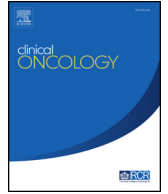




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**Letter****Full Spectrum of Cancer Patients in SARS-CoV-2 Infection Still Being Described**

*Madam* — Liang and colleagues [1] first reported a nationwide analysis with cancer patients in SARS-CoV-2 infection in China. However, there are some aspects worth reinterpreting that may cause misleading conclusions.

First, the proportion of COVID-19 patients with cancer in this cohort was not equal to the incidence of cancer in all COVID-19 cases. Moreover, detection signal bias may exist in cancer patients, as they may pay more attention to their health condition and are more likely to seek medical help in the early stages of any disease, which may increase the detection rate in cancer patients.

Most importantly, age is a very important confounding factor. The mean age of cancer patients (63.1 years) was significantly higher than that of those without cancer (48.7 years). Moreover, when focused on the 18 cases with cancer, the mean age with severe events was even higher than in those without severe events (71.89 years versus 54.33 years). There is clear evidence from other studies that older patients are more likely to be infected and have more serious conditions and death [2,3]. More male patients (male 12 versus female 6) in cancer cohorts may also response for the high proportion of severe events in cancer patients, as female patients might have relatively mild symptoms. The logistic regression analysis further shows that age and gender have a significant impact on severity, thus it is necessary to carry out age stratification analysis or paired analysis according to age and gender. The results should be reported after adjusting for these two factors.

Collectively, there were several confounding factors and defects in the statistical methods of this paper, and the effectiveness of the results may be uncertain. More rigid

designed studies are needed to depict the full spectrum of cancer patients in SARS-CoV-2 infection.

**Conflicts of Interest**

The authors declare no conflict of interest.

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