dispensation (yes/no) and final treatment received. Risk factors were evaluated with our country's drug regulatory agency (DRA) recommendations to assessed the indication. Efficacy was assessed by the proportion of patients admitted to hospital and 28-day mortality.

Results PAXLOVID was prescribed to 34 patients, 14 (41.2%) were women. The median age was 76.3 years old [RIQ 25.4]. Main indications for PAXLOVID were: to be undergoing treatment with myelotoxic chemotherapy (32.3%), corticosteroids or other immunosuppressants (29.4%); being over 80 years of age and presenting specific Risk factors (14.7%) and primary immunodeficiency (5.8%). 21 patients (61.8%) had some relevant interaction with their usual medication. The most frequent interactions were with statins (23.5%), analgesics (20.6%), oral anticoagulants (12%), antiarrhythmics (8.8%), antiplatelet drugs (5.8%), antidepressants (5.8%) and antidiarrhoeals (5.8%).

After Validatión by the Pharmacy Service, 11 patients (32.4%) did not receive PAXLOVID, 5 because they did not meet DRA criteria, 2 because their glomerular filtration rate was less than 30 ml/min and 4 because they had incompatible interactions, 4 patients finally received 3 days-remdesivir.

Among patients who received PAXLOVID, 82.26% received full doses, with 4 patients (11.76%) requiring adjustment for renal impairment. 3 patients (13%) were hospitalised in the first month, none died.

Conclusion and Relevance The main indications for which PAXLOVID was prescribed were patients undergoing chemotherapy and/or immunosuppressive treatments. Interactions with PAXLOVID were frequent and in some cases limited treatment. Validation by Pharmacy Service prevented a considerable number of patients from receiving PAXLOVID when it was no-indicated or when they had insurmountable interactions, also allowed patients to receive the dose adjusted for renal impairment. PAXLOVID was effective in avoiding hospital admission and mortality in the majority of patients.

# REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest

## 4CPS-177 OPTIMISATION OF THE THERAPEUTIC MANAGEMENT OF PATIENTS ON ECMO IN THE PAEDIATRIC INTENSIVE CARE UNIT

<sup>1</sup>O Hanafia\*, <sup>2</sup>H Capelle, <sup>1</sup>J Leonelli, <sup>3</sup>S Honore, <sup>1</sup>P Bertault-Peres. <sup>1</sup>Hôpitaux Universitaires de Marseille, Pharmacie Timone, Marseille, France; <sup>2</sup>CH Aubagne, Pharmacie, Aubagne, France; <sup>3</sup>AIX Marseille Université, Pharmacie Clinique, Marseille, France

10.1136/ejhpharm-2023-eahp.170

Background and Importance Extracorporeal Membrane Oxygenation (ECMO) is a last-resort rescue technique that allows the replacement of circulatory and/or respiratory functions. The pharmacokinetic modifications generated by this circulatory assistance require the adaptation of the dosage of certain drugs

Aim and Objectives The objective was to compare the drug prescription of patients under ECMO with data available in the literature to propose appropriate dosages

Material and Methods Our 6-month prospective observational monocentric study focuses on patients in the paediatric intensive care unit receiving ECMO. Clinico-biological data were collected from the computerised patient record and by our daily presence in the department. We noted the type and indication of ECMO, complications and adequacy of dosages compared to the literature for relevance

Results 14 patients under ECMO were included: mean age 18 months [0 to 168 months], sex ratio=1. Renal function was impaired in 8 patients (57%). The average duration of ECMO was 15 days [3-24 days]. 6 patients were weaned, 4 of whom were still hospitalised on the ward (43%) and 8 patients died (57%). 13 patients (93%) were on veno-arterial ECMO, following acute respiratory distress syndrome (8 cases or 61%), refractory cardiac arrest (3 cases 23%), cardiogenic shock (8%) or septic shock (8%). 1 patient (7%) was on veno-venous ECMO following an acute respiratory distress syndrome (ARDS). 11 patients (79%) developed complications related to ECMO (9 haemorrhages, 8 hemolysis, 6 oxygenation difficulties, 5 PAO, 4 stroke). Concerning the drug management of these patients, we counted 16 overdoses and 2 underdoses not justified either by the literature or by therapeutic drug monitioring (TDM) i.e. 18 nonconformities out of 73 lines analysed (Vancomycin, Gentamicin, Fluconazole, Caspofungin, Voriconazole, Ganciclovir, Heparin, Morphine, Sufentanil, Midazolam, Cisatracurium, Hydrocortisone Hemisuccinate, Methadone)

Conclusion and Relevance The populations studied in the literature remain different from ours, making it difficult to discuss our clinical results. However, following the non-conformities of dosage noted, we propose a table of dosage adaptation under ECMO synthesising the literature for the studied molecules which is systematically accompanied by instructions to make a TDM

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest

4CPS-180

VANCOMYCIN: CONCORDANCE OF DOSAGE ADJUSTMENT ACCORDING TO MINIMUM PLASMA CONCENTRATION AND AREA UNDER THE CURVE/ MINIMUM INHIBITORY CONCENTRATION

A Pérez Fácila\*, TE de Salinas Muñoz, JJ Saiz Molina, C Notario Dongil, R López Alvárez, MC Conde García. Hospital General la Mancha Centro, Farmacia Hospitalaria, Alcázar de San Juan Ciudad Real, Spain

10.1136/ejhpharm-2023-eahp.171

Background and Importance The pharmacokinetic/pharmacodynamic (PK/PD) target for vancomycin has recently been defined as an area under the curve (AUC) over 24 hours/minimum inhibitory concentration (MIC) of 400-600.

Aim and Objectives To evaluate the degree of concordance of recommendations after dose adjustment of vancomycin according to minimum plasma concentration (Cmin) and AUC/MIC ratio.

Material and Methods Retrospective study in adult patients who were treated with vancomycin administered by intermittent perfusion and monitored by the Pharmacy Service at a general hospital during the month of August 2022.

Variables collected: sex, age, weight, height, glomerular filtration rate (according to Cockcroft-Gault), total daily dose and recommendation issued based on the determination of Cmin and AUC/MIC.

Appropriate Cmin were considered 15-20µg/mL in compliinfection (endocarditis, nosocomial cated pneumonia,

meningitis, osteomyelitis/osteoarticular infection and wound infection/abscess) and 10-15µg/mL in all other infections. For the calculation of AUC/MIC, MIC=1µg/mL was assumed. Interpretation of plasma level and individualised vancomycin adjustment was performed using MediWare Pharm++® software using a bicompartmental model and a single vancomycin level (Cmin).

Results Vancomycin treatment was initiated and monitored in 42 patients (52.4% female; 72.3 ± 12.3). Anthropometric parameters (weight: 81.8 ± 17.9kg; height: 163.8 ± 7.9cm; glomerular filtration rate: 61.5 ± 27.0ml/min/1.73m2); total daily dose:  $1,878.5 \text{mg} \pm 524.8 \text{mg}$ . The recommendation issued was concordant via Cmin and AUC/MIC in 35.7%. In the case of discordance, overexposure was observed in 66.6% of cases.

Conclusion and Relevance Approximately 2 out of 3 recommendations were discordant according to the method used, with a high number of overexposures observed in the case of recommendations based on Cmin. Therefore, despite the small sample size, the implementation of vancomycin therapeutic monitoring according to AUC is considered necessary for the optimisation of therapeutic management.

### REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest

### 4CPS-181 | FOLLOW-UP OF EXPOSED NEWBORNS TO HIV IN PREGNANCY IN A TERTIARY HOSPITAL

R Aquilar Salmeron, E Nogué Pujadas, M Vila Currius, C Ortí Juan\*, X Larrea Urtaran, M Bruguera Teixidor, C Subirana Batlle, Y Ortuño Ruíz, I Gómez Ibañez, R Sacrest Güell. Hospital Universitari Dr Josep Trueta, Pharmacy Department, Girona, Spain

10.1136/ejhpharm-2023-eahp.172

Background and Importance The rate of new HIV diagnoses due to vertical transmission (VT) in Spain is very low and the new cases are related to failures in the implementation of prevention measures.

Aim and Objectives The aims of study are to identify and quantify risk factors (RF) for VT in the prenatal, intrapartum and postnatal periods and to evaluate the adequacy of antiretroviral (ART) prophylaxis, the appearance of adverse events and follow-up during the first year of life.

Material and Methods A descriptive, retrospective and observational study was designed which included all the children who were followed up in the hospital during the 2010-2020 period. The main RFs that could contribute to VT were defined in the three periods and demographic and clinical variables of mothers and children were collected. The follow-up was recorded during the first year.

Results A total of 30 children, of 22 HIV + mothers, were included. They were young women, mostly from immigrant communities and without toxic habits. 17% of the pregnant women were diagnosed during the pregnancy controls and of the remaining, 20% did not take ART treatment at the beginning of pregnancy. At the time of birth, 34.5% had detectable viral loads (CV). Regarding children, 57% were born by cesarean section and 13% were premature. The RF detected correspond mainly to the prenatal period (62.5%), followed by the intrapartum (26.8%) and the postnatal period. The most frequent RFs were detectable CVs followed by premature rupture of membranes. All the children received prophylaxis that was well tolerated, observing discrepancies regarding the regimen received. All children could be analytically confirmed the absence of VT, in some cases after 18 months.

Conclusion and Relevance None of the newborns became infected with HIV. Although the majority of mothers carried out controls during pregnancy, the absence of ART before/during pregnancy stands out, together with detectable CVs as the main RF detected. Information campaigns are necessary for the prevention of VT viewing during pregnancy, as well as, training for professionals and constant updating of protocols to guarantee the correct management of children exposed to

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest

4CPS-182

# **EXPERIENCE OF DISCONTINUATION TYROSINE KINASE** INHIBITORS THERAPY IN PATIENTS WITH CHRONIC MYELOID LEUKAEMIA IN CLINICAL PRACTICE

CM Dominguez Santana\*, M Dominguez-Cantero, M Mora Cortes, M Blanco Castaño, G Cano Martinez. Hospital Universitario Puerto Real, Pharmacy Department, Puerto Real,

10.1136/ejhpharm-2023-eahp.173

Background and Importance The treatment of chronic myeloid leukaemia (CML) with tyrosine kinase inhibitors (TKI) results in optimal cytogenetic and molecular reponses, improving life expectancy. Nevertheless as a lifelong pharmacological treatment, can lead to adverse events (AEs) that can substantially impact the quality of life, adherence and therefore the succes of treatment. Nowadays, discontinuing treatment in patients who achieved a sustained deep molecular response (DMR) is the main goal in CML therapy, in order to achieve a Treatement-Free Remision (TFR), leading to lower occurrence of drug-related AEs, cost reduction and feeling of cure.

Aim and Objectives To describe the clinical experience of discontinuing the therapy with TKI in patients diagnosed with

Material and Methods Retrospective, descriptive, single centre (350-bed university hospital) study of patients with Philadelphia chromosome (Ph) positive CML in chronical phase, treated with TKI till august 2022. Criteria for discontinuing the treatment: ≥5 years with TKI treatment and DMR achieved (molecular response (MR)  $\geq$ 4.0 during  $\geq$ 36 months). Outcomes were collected from medical records: gender, age, TKI treatment, follow-up time, candidates to discontinuation, time elapsed to reach MR, time between treatment start and discontinuation, TFR duration, percentage of patients who lost reponse and were reintroducted to therapy, time to lost of response, withdrawal symptoms and disease progression.

Results There were 48 patients, 70,83% male. Population presented a mean age of 61 (25-81) years. All received firstline imatinib, except one patient who received dasatinib. Follow-up time median was 60 months (3-243). 25% were candidates to discontinuation, median time to reach MR was 15 months (3-50). Time between treatment start and discontinuation showed a median of 9 years (3-16). TFR median was 10 months (3-108). Percentage of patients who lost response and were reintroducted to therapy was 25%. Median time to lost of response was three months since discontinuation. Just