

respiratory tract malignancies (10%). Most patients were on active systemic therapy or radiotherapy (84%), largely for advanced or metastatic disease (55%). In the overall population, early death rate was 15%, which was numerically higher than the Brazilian general population with COVID-19 diagnosis in 2020 (2.5%). We were able to match 442 cancer patients with COVID-19 to 1,187 controls with cancer from pre-pandemic times. The 30-day mortality rate was 12.4% in COVID-19 cases as compared to 5.4% in pre-pandemic controls with cancer (Odds Ratio 2.49, 95%CI 1.67 - 3.70; P value < 0.01, Power 97.5%). COVID-19 cancer patients had significantly higher death events than historical controls (Hazard Ratio 2.18, 95%CI 1.52 - 3.12; P value < 0.01, Power 99.7%), particularly from 20 to 30 days after diagnosis of the infection.

**Conclusions:** Cancer patients with COVID-19 have an excess mortality 30 days after the infection when compared to matched cancer population from pre-pandemic times and the general population with COVID-19, reinforcing the need for priority vaccination in public health strategies.

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### 1578P Clinical outcomes of patients with cancer who tested positive for COVID-19 hospitalised in a UK district general hospital

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**Background:** Individuals diagnosed with cancer have been particularly affected by the COVID-19 pandemic. Most of the relevant information so far has come from tertiary cancer centres and less is known of the outcomes of patients in District General Hospitals (DGH). In this audit, we aimed to investigate the clinical outcomes of patients with cancer who tested positive for COVID-19 and were admitted in a DGH.

**Methods:** Electronic records of patients admitted at Tameside General Hospital (TGH) (>500 beds) between March 2020–March 2021 were reviewed retrospectively. Clinical outcomes of those who tested positive for COVID-19 and factors relating to death were analysed. Cox regression and Kaplan-Meier survival analyses were performed (SPSS v26.0).

**Results:** Within the 12-month study period, there were 2417 inpatients who tested positive for COVID-19 at TGH. Of 235 individual patients with cancer admitted during this period, 14% (n=33) tested positive. Median age was 75 (68;81) years; majority female (67%). The most prevalent primary site of cancer were lung (21%) and breast (12%). Most were ECOG PS 1 (39%) or PS 2 (36%), and had high Charlson Comorbidity Index (median 5 (3;6), range 0-10). 24% of patients were on curative treatment, 39% palliative treatment, 18% best supportive care and 18% not on treatment. Types of treatment included chemotherapy (37%), hormonal treatment (26%), radiotherapy (21%) and immunotherapy (5%). On average, patients were admitted at least once (range 0-4) prior to positive test for COVID-19. At last follow-up, there were n=664/2417 (27%) and n=22/33 (67%) deaths in the non-cancer and cancer patient subgroups, respectively. The median time from diagnosis of COVID-19 to death/censor date was 44 (4;85) days. In univariate Cox regression analysis, only ECOG PS was significantly correlated with death, HR 1.523 (95% CI 1.064-2.181, p=0.022).

**Conclusions:** The outcomes of our cohort of patients with cancer who tested positive for COVID-19 and hospitalised were poor. The high comorbidity burden and poor ECOG PS could potentially account for this rather than the recent oncological treatment. Acute oncology input to general medical teams treating cancer patients with COVID-19 is pivotal for best possible outcomes for patients.

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### 1579P The risk of severe/critical COVID-19 infection in patients diagnosed with solid malignancies: Two center experience from Armenia

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**Background:** Nowadays, the data on Coronavirus Disease 2019 (COVID-19) among cancer patients is controversial. It is debatable whether cancer patients are at a significantly higher risk of severe COVID-19. The current study aims to assess the risk of severe and critical COVID-19 cases among patients receiving systemic anticancer treatment (SACT).

**Methods:** This was a retrospective cohort study utilizing census sampling. The data was obtained through medical records. Inclusion criteria: COVID-19 diagnosis through RT-PCR/chest CT among those who received SACT in the Chemotherapy Departments of Hematology Center after prof. Yeolyan and Institute of Surgery after Mikaelyan Yerevan, Armenia between March 1, 2020, and February 1, 2021. Descriptive analysis was done to characterize the cohort. We run logistic regression to evaluate the risk of COVID-19 severity (mild, severe/critical) among those receiving SACT (high, intermediate, and low-risk protocols of febrile neutropenia (FN), age, gender, smoking status, comorbidities).

**Results:** In total 75 cancer patients were diagnosed with COVID-19 in both centers. Data of only 72 patients were analyzed, as the outcome variable of the excluded patients was unknown. The male-to-female ratio was 1:1.5, age range was 31-80 years (median age: 61). The patients received SACT with high (13.9%), intermediate (63.9%), and low (8.3%) risk for FN. The others did not receive SACT at the moment of COVID-19 diagnosis. Infection-associated pneumonia was developed in 63% of cases. Mild COVID-19 was diagnosed in 76.4% and severe/critical in 23.6% of cases. Infected patients' hospitalization rate was 28%. The case fatality rate was 8%. Only patients who underwent SACT at the time of COVID-19 infection were included in logistic regression analysis (n=62). Significant association between COVID-19 severity and the risk of SACT-induced FN, gender, smoking status, comorbidities was not found. Contrary, COVID-19 severity was significantly associated with age when adjusted to other predictors ( $p=0.017$ , 95% CI = 1.021-1.230).

**Conclusions:** Thus, we demonstrate the lack of rationale to reschedule SACT during the pandemic as it does not affect the COVID-19 severity and may bring unnecessary treatment delays.

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### 1580P Impact of COVID-19 infection on breast cancer patients: Experience in Latin-American country ACHOCC-19B study

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**Background:** There are not specific information about outcomes of COVID-19 infection in patients with breast cancer. We aimed to describe the outcomes in this population in our national cohort of patients with cancer and infection for COVID-19.

**Methods:** ACHOCC-19B registry is a multicenter observational study composed of a cross-sectional and a prospective cohort component. Eligibility criteria were the diagnosis of breast cancer and COVID-19 infection confirmed with RT-PCR. Follow-up of 30 days was completed. Clinical data were extracted of the multicentric register of cancer and covid-19 in Colombia (ACHOCC-19), collected from Apr 1 until Oct 31, 2020. The primary outcome was 30-day mortality from all causes and secondary