[1]: Fitted to match variant specific reinfection data (EMS).
[2]: Effectiveness calculated from all EMS-registered cases/reinfections between Oct 1st to Nov 1st,2021
[3]: Calibrated using the agent-based epidemics model.
[4]: Assuming equal cross immunity against all Omicron subtypes (original data for BA.1 to BA.2)
[5]: Tseng, Hung Fu, Bradley K Ackerson, Yi Luo, Lina S Sy, Carla Talarico, Yun Tian, Katia Bruxvoort, et al.2022. "Effectiveness of MRNA-1273 against SARS-CoV-2 Omicron and Delta Variants."MedRxiv
[6]: Vaccines estimated 30 percent less effective against BA.2 and BA.4/5 compared to BA.1
[7]: SARS-CoV-2 variants of concern and variants under investigation in England, Technical briefing 31, UK Health Security Agency, 2021-12-10
[8]: Estimated to be equally effective as 3rd dose