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 hand-outs 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.

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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