

EVIDENCE FOR PREVENTION OF INFECTION

3 Studies After September 1, 2022

1. Primary vaccination provides near 0% efficacy against BA.2 after 3 months

Study: Tsang, N., So, H., Cowling, B., et al. Effectiveness of BNT162b2 and CoronaVac COVID-19 vaccination against asymptomatic and symptomatic infection of SARS-CoV-2 omicron BA.2 in Hong Kong: a prospective cohort study. *The Lancet Infectious Diseases*. Online First (December 12th, 2022)

Findings:

- A primary vaccination series was 1.1% effective against BA.2 infection >3 months after one's 2nd dose

Overall: a primary vaccination series provides near 0% efficacy against BA.2 infection >3 months from one's second dose

2. Primary vaccination provides 0% efficacy against BA.1 or BA.2 after 9 months.

Study: UK Health Security Agency, COVID-19 Vaccine Surveillance Report, Week 48 (December 1st, 2022)

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1121345/vaccine-surveillance-report-week-48-2022.pdf

Overall: a primary vaccination series provides 0% efficacy against BA.1 or BA.2 infection >9 months from one's second dose

3. Primary vaccination provides 0% efficacy against Omicron.

Study: Intawong, K., Chariyalertsak, S., Chalom, K., et al. Effectiveness of heterologous third and fourth dose COVID-19 vaccine schedules for SARS-CoV-2 infection during delta and omicron predominance in Thailand: A test-negative, case-control study. *The Lancet Regional Health Southeast Asia*. 100121 (December 3rd, 2022)

Findings:

- A primary vaccination series was 0% effective against Omicron infection anytime after one's 2nd dose

Overall: a primary vaccination series provides 0% efficacy against Omicron infection regardless of timing after one's 2nd dose