

## References

- Ogata T, Tanaka H. SARS-CoV-2 incubation period during the Omicron BA.5-dominant period in Japan. *Emerg Infect Dis.* 2023;29:595–8. <https://doi.org/10.3201/eid2903.221360>
- Tanaka H, Ogata T, Shibata T, Nagai H, Takahashi Y, Kinoshita M, et al. Shorter incubation period among COVID-19 cases with the BA.1 Omicron variant. *Int J Environ Res Public Health.* 2022;19:6330. <https://doi.org/10.3390/ijerph19106330>
- Manica M, De Bellis A, Guzzetta G, Mancuso P, Vicentini M, Venturelli F, et al.; Reggio Emilia COVID-19 Working Group. Intrinsic generation time of the SARS-CoV-2 Omicron variant: an observational study of household transmission. *Lancet Reg Health Eur.* 2022;19:100446. <https://doi.org/10.1016/j.lanepe.2022.100446>
- Liu Y, Zhao S, Ryu S, Ran J, Fan J, He D. Estimating the incubation period of SARS-CoV-2 Omicron BA.1 variant in comparison with that during the Delta variant dominance in South Korea. *One Health.* 2022;15:100425. <https://doi.org/10.1016/j.onehlt.2022.100425>
- Du Z, Liu C, Wang L, Bai Y, Lau EHY, Wu P, et al. Shorter serial intervals and incubation periods in SARS-CoV-2 variants than the SARS-CoV-2 ancestral strain. *J Travel Med.* 2022;29:taac052. <https://doi.org/10.1093/jtm/taac052>

Address for correspondence: Andrei R. Akhmetzhanov, National Taiwan University, College of Public Health, No. 17 Xuzhou Rd., Zhongzheng District, Taipei 10055, Taiwan; email: akhmetzhanov@ntu.edu.tw

## Tsuyoshi Ogata, Hideo Tanaka

Author affiliations: Itako Public Health Center of Ibaraki Prefectural Government, Ibaraki, Japan (T. Ogata); Public Health Center of Neyagawa City, Osaka, Japan (H. Tanaka)

DOI: <https://doi.org/10.3201/eid3001.231487>

**In Response:** We thank Dr. Cheng and colleagues (1) for their valuable comments regarding our study of incubation periods observed for the SARS-CoV-2 Omicron BA.5 subvariant in Japan (2). As we indicated in our study limitations paragraph, “patient pairs with long incubation periods might be censored during observational periods, and selection bias might result in underestimation” (2). We have several other comments to make regarding our study. First, our previous study during the increasing dominance of the Omicron BA.1 subvariant

only included patients who had 1 exposure day; we reported incubation periods of 3.0 days for L452R mutation-negative patients and 3.3 days for unvaccinated patients (3), which was similar to 3.2 days reported in a study of patients with BA.1 infections who had multiple exposure days (4). Therefore, the effect of only including patients who had 1 exposure day should be further evaluated. Second, the incubation period for the BA.5 subvariant in our study was 3.0 days for patients with infectors who were ≤19 years of age and 2.1 days for patients with infectors who were ≥60 years of age (2). Because those data are considerably different, adjustment for demographic factors for both infectors and infectees might be necessary to compare incubation periods. Third, although including patients with multiple exposure days decreases selection bias, it might increase uncertainty regarding the actual time of infection (5). Therefore, comparing incubation periods in studies that use various methods and evaluating corresponding study limitations are useful for review and discussion.

## References

- Cheng HY, Akhmetzhanov AR, Dushoff J. SARS-CoV-2 incubation period during Omicron BA.5-dominant period, Japan. *Emerg Infect Dis.* 2024 Jan [date cited]. <https://doi.org/10.3201/eid3001.230208>
- Ogata T, Tanaka H. SARS-CoV-2 incubation period during the Omicron BA.5-dominant period in Japan. *Emerg Infect Dis.* 2023;29:595–8. <https://doi.org/10.3201/eid2903.221360>
- Tanaka H, Ogata T, Shibata T, Nagai H, Takahashi Y, Kinoshita M, et al. Shorter incubation period among COVID-19 cases with the BA.1 Omicron variant. *Int J Environ Res Public Health.* 2022;19:6330. <https://doi.org/10.3390/ijerph19106330>
- Park SW, Sun K, Abbott S, Sender R, Bar-On YM, Weitz JS, et al. Inferring the differences in incubation-period and generation-interval distributions of the Delta and Omicron variants of SARS-CoV-2. *Proc Natl Acad Sci USA.* 2023; 120:e2221887120. <https://doi.org/10.1073/pnas.2221887120>
- McAloon C, Collins Á, Hunt K, Barber A, Byrne AW, Butler F, et al. Incubation period of COVID-19: a rapid systematic review and meta-analysis of observational research. *BMJ Open.* 2020;10:e039652. <https://doi.org/10.1136/bmjopen-2020-039652>

Address for correspondence: Tsuyoshi Ogata, Itako Public Health Center of Ibaraki Prefectural Government, Osu1446-1, Itako, Ibaraki 311-2422, Japan; email: kenkoukikikanri@gmail.plala.or.jp