The largest report up until September 30, 2020, comes from the Oncology July 2020 reported on 200 patients, of which 74% (147 patients) were on therapy at the time of COVID-19 diagnosis. Thirty-four patients were receiving ICB alone at the time of COVID diagnosis and, importantly, these patients did not show an increased risk for hospitalization (OR 0.51, 0.16-1.56) nor risk of death (OR 1.39, 0.52-3.64) by univariable analysis. A third study reflecting a single institution’s experience of COVID-19 and cancer reported no increase in ICU admission or death in 102 patients receiving cytotoxic chemotherapy and 18 patients receiving immunotherapy. Collectively, these findings suggest that ICB is not a strong risk factor for hospitalization or death in patients with cancer who have been infected with SARS-CoV-2.

The medical community is continuing to learn how to manage cancer patients amidst the COVID-19 pandemic. Mechanistically, immune checkpoint blockade drugs would not be expected to independently put cancer patients at risk of contracting COVID-19. The data presented here and our knowledge to date does not suggest that patients receiving these medications are at increased risk of a hyperinflammatory response to COVID-19, which might place a person at risk for hospitalization or death. It is recommended that providers thoughtfully consider the use of ICB for the treatment of malignancy as we navigate the many challenges surrounding patient care during the COVID-19 pandemic.

Three large, retrospective cohort studies regarding the clinical impact of COVID-19 on patients with cancer have been published. The largest report up until September 30, 2020, comes from the COVID-19 and Cancer Consortium (CCC19), which reported 30-day all-cause mortality for 928 patients from the United States, Canada, and Spain with laboratory confirmed SARS-CoV-2 and a diagnosis of invasive or hematologic malignancy between March 17, and April 16, 2020. Of those receiving anticancer therapy, only 16% (38 patients) had received immunotherapy, including ICB, allogeneic stem cell transplant, or adoptive cell therapy. The authors did not report the mortality risk for those patients receiving immunotherapy, however, type of malignancy, type and recency of anticancer therapy, and surgery were not associated with an increase in all-cause mortality.

The TERAVOLT study focused on patients with thoracic malignancies in Europe and North America. The results published in Lancet Oncology July 2020 reported on 200 patients, of which 74% (147 patients) were on therapy at the time of COVID-19 diagnosis. Thirty-four patients were receiving ICB alone at the time of COVID diagnosis and, importantly, these patients did not show an increased risk for hospitalization (OR 0.51, 0.16-1.56) nor risk of death (OR 1.39, 0.52-3.64) by univariable analysis. A third study reflecting a single institution’s experience of COVID-19 and cancer reported no increase in ICU admission or death in 102 patients receiving cytotoxic chemotherapy and 18 patients receiving immunotherapy. Collectively, these findings suggest that ICB is not a strong risk factor for hospitalization or death in patients with cancer who have been infected with SARS-CoV-2.

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