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 oncolgical 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 (σ=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 (7.0%) 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.

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**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 mg/m², 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 μmol/L at 48 hours and/or 0.1 μmol/L at 72 hours, or nephrotoxicity according to the Common Terminology Criteria for Adverse Events criteria V4.0.
The association of PIM with AE was determined by OR and the χ² test or Fisher’s exact probability test.

**Results** Sixty-four patients were treated with HDMTX for 160 cycles with a median HDMTX dose of 11760 mg (IQR 3370–14 207.5 mg). Median age was 66.4 years (IQR 55.6–75.3) and 42.2% were women. Eleven patients were treated for leukaemia and 53 for lymphoma.

Median baseline creatinine was 0.66 (IQR 0.57–0.78) mg/dL. AE was present in 80 cycles (50%). In 91.3% of these, patients were receiving concomitant PIM with methotrexate elimination. In 52 cycles methotrexate elimination was altered only after 72 hours.

PIM associated with AE were: levetiracetam (OR=6.9, 95% CI 1.5–32.4; p<0.05), non-steroidal anti-inflammatory drugs (OR=10.9, 95% CI 2.4–49.4; p<0.05) and doxycycline (OR=0.5, 95% CI 0.4–0.6; p<0.05). There were no significant differences between use of proton pump inhibitors, loop diuretics, amphotericin B, penicillin and derivate, aminoglycosides, ciprofloxacin or p-glycoprotein/ABC1 inhibitors.

**Conclusion and relevance** There was a high prevalence of patients with AE of HDMTX. Potentially interacting medications with HDMTX are frequently used during treatment. Only levetiracetam and non-steroidal anti-inflammatory drugs were associated with methotrexate in our patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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