

T-cell responses by blocking the binding of PD-1 to its ligands. Nivolumab, on June 2015 was authorised to treat melanoma, renal cell cancer (RCC) and non-small-cell lung cancer (NSCLC) administered in weight-based dosing (BW) schedules at 3 mg/kg every 2 weeks. In May 2018 the European Commission approved 240 mg flat dose (FD) every 2 weeks based on pharmacokinetics parameters.

Purpose Compare the financial impact of FD methodology versus BW in our population.

Material and methods Patients treated with nivolumab for melanoma, RCC and NSCLC in 2017 in our hospital were included in the analysis. Patients with the treatment started before the drug was commercialised were excluded. We analysed prescriptions on our informatic application to obtain the personal data of patients (age, sex, weight). We calculated the number of drug vials needed to fill a single prescription and the hypothetical drug waste. We used tender price (€ 11.8/mg) to calculate the hypothetical cost of BW and FD.

Results Ninety-one patients were treated in 2017 (636 doses), median age 68 years (SD \pm 8.7) and weight of 71 kg (SD \pm 15.8). The percentage of men was 63%. Seventy-two (79%) patients weighed less than 80 kg (75% doses). The diagnoses were: melanoma 19 (21%), RCC 12 (13%) and NSCLC 60 (66%). In our centralised unit we used a processing residue drug during compounding to minimise waste. The hypothetical cost of BW would be € 1,748,932 with a hypothetical waste of 7.970 mg (€ 94,620) which is 5% of the total drug cost. The real cost of nivolumab was € 1,661,154. This policy allowed us to save € 87 778 (5%). If the same patients received the FD, no waste would have been produced but the cost would be greater € 1,777,950 (+7%).

Conclusion FD simplifies prescribing, preparation, inventory and billing but the costs would be greater. In our cohort the median patient's weight was less than 80 kg so we would have used fewer vials using BW versus FD protocol.

REFERENCE AND/OR ACKNOWLEDGEMENTS

1. Zhao X, et al. Assessment of nivolumab benefit-risk profile of a 240-mg flat dose relative to a 3-mg/kg dosing regimen in patients with advanced tumors. *Ann Oncol* 2017.

No conflict of interest.

3PC-021

IMPACT OF A CENTRALISED INTRAVENOUS ADDITIVE SERVICE IN PATIENTS AND HEALTHCARE WORKERS RISK REDUCTION

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Background Parenteral drug compounding and its administration carries potential risks for patients. Safe handling procedures avoid healthcare workers' exposure to hazardous drugs. Compounding preparations in a Centralised IntraVenous Additive Service (CIVAS) could minimise both risks.¹

Purpose We conducted this study to assess patients and healthcare workers risk reduction by centralising parenteral preparations in a CIVAS compared to clinical areas (CA).

Material and methods Observational retrospective study in a 460-bed hospital. Inpatient parenteral preparations for CA (except Critical Care, Emergency Room and Neonatal Unit)

and outpatient preparations were included from January 2017 to December 2017.

For each preparation was recorded: compounding area (CIVAS/CA); number and type of preparation (fluid (F), parenteral nutrition (PN) or parenteral drug (PD)); type of admixture (standardised/individualised); risk level for patients (high/medium/low);² and hazardous level for healthcare workers (hazardous/non-hazardous).³

Results Overall, 3 22 693 preparations (F (19.8%), PN (1.6%) and PD (78.6%)) were compounded: 64.2% standardised, 26.9% medium-high risk preparations and 5.1% hazardous preparations. CIVAS coverage was 77.0% (248,254) (F (97.3%), PN (100.0%) and PD (71.3%)). CIVAS prepared 69.1% of total standardised preparations and 91.0% of individualised admixtures.

According to risk for patients, 89.6% (78,051) of medium-high risk preparations were centralised. Preparations that were not prepared in CIVAS corresponded to antibiotics, anti-epileptics, analgesics, proton-pump inhibitors and corticosteroids.

According to risk for operators, 75.7% (231,829) of non-hazardous drugs and 99.9% (16,425) of hazardous drugs were prepared in CIVAS, avoiding exposure risk for healthcare workers. Valproic acid was the only hazardous drug prepared in CA.

Conclusion Compounding in a CIVAS provides coverage of 77% parenteral preparations. Higher patient risk reduction and staff protection standards are provided by avoiding elaboration of 89.6% of medium-high risk preparations and 99.9% of parenteral hazardous drugs in clinical areas.

REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Resolution CM/Res (2016) on good reconstitution practices in health care establishments for medicinal products for parenteral use. Available from: https://www.edqm.eu/sites/default/files/resolution_cm_res_2016_2_good_reconstitution_practices_in_health_care_establishments_for_medicinal_products_for_parenteral_use_.pdf [Date accessed: October 15th 2018]
2. Guía de buenas prácticas de preparación de medicamentos en servicios de farmacia hospitalaria. Ministerio de Sanidad, Servicios Sociales e Igualdad. June 2014.
3. Connor TH, et al. *NIOSH list of antineoplastic and other hazardous drugs in healthcare settings* 2016. Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health, DHHS (NIOSH) Publication Number 2016-161.

No conflict of interest.

3PC-022

PRELIMINARY MICROBIOLOGICAL STUDY OF INJECTABLE CHEMOTHERAPY DOSE-BANDING

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Background In our medical centre, the production of injectable anti-neoplastic rose 20% between 2015 and 2017. As a consequence, the dispensing delay increased. It has therefore been decided to implement dose-banding. In order to guarantee the sterility of preparations after storage, we did a preliminary study of microbiological stability 28 days after making the preparation.

Purpose The study of microbiological stability of injectable chemotherapy produced at an oncological pharmacy after 28 days of storage.

Material and methods We simulated the production of anti-neoplastic preparation with dextrose 5% to avoid chemotherapy contamination at the hygiene laboratory.