

Table S3: Summary of quality assessment based on the Newcastle-Ottawa quality assessment scale for **cohort studies on transmission and secondary attack rates** [1].

Study	Design	Study quality								Overall quality (sum)	Reference
		S1	S2	S3	S4	C1	O1	O2	O3		
Meyer 2022	Retrospective cohort study	-	*		*	*	*	*	*	6	[2]
Jung 2022	Cohort study	-	-	*	*	-	*	-	*	4	[3]
Kang 2022	Cohort study	-	*	*	*	-	*		*	5	[4]
Layan 2022	Cohort study	-	*	*	*	*	*	*	*	7	[5]
Eyre 2022	Retrospective cohort study	*	*	*	*	*	*	*	*	8	[6]
Singanayagam 2022	Prospective cohort study	*	*	*	*	*	*	*	*	8	[7]
Baker 2022	Retrospective cohort study	*	-	*	-	*	*	*	*	6	[8]
Kelly 2022	Prospective cohort study	-	*	*	*	*	*	*	*	7	[9]
Muadchimaew 2022	Retrospective cohort study	-	*	-	-	*	-	-	*	3	[10]

Selection

S1: Representativeness of the exposed cohort (maximum: *)

S2: Selection of the non-exposed cohort (maximum: *)

S3: Ascertainment of exposure (complete vaccination of index case, or prior infection, respectively) (maximum: *)

S4: Demonstration that outcome of interest was not present at start of study (no detection of SARS-CoV-2 among any contact person) (maximum: *)

Comparability

C1: Comparability of cohorts on the basis of the design or analysis (contact persons: vaccination status of contacts, duration and frequency of contacts, frequency of COVID tests; proportion of recovered contact persons; physical distancing behaviour at home; hand hygiene behaviour at home) (maximum: **)

Outcome

O1: Assessment of outcome (SARS-CoV-2 detection in contact persons) (maximum: *)

O2: Was follow-up long enough for outcomes to occur? (time frame: 10 days) (maximum: ✱)

O3: Adequacy of follow up of cohorts (maximum: ✱)

References

1. Gierisch, J.M.; Beadles, C.; Shapiro, A.; McDuffie, J.R.; Cunningham, N.; Bradford, D.; Strauss, J.; Callahan, M.; Chen, M.; Hemminger, A.; et al. NEWCASTLE-OTTAWA SCALE CODING MANUAL FOR COHORT STUDIES. In *Health Disparities in Quality Indicators of Healthcare Among Adults with Mental Illness*; Department of Veterans Affairs (US), 2014; p. Appendix B.
2. Meyer, E.D.; Sandfort, M.; Bender, J.; Matysiak-Klose, D.; Dörre, A.; Bojara, G.; Beyrer, K.; Hellenbrand, W. BNT162b2 vaccination reduced infections and transmission in a COVID-19 outbreak in a nursing home in Germany, 2021. *Influenza Other Respi. Viruses* **2022**, 13051, doi:10.1111/IRV.13051.
3. Jung, J.; Kim, J.Y.; Park, H.; Park, S.; Lim, J.S.; Lim, S.Y.; Bae, S.; Lim, Y.-J.; Kim, E.O.; Kim, J.; et al. Transmission and Infectious SARS-CoV-2 Shedding Kinetics in Vaccinated and Unvaccinated Individuals. *JAMA Netw. Open* **2022**, 5, e2213606, doi:10.1001/JAMANETWORKOPEN.2022.13606.
4. Kang, S.W.; Kim, J.Y.; Park, H.; Lim, S.Y.; Kim, J.; Bae, S.; Jung, J.; Kim, M.J.; Chong, Y.P.; Lee, S.O.; et al. Comparison of outward transmission potential between vaccinated and partially vaccinated or unvaccinated individuals with the SARS-CoV-2 delta variant infection. *J. Infect.* **2022**, 85, e69, doi:10.1016/J.JINF.2022.06.002.
5. Layan, M.; Gilboa, M.; Gonen, T.; Goldenfeld, M.; Meltzer, L.; Andronico, A.; Hozé, N.; Cauchemez, S.; Regev-Yochay, G. Impact of BNT162b2 Vaccination and Isolation on SARS-CoV-2 Transmission in Israeli Households: An Observational Study. *Am. J. Epidemiol.* **2022**, 191, 1224–1234, doi:10.1093/AJE/KWAC042.
6. Eyre, D.W.; Taylor, D.; Purver, M.; Chapman, D.; Fowler, T.; Pouwels, K.B.; Walker, A.S.; Peto, T.E.A. Effect of Covid-19 Vaccination on Transmission of Alpha and Delta Variants. *N. Engl. J. Med.* **2022**, 386, 744–756, doi:10.1056/NEJMOA2116597.
7. Singanayagam, A.; Hakki, S.; Dunning, J.; Madon, K.J.; Crone, M.A.; Koycheva, A.; Derqui-Fernandez, N.; Barnett, J.L.; Whitfield, M.G.; Varro, R.; et al. Community transmission and viral load kinetics of the SARS-CoV-2 delta (B.1.617.2) variant in vaccinated and unvaccinated individuals in the UK: a prospective, longitudinal, cohort study. *Lancet Infect Dis* **2022**, 22, 183–195, doi:10.1016/S1473-3099(21)00648-4.
8. Baker, J.M.; Nakayama, J.Y.; O’Hegarty, M.; McGowan, A.; Teran, R.A.; Bart, S.M.; Mosack, K.; Roberts, N.; Campos, B.; Paegle, A.; et al. SARS-CoV-2 B.1.1.529 (Omicron) Variant Transmission Within Households — Four U.S. Jurisdictions, November 2021–February 2022. *Morb. Mortal. Wkly. Rep.* **2022**, 71, 341–346, doi:10.15585/MMWR.MM7109E1.
9. Kelly, J.D.; Lu, S.; Anglin, K.; Garcia-Knight, M.; Pineda-Ramirez, J.; Goldberg, S.A.; Tassetto, M.; Zhang, A.; Donohue, K.; Davidson, M.C.; et al. Magnitude and determinants of SARS-CoV-2 household transmission: a longitudinal cohort study. *Clin. Infect. Dis.* **2022**, 75, S193–S204, doi:10.1093/CID/CIAC545.
10. Muadchimkaew, M.; Siripongboonsitti, T.; Wongpatcharawarakul, S.; Boonsankaew, C.; Tawinprai, K.; Soonklang, K.; Mahanonda, N. Effect of Inactivated SARS-CoV-2 Vaccines and ChAdOx1 nCoV-19 Vaccination to Prevent COVID-19 in Thai Households (VacPrevent trial). *Int. J. Infect. Dis.* **2022**, 124, 190–198, doi:10.1016/J.IJID.2022.09.032.

