

IPCRG practice driven answers on COVID-19 and respiratory questions



What are the benefits of doses of the SARS-CoV-2 vaccines beyond the initial vaccination course?

What the research says

Protection against severe COVID-19 illness from current SARS-CoV-2 vaccines appears to begin to wane after about 6 months (Unpublished data from vaccine manufacturers; JCVI 2021). For this reason, an additional dose may be needed as part of a regular vaccination course. Studies are ongoing to evaluate the effectiveness of booster vaccination given at least 6 months after completion of initial vaccination. Early results indicate a robust immune response following vaccine booster doses (Li et al 2021). In the UK, adults considered at high risk for severe COVID-19 illness will be prioritised for booster vaccination: all adults over 70 years of age, adults (>16 years) who are clinically extremely vulnerable, those living in residential care homes or elderly care, frontline health and social care workers, and adults >16 years who are immunocompromised (JCVI 2021). In the US it appears that the recommendation will be for all adults to receive booster vaccination 8 months after completing their initial vaccination – a programme which is planned to start in September 2021. The European Centre for Disease Prevention and Control continue to monitor the data to support the benefits of booster doses (EMA 2021).

What this means for your clinical practice

- SARS-CoV-2 vaccine booster programs should be initiated according to National guidelines. Country policy may vary from current WHO advice that states at the time of writing: “In the context of ongoing global vaccine supply constraints, administration of booster doses will exacerbate inequities by driving up demand and consuming scarce supply while priority populations in some countries, or subnational settings, have not yet received a primary vaccination series. The focus for the time being remains on increasing global vaccination coverage with the primary series.”
- Booster programs where initiated should ideally be at or near 6 months, or more after initial vaccination
- We recognise that people with cancer and other immune suppressive issues (e.g. those on immunosuppressive therapy including long-term corticosteroids, those with HIV/AIDS, those with haematological conditions such as sickle cell disease and those with a primary immunodeficiency disorder) may be at higher risk and you should review condition specific protocols or seek disease specialist advice in these scenarios.

Useful links and supporting references

EMA. EMA and ECDC update on COVID-19. 14 July 2021. Available at : <https://www.ema.europa.eu/en/news/ema-ecdc-update-covid-19>. Accessed August 2021.

JCVI interim advice: potential COVID-19 booster vaccine programme winter 2021 to 2022. Available at: <https://www.gov.uk/government/publications/jcvi-interim-advice-on-a-potential-coronavirus-covid-19-booster-vaccine-programme-for-winter-2021-to-2022/jcvi-interim-advice-potential-covid-19-booster-vaccine-programme-winter-2021-to-2022#fn:6>. Accessed July 2021.

Li M, et al. A booster dose is immunogenic and will be needed for older adults who have completed two doses vaccination with CoronaVac: a randomised, double-blind, placebo-controlled, phase 1/2 clinical trial. Pre-print. Available at: <https://doi.org/10.1101/2021.08.03.21261544>. Accessed September 2021.

WHO Interim statement on COVID-19 vaccine booster doses. Available at: <https://www.who.int/news/item/10-08-2021-interim-statement-on-covid-19-vaccine-booster-doses>. Accessed September 2021.

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