based on quality criteria from different societies when it is carried out in a generalised, standardised and regulated way.

Aim and objectives To describe the implementation of a computerised checklist for the validation of prescriptions of oncological chemotherapy (ChemO) according to recommendations and clinical practice guidelines; and to evaluate the results of its implementation in terms of safety interventions.

Material and methods The checklist was designed in database format. This included the BOPA and GEDEFO recommendations for validation by having a series of different coloured alerts when laboratory values were not within normal limits for administration of ChemO. From this database the variables number of validations, interventions, type, and acceptance or not by the oncologist were collected from 1 January to 30 June 2019. Demographic data of the patients (age and sex) were also collected. Frequencies and means were analysed for the variables studied.

Results The data of 3050 validated prescriptions were included, with the checklist corresponding to 1162 patients of whom 593 (51%) were women. Mean age of the patients was 59.3 years ($\sigma=15.0$). A total of 293 interventions were performed (9.6% of prescriptions). The most common reasons for intervention were related to the diagnosis not reflected in the prescription (165 interventions (5.4%)), the periodicity of the chemotherapy scheme (46 (1.5%)) and the location of the patient within the hospital (63 (2.1%)). Seventeen (0.6%) interventions were related to the scheme, cytostatic, volume and prescribed serum. Regarding the severity of the intervention, 31 (1.0%) required consultation with the oncologist, 22 (70.1%) of which were accepted. Among the latter, the main reason for the consultation was related to laboratory parameters outside normal limits.

Conclusion and relevance The application of a checklist to the validation of the prescription served to improve patient safety as it standardised the process and marked the order for all the items reviewed. It was also useful for unifying the criteria among pharmacists and was helpful in the training of resident pharmacists.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-043 IMPLEMENTATION OF A PREPARATION PROTOCOL FOR CHEMOTHERAPY ADMIXTURES OF HIGH ECONOMIC IMPACT

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Background and importance The administration of intravenous admixtures (IVMs) in the haemato-oncology day hospital is determined by the patient's health status. Poor health is a cause of non-administration of IVMs, causing medication and economic losses due to their low stability.

Aim and objectives To implement a protocol for the preparation of IVMs of antineoplastic drugs with high economic impact, low physical-chemical stability and/or high frequency of adverse effects; and to analyse the results obtained and to propose lines of improvement.

Material and methods The protocol consisted of review of the analytical data available early in the morning by the pharmacist and assessment of the physical condition of the patient by

the nursing staff before preparation. All data on IVMs of the drugs included in this protocol and their cost were collected as well as the total number of IVMs prepared over a period of 3 months. We calculated the percentage of unprepared IVMs overall and per drug, including the amount of IVMs unprepared and the savings that they represented with respect to the total number of controlled IVMs.

Results The number of drugs included in the protocol was 17. In the period evaluated, a total of 5426 IVMs of antineoplastics were programmed: 399 IVMs were included in the protocol. Of these, 58 (14.5%) IVMs were not prepared. Seven of the 17 drugs included in the protocol presented causes for not being administered and, therefore, were not prepared. Drugs not prepared: panitumumab and nab-paclitaxel (10.4%), eribulin (8.6%), nivolumab and aflibercept (5.2%), pemetrexed and liposomal doxorubicin (1.7%). Fluorouracil (13.7%), gemcitabine (6.9%), oxaliplatin and irinotecan (5.2%), carboplatin and denosumab (3.4%) were not prepared in association with these drugs. The most frequent reasons for non-preparation were haematological adverse effects (36 (62.0%)), digestive adverse effects (10 (17.2%)), surgical intervention (4 (6.8%)) and other (4 (6.8%)). The economic savings in unprepared mixtures was € 24 703.24 (7.1% of the total controlled mixtures included).

Conclusion and relevance The protocol was an important tool for cost savings in the preparation of antineoplastic IVMs. Of the drugs involved, only a limited number had reasons not to be prepared, so that the protocol could be updated with a smaller number of drugs while maintaining its objectives.

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No conflict of interest.

5PSQ-044 IMPACT OF DRUG INTERACTIONS IN HIGH DOSE METHOTREXATE ELIMINATION

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Background and importance High dose methotrexate (HDMTX) chemotherapy, defined as a dose $>500 \text{ mg/m}^2$, is used to treat several oncological and haematological malignancies. Despite appropriate hydration, urine alkalisation and leucovorin rescue, nephrotoxicity remains a risk which can lead to significant morbidity and mortality. Different drugs have been associated with altered elimination (AE) of HDMTX due to delayed elimination or nephrotoxicity.

Aim and objectives To describe the incidence of AE and assess the impact of drug interactions in HDMTX induced AE.

Material and methods A bibliographic research in the Lexi-comp database was conducted to identify drug interactions with HDMTX. A retrospective study was carried out including all patients who received HDMTX between 2010 and 2019. Data collected were age, sex, methotrexate dosage, number of HDMTX cycles, creatinine level before and after HDMTX, serum levels of methotrexate and potentially interacting medications (PIM) prescribed 24 hours before HDMTX infusion and during methotrexate elimination. AE was defined as plasma concentration $>1 \mu\text{mol/L}$ at 48 hours and/or $0.1 \mu\text{mol/L}$ at 72 hours, or nephrotoxicity according to the Common Terminology Criteria for Adverse Events criteria V4.0.