including two case studies with CSTDs, only one of which has been published.[2]

Material and Methods Case studies were performed with Chemfort® and PhaSeal™ Optima CSTDs inside a glove box continuously aerosolised with human coronavirus HCoV-OC43. With Chemfort®, reconstitution was simulated by transferring sterile saline from IV bag to vial and back to IV bag. With Optima™, bolus preparation was simulated by transferring sterile saline from vial to syringe, and infusion preparation was simulated by transferring sterile saline into an IV bag. Three repetitions times three technical replicates were performed for each simulation. HCoV-OC43 RNA in syringes and IV bags was quantified by qPCR, including calibration samples. Air sampling verified the continued presence of viral aerosols in the glove box. For negative control, liquid transfers were performed in the presence of sterile medium aerosols.

Results Viral RNA could be quantified at concentrations ≥ 5 PFU/ml.

Chemfort®: No viral RNA traces were detected in any of the nine replicates Optima™: In bolus simulations, viral RNA traces were observed in all nine replicates and were within the quantifiable range for 56% of replicates. In infusion simulations, viral RNA traces were observed in 67% of replicates, but were below the quantifiable range.

Conclusion and Relevance A method was developed for testing CSTDs' ability to prevent viral contamination. The method was applied to two CSTDs for different simulated pharmacy tasks. The method can be applied for evaluation of additional CSTDs and for direct comparison between CSTD brands performing the same tasks. The knowledge gained could help protect vulnerable patients from viral infection.

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5PSQ-014 ELECTRONIC COMMUNICATION OF THE DISCONTINUATION OF HOME TREATMENT PRESCRIBED TO PATIENTS IN A TERTIARY LEVEL HOSPITAL

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Background and Importance Despite its apparent benefits, electronic prescribing systems still face numerous challenges. Without effective electronic communication between prescribers and pharmacists, medication may be dispensed incorrectly, resulting in patient harm.

Aim and Objectives To determine potential errors in the prescription of home medication, preventively suspend this medication and alert the prescribing physician so that the error can be solved.

Material and Methods Prospective cross-sectional study from October 2022 to May 2023 in a tertiary level hospital. Potential errors in their electronic prescriptions were detected using an electronic program linked to the patients' home prescriptions. Errors and reasons for suspension of treatment were classified: incorrect dosage (1), treatment completed and not discontinued (2), incorrectly withdrawn treatment (3), incorrect presentation (5) and therapeutic duplicity (6).The interventions carried out in which the deadline for modification of the interventions by the prescribers expired (2 weeks) were also taken into account (4). Treatments and medical services involved were analysed. Average number of days between the detection and notification of the error and its resolution by the prescriber was also evaluated. The e-prescribing system was used as well as a micro-strategy data analysis system.

Results 340 potential home prescribing errors were detected of which 190 (55.9%) were real. 98 (51.58%) were women with a median age of 63 [20–73]. Of these patients 81 (42.63%) were polymedicated with 10 drugs and 34 (41.97%) had at least 15 or more drugs prescribed. The average number of drugs prescribed was 8 [4–13]. Most frequent errors were detected in: semaglutide (28.5%), triptorelin (15%), methotrexate (12.5%), denosumab (9%), aledronic (9%), leuprorelin (5%), dulaglutide (5%), ibandronic (4.7%), risedronic (3%), paliperidone (3%), aripiprazole (2.5%), lanreotide (1.5%) and estradiol (1.3%). The medical specialties with the highest number of prescription errors were rheumatology (31%), endocrinology (28.5%), cardiology (10%), oncology (7.3%) and urology (7.3%). An average of 7 [4–11] days was observed between precautionary annulment and correction of the error. The causes of preventive discontinuation of treatment were type 1 (74%), type 6 (11%), type 4 (6%), type 5 (9%). After the intervention, 98 treatments (51.57%) were discontinued for various reasons: 1 (30.6%), 6 (21.5%), 4 (16.3%), 2 (15.3%), 5 (15.3%) and 3 (1%).

Conclusion and Relevance Electronic communication of discontinuation of home treatment is an important functionality with potential to decrease adverse events due to medication errors and also to reduce costs for the healthcare system and for polymedicated patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of Interest No conflict of interest.

5PSQ-015 ANALYSIS OF THE OCCURRENCE OF ATRIAL FIBRILLATION WITH THE ADMINISTRATION OF IBRUTINIB: SHOULD WE BE CAREFUL WITH THIS DRUG?

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Background and Importance Ibrutinib is a Bruton's tyrosine kinase (BTK) inhibitor used for the treatment of chronic lymphocytic leukaemia (CLL). Ibrutinib has been associated with an increased incidence of atrial fibrillation (AF) in trials ranging from 5% to 16% (1).

Aim and Objectives To analyse the appearance of AF and the time of its debut, as well as the possible risk factors in patients being treated with ibrutinib in a tertiary hospital.
Material and Methods Observational, cross-sectional, retrospective, multicentre study. Patients with CLL treated with ibrutinib from July 2016 to September 23 for at least 2 months were included. Diraya®, FarmaTools® and Prisma® databases were consulted. Variables were collected: age, sex, cardiovascular risk factors: arterial hypertension (AHT), diabetes mellitus (DM) and obesity. Duration of treatment with ibrutinib, serum creatinine at the start of treatment, drugs prescribed after ibrutinib, appearance of AF, time to AF and whether hospitalisation was required.
Results Forty-six patients with CLL in the last 7 years were included (16 women, 35%); the median age was 63 years [45–88]. 22 patients (48%) had AHT, eight patients (17%) had DM and five patients (11%) were obese. The mean creatinine value was 0.97 [1.91–0]. Anticoagulation was prescribed to seven patients (15%) and renin angiotensin system blockers to five patients (11%). Thirty-one patients (67%) continue to be treated with ibrutinib. The mean duration of treatment in the 13 patients (28%) who discontinued treatment was 546 days. Of these, two patients (4%) developed AF on days 21 and 594. In the first case, hospitalisation was required and treatment was suspended. In the second, it was not related to ibrutinib because too much time had elapsed since onset, did not require hospitalisation and the drug was not discontinued. Two patients (4%) with previous chronic AF did not develop any new event. One patient (2%) with no risk factors developed ventricular extrasystoles.
Conclusion and Relevance According to our cohort, a considerable number of cases appeared after treatment with ibrutinib that can be extrapolated to the results obtained in previous studies[1] without appearing to be related to cardiovascular risk factors prior to treatment. Those responsible for these patients should be aware that this is a serious adverse effect that should be monitored.

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Conflict of Interest No conflict of interest.

5PSQ-016 ASSESSMENT OF THE ACCREDITATION AND CONTINUOUS EDUCATION TESTS FOR PHARMACY TECHNICIANS WITHIN A CYTOTOXIC RECONSTITUTION UNIT

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Background and Importance The new preparation good practices for 2023 require a staff assessment. We decided to implement an annual, specific and adapted test to our activity, with the aim of guaranteeing the authorisation of new pharmacy technicians (PT) and the continuous education (CE) of those already present.
Aim and Objectives Realisation of the 2023 annual examination for the accreditation of new pharmacy technicians and the continuous education of PTs already accredited.
Material and Methods The test lasts 30 minutes and consists of two parts. The first part is made up of 10 multiple choice questions (MCQ) covering the competencies of pharmacy technicians: pharmacology, environment, equipment, hygiene, asepsis, quality, risk management. The second part consists of three videos containing errors in the preparation methods (choice of the molecule, volume to be withdrawn, dilution) which have been exported from our digital double-check video system. A pass rate of over 75% is required to validate the examination. Below the required rate, a second session is mandatory. A debriefing session is organised with the provision of a document containing the questions that posed problems (with a pass rate below 80%) along with associated procedures.
Results In the context of the CE, 10 PTs were reassessed. The average pass rate for the test was 81.5% [75%-85%] with an average of 72.9% for MCQ and 100% for videos. For accreditation, two PTs were evaluated. The overall average of the test was 70.3% [55%-65%] with an average of 57.2% for MCQ and 83.4% for videos requiring a second session. The overall average of the second session was 90% with an average of 85.7% for MCQ and 100% for videos. Among the 10 MCQ, seven had a pass rate below 80% and required a reminder.
Conclusion and Relevance For the personnel having carried out their CE the results are satisfactory and all the staff have been rehabilitated in the first session. As for the new PT, the results were insufficient. They were required to rework all procedures. This annual assessment frequency contributes to the safeguarding of our process by keeping knowledge up-to-date and reinforcing good practices. A satisfaction survey among PT can be conducted to evolve our evaluation methods.

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5PSQ-017 PHARMACEUTICAL INTERVENTIONS IN ORAL AND SUBCUTANEOUS MTX PRESCRIBING ERRORS

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Background and Importance Methotrexate (MTX) is a cytostatic drug used as an immunomodulator in non-oncological diseases, dosed at 7–25 mg per week orally/subcutaneously in adults. It is catalogued by the ISMP (Institute for Safe Medication Practices) as 'high-risk drugs', which incorrectly used have a higher likelihood of causing serious-fatal harm to patients. Folic acid (FA) is administered to prevent MTX toxicity.
Aim and Objectives To analyse pharmaceutical interventions (PIs) on oral/subcutaneous MTX and FA prescriptions and to assess the acceptance degree by the physicians.
Material and Methods Prospective observational study.

Oral/subcutaneous MTX prescriptions in adults between March to May 2023 of patients in a third-level hospital area were obtained. Filters applied to detect errors were: dosage of one tablet (2.5 mg) and administration frequency different from 7 days. Once patients were identified, MTX and FA