versus IFX-B, as well as the prevalence of immunogenicity between both.

Material and methods We conducted a retrospective observational study (March 2017–September 2018). We included all patients with IBD who received maintenance therapy with IFX and underwent pharmacokinetic monitoring.

The variables studied were: sex, age, diagnosis, type of drug (IFX-O or IFX-B), number of serum samples collected, serum trough levels IFX and the presences of antibodies. Blood extraction was performed in trough levels and determined by sandwich ELISA (Promonitor). The IFX therapeutic range was defined as between 3–10 mcg/mL. We used the X^2 test to compare the association between categorical variables and the student *t*-test for quantitative variables. All tests were performed using SPSS v.23.0.

Results We included 70 patients (65.7% were males). The average age of the study population was 41.8 (DE: 14.8) years. 74.4% had Crohn's disease.

Concerning treatment, 49.3% were treated with IFX-O and 50.7% with IFX-B. We analysed 174 serum samples (61.5% IFX-O), 2.9 (SD: 1.1) and 1.8 (SD: 1.0) samples per patient of IFX-O and IFX-B respectively. Mean serum trough levels of IFX-O were 7.2 (SD: 4.5) mcg/mL versus 8.3 (SD: 7.8) mcg/mL with IFX-B (p=0.790), of which 61.9% and 47.8% (p=0.137) were in the therapeutic range respectively. In terms of immunogenicity, 13.1% patients presented antibodies anti-IFX (11.6% IFX-O and 15.4% IFX-B, p=0.43).

Conclusion In our study there was no significant difference in the mean concentration of drugs between IFX-O and IFX-B, and neither in immunogenicity, with IFX-B as a cost-effective alternative to the originator product. Pharmacokinetic monitoring represents a fundamental mainstay in the optimisation of these treatments.

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No conflict of interest.

4CPS-154 ABSTRACT WITHDRAWN

4CPS-155 A NEW MULTIDISCIPLINARY MODEL WITH THE CLINICAL PHARMACIST FOR MEDICATION RECONCILIATION IN THE PATIENT WITH ADVANCED RENAL DISEASE

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Background Most of the patients with advanced chronic kidney disease (ACKD) are fragile due to multimorbidity and associated polypharmacy. For this kind of population, polypharmacy and potentially inappropriate prescribing are common problems that impact both on patient compliance and on drugs cost for the National Health System (NHS). For therapy with high pill-burden medication reconciliation (MR), supported by Information and Communication Technology's (ICT) instrument, is one of the most effective tools in preventing over/under/mis-prescription and drug interaction (DI), and the clinical pharmacist is the suitable figure to support the clinician in promoting the appropriateness of therapies in the transition of care.

Purpose The aim was to estimate compliance and the economic impact of a multidisciplinary clinical-pharmacist-led MR process in patients with ACKD.

Material and methods Selection and implementation of ICT tool; identification of mistaken prescription with indicators of appropriateness, such as START/STOPP and Beers criteria;

proposal and evaluation of new therapies with the nephrologist; and estimation of therapies costs pre- and post-MR.
Results The identified ICT tool was the acknowledged platform NavFarma Suite, the same as used in two other regional projects with the purpose of creating a path between admission and discharge therapy. MR was conducted in 92 patients. The clinical pharmacist identified 265 DI, five classified as contraindicated and 260 as major, with a level of evidence equal to 52% excellent, 16% good and 32% discrete. 3.75% of therapies analysed were considered inappropriate. Cost analysis: the average cost of a single treatment for the patient was € 704 charged to the NHS and € 102 charged to the patient. The MR allowed a cost reduction of 4% for the NHS and of 37% for the patient.
Conclusion The project demonstrates that MR is one of the most appropriate methodologies to correct prescription errors, improve patient compliance and carry out a more effective model for pharmaceutical expenditure management. Technology and multidisciplinary summarises more suitable the innovation of the proposed model, in which a new figure, the clinical pharmacist, integrates the medical and nursing team by bringing his contribution in terms of pharmacological and pharmacokinetic knowledge and stimulates the critical evaluation of the therapeutic choices and of the data processed through the use of an accurate ICT tool.

REFERENCES AND/OR ACKNOWLEDGEMENTS
No conflict of interest.

4CPS-156 SAFETY PROFILE OF APREMILAST IN PSORIASIS AND PSORIATIC ARTHRITIS

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Background Apremilast is an oral selective inhibitor of phosphodiesterase-4 with active psoriatic arthritis (PsA) and moderate to severe psoriasis (Ps). Apremilast is on the European list of medicinal products under additional monitoring.
Purpose To assess the safety profile of apremilast and identify patient risk factors associated with the appearance of side effects (ASE).
Material and methods A descriptive, retrospective study was carried out in patients with Ps and PsA who initiated apremilast between 2016–2018. Data were collected from clinical history and the pharmacy program (Farmatools).

Data analysed: demographic characteristics, diagnosis, previous treatment, ASE, dose reductions, reason for drug discontinuation and duration of treatment in those patients who discontinued apremilast.

The relationship between factors related to the patient and the ASE was evaluated using SPSS15.0.
Results Fifty patients were analysed, median age 55.1 years (IQR: 45.5–61.8), 52% females. Sixty-six per cent were diagnosed with Ps, 32% with PsA and 2% were on off-label use.

The median of previous treatments received was 2 (IQR: 1–3). All patients had previously been treated with, at least, one conventional systemic therapy: methotrexate 86%, acitretin 46%, cyclosporine 26% and others 20%; and 24% had also been treated with biologic agents: adalimumab 58%, etanercept 50% and others 42%.

Side effects (SE) were observed in 78% of patients (median of SE: 1 (IQR: 1–3)). Most frequent were: diarrhoea 72%, headache 42%, nausea and vomiting 36%, acid reflux 32%, decreased appetite 18%, abdominal pain 18% and depression 12%. Dosage reductions of 50% were observed in 14% of patients.

Medium duration until ASE was 1.3 (IQR: 0–9.5) months.

Half of the patients discontinued apremilast, 48% due to inefficacy, 36% SE, 12% both and 2% patients' request.

There were not statistically significant differences in ASE in terms of sex ($p=0.167$) or diagnosis ($p=0.062$). However, significant differences were found according to age ($p=0.044$).
Conclusion A high percentage of patients presented SE to apremilast, with diarrhoea the most frequent.

Patients' demographic characteristics and diagnosis were not related to the ASE, apart from age.

For future research, it would be interesting to determine the effect of age on the ASE and to evaluate the tolerance and the effectiveness of reduced doses of apremilast in these type of patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS
No conflict of interest.

4CPS-157 TUMOUR NECROSIS FACTOR INHIBITORS: UTILITY OF PHARMACOKINETICS MONITORING IN INFLAMMATORY BOWEL DISEASE MANAGEMENT

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Background Infliximab (IFX) and adalimumab (ADA) are two monoclonal antibodies (inhibitors of tumour necrosis factor alpha (anti-TNF)) that have revolutionised the management of patients with inflammatory bowel disease (IBD). However, there is a high rate of patients who show no initial clinical benefit for anti-TNF therapy or who lose the response over time. This fact, besides the high cost of these drugs, makes it necessary for an adequate individualisation of the therapy in order to optimize it.
Purpose To describe the pharmacokinetic determinations of serum levels of IFX and ADA in patients with IBD and to evaluate its impact on clinical decision-making.
Material and methods Retrospective, cross-sectional study, carried out in a general hospital. We analysed all anti-TNF determinations (ADA and IFX) performed during 1 year (2017) in patients with IBD. After the analytical determination, the pharmacy service performed a pharmacokinetic study (Bayesian adjustment) and recommended a new posology to the digestive specialist. Anthropometric data of the patients, diagnosis, reason for the request for monitoring, analytical result, pharmacokinetic recommendation and acceptance of this by the physician were collected.
Results A total of 71 determinations were obtained corresponding to 49 participants (60.2% males; 45.6±15.4 age; 63.3% Crohn's disease and 36,7% ulcerative colitis; 57% treated with ADA). The main reason for monitoring was the presence of activity of the disease (65% ADA; 64% IFX), followed by periodic control (35% ADA; 32% IFX) and other reasons. The drug levels obtained in the monitoring were 5.0 ±4.0 mcg/mL (0.1–12.3) for ADA and 6.4±3.9 mcg/mL (1–18.5) for IFX. A large number of patients presented serum levels outside the target range (63% ADA and 32% IFX underdosed, 2% ADA and 46% IFX overdosed).