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Prospective data of >20,000 hospitalised patients with cancer and COVID-19 derived from the International Severe Acute Respiratory and emerging Infections Consortium WHO Coronavirus Clinical Characterisation Consortium: CCP-CANCER UK

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Background

The International Severe Acute Respiratory and emerging Infections Consortium (ISARIC) WHO Clinical Characterisation Protocol (CCP) UK has collected complete data from 195,000 COVID-19 patients in the UK as of 12th August 2021. Within this consortium CCP-CANCER-UK has been established to study the effects of COVID-19 in hospitalised patients with cancer.

Methods

Patients admitted with proven SARS-CoV-2 infection and registered on CCP-UK from 17th January onwards in 258 healthcare facilities in the UK. Case report forms were used to identify patients with a history of malignant neoplasm or on active treatment for cancer. Analysis is restricted to outcome of patients who were admitted >14 days before data extraction. Patients with a history of cancer and on active treatments were compared to those patients with no history of cancer.

Results

As of 12th August 2021 of the 195,492 participants 15,250 (7.8%) had a history of cancer (Hx Ca) and 5,357 (2.7%) were on active cancer treatment (Act Tx). Patients with cancer were less likely to receive critical care: Hx Ca adjusted odds ratio (aOR) 0.83, 95%CI 0.72 to 0.95, $p < 0.001$, Act Tx aHR 0.68, 95% CI 0.62 to 0.74, $p < 0.001$. In hospital mortality 23.6% no cancer, 38.9% Hx Ca and 37.6% (aHR Hx Ca: 1.18, 95%CI 1.10 to 1.27, $p < 0.001$, Act Tx: aHR 1.57, 95%CI 1.48 to 1.66, $p < 0.001$). Younger cancer patients, particularly on Act Tx, were more likely to die than similar aged no Ca patients (Act Tx <50 yrs aHR 5.22, 95%CI 4.19 to 6.52, $p < 0.001$). Data will be presented that show over the course of the pandemic, mortality in cancer patients was higher throughout and did not parallel the downward trends seen in patients with no history of cancer.

Conclusions

Europe's largest prospective hospitalised COVID-19 dataset continues to demonstrate that cancer is independently associated with mortality with younger patients remaining at increased relative risk. Cancer patients face unique risks from the SARS-CoV-2 pandemic. Ongoing vaccination/mitigation studies need to recruit cancer patients to understand the degree of protection afforded in this at risk population.

Clinical trial identification

ISRCTN66726260.

Legal entity responsible for the study

University of Oxford.

Funding

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Disclosure

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