

MAY 2021

CONSENSUS STATEMENT

# COVID-19 VACCINATION

FOR PATIENTS WITH SOLID TUMORS

CHAPTER OF MEDICAL ONCOLOGISTS  
COLLEGE OF PHYSICIANS, SINGAPORE



ACADEMY OF MEDICINE  
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## BACKGROUND/KEY POINTS

- ❖ Persons with active cancer are at increased risk of complications from SARS-CoV-2.
- ❖ Patients with cancers were not included in any of the initial COVID-19 vaccine trials. As such, there is no data from clinical trials available on vaccine safety and efficacy in this group of patients at present.
- ❖ There are no reports of increased risk for side effects from COVID-19 vaccines in patients with cancer as compared to the general population, but published safety data are currently limited for cancer patients.
- ❖ International guidelines recognize the paucity of data but weighing the risk and benefits, NCCN, MSKCC, ASCO and ESMO guidelines recommend COVID vaccination to cancer patients, including patients on treatment. Patients on immune checkpoint inhibitors are not specifically excluded.

## GUIDELINES

### LOW RISK PATIENT GROUPS

Low-risk patient groups are suitable to receive COVID vaccination in the community setting at vaccination centres as per current MOH issued guidelines.

These include:

1. Patients with a history of cancer who are in remission.
2. Patients on hormonal therapy for cancer.
3. Patients with active cancer, who are not on systemic anti-cancer treatment with chemotherapy, radiotherapy, targeted therapy/tyrosine kinase inhibitors (TKIs) or immunotherapy, where active cancer not on treatment is defined as:
  - a. Not on any treatment for the past 3 months **AND**
  - b. No planned treatment in the next 2 months.

Patients who meet the above criteria should be allowed to proceed with COVID vaccination at vaccination centres without requiring further specific discussion or documentation with treating oncologist.

### PATIENTS ON ACTIVE ANTI-CANCER THERAPY

Patients who are on active anti-cancer therapy should have a discussion with their treating oncologist regarding the risk-benefit of COVID vaccination while on anti-cancer therapy.

#### 1) Patients on targeted therapy/TKIs

Patients stable on targeted therapy/TKIs should have a discussion with their treating oncologist. Patients on targeted therapy/TKIs who choose to proceed with COVID vaccination after counselling should be vaccinated in the hospital setting.

*\*Targeted therapy includes drugs or monoclonal antibodies, which do not contain a chemotherapy moiety or directly target an immunological target (e.g. immune checkpoints).*

## 2) Patients on chemotherapy

Patients on chemotherapy may proceed with COVID vaccination after discussion with their treating oncologist. Patients should be counselled on the limited safety and efficacy data currently available from the initial COVID vaccine trials for cancer patients on treatment. The efficacy of COVID vaccination could potentially be lower in patients who are immunosuppressed from anti-cancer therapy. There should be a documented discussion with the oncologist about this unknown.

Patients on chemotherapy who choose to proceed with COVID vaccination after counselling should be vaccinated in the hospital setting. It is particularly important for patients on chemotherapy to complete both doses of mRNA vaccine<sup>1</sup>.

## 3) Patients on immune checkpoint inhibitors (ICIs)

Patients on ICIs may proceed with COVID vaccination after discussion with their treating oncologist. In these patients, there is a theoretical concern that they may be at greater risk for immune related adverse events after receiving the vaccine. There is limited data available on this presently<sup>2</sup>. There should be a documented discussion with the oncologist about this unknown.

Patients on ICIs who choose to proceed with COVID vaccination after counselling should be vaccinated in the hospital setting.

Recommendations and guidelines may be updated as more data becomes available.

## REFERENCES

- [1] *Monin-Aldama et al. medRxiv preprint* <https://doi.org/10.1101/2021.03.17.21253131>

A UK study in preprint reports reduced serological response to vaccination amongst cancer patients on chemotherapy compared to the general population with 1 dose of vaccine, although serological response is nearly complete if cancer patients receive the 2<sup>nd</sup> dose.

- [2] *Waissengrin et al. Lancet Oncology published online 1<sup>st</sup> April 2021* [https://doi.org/10.1016/S1470-2045\(21\)00155-8](https://doi.org/10.1016/S1470-2045(21)00155-8)

An Israeli study reports experience of 170 cancer patients on immune checkpoint inhibitors. There was no new immune-related adverse events or exacerbation of previous immune-related adverse events. There was mild increased arm ache, but adverse events were similar to the general population. Patients with previous ICI-immune-related adverse events also tolerated the vaccine well.

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