

and age over 60 years (58.3% vs 36.4%,  $p=0.043$ ),  $\geq 2$  lines of treatment (72.7% vs 44.3%,  $p=0.020$ ), active disease (62.5% vs 29.4%,  $p=0.002$ ) and pneumonia (61.2% vs 22.7%,  $p=0.002$ ). Overall, 47.5% overcame the infection, and in 5.0% SARS-CoV-2 genetic material was still detected at the time of analysis. A non-significant lower mortality rate was observed among: previous transplantation (45.7% vs 64.3%,  $p=0.19$ ), neutrophil  $>1900$  cells/ $\mu\text{L}$  (41.1% vs 60.0%,  $p=0.09$ ), lymphocyte  $>1000$  cells/ $\mu\text{L}$  (42.9% vs 63.6%,  $p=0.09$ ) and hydroxychloroquine or chloroquine plus azithromycin (35.3% vs 60.0%,  $p=0.10$ ).

**Conclusion and relevance** SARS-CoV-2 infection produced high mortality among AML patients. Mortality was correlated with age, active disease and pneumonia.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

Acknowledgements: Pethema Foundation

**Conflict of interest** No conflict of interest

#### 4CPS-288 CLINICAL PHARMACIST'S IMPACT IN IMPROVING THE SAFETY OF THERAPIES FOR PATIENTS USING ORAL ANTICANCER AGENTS: A PROSPECTIVE SINGLE CENTRE STUDY

J Tabe\*. *Pharmacist Hospital, Pharmacy, Huissignies, Belgium*

10.1136/ejhp-2021-eahpconf.120

**Background and importance** Oral anticancer agents (OAA) are frequently used in oncology practice. Drug interactions involving OAA are of great concern as they can cause an altered safety or efficacy profile for cancer treatments.

**Aim and objectives** To estimate the prevalence of potential drug interactions in cancer patients to justify the implementation of preventive actions to optimise the effectiveness and efficiency of cancer management, in a context where the relevance of care is a public health issue.

**Material and methods** Data on drugs used for comorbidities, OAA, over-the-counter (OTC) drugs and herbal supplements were collected through a structured interview with the patient, a review of medical records and a call to the dispensing pharmacist. Potential drug interactions involving OAA were detected during the primary prescribing process using the databases Lexicomp and Micromedex.

**Results** 51 patients were included in the study. The median age of patients was 70 years. We identified 26 potentially clinically significant interactions (PCSI) in 24 patients (47%). Of the PCSI detected, 17.4% were assessed by both sources as major interactions and 8.7% as moderate interactions. The OAA that interacted the most were anagrelide (19.2%), capecitabine (15.4%) and lenalidomide (11.5%). PCSI involving OAA appeared in the following therapeutic classes: PPI 26.9%, herbal therapy 11.5% and antiplatelet-anticoagulants 11.5%. We observed that 30.8% of PCSI resulted in an altered efficacy profile of the OAA.

**Conclusion and relevance** Analysis of PCSI in cancer patients allows the description of the use of OAA and thus how to optimise monitoring of the correct use of these drugs. The clinical pharmacist can improve drug safety by notifying hospital and frontline healthcare staff of PCSI to reduce drug therapy problems and optimise drug therapy for these patients.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Ranchon F, Bouret C, Charpiat B, *et al.* Sécurisation de l'emploi des chimiothérapies anticancéreuses administrables par voie orale. *Le Pharmacien Hospitalier* 2009;**44**:36–44.
2. Banna GL, Collovà E, Gebbia V, *et al.* Anticancer oral therapy: Emerging related issues. *Cancer Treatment Reviews* 2010;**36**:595–605.

**Conflict of interest** No conflict of interest

#### 4CPS-289 ANALYSIS OF ANTINEOPLASTIC DRUG CONTAMINATION LEVEL IN THE HOSPITAL PHARMACY: PROBLEM MONITORING AND SOLVING

<sup>1</sup>V Garau\*, <sup>1</sup>SG Gheza, <sup>1</sup>S Colombo, <sup>1</sup>S Cadelano, <sup>2</sup>M Tulli, <sup>2</sup>G Marcias, <sup>1</sup>P Serra. <sup>1</sup>A Businco' Oncology Hospital, Hospital Pharmacy, Cagliari, Italy; <sup>2</sup>A Businco' Oncology Hospital, Hospital Prevention and Protection Service, Cagliari, Italy

10.1136/ejhp-2021-eahpconf.121

**Background and importance** Handling of antineoplastic agents poses major health risks to healthcare workers. Apart from pharmacists, nurses and physicians, staff involved in cleaning, transport and disposal of hazardous drugs or contaminated material are also involved. Monitoring via wipe samples can be used to investigate mechanisms of release and spread and thus help identify possible sources and routes of exposure.

**Aim and objectives** Our aim was to evaluate the effectiveness of our decontamination procedure, to obtain objective data on contamination of operators in contact with antineoplastic drugs.

**Material and methods** The preparation rooms have closed laminar flow hoods where drugs are reconstituted and diluted using closed circuit devices. The exposure assessment involved nine nurses and two pharmacists. Biological monitoring was performed for cyclophosphamide (CP), gemcitabine and urinary metabolite 5-fluorouracil (5-FU), alpha-fluoro-beta-alanine (FBAL) in urine at the end of the shift. Analyses were performed using UHPLC-MS/MS liquid chromatography. In parallel, environmental monitoring was carried out for the determination of 5-FU and CP on the surfaces inside and adjacent to the set-up area and on the operators, using the WIPE test and PAD test techniques, respectively, at the beginning and end of the shift.

**Results** Levels of urinary metabolites measured were all below their respective limits of determination (LOD). Drug contamination measured by the WIPE test was found to be slightly above the reference value of 0.1 ng/cm<sup>2</sup> and high contamination in the external handle of the laminar flow hood was found. The analytical results collected by the PAD test showed levels of 5-FU lower than the LOD and the presence of a trace of CP on the preparer, while significant contamination by 5-FU was found on the chest and forearm of the off-field operator.

**Conclusion and relevance** This study highlighted environmental contamination with a low exposure of operators limited to the preparation laboratory, but higher contamination levels were found on laboratory surfaces and on an off-field operator. Improper transport of a contaminated drug basket to a clean zone is critical. This assessment allowed us to review and update our decontamination procedure, confirmed by the subsequent environmental control. A monitoring schedule for the environment and health workers and specific training courses for the cleaning teams were proposed.

#### REFERENCES AND/OR ACKNOWLEDGEMENTS

1. Sottani, *et al.* 2017.

**Conflict of interest** No conflict of interest