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.

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Conflict of Interest No conflict of interest

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

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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

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Conflict of Interest No conflict of interest

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

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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

patient data into population models through which pharmacists can establish the optimal dosage regimen.

Aim and Objectives To analyse the influence of pharmacokinetic reports on clinical decision.

Material and Methods A retrospective observational study was conducted from January to August 2022 in a general hospital. Patients with at least one plasma concentration of amikacin, amitriptyline, carbamazepine, digoxin, phenytoin, phenobarbital, gentamicin, lithium, theophylline, tobramycin, valproic acid, and vancomycin were included.

Collected data included gender, age, weight, height, serum creatinine, drug, dosage, plasma concentrations and concomitant medication.

A pharmacokinetic software was used. By Bayesian estimation, optimal dosage regimen was calculated. Based on these data, the pharmacist prepared the pharmacokinetic report and dosage recommendations for the physician.

Recommendations made by the pharmacist were recorded and classified according to following criteria: Underdosing, intoxication, no adjustment required, lack of adherence and interaction adjustment. The percentage of acceptance of the interventions was analysed.

Results 182 patients and 395 interventions were evaluated.

Clinical services that received more pharmacokinetic reports were internal medicine (48%) and psychiatry (19%). The most common monitored drugs were digoxin (24%), valproic acid (22%) and vancomycin (18%).

In 21% of the patients adjustments were made due to underdosing, 13% due to overdosing, 4% due to lack of adherence, and 2% due to drug-drug interactions. There was no need to adjust dosage in 40% of monitored patients. The remaining 20% were interventions related to errors in the extraction of the analytics.

71% of the recommendations addressed to physicians were accepted.

Conclusion and Relevance The most common dosage adjustment was due to underdosing so that the efficacy of the treatment was compromised. It should also be noted that there is a high percentage of errors in the analytic extraction procedure. Health professionals who perform the sample collection must be properly trained.

Clinical pharmacokinetics is a tool that allows us to optimise the patient's dosage regimen.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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4CPS-115 DEVELOPMENT AND IMPLEMENTATION OF A REVIEW PROGRAMME ASSISTED BY THE PHARMACIST TO IMPROVE THE ADEQUACY OF TREATMENT IN POLYMEDICATED PATIENTS IN HOSPITAL OUTPATIENT SETTING

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Background and Importance A high number of polymedicated patients pass through outpatient consultations and prescribers often don't have the time or capacity to deal with their polypharmacy.

Aim and Objectives Development of a web tool for the review and analysis of polymedicated patients (>15 drugs/month) who attend outpatient consultations in order to improve the prescription of polymedicated patients and increase the presence of the pharmacist in outpatient consultations.

Material and Methods A web application named VIGÍA was developed (**VI**ewer of Potentially **InA**dequate Pharmacotherapeutic **G**roups). It can calculate adherence to treatment according to pharmacy dispensing record and detect inadequacies in pharmacotherapy: duplicities, prescribing cascades, drugs with low therapeutic value, drugs that prolong the QT-interval and drugs contributing to anticholinergic burden, giving a score named Potential Inadequacy Index (PII):

Potential Inadequacy Index (PII)	
Duplicity	**1 point**
Low therapeutic value	1 point
Prescribing cascades	0,5 points
QT interval prolongation	0,5 points
Anticholinergic burden	0,5 points

VIGIA can filter patients by consultation date. Doctors have the reviews available online with the pharmacist recommendations, being able or not to modify the prescription at their choice.

PII before and after the study was calculated, comparing the means through Student's t-test for two means of the same population (two tails, significance at 5%).

Results After a study period of 120 days, we elaborated 486 review reports from rheumatology and digestive consultations, achieving to reduce the PII score from 1.58 to 1.46, and average number of medications went from 18 to 17.3. Student's t test for the PII value before and after the study period was significant ($p < 0.05$).

Abstract 4CPS-115 Table 1

Inadequacies	Before pharmacist review	After pharmacist review
Duplicities	0.84	0.75
Prescribing cascades	0.15	0.13
Drugs with low therapeutic value	0.31	0.28
Drugs that prolong the QT interval	0.33	0.33
Drugs contributing to anticholinergic burden	0.41	0.38
PII	1.58	1.46 ** (p<0.05)
Average number of medications	18	17.3

Conclusion and Relevance Review of polymedicated patients by the pharmacist seems to reduce inadequacies of their pharmacotherapy.

This PII score, made up of different situations considered to be at risk, can give an idea of the benefit of its reduction, not only in terms of patient safety but also economic, by reducing the average number of drugs.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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