Conclusion The pharmaceutical process with the highest productivity was elaboration of cytotoxic drugs. The processing of EA vs 'off-label' in oncology means 92.4% of total management activity.

REFERENCE AND/OR ACKNOWLEDGEMENTS

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No conflict of interest.

2SPD-013 ECONOMIC IMPACT OF THE USE OF FLAT DOSE VS PERSONALISED DOSE OF PEMBROLIZUMAB

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Background Pembrolizumab is a highly selective anti-PD-1, approved for the treatment of metastatic melanoma, lung cancer and other advanced malignancies. The dosage was changed from a personalised dose to a flat dose. We suspected that using a newly approved dose of 200 mg for all patients may be an unnecessarily high dose, given the average weight of our patients, 70 kg.

Purpose The objective of this study is to demonstrate the economic impact of the use of a flat dose (200 mg) vs personalised dosing (2 mg/kg) vs dose banding.

Material and methods We collected data from all pembrolizumab's prescriptions, between March and August 2018, from our software.

The data were processed: by date, weight, diagnosis and number of therapies prepared. Then we calculated the actual number of milligrams used and the related economic impact value of the 3 strategy.

Results From March to August 2018, 81 patients were treated, 56 men and 25 women. The most frequent diagnosis was melanoma (43) and lung cancer (38). The mean weight of the patients was 71.8 kg. In this 6 months' period we prepared a total of 372 preparations in a personalised dose (2 mg/kg), 53424 mg were prescribed, for a value of € 1.118.9218,24. Simulating the same preparation with a flat dose, would have prescribed 74400 mg, with a value of € 1,656,144.00, an increase of 39% (€ 466,925.76). Simulating the same situation with dose banding (we use NHS table banding as an example), 51 775 mg would be prescribed, with a value of € 1,152,511.00, a small decrease of 3%.

Conclusion Our analysis shows how the introduction of the flat dose can undermine the sustainability of these high-cost therapies. The Food and Drug Administration determined, on the basis of pharmacokinetic models, that the 200 mg dose is comparable to that of 3 mg; but the same studies show that there are no clinically significant effects on safety and efficacy between the two doses. From our perspective it is important to consider strategies to minimise wastage without compromising the efficacy, such as dose banding, or organisation of the Pembrolizumab's Day, which could help to alleviate pressure on drug budgets.

REFERENCE AND/OR ACKNOWLEDGEMENTS

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No conflict of interest.

2SPD-014 MULTIDISCIPLINARY STOCK MANAGEMENT AND REDUCED DISTRIBUTION OF MEDICINE UP TO A DRUG PATENT EXPIRY REDUCED EXPENSES WITHOUT COMPROMISING MEDICINE SUPPLY IN A HOSPITAL SETTING

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Background When a drug patent expires, prices usually fall dramatically with the entrance of generic competitors. While the economic benefit from this price reduction is obvious, the benefit is often dampened by two conditions: when the hospital shortly before the patent expiry hands out medicine to patients that covers several months' home treatment, patients use the expensive original product at home after the availability of cheaper generic products; and the patent expiry is followed by a transition period where the hospital uses the original product despite the availability of cheaper generic products because there is a stock of original product.

Purpose The aim of this project was to increase the economic benefit of a drug patent expiry by reducing the unnecessary use of the original product after the entrance of generic competitors without putting supply at risk.

Material and methods The handing out of medicine to patients was fitted to the tender period end date instead of consistently handing out medicine for 6 months' treatment. Moreover, the stock of the original product was depleted before the beginning of the new tender period. The tender organisation interviewed presumed generic suppliers in advance of the tendering process to guarantee low prices and supply reliability. The effects on the economy and supply reliability were evaluated.

Results The controlled reduction of stock and medicine handouts to patients of the original product led to a reduction in medicine expenses of approx. € 1.4 million (corresponding to a 54% reduction) in the past five months before patent expiry. The supply of the generic product was sufficient in the whole country. Close collaboration between the hospital pharmacy, the tender organisation and the clinic appeared crucial to the success of the new method without putting the medicine supply to patients at risk.

Conclusion Collaboration between the hospital pharmacy, the tender organisation and the clinic prevented unnecessary use of the original product after patent expiry and a fast transition to the generic product, which reduced medicine expenses without compromising the medicine supply.

REFERENCES AND/OR ACKNOWLEDGEMENTS

None.

No conflict of interest.

2SPD-015 RISK-ADAPTED MANAGEMENT OF DRUG SHORTAGES TO ENSURE PROPER CARE FOR PATIENTS IN MEDICAL NEED

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Background The experienced increase of drug shortages (DS) in recent years has obliged pharmacists to monitor the actual

market situation. This is significant since there is currently no reliable central database in Germany which lists DS in time. The kind of DS in the hospital setting demands a rapid and focused management in order to ensure continuity of care.

Purpose Our aim was to develop a method to provide internal transparency over DS affecting our clinic (a 1600-bed maximum acute care facility), to cooperate with the physicians for a proper and efficient decision flow, and to adapt correspondingly to the drug-supply chain (DSC).

Material and methods We created a colour-coded algorithm on how to react to DS, depending on certain factors:

1. Yellow/orange: Therapeutic alternative is available. Consider brief information for the affected units.
2. Red: Therapeutic alternative is available but with relevant changes (e.g. import, internal compounding in the pharmacy), there is a very limited supply or no drug left at all. Consider interprofessional consultation.

The information was handed out by our drug information department via a drug-information sheet.

The data was recorded in an EXCEL sheet and updated upon each report from the manufacturers. Moreover, relevant changes had to be made depending on the classification of the DS (e.g. master-data-management, ward-order-system, Kanban-system, handling instructions) in order to ensure the DSC.

Results Between 1 January 2018 and 30 June 2018, 273 DS were recorded. Existing DS from 2016/2017 (38) were also included. One-hundred and seventy were resolved by 1 July 2018. Sixty-two were classified as red (critical or threatening to patient safety), 22 of which led to an interprofessional consultation. There was no alternative at all for five DS. Each consultation lasted 1 hour on average. Twenty-two of the recorded DS did not affect our clinic due to length and sufficient stock.

Conclusion The situation in everyday practice is so complex that standard procedures and interdisciplinary communication paths are necessary to manage DS in a way that does not impact the quality and continuity of patient care. Therefore, restrictions on therapeutic alternatives need to be determined and the close collaboration among pharmacists, nurses and physician is inevitable.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No references.

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2SPD-016 BIOSIMILARS OF INFLIXIMAB AND RITUXIMAB: DOES THE INITIAL STRATEGY OF SELECTION HELP THEIR PRESCRIPTIONS?

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Background The development of biological medicines (BM) was a major step in the treatment of chronic diseases and cancer. However, their high costs are a financial issue for hospitals. The arrival of biosimilar drugs (BD) improved their accessibilities by reducing their prices. Nevertheless, in France, their consumption is still low.

Purpose The purpose of the study was to measure and analyse the penetration rate (PR) of biosimilar Infliximab and biosimilar Rituximab in hospitals containing 300 to 700 beds in Auvergne Rhône Alpes (France).

Material and methods A web survey was sent to hospital pharmacists dispensing Infliximab and/or Rituximab to collect: consumption of Infliximab and Rituximab (biological reference products (BRM) and BD) in the first 6 months of 2018; initiation and switching strategy of BD; and education tools provided by pharmacists to patients and/or healthcare professionals. The PR was defined as the percentage of biosimilars of the total of BM. The web survey was online for 1 month.

Results Seven hospitals replied to the survey: all were consumers of Infliximab and four were consumers of Rituximab. The PR of biosimilar Infliximab was around 50% for two hospitals, around 30% for three hospitals and two hospitals did not use BD. The seven hospitals adopted the same initiation and switching strategy: biosimilar Infliximab was prescribed only for BM-naïve patients and continuous therapy could be switched with doctor's agreement.

Concerning Rituximab, the PR was 100% for two hospitals, 70% for one hospital and 40% for one hospital. All four hospitals concerned reported using the same strategy: switch from the BRM to the BD for every patient. The recent introduction of Rituximab biosimilar in the French market could explain the 2 PR lower than 100%.

Concerning education provided by pharmacists about BD, all had a different strategy (education to patient, to doctor, presentation in drug committee…).

Conclusion Although these hospitals adopted the same strategy of biosimilar selection, the PR were significantly different from one hospital to another. None of the education tools provided was linked to a greater biosimilar penetration. The consensus of national societies and expert recommendations should help pharmacists to convince prescribers.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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2SPD-017 ECHO-ENDOSCOPY: FOR A SOURCING AS SHARP AS A NEEDLE

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Background In April 2018, the acquisition of two echo-endoscopes enabled the deployment of a new activity within the hospital centre. Echo-endoscopy is an act of exploration combining ultrasound with endoscopy, which allows, using specific needles, the realisation of sampling and therapeutic drainages.

Purpose Therefore, we compared the different market-available needles.

Material and methods Three providers (A, B, C), previously selected in a regional framework agreement, were solicited for new quotations and specimens. A technical sheet was designed evaluating: quality of packaging and labelling; composition of the kit; characteristics of the needles (dimensions, materials, fenestrated or not, echogenicity, penetration, graduation accuracy, grip, diameter compatibility with the working channel); and quality of the samples obtained. The scores of each supplier were calculated with a weighting of 80% for the quality and 20% for the price.