
Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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## Letters

# 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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# The Eleventh Hour

*Madam* — The SARS-CoV-2 novel coronavirus has precipitated the world into a state of emergency [1,2]. Although the index case was acquired by zoonotic exposure [3], the combined dynamics of rapid human-to-human transmission [4], incubation period dissemination [5], and potential faeco-oral spread [6,7] render cancer patients vulnerable, owing to immunosuppression due to the primary disease or secondary to treatment [8].

India expects an exponential increase in the number of cases in the coming weeks. This was estimated at 300 million in the absence of external interventions [9] and is worsened by low testing rates [10]. To put numbers into perspective, India has an annual incidence of 1.2 million cancer patients, two-thirds of whom require radiotherapy [11]. A shortfall of radiotherapy units, a low clinician to patient ratio, and inadequate financial coverage; a prototype unique to lower–middle-income countries (LMICs) and low-income countries (LICs) already contributes to long waiting lists and patients foregoing treatment with subsequent disease progression [12]. These factors combined with a high population density can result in increased SARS-CoV-2 transmission and mortality in LMICs/LICs, and cautious policymaking is warranted.

Fractionated radiotherapy treatments typically last over a few weeks and stopping or delaying treatment during its course correlates with poor local control and adverse survival. The general measures should include but not be limited to prioritising patients, consideration of induction chemotherapy instead of radiotherapy when there is an evidence-driven choice (e.g. hypopharyngeal and laryngeal cancers), judicious use of advanced radiotherapy techniques that require more time for planning and verification, the use of hypofractionation, and proper administrative handling of staff [13]. Ideally, one needs to achieve an 'oncological triage', whereby cancer progression due to logistic delay is balanced by mitigating SARS-CoV-2 transmission by social distancing. Finally, the appearance of pseudoscientific quackery in times of a global pandemic is deeply disturbing [14,15] and should be dealt with sternly. We are already at the eleventh hour and must act now in unison to achieve the best possible outcomes for our patients.

## Conflicts of Interest

The author declares no conflict of interest.

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