

Cancer patients should be considered as a high risk priority target in the coronavirus disease 2019 vaccination process

To the Editor,

We read with great interest the study published by Rajan et al.¹ which successfully demonstrates the significant impact of the coronavirus disease 2019 (COVID-19) pandemic on disruptions in cancer care delivery from cancer patients' perspective. The authors not only explained the importance of prioritizing cancer care during the pandemic but also encouraged us to be prepared to deliver and maintain the same quality care during global crises in general.

In addition to the unpredictable COVID-19 pandemic events and factors, such as curfew, lockdown, and new breakouts, maintaining quality care for cancer patients may also depend on the patient's condition in terms of immunosuppressive changes due to their treatments, making them more susceptible to COVID-19 infections.² Given the weakened immune system in these patients, the question lies on whether the immune system can generate an appropriate immune response against the COVID-19 vaccine or develop an elevated risk of COVID-19 vaccine complications.³

It is usually common to exclude these patients from vaccine trials, which often raises the question of whether or not they should receive the COVID-19 vaccine.⁴ However, recent trials of messenger RNA-based COVID-19 vaccine showed 95% and 94.1% efficacy, and reported no significant safety concerns.³ Moreover previous studies showed no evidence of increased complications from prior vaccine administration in patients under immunotherapy.⁵ Additionally, cancer patients undergoing surgery who may have contracted the severe acute respiratory syndrome coronavirus 2 preoperatively are subject to an elevated risk of postoperative mortality and pulmonary complications, as reported by the COVIDSurg Collaborative in their recent international cohort study.^{6,7} These factors altogether may suggest the urgent need to establish deep and long-lasting measures to protect the vulnerable population of patients with cancer^{6,8} which may be achieved through priority vaccination against COVID-19, especially in low to middle-income countries (LMIC).

To date, based on the increased risk of mortality by COVID-19 infection in patients under cancer therapies⁵ as well as their frequent exposure to healthcare workers in the context of limited supply of vaccines, in particular in LMIC,^{9,10} we urge the scientific community to further focus on cancer patients during this pandemic and to consider them as a high-risk priority target

line in the COVID-19 vaccination process. These patients must benefit from an early vaccination, especially those with advanced-stage cancer and high risk of COVID-19 complications, and equally those with hematologic malignancies and lung cancer.


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