Background Information technologies' development and their integration in healthcare processes brought a major role in data generation to the pharmacy department. This massive data, also known as BIG DATA, is a powerful resource to initiate the measurement of healthcare outcomes related to dispensed drugs.
Purpose To access the main health outcomes of patients who received new tyrosine kinase inhibitors (TKI) and to develop a tool which provides real-life information based on the hospital environment to support the clinical decision.
Material and methods Every patient's data was collected from the electronic medical records, from 2013 until 2017. For each patient, we recorded the outcome, the performance status and the duration of the treatment. The main analysis outcome was the overall survival (OS). The survival analysis was done using IBM SPSS Statistics.
Results Of the estimated glomerular filtration rate +patients, the majority received Erlotinib (n=42), either as second/third lines (n=30) or first line (n=12). The number of patients who took Gefitinib was smaller than Erlotinib (n=4). All the ALK +patients were treated with Crizotinib (n=5).

The observed median survival was 20.3 months for TKI in the line (n=21) and 3.2 months for the second/third lines (n=30), with p<0001. The median OS for Erlotinib in the first line was 21.3 months and 2.8 months for patients in the second/third lines. For Crizotinib, the observed median OS was 13.8 months, with an 18 month follow up. The sample was too small for the Gefitinib survival analysis.
Conclusion There is a major difference in the OS of TKIs used in the first versus second and further lines, which was expected since these patients present a higher ECOG PS than the first-line group. This study shows that the real-world data, even with small samples in single-centre studies, can be similar to clinical trials data, as our OS with Erlotinib is nearly identical to the one reported in the OPTIMAL study.

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No conflict of interest.

4CPS-210 PATIENTS IN CLINICAL TRIALS AND THEIR TREATMENT: DID THE PRESCRIPTION SUPPORT A FIRST-LINE INFORMATION TOOL?

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Background According to the Code of Public Health, the pharmacist advises and informs the patient to ensure the right use and high drug adherence. In clinical trials (CT), investigational medicinal products (IMP) are dispensed by the pharmacy department. A copy of the prescription is given to the patients in ambulatory: it is a support to information for the patient available at any time at home. In our hospital, prescriptions for CT are usually provided by the sponsor.
Purpose The purpose of this work was to evaluate information about IMP on the prescriptions provided by the sponsors and to propose areas for improvement.
Material and methods All the CTs with at least one IMP was taken at home and opened in the pharmacy department of a university hospital on 1 January 2018 were included in this retrospective study. A checklist of eight criteria deemed essential to inform the patient regarding his treatment was created in accordance with the regulations.
Results A total of 93 CTs were evaluated, 35% were institutional CTs. Eleven per cent (n=10) of the prescriptions contained none of the listed criteria. For each criterion, the proportion of prescriptions including the information was 83% for dosage, 69% for product's conditioning, 43% for treatment's duration, 25% for time of taking, 19% for intake, 5% for storage temperature, 2% for adverse reactions and 0% for drug interactions. Eighty-eight per cent (n=82) of the evaluated CTs were oral IMP and 30% (n=25) were chemotherapies.
Conclusion The most frequent information on prescriptions is the dosage and the packaging of the IMP. At the other end, information on what to do in case of adverse events and drug interactions are rare or non-existent. The pharmacist has an important and essential role in dispensing pharmaceutical advice for CT.[1] A collaboration between services and pharmacy is planned in order to establish a standard prescription for CTs with specific information. Improving the quality of prescription information will optimise the safety of IMP taking.

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No conflict of interest.

4CPS-211 IMPACT OF THE ELECTRONIC PRESCRIPTION IN AN EMERGENCY DEPARTMENT

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Background The emergency medicine (EM) pharmacist, on working days, performs medication review and reconciliation. The EM pharmacist communicates, verbally or through small reports, the interventions to the doctor. After the electronic prescription (EP) implementation, in October 2017, these reports changed to a messaging system of the prescription programme.
Purpose To analyse the impact of the EP on EM pharmacist interventions.
Material and methods Unicentric, observational and prospective study conducted in a tertiary university hospital. We included all patients in the emergency department observation area (30 beds). The interventions reported in the first semester of 2017 (pre-intervention) were compared with the first semester of 2018 (post-intervention).

The results of this activity were collected in a spreadsheet (Excel). We recorded the intervention type and its acceptation.
Results In 2017, 1178 patients had at least one intervention on their medication (29.7% of the total) and we performed 1605 pharmaceutical interventions (1.4 intervention/patient). In 2018, 491 patients (12.4% of the total) and 744 interventions (1.5 intervention/patient).

Abstract 4CPS-211 Table 1

	2017	2018
	n (%)	n (%)
MEDICATION CHANGE	1015 (63.2%)	193 (23.4%)
Therapeutic exchange	981 (96.7%)	193 (23.4%)
Other	34 (3.3%)	27 (14%)
MEDICAL PRESCRIPTION CORRECTION	194 (12.1%)	135 (16.4%)
START TREATMENT RECOMMENDATION	142 (8.8%)	146 (17.7%)
DOSE MODIFICATION	91 (5.7%)	155 (18.8%)
SUSPENSION TREATMENT RECOMMENDATION	125 (7.8%)	68 (8.2%)
SCHEDULE MODIFICATION	31 (1.9%)	36 (4.4%)
PHARMACEUTICAL FORM MODIFICATION	7 (0.4%)	11 (1.3%)
TOTAL	1605	744
ACCEPTED	1480 (92.2%)	625 (84%)
UNDETERMINED	112 (7%)	105 (14.1%)
NOT ACCEPTED	13 (0.8%)	14 (1.9%)

Conclusion Interventions (both number and patients) have been reduced to more than half after the EP implementation. This suggests an improvement in the quality of the prescription.

- There is a change in the interventions profile. Therapeutical exchange decrease sighnificantly because the EP programme only allows prescription of medication included in the hospital therapeutical guide.
- The messaging system is a point of improvement because the acceptance of interventions have decreased.

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No conflict of interest.

4CPS-212 PRESCRIPTION AND ADMINISTRATION OF ORAL MEDICATION THROUGH THE JEJUNOSTOMY AND THE NASOGASTRIC TUBE IN AN INTENSIVE CARE UNIT: IMPACT OF GOOD PRACTICES GUIDELINES ON CLINICAL PRACTICE

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Background In the intensive care unit (ICU), patients are frequently unable to take oral tablets and capsules due to invasive ventilation or sedation. Therefore, medications are administered by nasogastric tube or jejunostomy. We conducted a study in 2017 to describe prescription and administration of oral medications through nasogastric tube or jejunostomy. From this study, local prescription and administration guidelines were implemented in the ICU.
Purpose Our study aimed to assess the impact of guidelines on prescription and administration quality.
Material and methods We conducted a descriptive study in 2018 among patients with jejunostomy, or nasogastric tube and oral medications prescription and administration. Medical data, drugs prescription data, administration data (methods of preparation and administration) were collected in medical files and by physicians' and nurses' interviews by a clinical pharmacy student using a standardised method. The quality of drugs prescriptions were assessed regarding the adequacy of medication's site of absorption with the administration route; adequacy of pharmaceutical form with the administration route; and prescription of the specific administration route (jejunostomy, nasogastric tube). The quality of drugs administrations were assessed regarding the respect of local guidelines in the preparation method, solvent used and lack of simultaneously mix in the same syringe. The results were compared with a study performed in 2017 by Chi-square test with RStudio software (version 3.2.4).
Results Overall, 385 prescriptions were studied in February and March 2018. Guidelines were consulted by physicians in 65% of prescriptions. Concerning prescriptions, the drug's site of absorption was respected in 93% (versus 81% in 2017) ($p<0.0001$) and appropriate pharmaceutical forms were used in 64% (versus 37%) ($p<0.0001$). Unfortunately, 42% of medications were prescribed without specific administration route (versus 20%) ($p<0.0001$). The residents prescribed more frequently the route of administration (65%) than senior physicians (41%) ($p<0.023$). Nurses were interviewed for 211 administrations. Preparation methods were consistent with guidelines in 96% (versus 49%) ($p<0.0001$), and dilution of medication into tap water (recommended solvent) increased (90% versus 34%) ($p<0.0001$). Simultaneous mix in the same syringe increased without reaching significance (37% versus 29%) ($p=0.17$). To conclude, four out of six of prescriptions and administrations quality criteria were improved.
Conclusion The guidelines' implementation in the ICU for patients with oral medications through jejunostomy or nasogastric tube improved the quality of prescriptions and administrations. However, improvements are still possible involving clinical pharmacy students to support guidelines.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-213 ABSTRACT WITHDRAWN