

**Background and importance** Cefiderocol is a new siderophore cephalosporin for the treatment of multidrug-resistant Gram-negative pathogens such as *Acinetobacter baumannii* (AB).

**Aim and objectives** To describe our clinical experience with cefiderocol use in two SARS-CoV-2 patients with ventilator-associated pneumonia (VAP) due to multidrug-resistant AB (MRAB).

**Material and methods** A descriptive retrospective study on cefiderocol therapy in two patients with MRAB was conducted until 31 August 2021. The electronic medical record was used to collect data: comorbidities, baseline clinical context, treatment, and clinical evolution of patients.

**Results** A 49-year-old man with hypertension, obesity and chronic renal insufficiency was diagnosed with SARS-CoV-2. He required orotracheal intubation (OI) and mechanical ventilation (MV). The patient presented VAP after 4 weeks in the intensive care unit (ICU). Panresistant AB was isolated from bronchoalveolar lavage (BAL) and was treated with cefepime, imipenem, tigecycline and nebulised colistin. Given his poor clinical improvement, cefiderocol 2 g/8 hours (14 days) was initiated. No renal dose adjustment was performed for cefiderocol. Clinical evolution was favourable. The patient remained afebrile and acute phase reactants (APR) decreased. Unfavourable evolution and increased APR were observed on the third day after treatment with cefiderocol, with presence of AB in BAL. The patient died of multiorgan dysfunction syndrome 8 days later.

A 65-year-old man with hypertension, dyslipidaemia and diabetes was diagnosed with SARS-CoV-2. He required OI and MV. After 4 weeks in ICU, the patient presented VAP due to MRAB and coinfection with *Mycoplasma pneumoniae*. Tigecycline, nebulised colistin and ceftazidime/avibactam were used. A clinical worsening was observed and cefiderocol 2 g/8 hours (14 days) and amikacin (5 days) were started. The patient remained afebrile and APR slightly decreased after initiation of cefiderocol and amikacin treatments. BAL culture was negative, although AB colonisation persisted in pharynx. Tigecycline, piperacillin/tazobactam and nebulised colistin were administered. After 71 days in ICU, the patient was transferred to a hospital ward, where he remained for 98 days before discharge.

**Conclusion and relevance** The use of cefiderocol led to a slight improvement in two patients with VAP caused by MRAB. One patient died due to multiorgan dysfunction syndrome after cefiderocol therapy, and the other case required subsequent antibiotherapy due to persistence of MRAB.

## REFERENCES AND/OR ACKNOWLEDGEMENTS

**Conflict of interest** No conflict of interest

### 5PSQ-031 EVALUATION OF THE SAFETY AND TOLERANCE OF THE COMMERCIAL PRESENTATION OF CYCLOSPORINE 0.1% COLLYRIUM

AM Martínez Soto, M García Coronel, P Ortiz Fernandez, JM Marco Puig, C Pastor Mondéjar\*, P Fernandez-Villacañas Fernandez, L Rentero Redondo, C Caballero Requejo, C Iniesta Navalon, I Salar Valverde, E Urbieta Sanz. *Hospital General Universitario Reina Sofía, Pharmacy, Murcia, Spain*

10.1136/ejpharm-2022-eahp.268

**Background and importance** Cyclosporine collyrium is used in the treatment of severe keratitis in adult patients with xerophthalmia who do not improve despite treatment with eye drops. The current commercial presentation has a concentration of 0.1% although there is also a 0.05% formulation.

**Aim and objectives** The purpose was to evaluate the safety of 0.1% cyclosporine collyrium and assess the rate of patients who do not tolerate this presentation and its causes.

**Material and methods** This was a retrospective observational study. It was carried out in a model hospital in this area. All patients treated with cyclosporine collyrium between January and September 2021 were included.

Demographic (sex and age) data were collected from the computerised clinical history.

A questionnaire was produced for the clinic interview of the external patients who had adverse reactions after treatment with 0.1% cyclosporine collyrium such that they had to switch to the 0.05% formulation. In this questionnaire the reason for the switch, the type of adverse reaction, severity and time of appearance (immediate/late) were included.

**Results** 137 patients who picked up 0.1% cyclosporine collyrium from the Pharmacy External Patients Unit were included, 84.67% were women and the mean age was 64 years.

11.67% of the patients suffered some adverse reaction which forced them to switch from the 0.1% cyclosporine presentation to the 0.05% cyclosporine compound made by the Pharmacy Unit.

Within the described adverse reactions, 100% of patients exhibited stinging, 31.25% irritation, 25.00% pain, 12.50% blurry vision, 31.25% reddening, 12.5% swelling, 31.25% photosensitivity and 18.75% dry eyes.

100% of the adverse reactions occurred immediately following application of the collyrium. The adverse reactions were classified as severe (68.75%), moderate (25%) and mild (6.25%) by the patients.

The adverse reactions were reversible and autolimited.

The switch to our compounding was well tolerated in 100% of cases.

**Conclusion and relevance** The 0.1% cyclosporine presentation is safe and it was well tolerated by most of our patients; only 11.67% experienced an adverse reaction.

Moreover, these patients did not suffer any adverse reaction with our preservative-free 0.05% cyclosporine Pharmacy Unit compound, thus we do not know if the adverse reactions were due to the higher cyclosporine concentration or some of its excipients. Further research is needed.

## REFERENCES AND/OR ACKNOWLEDGEMENTS

**Conflict of interest** No conflict of interest

### 5PSQ-032 COMPLIANCE ANALYSIS OF PAEDIATRIC ANTICANCER DRUG DOSING

<sup>1</sup>S Mousannif\*, <sup>2</sup>A Meftah, <sup>3</sup>A Cheikh, <sup>4</sup>H Attjioui, <sup>4</sup>M Boutboukalt, <sup>1</sup>M Bouatia. <sup>1</sup>Mohammed V University – Faculty of Medicine and Pharmacy – Paediatric Hospital, Pharmacy Department, Rabat, Morocco; <sup>2</sup>Paediatric Hospital Rabat, Pharmacy Department, Rabat, Morocco; <sup>3</sup>Cheikh Zaid Hospital, Pharmacy Department, Rabat, Morocco; <sup>4</sup>Mohammed V University – Faculty of Medicine and Pharmacy of Rabat, Pharmacy Department, Rabat, Morocco

10.1136/ejpharm-2022-eahp.269

**Background and importance** The optimal dose of anticancer drugs is the one that produces the maximum antitumour effect associated with an acceptable level of toxicity. Low doses will be ineffective against cancer, while high doses will produce intolerable toxicity, especially in children.

**Aim and objectives** The purpose of this study was to evaluate and analyse the compliance of dosages related to children anticancer drugs underdose or overdose.

**Material and methods** It was a retrospective study based on the recalculation of doses of 270 prescriptions of cytotoxic drugs in the paediatric hemato-oncology department of Rabat.

**Results** The anticancer drugs most often used are vincristine (21.5%), cyclophosphamide (14.4%), mercaptopurine (10%), methotrexate (7.8%), etoposide (6.7%), other drugs (39.6%).

Of 270 recalculated doses of anticancer drugs, 67.8% were compliant, 27.4% were underdosed and 4.8% were overdosed.

45.1% of deviation cases were not justified, 33.3% of the doses were rounded off, 9.6% represented the maximum that can be administered, 8.6% were calculated according to weight and not by body surface area, and 3.2% were for children in denutrition.

Concerning the recorded underdoses, the maximum deviation noted was 47.3% with an average of 14.7% compared to the therapeutic dose. For the overdoses, the maximum deviation was 41.6% with an average of 4% compared to the therapeutic dose.

Based on the number of drugs with anomalies, the most underdosed drugs were cyclophosphamide (17.5%) followed by vincristine (16.2%) then etoposide (13.5%). Conversely, the most overdosed drugs were mercaptopurine (23%) followed by methotrexate (15.3%).

Based on the average deviation between prescribed and therapeutic doses, the most underdosed drugs were high-dose methotrexate (35%), mercaptopurine (28%) and adriamycin (26%), whereas the most overdosed drugs were vincristine (42%), mercaptopurine (9%) and high-dose methotrexate (6%).

The interventions made by pharmacists in cases of dose deviations were to recalculate the prescribed doses and inform the prescribing physician either to detect a possible error of overdosing in order to correct it or to look for the reason for underdosing if this is not mentioned on the chemotherapy preparation sheet.

**Conclusion and relevance** According to the results, almost half of the anomalies are unjustified, hence the importance of pharmaceutical validation of chemotherapy orders and dose compliance verification by the hospital pharmacist to better manage anticancer drugs risks.

## REFERENCES AND/OR ACKNOWLEDGEMENTS

**Conflict of interest** No conflict of interest

### 5PSQ-033 POSITIVE IMPACT OF AN IMPLEMENTED WARD PHARMACIST IN A MULTIPROFESSIONAL CANCER CARE TEAM IN GERMANY

S Dierkes\*, A Freidank, R Radziwill. *Klinikum Fulda, Apotheke, Fulda, Germany*

10.1136/ejhpharm-2022-eahp.270

**Background and importance** There is an increasing demand for better management of patients due to high numbers of newly diagnosed cancer patients and increasing complexity of

chemotherapeutics. Pharmacists are able to ensure patient's safety and quality of life.<sup>1</sup>

**Aim and objectives** The objective of this intervention study was to evaluate the benefit of a pharmacist embedded in a multiprofessional cancer care team on an oncology ward of a maximum care hospital with >1000 beds in Germany.

**Material and methods** The present study, conducted from 2020 to 2021, was a single-centre, controlled, retrospective and prospective intervention study consisting of three different phases P<sub>0</sub>, P<sub>1</sub> and P<sub>2</sub> with a duration of 3 months each. P<sub>0</sub> represented the retrospective control phase as there was no pharmacist on ward. In the prospective phases P<sub>1</sub> and P<sub>2</sub>, the ward pharmacist determined, documented, and solved medication errors (MEs) as part of their daily work. ME was defined as any unintentional mistake in prescription of drugs. MEs can result in avoidable adverse drug events. In P<sub>2</sub>, newly developed medical standards exist to allow the pharmacist to work in a more structured environment. Throughout all phases, two clinical pharmacists independently identified all MEs which they detected from archived medical files (P<sub>0</sub>) or electronic patient records (P<sub>1</sub> and P<sub>2</sub>). The classification as clinically relevant ME was set after confirmation by an oncologist to ensure clinical relevance.

**Results** The three phases with 52, 46 and 50 patients, respectively, were comparable regarding the baseline characteristics. For better comparability the MEs refer to the number of medication lines (ML) which comply with one drug per day. The statistical analysis showed a significant reduction of clinically relevant MEs (P<sub>0</sub>: 34 MEs/100 ML vs P<sub>1</sub>: 8 MEs/100 ML vs P<sub>2</sub>: 2 MEs/100 ML; p<0.001) for all phases.

**Conclusion and relevance** The implementation of a ward pharmacist had a significant impact on the reduction of MEs and consequently increased the patient's medication safety. Although these results cannot be easily transferred to other disciplines, the present study clearly shows the benefit of a ward pharmacist in oncology together with oncology-related services (eg, preparation of cytostatics) offered by the hospital pharmacy.

## REFERENCES AND/OR ACKNOWLEDGEMENTS

1. E.M. Segal, et al. *J Oncol Pharm Pract* 2019.

**Conflict of interest** No conflict of interest

### 5PSQ-034 HOMOGENEITY OF OPINION EXPERT ON CLEO SCALE WHEN APPLIED TO 50 MODELLED PHARMACEUTICAL INTERVENTIONS

<sup>1</sup>C Viaud\*, <sup>1</sup>A Potier, <sup>1</sup>J Bouet, <sup>1</sup>M Ade, <sup>2</sup>A Dony, <sup>2</sup>E Divoux, <sup>1</sup>AS Willemin, <sup>2</sup>M Sergent, <sup>3</sup>C Titah, <sup>2</sup>N De Abreu, <sup>2</sup>W Hamdad, <sup>1</sup>B Demore, <sup>2</sup>E Dufay. <sup>1</sup>CHU Nancy, Pharmacy, Vandoeuvre Les Nancy, France; <sup>2</sup>CH Luneville, Pharmacy, Lunéville, France; <sup>3</sup>CHU Nancy, Geriatric, Vandoeuvre Les Nancy, France

10.1136/ejhpharm-2022-eahp.271

**Background and importance** The CLEO Scale is a three-dimensional tool to assess the clinical, economic and organisational impact of pharmacists' interventions (PI) which would resolve drug-related problems in prescriptions.

AVICENNE is an advanced real-time pharmaceutical decision support system based on the patient's data, pharmaceutical algorithms and PharmaClass (Keenturtle) which enhances the PI relevance.