to improve efficiency. We registered demographic data (sex, weight and age), number of cycles received and doses prescribed in the study period. Patient data were obtained from our chemotherapy prescription and preparation database software and digital clinical history. Direct costs between the use of WBD instead of FD were compared to calculate the economic saving.

**Results** Seventy-one patients treated with nivolumab (58) and pembrolizumab (13) were analysed during the study period, 42% men, median age 67.5 (range 43–86) years and median weight 74 kg (range 43–112). A total of 775 cycles of nivolumab and pembrolizumab were administered and 42/71 patients (59%) were treated with WBD instead of FD because of weight <80 kg (nivolumab) and <100 kg (pembrolizumab). The real cost of nivolumab and pembrolizumab WBD in the study period was 1 614 256€, instead of the theoretical cost of these drugs using FD (1 873 357€), meaning a reduction in costs of 259 101€ (13.83%).

**Conclusion and relevance** Despite the recommendation to prescribe FD of nivolumab and pembrolizumab, with equal efficiency and safety for our population, WBD means a reduction

in costs, with huge optimisation of the resources available in our hospital.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

#### 4CPS-088 CHECKPOINT INHIBITORS IN NON-MICROCYTIC LUNG CANCER: RESULTS IN COMMON CLINICAL PRACTICE

A Magallon Martínez\*, MJ Agustín Ferrández, A Pinilla Rello, A Escolano Pueyo, O Pereira Blanco, L Cazorla Poderoso, M Perez Moreno, A Casajús Navasal, R Abaz Sazatornil. *Universitary Miguel Servet Hospital, Hospital Pharmacy, Zaragoza, Spain*

10.1136/ejhp-2020-eahpconf.189

**Background and importance** The guidelines recommend anti-PD-1/PD-L1 immunotherapy as secondline treatment in patients with locally advanced or metastatic non-small cell lung cancer (NSCLC), regardless of PD-L1 expression.

**Aim and objectives** To evaluate the effectiveness of treatment with checkpoint inhibitors (ICI) (nivolumab, pembrolizumab and atezolizumab) in the secondline treatment of metastatic NSCLC.

**Material and methods** This was a descriptive, transversal, retrospective research of all patients treated with ICI as a secondline treatment for metastatic NSCLC between November 2013 and September 2019. Variables collected were: age, sex, histology, PD-L1 expression, ECOG at the beginning of treatment, cycles received and duration of treatment. Effectiveness criteria were: median overall survival (OS), and OS at 2 and 3 years (Kaplan–Meier method). Data were obtained from the electronic clinical record and the onco-haematological electronic prescription programme (Oncowin). Analysis was done by SPSS Statistics.

**Results** A total of 119 patients were included (74.8% men), with a median age at the beginning of treatment of 67 years (48–86). Histology was adenocarcinoma in 59.48%, squamous in 37.07% and large cell in 3.45%. We found that 15.12% of patients had negative PDL-1 (<1%), 24.37% PDL-1 (1–50%) and 17.65% PDL-1 (>50%); in 42.86% of patients, expression was not determined. ECOG at the beginning of treatment was 47.31% for ECOG 0 and 52.69% for ECOG 1. A total of 53.78% of patients were treated with nivolumab, 14.29% with pembrolizumab and 31.93% with atezolizumab, with median number of cycles administered of 6 (1–57). Median OS was 8.89 months (95% CI 6.13–11.65). No significant differences were found in median OS based on expression of PDL-1 or drug. Variable that significantly influenced median OS were ECOG (ECOG 0 greater survival, p=0.045). OS at 2 and 3 years were 24.7% and 17.0%, respectively. In 29.41% of patients, thirdline chemotherapy was given: 57.14% taxane monotherapy, 11.42% pemetrexed, 14.28% carboplatin–pemetrexed and 17.16% other, with a median OS of 7.77 months (95% CI 4.37–11.17).

**Conclusion and relevance** Under usual clinical practice, ICI achieved an OS of 8.72 months, lower than that obtained in the pivotal trials, but the percentage of long term survivors was similar to the pivotal trials. Although the percentage of patients who were treated with a thirdline was low, their OS was considerable.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.