assessed. Only 5 errors were detected, which represents an error rate of 0.083%.

The errors detected were the following: 1 of incorrect dose by overdose (0.016%), 1 of incorrect unit of medicine by excess (0.016%), 1 of incorrect unit of medicine by default (0.016%) and 2 of incorrect administration time (0.033%).

Conclusion and relevance The review of the medication carts before their arrival at the Clinical Units allows the detection of potential medication errors in their preparation that may affect the safety of the patient. The percentage of error obtained indicates the degree of quality related to the medication dispensing system. In this case, the error rate is low, although it could be lower in the case of automation of the process instead of manual preparation.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-049 STARTING POINT TO PROMOTE A POTENTIALLY INAPPROPRIATE PRESCRIPTION ASSESSMENT PROJECT

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Background and importance Potentially inappropriate prescriptions (PIPs) in polymedicated elderly patients are related to adverse drug reactions, hospitalisation, increased hospital stay and higher healthcare costs. In our environment a system or a department to detect and analyse these PIPs is not available.

Aim and objectives To evaluate the prevalence and type of PIPs at hospital admission to assess whether the implementation of pharmaceutical intervention strategies in this population is useful and which ones would be the most efficient.

Material and methods Cross-sectional descriptive observational study. Patients over 65 years of age treated with ≥6 chronic drugs admitted to a tertiary hospital from 10–16 May 2021 were included. Demographic and clinical variables were recorded: age, sex, admission department, background, history of falls, pharmacological ambulatory treatment, number and type of PIPs detected, and anticholinergic burden (AB). Current ambulatory treatment was obtained by reviewing the medical records. To identify PIPs, the Screening Tool of Older Persons Prescriptions (STOPP) criteria (2014 edition Spanish version) was selected. Due to the lack of e-tools, 121 criteria could not be manually analysed in every patient, so a bibliographic search was carried out to select the 20 STOPP criteria most frequently reported in the literature. The anticholinergic burden was calculated with the Drug Burden Index (DBI) using the Anticholinergic Burden Calculator. Descriptive statistical analysis was performed with the Stata version 12.1 program.

Results 102 patients (53% women) were included. Age: 80.4 ±7.8 years. Pathologies/patient: 7.7±2.7. Drugs/patient: 10.2 ±2.9 (39% excessive polypharmacy with ≥10 drugs). Had falls: 68%. 1018 drugs were analysed. 208 PIPs (2.04±1.7 PIPs/patient) were detected. The most frequently observed PIPs were: 15% benzodiazepines ≥4 weeks, 14% drugs without indication based on clinical evidence, 9% medications with a longer duration than indicated, 8% loop diuretics in hypertension/incontinence and 8% medications that cause constipation in patients with chronic constipation. AB: 0.7±0.6. High-risk AB: 32%.

Conclusion and relevance PIPs are quite prevalent in our environment. Having tools for the systematic detection of PIPs would be very useful. These data suggest that developing a multidisciplinary pilot project, led by a pharmacist, to intervene in patients at highest risk and therefore contribute to improving the quality and safety of drug prescription would be beneficial.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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5PSQ-051 COST-EFFECTIVENESS OF A PRESURGICAL PHARMACEUTICAL CARE CONSULTATION

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Background and importance 4.7% of Spanish hospital patients suffer a preventable adverse event (AE) due to medication errors. In surgical specialties, errors may result in important negative consequences, so hospital pharmacists have implemented new programmes to prevent them.

We created a Presurgical Pharmaceutical Care Consultation in 2016 to avoid errors prior to surgery with managing a patient's chronic medication.

Aim and objectives The aim was to analyse the economic impact of implementing this consultation based on the presurgical medication errors avoided with pharmaceutical interventions.

Material and methods We analysed all the interventions performed by pharmacists in the Presurgical Pharmaceutical Care Consultation between 2016 and 2020 in Traumatology, General, Cardiac and Thoracic Surgery Services of a third-level hospital.

Two clinical pharmacists and two anaesthesiologists composed a multidisciplinary team for intervention analysis and classification. **Each prevented error was classified according to its probability of causing an AE, based on literature and clinical judgement. Assigned probability could be 0, 0.01, 0.1, 0.4 or 0.6 (1 was not considered due to a conservative approach).We calculated the cost of each prevented error as: 'AE probability * € 6924', € 6924 being the cost of an AE according to the Spanish literature, adjusted by the 2020 Consumer Price Index. A sensitivity analysis was performed using an AE cost 20% higher or lower. The total cost of hiring pharmacists (one full-time pharmacist in the consultation during 5 years) was € 227 470 (€ 45 494 per year).**

Results Between 2016 and 2020, 3101 patients were assisted in our Consultation (51.30% male, mean age 66.4 years), on whom 1179 interventions were performed to prevent medication errors. Classification according to probability of causing an AE was as follows: 0: 6 (0.5%), 0.01: 224 (19.0%), 0.1: 346 (29.3%), 0.4: 497 (42.2%) and 0.6: 106 (9.0%), meaning that 299 AE could be avoided in total. Cost avoidance was estimated at € 2 076 785 (sensitivity analysis € 1 657 490–€

2 486 385). Cost–benefit ratio of the Presurgical Pharmacist Consultation was € 9.1 in savings for each invested euro (sensitivity analysis € 5.4–€ 10.9).
Conclusion and relevance The implementation of our Presurgical Pharmaceutical Care Consultation was cost-effective, preventing more than 200 medication errors per year. It could be extrapolated to other hospitals in order to improve surgical patient safety in a cost-effective way.

REFERENCES AND/OR ACKNOWLEDGEMENTS
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5PSQ-053 INFLUENCE OF AUGMENTED RENAL CLEARANCE IN THE LOWER INCIDENCE OF LINEZOLID-RELATED HAEMATOLOGICAL TOXICITY

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Background and importance Linezolid-related haematological toxicity has been described to be a major cause of treatment withdrawal and transfusion requirements, especially in renal injured patients (<60 mL/min/1.73 m^2).
Aim and objectives To evaluate the influence of augmented renal clearance (ARC) in the incidence of haematological toxicity as part of the antimicrobial stewardship programme in which our Pharmacy Department participates.
Material and methods A retrospective, observational study was conducted. Hospitalised patients aged >18 years treated with oral or intravenous linezolid for ≥5 days during the period 2014–2019 in a university hospital were included. Two groups were compared: ARC patients with a filtration rate of ≥130 mL/min/1.73 m^2 (≥120 mL/min/1.73 m^2 for women) versus reference patients (60–90 mL/min/1.73 m2) according to the CKD-EPI formula. Exclusion criteria: critically ill, ≤100×103/mm^3 platelets or <10 mg/dL haemoglobin as baseline.

Data were picked by electronic system. Demographic (gender, age) and clinical characteristics (duration of treatment, site of infection, haematological parameters (platelets, haemoglobin and neutrophils) at duration of therapy, concomitant inmunosupressant therapies and chemotheraphy <6 months) were registered.

Haematological toxicity was defined as a decrease of 25% in platelets, 25% in haemoglobin and/or 50% in neutrophils from baseline.

Fisher's exact test was performed by XLSTAT program. Level of significance p<0.05.
Results 92 patients were studied: 46 ARC patients (54% male) median age 39 (18–74) years and 46 reference patients (71% male), median age 57 (21–79) years. Median duration of treatment was 7 (5–28) days and 9 (5–25) days, respectively. Site of infection: 58.7% respiratory tract infections (RTIs), 21.7% soft tissues and 13% bacteraemia in the first group and 48.3% soft tissues, 26% RTIs and 21.7% bacteriemia in the second group.

In the ARC population, 8.7% were under inmunosupressant treatment and 8.7% had received chemotheraphy <6 months vs 17.4% and 8.7% in the reference population.

Haematological toxicity was observed in 6.5% ARC patients vs 28.3% (p=0.006). Thrombocytopenia 4.4% vs 19.6% (p=0.024), anaemia 2.2% vs 13% (p=0.049) and neutropenia 2.2% vs 13% (p=0.049). 8.7% patients in the reference group required tranfusion and none of ARC patients.
Conclusion and relevance Our findings suggest an association between ARC and a lower incidence of linezolid-related haematological toxicity.

REFERENCES AND/OR ACKNOWLEDGEMENTS
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5PSQ-055 LONG-TERM EFFECTIVENESS OF ADALIMUMAB IN SECOND-LINE OF BIOLOGICAL THERAPY IN ULCERATIVE COLITIS AND INFLUENCE OF THE FIRST-LINE TREATMENT

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Background and importance Ulcerative colitis (UC) presents high levels of tumour necrosis factor alpha (TNFα) in colonic mucosa. Poor response to retreatment with a second TNF antagonist agent (anti-TNF) has been suggested in patients refractory to first line treatment with an anti-TNF.
Aim and objectives To evaluate long-term effectiveness of adalimumab as second anti-TNF and influence of the first anti-TNF treatment in UC.
Material and methods A descriptive retrospective study was conducted in patients with UC treated with adalimumab as second anti-TNF (January 2013–July 2021). Variables recorded were: age, sex, previous anti-TNF, response to anti-TNF treatment, duration of therapy and Mayo clinic score (MCS). Effectiveness was evaluated by MCS at 6, 36 and 72 months. Clinical remission (R) was defined as MCS ≤2 points. Clinical response (CR) was a decrease of ≥3 points in MCS with respect to baseline. Lack of response (LOR) was defined as none of the above. Patients with LOR and treatment suspension in a certain week were assumed as LOR in subsequent weeks. Influence of effect of first anti-TNF was estimated using association between types of response to first and second anti-TNF. Primary non-response (PNR) to anti-TNF therapy was considered as LOR in induction period (before week 10 for infliximab and before week 4 for adalimumab). Secondary non-response (SNR) to anti-TNF treatment was defined as LOR after induction period.
Results Thirty-one patients were included (54.8% women). Median age was 43 (86–21) years. All patients received infliximab as first anti-TNF. Median adalimumab treatment duration was 18 (1–91) months. MCS at 6 months: 32.26% R, 19.36% CR and 48.38% LOR. MCS at 36 months: 25.80% R, 3.23% CR and 70.97% LOR. MCS at 72 months: 6.45% R, 3.23% CR and 90.32% LOR. Two patients with PNR to adalimumab (2/10, 20%) had PNR to first anti-TNF and 8 with PNR to adalimumab (8/10, 80%) presented SNR to first anti-TNF. All patients with SNR to adalimumab demonstrated SNR to first anti-TNF.
Conclusion and relevance Adalimumab as a second anti-TNF maintained more than a quarter of patients with UC in R at 36 months, but almost all patients lost effectiveness at 72 months. Adalimumab's PNR was less frequent in patients with PNR to a first anti-TNF therapy than in those with SNR.

REFERENCES AND/OR ACKNOWLEDGEMENTS
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