

IPCRG practice driven answers on COVID-19 and respiratory questions



What is the optimal time for COVID-19 vaccinations for people with post-COVID disease and do they require one or two vaccine doses of dual-dose vaccines?

What the research says

There is currently no evidence-based recommendation for the minimum or optimal interval between SARS-CoV-2 infection and COVID-19 vaccination. The World Health Organization recommends SARS-CoV-2 vaccination with the Pfizer-BioNTech vaccine should be deferred in patients with acute COVID-19 illness until the acute illness has been resolved (WHO 2021). While there is no specific guidance on vaccination of patients with ongoing COVID-19 symptoms (long-COVID, post-COVID illness), the US Centers for Disease control recommend that people should be offered vaccination regardless of

whether they have previously had SARS-CoV-2 infection including those with prolonged post-COVID symptoms (CDC 2021). This is particularly important as evidence suggests that while the risk of SARS-CoV-2 reinfection is low in the months following an initial infection, waning immunity may increase the possibility of reinfection (CDC 2021).

Observational data suggests SARS-CoV-2 vaccination is not associated with symptoms worsening or an increased incidence of adverse events among patients with long-COVID (Arnold et al 2021, Raw et al 2021). Anecdotal evidence from patient advocacy groups in the US and the UK suggest that around half of patients with long-COVID might experience improvement or even resolution of their symptoms following COVID-19 vaccination. Research in this area is underway.

For vaccines requiring two doses there is no evidence to indicate whether individuals with prior SARS-CoV-2 infection require one or both doses. National guidelines vary and a selection are provided in the table below.

Country	Recommendation
The Netherlands	<ul style="list-style-type: none"> A single vaccine dose should be given if the infection was within the previous 6 months and both doses if the infection was more the 6 months prior Vaccination can be undertaken from 8 weeks following a positive COVID test (lateral flow or PCR) or symptom onset
Portugal	A single dose should be given if the infection was within the previous 6 months
Greece	A single dose should be given 6 months after infection
Malaysia	Vaccination should be deferred until the person has recovered from the acute illness (if symptomatic) and they have met criteria to discontinue isolation

What this means for your clinical practice

- Vaccination may be considered once the acute symptoms have resolved and any mandatory isolation requirements have been met
- Patients with long-COVID should receive SARS-CoV-2 vaccination according to National guidelines
- Some patients may be unsure about having a second vaccine dose where they have also been infected with SARS-CoV-2 after a first vaccine dose. National guidelines should be consulted where available. Otherwise a clinical risk assessment should be performed based on patient factors, such as risk of severe disease versus population factors such as current risk of being infected and known rates of adverse effects in populations with similar characteristics to the patient e.g. age, pregnancy or other co-morbidity.

Useful links and supporting references

Arnold DT, et al. Are vaccines safe in patients with Long COVID? A prospective observational study. Available at: [Are vaccines safe in patients with Long COVID? A prospective observational study | medRxiv](#). Accessed June 2021.

Useful links and supporting references continued

Centers for Disease Control. Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Authorized in the United States <https://www.cdc.gov/vaccines/covid-19/clinical-considerations/covid-19-vaccines-us.html>. Accessed June 2021.

Raw RK, et al. Previous COVID-19 infection, but not Long-COVID, is associated with increased adverse events following BNT162b2/Pfizer vaccination. J Infection 2021. Available at: [Previous COVID-19 infection, but not Long-COVID, is associated with increased adverse events following BNT162b2/Pfizer vaccination - Journal of Infection](#). Accessed June 2021.

World Health Organization (2021). Interim recommendations for use of the Pfizer-BioNTech COVID-19 vaccine, BNT162b2, under Emergency Use Listing. Available at: https://www.who.int/publications/i/item/WHO-2019-nCoV-vaccines-SAGE_recommendation-BNT162b2-2021.1. Accessed June 2021.

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