**Background and Importance** Obesity is a disease that influences numerous physiological processes. Currently there is little pharmacokinetic data in obese patients and extrapolated data from patients with normal weight are often used. In order to optimise the dosage of drugs in obese patients, it is necessary to design specific population models in this group of patients.
**Aim and Objectives** To analyse the differences in the pharmacokinetic parameters of amikacin in hospitalised patients based on body mass index (BMI).
**Material and Methods** Retrospective observational study in which patients treated with amikacin between January and August 2022 were analysed. The variables collected were: age, weight, height, sex, serum creatinine, dosage regimen and amikacin level.

Patients were classified according to their BMI: less than 30 Kg/m2 (non-obese) and greater than 30 Kg/m2 (obese). The mean and standard deviation of the volume of distribution (Vd) and clearance (Cl) of the two groups were calculated using a pharmacokinetic programme (MwPharm) based on a single compartment model.

Statistical analysis was performed using Student's t-test for independent samples.

Based on the data collected, BMI and creatinine clearance (according to the Cockcroft-Gault equation) were calculated. Patients with a glomerular filtration rate of less than 30 mL/min were excluded.
**Results** 42 patients (52% women) with 156 levels of amikacin and a mean age of 69 ± 28 years were included. The distribution of patients according to BMI was: 59% normal weight and 41% obese.

The mean and standard deviation of Cl of obese patients and normal weight were 2.67 ± 1.41 L/h and 1.92 ± 1.04 L/h, respectively. P-value from t-test was 0.04 ($p < 0.05$) for Cl.

Vd data were 0.314 ± 0.068 L/Kg (obese) and 0.28 ± 0.034 L/h (normal weight). P-value was 0.648 ($p>0.05$) for Vd.
**Conclusion and Relevance** Statistically significant differences were found in Cl between both groups: in obese patients amikacin Cl was higher than in patients with normal weight.

No significant differences in Vd were found between the two study groups.

Future studies are needed to design population pharmacokinetic models of amikacin in obese patients.

### REFERENCES AND/OR ACKNOWLEDGEMENTS

**Conflict of Interest** No conflict of interest

## 4CPS-108 PATIENT AND PHYSICIANS'S SATISFACTION WITH CLINICAL PHARMACY SERVICES ON A HAEMATOLOGY WARD IN A LARGE TERTIARY CARE HOSPITAL

[1]J Neefs, [1]E Simons, [2]A Janssens, [1,3]I Spriet*, [1]T Van Nieuwenhuyse. *[1]University Hospitals Leuven, Department of Pharmacy, Leuven, Belgium; [2]University Hospitals Leuven, Department of Haematology, Leuven, Belgium; [3]Ku Leuven, Department of Pharmaceutical and Pharmacological Sciences, Leuven, Belgium*

10.1136/ejhpharm-2023-eahp.123

**Background and Importance** Oral anticancer therapy is increasingly used for the treatment of hematologic malignancies. Despite its convenience, several challenges such as medication adherence may impact therapeutic effectiveness and outcome. Therefore, a clinical pharmacy service was initiated on the haematology ward at our hospital .
**Aim and Objectives** To determine the satisfaction rate of the clinical pharmacy service in patients with haematological malignancies treated with oral anticancer therapy and in haematologists-in-training.
**Material and Methods** Between January and May 2022, a survey was developed to assess patient and haematologists-in–training satisfaction and perceived value of healthcare services provided by clinical pharmacists at a tertiary care hospital. The survey was taken by a pharmacist not involved in daily clinical pharmacy practice. The survey contained questions addressing demographic, type of oral anticancer therapy and pharmacist-specific items. Responses were analysed using descriptive statistics. Satisfaction was assessed by 5 Likert-scale questions and either 8 or 4 open-ended questions for cancer patients and for haematologists in training, respectively. We aimed to have a satisfaction rate of at least 80%.
**Results** A total of 65 patients and 11 haematologists-in-training participated in the survey. All patients (100%) ranked the pharmacists' explanation about medication intake and side-effects as either very satisfying or satisfying . Counselling about drug interactions was the only criterion that did not result in the achievement of the predefined 80% satisfaction rate, with 27.6% of patients being very satisfied and 51.7% of patients being satisfied about this topic, respectively. Overall, the majority of patients (89.7%) indicated that pharmacist counselling and follow-up visits were of added value. All 11 included haematologists in training expressed high levels of satisfaction with the clinical pharmacist service.
**Conclusion and Relevance** High levels of satisfaction with the clinical pharmacist service was reported by both patients with a haematological malignancy and haematologists-in-training. This survey identified that counselling on drug interactions of oral cancer therapy might be improved. Further studies may include assessment of the association between patient satisfaction and compliance and treatment outcomes. Also the added value and cost effectiveness of the clinical pharmacist service needs to be investigated in future research.

### REFERENCES AND/OR ACKNOWLEDGEMENTS

**Conflict of Interest** No conflict of interest

## 4CPS-109 THERAPEUTIC DRUG MONITORING OF VANCOMYCIN IN ONCOLOGIC AND HAEMATOLOGIC PATIENTS: REAL-WORLD DATA

M Bardoll Cucala, M Gilabert Sotoca, J Rius Perera, I Mangues Bafalluy, B Martinez Castro, M Mir Cros, A Morales Portillo, JA Schoenenberger Arnaiz. *Hospital Arnau de Vilanova de Lleida, Servicio de Farmacia, Lleida, Spain*

10.1136/ejhpharm-2023-eahp.124

**Background and Importance** Vancomycin clearance tends to be higher in patients with neutropenia[1]; consequently, therapeutic drug monitoring (TDM) is highly recommended.[2]
**Aim and Objectives** To assess the achievement of a therapeutic pharmacokinetics/pharmacodynamics (PK/PD) target of vancomycin in oncologic and haematologic patients using trough-only TDM.
**Material and Methods** We conducted a retrospective and descriptive study that included oncological and haematological

patients admitted to a second-level hospital, starting treatment with vancomycin and dosing adjustment guided by TDM at the Pharmacy service.

Demographic variables, Cockcroft-Gault creatinine clearance (CrCl), initial dosage, dose adjustments, the first trough level, duration of treatment, and reason for withdrawal were collected. Renal impairment was defined as CrCl < 60 ml/min. Dosages of 15-20 mg/kg/dose and trough levels between 10 and 20 µg/ml were considered optimal for intermittent infusion schedules. TDM used the PKS® software.

**Results** Vancomycin trough levels were obtained in 49 patients; 12 were oncological, and 37 were haematological.

Dosage adjustment was necessary for 30 patients (61%), 25/30 due to subtherapeutic level (trough level <10 µg/ml) and 5/30 due to supratherapeutic level (through level >20 µg/ml with or without renal impairment).

The initial mean dosage was 13,7 ± 2,5 mg/kg/12h, except in three patients who started every 24 h due to renal impairment. After the dosage adjustment, the recommended mean dosage was 14 ± 3 mg/kg/8h in 18 patients and 13,6 ± 7,6 mg/kg/12h in 12 patients.

The mean duration of antibiotic treatment was 7 ± 4,2 days. The reasons for stopping the treatment were: clinical improvement (n=29), switch to a target treatment (n=10), clinical deterioration (n=9) and nephrotoxicity (n=1). Nine patients died.

**Conclusion and Relevance** More than half of the patients had subtherapeutic vancomycin levels and required antibiotic dose adjustment.

Most patients required shorter dosing intervals rather than increased doses to reduce the incidence of nephrotoxicity.

## REFERENCES

1. Bury D, *et al. Eur J Clin Pharmacol* 2019;**75**: 921–928
2. Rybak MJ, *et al. Am J Health-Syst Pharm*. 2020;**77**: 835–864

**Conflict of Interest** No conflict of interest

## 4CPS-110 ASSOCIATION BETWEEN BASELINE CHARACTERISTICS AND FIRST-LINE CHEMOTHERAPY IN ADVANCED GASTRIC CANCER PATIENTS

[1]A Arias*, [2]FJ Alvarez Manceñído, [3]A Martinez Torron, [3]L Macia Rivas, [4]A Calvo, [5]L Visa, [6]ML Limón, [7]G Iglesias Álvarez, [7]A Mariño Méndez, [8]P Pimentel, [3]A Lozano-Blázquez. *[1]University of Granada/Hospital Universitario Germans Trias, Doctoral Programme In Pharmacy, Faculty of Pharmacy/Pharmacy Department, Granada, Spain; [2]Hospital Universitario Central de Asturias/University of Granada, Pharmacy Department/Doctoral Programme In Pharmacy, Faculty of Pharmacy, Oviedo, Spain; [3]Hospital Universitario Central de Asturias, Pharmacy Department, Oviedo, Spain; [4]Hospital Universitario Gregorio Marañon, Department of Medical Oncology, Madrid, Spain; [5]Hospital Universitario El Mar, Department of Medical Oncology, Barcelona, Spain; [6]Hospital Universitario Virgen Del Rocío, Department of Medical Oncology, Sevilla, Spain; [7]Hospital Universitario Central de Asturias- Universidad de Oviedo- Ispa, Department of Medical Oncology, Oviedo, Spain; [8]Hospital General Universitario Santa Lucía, Department of Medical Oncology, Cartagena, Spain*

10.1136/ejhpharm-2023-eahp.125

**Background and Importance** There is no standard first-line regimen for HER2-negative advanced gastroesophageal adenocarcinoma.

**Aim and Objectives** To study the variability in the choice of regimens according to tumour, patient baseline variables and prescribing physician.

**Material and Methods** Patients with HER2-negative advanced gastroesophageal adenocarcinoma diagnosed between 2008 and 2021 from a multicentre registry (34 centres) were included. Patients received chemotherapy based on platinum (cisplatin or oxaliplatin) and fluoropyrimidine (5-fluorouracil or capecitabine). Association between the following baseline variables: specialty of the prescribing oncologist, ECOG-PS (Eastern Cooperative Oncologic Group Performance Status), serum albumin, tumour location, Lauren classification and platinum and fluoropyrimidine regimens were evaluated and Chi 2 test was performed.

**Results** A total of 1334 patients were registered, 66.49% (n=893) were male. Seventy percent of our population was treated almost equally with FOLFOX6 (n=468) and XELOX (n= 466), followed by XP 19% (n=252), FP3w 7% (n=95) and in fewer percent with FUOX modified 3%(n=44), FP4w 1% (n=12) and FLO (n=6). Oxaliplatin was the most commonly used platinum (73%, p=971) while both fluoropyrimidines where administered in a similar proportion (capecitabine 54%). Patients were mainly treated by an oncologist specialising in gastric cancer (95%). General oncologist preferred oxaliplatin-based regimens (46% vs 6%) and specialist opted more for cisplatin and capecitabine associated regimens (p=0.031). Patients with worst performance status (ECOG=2) were treated to a greater extent than the overall population with schemes based on oxaliplatin and 5-fluorouracil 50% versus 38% of the general population. Those with ECOG=0 received more than expected schemes with cisplatin and capecitabine (21%, n=55).Patients with baseline hypoalbuminaemia (albumin < 35 g/dL) received intravenous fluoropyrimidine schedules with both oxaliplatin (47%, n=156) and cisplatin (9%, n=3) in a higher proportion than expected (p<0.000).According to Lauren`s classification, there was a higher use of capecitabine versus 5-FU in intestinal tumours. This trend is reversed in diffuse tumours (p<0.000).

**Conclusion and Relevance** In this study we found an association between the platinum and fluoropyrimidine selected in patients with advanced gastric cancer and certain baseline variables. Future studies are needed to evaluate whether this choice has an impact on patient benefit.

## REFERENCES AND/OR ACKNOWLEDGEMENTS

1. This study is part of a doctoral thesis of the Doctoral Programme in Pharmacy of the University of Granada. Thanks for your support in this research.

**Conflict of Interest** No conflict of interest

## 4CPS-111 IMPORTANCE OF IMPLEMENTING A CLINICAL PHARMACOKINETIC UNIT IN HOSPITAL PHARMACY SERVICE

[1]O Serna-Romero*, [1]S Buendia-Bravo, [1]C Gastalver-Martin, [1]C Capilla-Montes, [1]A Iglesias-Bolaños, [1]I Escribano-Valenciano, [2]AL Salcedo-Mingorranz, [1]T Cruz-Cruz. *[1]Hospital Universitario Del Sureste, Pharmacy Department, Arganda Del Rey, Spain; [2]Hospital Universitario Severo Ochoa, Pharmacy Department, Leganés, Spain*

10.1136/ejhpharm-2023-eahp.126

**Background and Importance** Pharmacokinetic monitoring is a tool used in therapeutic optimisation to achieve the best clinical results and minimise the incidence of adverse effects.

It is particularly useful in drugs with a dose-dependent clinical response and toxicity relationship and with a narrow therapeutic margin. Computing software are used to integrate