4CPS-009 **ABSTRACT WITHDRAWN**

4CPS-010 **ABSTRACT WITHDRAWN**

4CPS-012 PLATELET TO LYMPHOCYTE RATIO (PLR) AS BIOLOGICAL MARKER OF INTEREST IN IMMUNOTHERAPY

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Background and Importance Inflammation plays a major role in the progression of neoplasms such as non-small-cell lung cancer (NSCLC), so it is vitally important to find biomarkers that are easily applicable and reproducible in routine clinical practice that allow us to classify patients according to their forecast.

Aim and Objectives To analyse the inflammatory marker platelet/lymphocyte ratio (PLR) as a predictor of efficacy in immunotherapy treatments; to assess whether there is a relationship between PLR value and response to treatment.
Material and Methods Retrospective and observational study of patients diagnosed with NSCLC and treated with pembrolizumab in a tertiary hospital, from January 2018 to December 2021. We collected demographic variables (sex and age), ECOG, histology, presence of metastases, PD-L1 expression and previous treatments. Progression-free survival (PFS) and overall survival (OS) were calculated by the Kaplan-Meier method and log-rank as hypothesis testing.; PLR (absolute platelet count/absolute lymphocyte count) was calculated and PLR=200 was considered the cut-off point. Cox regression test was used to assess the influence of PLR on treatment efficacy.
Results Seventy-three patients treated with pembrolizumab (80.8% male, n=59) and median age 65 [83-37] years. Adenocarcinoma histology was 90% (n=66); 40 patients ECOG=0, 31 patients ECOG=1 and 2 patients ECOG=2; 26 patients PD-L1<50%, 19 patients PD-L1>50% and for 28 patients it was unknown; 12 patients CNS metastases and 22 patients had liver/bone metastases. Significant differences were obtained in the group of patients with liver/bone metastases in PFS with median of 6.3 (2.9-9.6) CI 95% vs 17.3 (11.4-23.2) CI 95% months (p=0.03), and in the group of patients with CNS metastases in OS with a median of 9.6 (1.2-17.9) CI 95% vs at 24.9 (18.6-31.2) 95% CI months (p=0.003). Median PFS was 15.6 [10.15-21.1] 95% CI for PLR <200 vs 9.97 [2.86-17.1] 95% CI months for PLR >200 (p=0.04); median OS was 26.25 [19.87-32.64] 95% CI for PLR <200 vs 11.31 [3.86-18.79] 95% CI months for PLR >200 (p=0.001). Cox regression test: HR=1.001 (p=0.017) for PFS and HR=1.002 (p=0.003) for OS.
Conclusion and Relevance PLR and the presence of metastases correlates with PFS and OS. PLR, with a cut-off point =200, appears useful as a prognostic biomarker for patients with NSCLC treated with pembrolizumab; higher PLR values, result in lower PFS and OS (HR>1 in PFS and OS).

REFERENCES AND/OR ACKNOWLEDGEMENTS
Conflict of Interest No conflict of interest

4CPS-014 COMPARISON OF TWO PROTOCOLS FOR THE ADMINISTRATION OF LEUCOVORIN RESCUES AFTER HIGH DOSE METHOTREXATE INFUSION OF 24 HOURS

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Background and Importance Therapeutic drug monitoring (TDM) of methotrexate (MTX) in plasma is a standard procedure to early identify patients with delayed drug elimination and adjust leucovorin dose. Adequate leucovorin rescues (LR) should start within 42-48h of the beginning of high dose (HD)-24h-MTX infusion to avoid MTX toxicity but extending LR more than needed can reduce MTX antitumour effect. Before implementation of new PETHEMA-2019 protocol at our hospital, standard LR were prescribed and MTX plasma concentration was determined 48h after infusion completion. Following new protocol recommendations, pharmacists started TDM.
Aim and Objectives To assess whether the implementation of the new protocol allowed reducing the total leucovorin dose administered after HD-24h-MTX infusion. Secondary outcomes: compare the incidence of toxicity and the level of compliance of appropriate MTX sampling times and LR between both protocols
Material and Methods Retrospective observational study conducted at a university tertiary hospital. Adults treated with a HD-24h-MTX infusion as treatment for acute lymphoblastic leukaemia (ALL) and Burkitt lymphoma from May 2019 to June 2022 were included. Patients were stratified (1:1) according to the protocol followed. Data collected were: age, sex, haematology malignancy, MTX dose, LR and serum creatinine.
Results Fifty-eight HD-24h-MTX infusions were analysed corresponding to 20 patients for the new protocol (75% males; mean ± SD age 49 ± 15 years; 7 with lymphoma, 11 ALL-B, 2 ALL-T) and to 20 for the original (65% male; mean ± SD age 49 ± 16 years; 10 lymphoma; 7 ALL-B, 3 ALL-T). The median [interquartile range] leucovorin dose administered per cycle following the original protocol was an 87% higher than the dose administered with the new protocol (597 mg/m2 [475,700] vs 75 mg/m2 [45,180], p<0,001). Nephrotoxicity incidence (increase of 0,3 mg/dl from basal creatinine) was 21% in the original protocol vs 19% in the new one (p=0,84). Sample extractions for TDM were correctly drawn in 93% of the cases and LR were correctly administered in 76% of the cases when using the new protocol, in comparison with 97% and 55% when using the original protocol).
Conclusion and Relevance Implementation of the new protocol allows a significant reduction of the leucovorin dose by 87% without an increase in nephrotoxicity. Measures to increase adherence to the new protocol may be implemented hereafter.

REFERENCES AND/OR ACKNOWLEDGEMENTS
Conflict of Interest No conflict of interest

4CPS-015 ROLE OF CLINICAL PHARMACIST IN THE OPTIMISATION OF NIRMATRELVIR/RITONAVIR PRESCRIPTION IN THE EMERGENCY DEPARTMENT

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Background and Importance Nirmatrelvir/ritonavir (Paxlovid®) has been recently authorised for treating coronavirus disease 2019 (COVID-19) in adults who do not require supplemental oxygen and who are at increased risk for progressing to severe disease. Due to multiple drugs metabolised by CYP3A may have significant interactions with ritonavir, physicians and pharmacists should work together for the safe and effective use of paxlovid.
Aim and Objectives To describe the pharmacist interventions (PIs) in the emergency department (ED) regarding optimisation of paxlovid prescriptions in non-hospitalised COVID-19 patients.
Material and Methods An observational prospective study was conducted from 1 April 2022 to 31 August 2022 in a 1000-bed university hospital. Clinical variables were obtained using electronic medical records. We registered demographic data (sex, age), vaccination status and comorbidities, hospitalisation and prescription with other therapies (such as remdesivir and baricitinib) after paxlovid treatment, posology, potential drug