



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.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

Risk of COVID-19 for patients with cancer

The outbreak of coronavirus disease 2019 (COVID-19) is of international concern. We appreciated the Comment from Wenhua Liang and colleagues¹ published in *The Lancet Oncology* on Feb 14, 2020, which, to the best of our knowledge, was the first to focus on COVID-19 infection in patients with cancer.

The authors concluded by use of epidemiological statistics that because the proportion of patients with cancer histories was higher in a cohort with COVID-19 than in the population in China, patients with cancer were more likely to develop COVID-19. They found 18 COVID-19 patients with cancer histories among 1590 COVID-19 patients from 575 hospitals in 31 provincial regions. Of these 16 patients (two of the 18 patients had unknown treatment status), only four had undergone surgery or chemotherapy within the previous month; 12 had recovered from initial cancer treatments (eg, surgery or chemotherapy) and had no obvious immunosuppression. We therefore do not think the COVID-19 infections in the 12 survivors of previous cancers were associated with their cancers. COVID-19 is a highly contagious infection to which everyone, to our knowledge, is susceptible; the most important morbidity factor is exposure to an infection source.²

Furthermore, although the authors indicate that patients with cancer had worse outcomes from COVID-19, they also reported the median age of these patients (63.1 years) to be significantly higher than for those without cancer (48.7 years), suggesting that older age is associated with worse COVID-19 outcomes.³

In this COVID-19 outbreak, the major risk for patients with cancer is the inability to receive necessary medical services (both in terms of getting to hospital and provision of normal

medical care once there) because of the outbreak. Since January, 2020, more than 30 000 medical workers have gone to Wuhan to help manage patients, prevent the spread of COVID-19, and contain the outbreak, which has affected medical services outside Wuhan because there are now fewer doctors in those regions. Patients are also advised not to visit hospitals because of infection risk. Consequently, some clinical trials are being delayed; enforced quarantine, as is widely the case in Wuhan, complicates hospital attendance for repeat appointments and continuity in care, and when severe complications or emergencies occur in patients with advanced cancers, treatment delays or unavailability are possible concerns. Adverse effects among patients who receive immune checkpoint inhibitors (such as for severe myocarditis and pneumonitis)⁴ are more challenging to diagnose and might not be treated promptly, which might affect their survival.

During this epidemic, in addition to better protection, patients with cancer need online medical counselling and appropriate identification and treatment of critical cases. In endemic areas outside Wuhan, decisions on whether or not to postpone cancer treatment need to be made on a patient-by-patient basis and according to the risk to the patient and the prevailing situation because delays could lead to tumour progression and ultimately poorer outcomes.

We declare no competing interests.

Hanping Wang, *Li Zhang
zhanglipumch1026@sina.com

Department of Respiratory Medicine, Peking Union Medical College Hospital, Peking Union Medical College and Chinese Academy of Medical Sciences, 100730 Beijing, China

- 1 Liang W, Guan W, Chen R, et al. Cancer patients in SARS-CoV-2 infection: a nationwide analysis in China. *Lancet Oncol* 2020; published online Feb 14. [http://dx.doi.org/10.1016/S1470-2045\(20\)30096-6](http://dx.doi.org/10.1016/S1470-2045(20)30096-6).
- 2 Chen N, Zhou M, Dong X, et al. Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. *Lancet* 2020; **395**: 507–13.

- 3 Wang D, Hu B, Hu C, et al. Clinical characteristics of 138 hospitalized patients with 2019 novel coronavirus-infected pneumonia in Wuhan, China. *JAMA* 2020; published online Feb 7. DOI:10.1001/jama.2020.1585.
- 4 Wang Y, Zhou S, Yang F, et al. Treatment-related adverse events of PD-1 and PD-L1 inhibitors in clinical trials: a systematic review and meta-analysis. *JAMA Oncol* 2019; **5**: 1008–19.

Published Online
March 3, 2020
[https://doi.org/10.1016/S1470-2045\(20\)30149-2](https://doi.org/10.1016/S1470-2045(20)30149-2)