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Re: Clinical Characteristics and Outcomes of COVID-19–Infected Cancer Patients: A Systematic Review and Meta-Analysis

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Zhang and colleagues (1) recently reported in the Journal a meta-analysis describing clinical characteristics and outcomes of patients with cancer and infected with the SARS-Cov-2 virus. The first part of this report focused on a pooled analysis of 15 selected studies. This analysis suggests an overall case fatality rate of approximately 22%, in line with our own report including a very similar population (2), albeit slightly higher than reported by others (3). Subgroups analyses suggested that this rate was higher in patients with lung and hematological malignancies, as already reported (2,4). Next, Zhang et al. (1) proposed an individual patient data analysis from a subset of 150 patients. This subset analysis, which represents the genuine meta-analysis of this report, has not been able to identify any poor prognosis factor of coronavirus disease 2019 (COVID-19) beyond age older than 65 years and male gender, which are not specific to cancer patients.

The clinical landscape of COVID-19 in cancer patients is still to be completely depicted because of the general heterogeneity of the clinical spectrum and of the clinical reports. Any joint analysis raises the issue of combining trials with various case mixes. The proportion of patients with advanced disease or palliative setting is insufficiently reported and cannot be meta-analyzed. Prognostic factors analysis on 150 patients and fewer than 30 events has only very limited statistical power (5). Additionally, data from prospective clinical trials (available at https://www.who.int/clinical-trials-registry-platform) are an important source of information. Finally, prognostic factors analysis on large multinational populations with the most recent observations to account for the improvement in survival of COVID-19 patients is requested.

Beyond these methodological limitations, it is our belief that the report from Zhang et al. (1) does not bring clarity. Even if several important series also pointed out the role of age and cancer type in COVID-19 prognosis (3,4,6), it is striking that very few reports included the clinical presentation of COVID-19 in the prognosis evaluation and focused mostly on already-

hospitalized patients. In our recent report, we chose to implement a prospective follow-up of all cancer patients followed at our institution and presenting with positive COVID-19 imaging and/or positive RT-PCR (reverse transcriptase - polymerase chain reaction) testing for COVID-19, regardless of their symptoms (2). All relevant patient-, COVID-19-, and cancer-related characteristics were considered in the prognostic analyses. It is striking to observe that, in line with other recent reports (6), independent poor prognosis factors at the time of COVID-19 diagnosis associated with death or intensive care unit admission were extent of COVID-19 pneumonia and decreased baseline O₂ saturation. Despite clinically meaningful trends, none of the patient- or cancer-related features were significantly associated with prognosis. Further, there is no definite evidence that cancer patients on anticancer treatment are at an increased risk of mortality from COVID-19 disease compared with those not on active treatments (7).

At this time of a still widely ongoing pandemic, it is our responsibility as cancer caregivers to continue our daily endeavor and provide an individual, methodical, and always renewed attention to the symptoms of our patients along with the continuation of cancer care.

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Data Availability

No new data have been presented in this correspondence for readers to access.

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