special attention during ICI treatment. This case report suggests a direct relationship between immunotherapy and disorder coagulation events; however, this cannot always be demonstrated but the diagnosis was made by exclusion. Therefore, extensive research in relation to haematological IrAEs and ICIs are necessary.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

5PSQ-151 SEVERE TOXICITY IN A PATIENT WITH ACUTE LYMPHOBLASTIC LEUKAEMIA RESULTING FROM SUBSTITUTION OF DAUNORUBICIN WITH DOXORUBICIN DUE TO MEDICINE SHORTAGE: A CASE REPORT

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Background and importance We present the case of a young patient with T lymphoblastic lymphoma (T-LBL) who developed severe toxicity after receiving an anthracycline based protocol that is generally well tolerated by healthy patients. We assume that the substitution of daunorubicin by doxorubicin due to a nationwide shortage of daunorubicin played a crucial role in developing severe toxicity.

Aim and objectives The 19-year-old man with no previous illnesses was diagnosed in December 2019 with T-LBL, a rare, aggressive neoplasm of precursor T cells that progresses rapidly and requires prompt diagnosis and medical intervention. T-LBL shows morphological and immunophenotypical similarities to acute lymphoblastic leukaemia (ALL). T-LBL treatment is the same as for ALL.

Material and methods The induction protocol consisted of dexamethasone, vincristine, daunorubicin and pegasparginase. Due to a nationwide shortage, daunorubicin (30 mg/m²) was substituted by doxorubicin (25 mg/m²).

Results Chemotherapy was initially well tolerated, but beginning on day 15, the patient developed pronounced mucositis and increased skin toxicity (hand-foot syndrome, grade IV). Moreover, coagulation parameters deteriorated, and repeated transfusions with erythrocytes and platelet concentrates were needed. After administration of pegasparginase on day 31, liver values increased, and finally, the patient had to be transferred to the intensive care unit due to fulminant pancreatitis. After 3 days, the patient could be transferred back to our ward. However, within 2 weeks, the patient developed sensory disturbances in all extremities, which was classified as chemotherapy associated polyneuropathy.

In the further clinical course, the patient's general condition improved, and PET-CT showed complete metabolic remission. Due to the severe chemotherapy associated side effects, intensive consolidation treatment, according to the protocol, was cancelled. Instead, a consolidating therapy with nelarabine was carried out without complications. To date (October 2020), the patient is in a good clinical condition and has not developed disease recurrence. Probability assessment using the Nar-anjo algorithm resulted in 'probable adverse drug reaction' (score=6).

Conclusion and relevance Our case report underlines the fact that shortages of essential anticancer drugs can have a particular impact on the efficacy and safety of established chemotherapy regimens, as these medicines often have few or no proven effective alternatives.

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Conflict of interest No conflict of interest

5PSQ-152 REAL WORLD EFFICACY AND COST DATA ON PATIENTS WITH METASTATIC NON-SMALL CELL LUNG CANCER TREATED WITH CHECKPOINT INHIBITORS IN AN ITALIAN UNIVERSITY HOSPITAL IN SEPTEMBER 2016–2020

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Background and importance Non-small cell lung carcinoma (NSCLC) accounts for 85–90% of all forms of lung cancer. In recent years, the development of immune checkpoint inhibitors has completely changed the therapeutic landscape of NSCLC and changed treatment standards. Immuno-oncology is a promising therapeutic option based on the use of synthetic antibodies, such as nivolumab and pembrolizumab which can both improve the survival of patients. All this represents a valid new approach, but the high cost requires a specific evaluation of health outcomes.

Aim and objectives The main aim of this retrospective observational study was to analyse the characteristics of NSCLC patients, treatment outcomes and costs of treatment of advanced stage NSCLC with nivolumab and pembrolizumab in an Italian teaching hospital in a cohort of 102 selected patients.

Material and methods A retrospective observational analysis was conducted in patients treated with immune checkpoint inhibitors from September 2016 to September 2020 at the university hospital 'Mater Domini' in Catanzaro, Italy. Data sources were medical records, internal prescription cards and reports of adverse reactions.

Results 102 patients (89.2% men) were diagnosed with advanced NSCLC, 69.6% characterised by a non-squamous histology and 30.4% squamous. Firstline treatment with pembrolizumab was administered to 53 patients for an average of 11.5 months, 9 of whom were receiving innovative treatment with pembrolizumab+pemetrexed as firstline treatment with an average annual patient cost of 4915.78€, while 49 patients were treated with nivolumab for an average of 16.5 months with an average annual patient cost of 11 306.08€. The data showed a survival rate of 64.8% after 12 months, 57.9% after 24 months and 48.1% after 36 months. Most patients received immunotherapy as firstline and the others as subsequent treatment.

Conclusion and relevance Currently, there are numerous clinical studies for NSCLC but no study has compared immunotherapy treatments. From this study, based on real world data,