Supplementary Material for Durability of COVID-19 vaccine and infection induced immunity: a systematic review and meta-regression analysis

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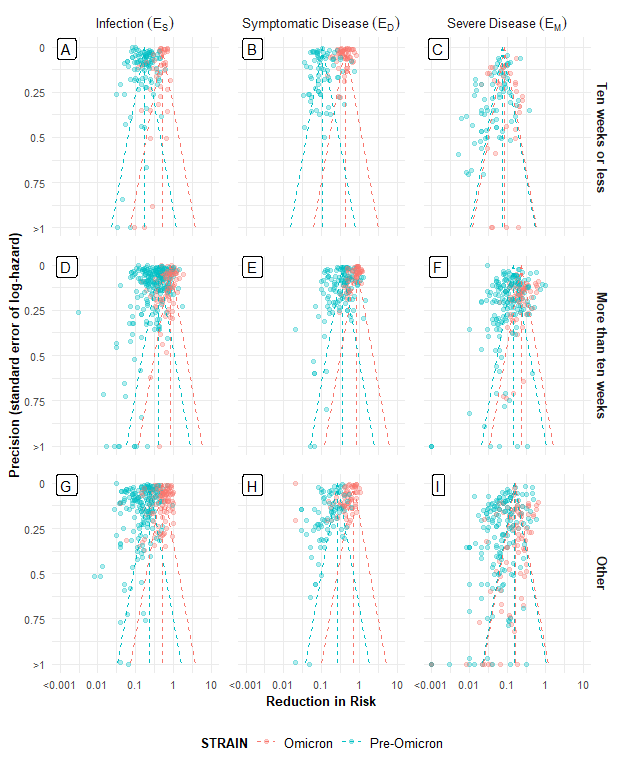
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**Supplementary Table S1.** Studies excluded from meta-analysis with reasons.

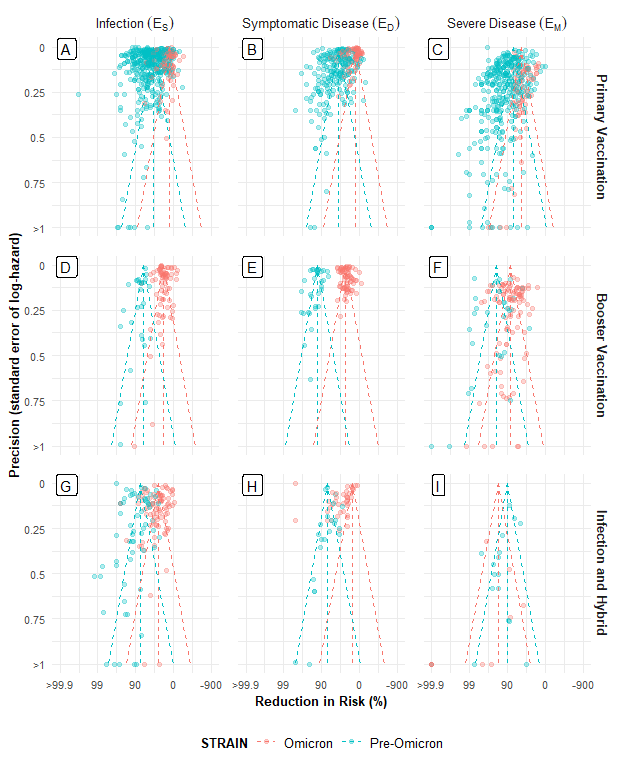
| **Study** | **Reason for exclusion** |
| --- | --- |
| Bansel *et al. Vaccines* 20221 | Outcome is severe infection conditional on infection |
| Barda *et al. The Lancet* 20212 | Comparator group is individuals with three vaccine doses |
| Gazit *et al. The BMJ* 20223 | Comparator group is individuals with three vaccine doses |
| Kirsebom *et al. The Lancet Regional Health-Europe* 20224 | Comparator group is individuals with primary vaccination |
| Magen *et al. New England Journal of Medicine* 20225 | Comparator group is individuals with three vaccine doses |
| McConeghy *et al. JAMA network open* 20226 | Comparator group is individuals with primary vaccination |
| Nielsen *et al. PLoS medicine* 20227 | Comparator group is individuals with prior infection |
| Nyberg *et al. The Lancet* 20228 | Outcome is severe infection conditional on infection |
| Patalon *et al. JAMA Internation Medicine* 20229 | Comparator group is individuals with primary vaccination |
| Patalon *et al. Nature Communcations* 202210 | Comparator group is individuals with primary vaccination |
| Sharma *et al. medRx* 202111 | Comparator group is individuals with primary vaccination |

**Supplementary Table S2.** Estimates used in meta-analysis.

| Study | Outcome | Type of Immunity (vs naive) | Strain | Estimate | Age range | Time since immune conferring event |
| --- | --- | --- | --- | --- | --- | --- |
| 1 | M | Primary series (no prior infection) | Pre-Omicron | 97.4 (93.0 - 99.0) | Adult/Elderly | 4 to 8 weeks |
| 1 | M | Primary series (no prior infection) | Pre-Omicron | 97.8 (83.7 - 99.7) | Adult/Elderly | 8 to 13 weeks |
| 1 | M | Primary series (no prior infection) | Pre-Omicron | 100.0 (55.0 - 100.0) | Adult/Elderly | 13 to 17 weeks |
| 1 | M | Primary series (no prior infection) | Pre-Omicron | 91.5 (60.8 - 98.1) | Adult/Elderly | 17 to 21 weeks |
| 1 | M | Primary series (no prior infection) | Pre-Omicron | 93.8 (53.6 - 99.2) | Adult/Elderly | 21 to 26 weeks |
| 1 | M | Primary series (no prior infection) | Pre-Omicron | 67.6 (-165.6 - 96.0) | Adult/Elderly | 26 to 30 weeks |
| 1 | M | Primary series (no prior infection) | Pre-Omicron | 100.0 (-146.7 - 100.0) | Adult/Elderly | 30 to 34 weeks |
| 1 | M | Primary series (no prior infection) | Pre-Omicron | 100.0 (-194.4 - 100.0) | Adult/Elderly | 34+ weeks |
| 1 | S | Primary series (no prior infection) | Pre-Omicron | 88.5 (87.2 - 89.7) | Adult/Elderly | 4 to 8 weeks |
| 1 | S | Primary series (no prior infection) | Pre-Omicron | 90.6 (88.7 - 92.1) | Adult/Elderly | 8 to 13 weeks |
| 1 | S | Primary series (no prior infection) | Pre-Omicron | 86.5 (83.8 - 88.8) | Adult/Elderly | 13 to 17 weeks |
| 1 | S | Primary series (no prior infection) | Pre-Omicron | 80.7 (77.0 - 83.8) | Adult/Elderly | 17 to 21 weeks |
| 1 | S | Primary series (no prior infection) | Pre-Omicron | 72.1 (66.7 - 76.7) | Adult/Elderly | 21 to 26 weeks |
| 1 | S | Primary series (no prior infection) | Pre-Omicron | 70.6 (62.7 - 76.8) | Adult/Elderly | 26 to 30 weeks |
| 1 | S | Primary series (no prior infection) | Pre-Omicron | 29.9 (13.1 - 43.5) | Adult/Elderly | 30 to 34 weeks |
| 1 | S | Primary series (no prior infection) | Pre-Omicron | 3.5 (-33.2 - 30.2) | Adult/Elderly | 34+ weeks |
| 1 | D | Primary series (no prior infection) | Pre-Omicron | 79.9 (75.5 - 83.4) | Adult/Elderly | 4 to 8 weeks |
| 1 | D | Primary series (no prior infection) | Pre-Omicron | 81.8 (75.2 - 86.6) | Adult/Elderly | 8 to 13 weeks |
| 1 | D | Primary series (no prior infection) | Pre-Omicron | 66.1 (52.7 - 75.7) | Adult/Elderly | 13 to 17 weeks |
| 1 | D | Primary series (no prior infection) | Pre-Omicron | 63.6 (48.8 - 74.2) | Adult/Elderly | 17 to 21 weeks |
| 1 | D | Primary series (no prior infection) | Pre-Omicron | 33.7 (3.7 - 54.4) | Adult/Elderly | 21 to 26 weeks |
| 1 | D | Primary series (no prior infection) | Pre-Omicron | 30.8 (-13.0 - 57.6) | Adult/Elderly | 26 to 30 weeks |
| 1 | D | Primary series (no prior infection) | Pre-Omicron | -46.6 (-115.6 - 0.2) | Adult/Elderly | 30 to 34 weeks |
| 1 | D | Primary series (no prior infection) | Pre-Omicron | -28.4 (-129.3 - 28.1) | Adult/Elderly | 34+ weeks |
| 2 | M | Primary series (no prior infection) | Omicron | 41.0 (25.0 - 54.0) | Adult/Elderly | 2+ weeks |
| 2 | M | Primary series (no prior infection) | Omicron | 36.0 (21.0 - 48.0) | Adult/Elderly | 2+ weeks |
| 2 | M | Primary series (no prior infection) | Omicron | 34.0 (21.0 - 45.0) | Adult/Elderly | 151+ days |
| 2 | M | Primary series (no prior infection) | Omicron | 53.0 (33.0 - 67.0) | Adult/Elderly | 14 to 150 days |
| 2 | M | Primary series + booster dose (no prior infection) | Omicron | 65.0 (55.0 - 73.0) | Adult/Elderly | 2+ weeks |
| 2 | M | Primary series + booster dose (no prior infection) | Omicron | 68.0 (17.0 - 88.0) | Adult/Elderly | 2+ weeks |
| 2 | M | Primary series + booster dose (no prior infection) | Omicron | 64.0 (55.0 - 72.0) | Adult/Elderly | 2+ weeks |
| 2 | M | Primary series + booster dose (no prior infection) | Omicron | 73.0 (44.0 - 87.0) | Adult/Elderly | 2+ weeks |
| 2 | M | Primary series + booster dose (no prior infection) | Omicron | 76.0 (69.0 - 81.0) | Adult/Elderly | 7 to 120 days |
| 2 | M | Primary series + booster dose (no prior infection) | Omicron | 39.0 (22.0 - 53.0) | Adult/Elderly | 121+ days |
| 2 | M | Primary series + booster dose (no prior infection) | Omicron | 62.0 (35.0 - 78.0) | Adult/Elderly | 7 to 120 days |
| 3 | S | Prior pre-Omicron 2infection | Pre-Omicron | 91.0 (34.5 - 98.8) | Adult/Elderly | 36 to 56 weeks |
| 3 | S | Prior pre-Omicron 2infection | Pre-Omicron | 89.4 (22.6 - 98.5) | Adult/Elderly | 12 to 32 weeks |
| 3 | S | Prior pre-Omicron 2infection | Pre-Omicron | 93.4 (87.6 - 96.5) | Adult/Elderly | 12 to 32 weeks |
| 3 | S | Prior pre-Omicron 2infection | Pre-Omicron | 91.1 (83.3 - 95.3) | Adult/Elderly | 36 to 56 weeks |
| 3 | S | Prior pre-Omicron 2infection | Pre-Omicron | 87.1 (59.4 - 95.9) | Adult/Elderly | 60+ weeks |
| 3 | S | Prior pre-Omicron 2infection | Omicron | 59.6 (50.7 - 67.0) | Adult/Elderly | 60+ weeks |
| 3 | S | Prior pre-Omicron 2infection | Omicron | 64.0 (54.7 - 71.4) | Adult/Elderly | 12 to 32 weeks |
| 3 | S | Prior pre-Omicron 2infection | Omicron | 47.2 (37.5 - 55.4) | Adult/Elderly | 36 to 56 weeks |
| 3 | M | Prior pre-Omicron 2infection | Pre-Omicron | 69.4 (-143.6 - 96.2) | Adult/Elderly | 2+ weeks |
| 3 | M | Prior pre-Omicron 2infection | Pre-Omicron | 100.0 (43.3 - 100.0) | Adult/Elderly | 2+ weeks |
| 3 | M | Prior pre-Omicron 2infection | Omicron | 87.8 (47.5 - 97.1) | Adult/Elderly | 2+ weeks |
| 3 | D | Prior pre-Omicron 2infection | Pre-Omicron | 95.3 (66.0 - 99.3) | Adult/Elderly | 2+ weeks |
| 3 | D | Prior pre-Omicron 2infection | Pre-Omicron | 90.2 (81.9 - 94.6) | Adult/Elderly | 2+ weeks |
| 3 | D | Prior pre-Omicron 2infection | Omicron | 61.9 (48.2 - 72.0) | Adult/Elderly | 2+ weeks |
| 4 | M | Prior pre-Omicron 2infection | Omicron | 100.0 (15.1 - 100.0) | Adult | 2+ weeks |
| 4 | M | Prior pre-Omicron 2infection | Omicron | 73.4 (0.2 - 92.9) | Adult | 2+ weeks |
| 4 | D | Prior pre-Omicron 2infection | Omicron | 46.1 (39.5 - 51.9) | Adult | 2+ weeks |
| 4 | D | Prior pre-Omicron 2infection | Omicron | 50.2 (38.1 - 59.9) | Adult | 2+ weeks |
| 4 | D | Primary series (no prior infection) | Omicron | -1.1 (-7.1 - 4.6) | Adult | 2+ weeks |
| 4 | D | Primary series (no prior infection) | Omicron | -4.9 (-16.4 - 5.4) | Adult | 2+ weeks |
| 4 | D | Primary series + booster dose (no prior infection) | Omicron | 52.2 (48.1 - 55.9) | Adult | 2+ weeks |
| 4 | D | Primary series + booster dose (no prior infection) | Omicron | 59.6 (52.9 - 65.3) | Adult | 2+ weeks |
| 4 | D | Primary series (prior pre-Omicron infection) | Omicron | 55.1 (50.9 - 58.9) | Adult | 2+ weeks |
| 4 | D | Primary series (prior pre-Omicron infection) | Omicron | 51.7 (43.5 - 58.7) | Adult | 2+ weeks |
| 4 | D | Primary series + booster dose (prior pre-Omicron infection) | Omicron | 77.3 (72.4 - 81.4) | Adult | 2+ weeks |
| 4 | D | Primary series + booster dose (prior pre-Omicron infection) | Omicron | 74.4 (63.4 - 82.2) | Adult | 3+ weeks |
| 4 | M | Primary series (no prior infection) | Omicron | 76.8 (58.0 - 87.1) | Adult | 2+ weeks |
| 4 | M | Primary series (no prior infection) | Omicron | 96.8 (71.1 - 99.0) | Adult | 2+ weeks |
| 4 | M | Primary series + booster dose (no prior infection) | Omicron | 98.2 (91.9 - 99.6) | Adult | 2+ weeks |
| 4 | M | Primary series + booster dose (no prior infection) | Omicron | 97.5 (71.7 - 99.8) | Adult | 2+ weeks |
| 4 | M | Primary series + booster dose (prior pre-Omicron infection) | Omicron | 100.0 (82.6 - 100.0) | Adult | 2+ weeks |
| 4 | M | Primary series + booster dose (prior pre-Omicron infection) | Omicron | 100.0 (30.6 - 100.0) | Adult | 2+ weeks |
| 4 | M | Primary series (prior pre-Omicron infection) | Omicron | 97.8 (82.6 - 99.7) | Adult | 2+ weeks |
| 4 | M | Primary series (prior pre-Omicron infection) | Omicron | 96.2 (37.7 - 99.8) | Adult | 2+ weeks |
| 5 | S | Prior pre-Omicron 2infection | Omicron | 33.5 (29.3 - 37.5) | Adult | 2+ weeks |
| 5 | S | Prior Omicron infection | Omicron | 80.2 (78.7 - 81.7) | Adult | 2+ weeks |
| 5 | D | Prior pre-Omicron 2infection | Omicron | 38.1 (27.7 - 46.9) | Adult | 2+ weeks |
| 5 | D | Prior Omicron infection | Omicron | 84.5 (81.1 - 87.2) | Adult | 2+ weeks |
| 6 | S | Prior pre-Omicron 2infection | Pre-Omicron | 76.0 (73.0 - 79.0) | Adult | 30+ weeks |
| 6 | S | Prior pre-Omicron 2infection | Pre-Omicron | 92.0 (86.0 - 95.0) | Adult | 120 to 149 days |
| 6 | S | Prior pre-Omicron 2infection | Pre-Omicron | 93.0 (84.0 - 97.0) | Adult | 90 to 119 days |
| 6 | S | Prior pre-Omicron 2infection | Pre-Omicron | 95.0 (85.0 - 99.0) | Adult | 60 to 89 days |
| 6 | S | Prior pre-Omicron 2infection | Pre-Omicron | 86.0 (76.0 - 91.0) | Adult | 150 to 179 days |
| 6 | S | Prior pre-Omicron 2infection | Pre-Omicron | 84.0 (74.0 - 90.0) | Adult | 180 to 209 days |
| 6 | S | Prior pre-Omicron 2infection | Pre-Omicron | 70.0 (50.0 - 83.0) | Adult | 30 to 59 days |
| 6 | S | Prior pre-Omicron 2infection | Omicron | 34.0 (31.0 - 38.0) | Adult | 30+ weeks |
| 6 | S | Prior pre-Omicron 2infection | Omicron | 52.0 (45.0 - 58.0) | Adult | 180 to 209 days |
| 6 | S | Prior pre-Omicron 2infection | Omicron | 55.0 (46.0 - 62.0) | Adult | 120 to 149 days |
| 6 | S | Prior pre-Omicron 2infection | Omicron | 53.0 (43.0 - 60.0) | Adult | 150 to 179 days |
| 6 | S | Prior Omicron infection | Omicron | 63.0 (58.0 - 67.0) | Adult | 60 to 89 days |
| 6 | S | Prior Omicron infection | Omicron | 57.0 (52.0 - 62.0) | Adult | 90 to 119 days |
| 6 | S | Prior Omicron infection | Omicron | 73.0 (66.0 - 79.0) | Adult | 30 to 59 days |
| 6 | D | Prior pre-Omicron 2infection | Pre-Omicron | 77.0 (74.0 - 80.0) | Adult | 30+ weeks |
| 6 | D | Prior pre-Omicron 2infection | Pre-Omicron | 92.0 (86.0 - 95.0) | Adult | 120 to 149 days |
| 6 | D | Prior pre-Omicron 2infection | Pre-Omicron | 98.0 (86.0 - 100.0) | Adult | 60 to 89 days |
| 6 | D | Prior pre-Omicron 2infection | Pre-Omicron | 94.0 (83.0 - 98.0) | Adult | 90 to 119 days |
| 6 | D | Prior pre-Omicron 2infection | Pre-Omicron | 88.0 (78.0 - 93.0) | Adult | 180 to 209 days |
| 6 | D | Prior pre-Omicron 2infection | Pre-Omicron | 84.0 (73.0 - 90.0) | Adult | 150 to 179 days |
| 6 | D | Prior pre-Omicron 2infection | Pre-Omicron | 70.0 (48.0 - 83.0) | Adult | 30 to 59 days |
| 6 | D | Prior pre-Omicron 2infection | Omicron | 37.0 (33.0 - 40.0) | Adult | 30+ weeks |
| 6 | D | Prior pre-Omicron 2infection | Omicron | 53.0 (45.0 - 59.0) | Adult | 180 to 209 days |
| 6 | D | Prior pre-Omicron 2infection | Omicron | 54.0 (44.0 - 62.0) | Adult | 150 to 179 days |
| 6 | D | Prior pre-Omicron 2infection | Omicron | 51.0 (41.0 - 60.0) | Adult | 120 to 149 days |
| 6 | D | Prior Omicron infection | Omicron | 62.0 (57.0 - 67.0) | Adult | 60 to 89 days |
| 6 | D | Prior Omicron infection | Omicron | 55.0 (48.0 - 60.0) | Adult | 90 to 119 days |
| 6 | D | Prior Omicron infection | Omicron | 73.0 (66.0 - 80.0) | Adult | 30 to 59 days |
| 6 | D | Primary series (prior Omicron infection) | Omicron | 86.0 (81.0 - 90.0) | Adult | 30 to 59 days |
| 6 | D | Primary series (prior Omicron infection) | Omicron | 82.0 (73.0 - 87.0) | Adult | 60 to 89 days |
| 6 | D | Primary series (prior pre-Omicron infection) | Omicron | 63.0 (54.0 - 70.0) | Adult | 30+ weeks |
| 6 | D | Primary series (prior pre-Omicron infection) | Omicron | 68.0 (56.0 - 77.0) | Adult | 90 to 119 days |
| 6 | D | Primary series (prior pre-Omicron infection) | Omicron | 52.0 (39.0 - 62.0) | Adult | 180 to 209 days |
| 6 | D | Primary series (prior pre-Omicron infection) | Omicron | 52.0 (32.0 - 66.0) | Adult | 150 to 179 days |
| 6 | D | Primary series (prior pre-Omicron infection) | Omicron | 53.0 (32.0 - 67.0) | Adult | 120 to 149 days |
| 6 | D | Primary series + booster dose (prior Omicron infection) | Omicron | 81.0 (79.0 - 83.0) | Adult | 30 to 59 days |
| 6 | D | Primary series + booster dose (prior Omicron infection) | Omicron | 76.0 (72.0 - 79.0) | Adult | 60 to 89 days |
| 6 | D | Primary series + booster dose (prior pre-Omicron infection) | Omicron | 70.0 (50.0 - 82.0) | Adult | 90 to 119 days |
| 6 | S | Primary series (prior Omicron infection) | Omicron | 88.0 (86.0 - 89.0) | Adult | 60 to 89 days |
| 6 | S | Primary series (prior Omicron infection) | Omicron | 88.0 (85.0 - 91.0) | Adult | 30 to 59 days |
| 6 | S | Primary series (prior pre-Omicron infection) | Omicron | 85.0 (82.0 - 87.0) | Adult | 90 to 119 days |
| 6 | S | Primary series (prior pre-Omicron infection) | Omicron | 81.0 (75.0 - 86.0) | Adult | 120 to 149 days |
| 6 | S | Primary series (prior pre-Omicron infection) | Omicron | 66.0 (53.0 - 75.0) | Adult | 150 to 179 days |
| 6 | S | Primary series (prior pre-Omicron infection) | Omicron | 67.0 (52.0 - 77.0) | Adult | 180 to 209 days |
| 6 | S | Primary series (prior pre-Omicron infection) | Omicron | 68.0 (50.0 - 79.0) | Adult | 30+ weeks |
| 6 | S | Primary series + booster dose (prior Omicron infection) | Omicron | 81.0 (79.0 - 82.0) | Adult | 30 to 59 days |
| 6 | S | Primary series + booster dose (prior Omicron infection) | Omicron | 77.0 (73.0 - 80.0) | Adult | 60 to 89 days |
| 6 | S | Primary series + booster dose (prior pre-Omicron infection) | Omicron | 66.0 (46.0 - 79.0) | Adult | 90 to 119 days |
| 7 | D | Primary series (no prior infection) | Pre-Omicron | 91.3 (83.8 - 95.4) | All | 2+ weeks |
| 7 | D | Primary series (no prior infection) | Pre-Omicron | 86.4 (79.3 - 91.1) | All | 30+ days |
| 7 | D | Primary series (no prior infection) | Pre-Omicron | 81.5 (74.7 - 86.6) | All | 60+ days |
| 7 | D | Primary series (no prior infection) | Pre-Omicron | 76.4 (68.6 - 82.4) | All | 90+ days |
| 7 | D | Primary series (no prior infection) | Pre-Omicron | 70.8 (60.4 - 78.6) | All | 150+ days |
| 7 | D | Primary series (no prior infection) | Pre-Omicron | 64.7 (49.6 - 75.4) | All | 120+ days |
| 7 | D | Primary series (no prior infection) | Pre-Omicron | 58.0 (36.1 - 72.4) | All | 180+ days |
| 7 | D | Primary series (no prior infection) | Pre-Omicron | 53.2 (23.6 - 71.2) | All | 28+ weeks |
| 7 | D | Primary series (no prior infection) | Pre-Omicron | 50.8 (19.7 - 69.8) | All | 30+ weeks |
| 7 | D | Primary series (no prior infection) | Pre-Omicron | 42.9 (-0.1 - 67.1) | All | 240+ days |
| 7 | D | Primary series (no prior infection) | Pre-Omicron | 38.4 (-11.9 - 65.6) | All | 270+ days |
| 7 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 95.0 (82.8 - 98.6) | All | 1+ weeks |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 89.5 (89.3 - 89.7) | Adult | 14 to 69 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 92.4 (92.1 - 92.7) | Adult | 7 to 13 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 84.3 (83.7 - 84.8) | Adult | 14 to 69 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 88.3 (76.6 - 78.0) | Adult | 70 to 104 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 72.1 (71.2 - 72.9) | Adult | 105 to 139 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 72.9 (71.5 - 74.1) | Adult | 70 to 104 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 69.2 (67.7 - 70.6) | Adult | 20+ weeks |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 87.7 (86.0 - 89.2) | Adult | 7 to 13 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 79.6 (77.0 - 81.8) | Elderly | 14 to 69 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 69.4 (66.7 - 71.8) | Elderly | 70 to 104 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 63.1 (60.2 - 65.9) | Elderly | 105 to 139 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 54.9 (51.1 - 58.5) | Elderly | 140 to 174 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 51.8 (45.4 - 57.4) | Elderly | 25+ weeks |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 69.8 (52.4 - 80.8) | Adult | 105 to 139 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 60.0 (25.4 - 78.6) | Elderly | 7 to 13 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 93.8 (93.4 - 94.1) | All | 14 to 69 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 94.9 (93.6 - 95.9) | All | 14 to 69 days |
| 8 | D | Primary series (no prior infection) | Pre-Omicron | 94.8 (88.4 - 97.7) | All | 70 to 104 days |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 98.7 (96.3 - 97.3) | All | 14 to 69 days |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 96.8 (96.3 - 97.3) | All | 70 to 104 days |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 98.6 (97.9 - 99.1) | Adult | 14 to 69 days |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 99.2 (98.3 - 99.6) | Adult | 14 to 69 days |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 97.7 (96.9 - 98.3) | Adult | 70 to 104 days |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 94.9 (94.1 - 95.5) | All | 105 to 139 days |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 96.5 (95.3 - 97.4) | Adult | 105 to 139 days |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 95.8 (94.4 - 96.9) | Elderly | 70 to 104 days |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 99.2 (96.9 - 99.8) | Adult | 7 to 13 days |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 93.4 (91.6 - 94.7) | Elderly | 105 to 139 days |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 98.0 (95.9 - 99.1) | Elderly | 14 to 69 days |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 90.5 (87.6 - 92.7) | Elderly | 20+ weeks |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 93.8 (87.5 - 96.9) | Adult | 20+ weeks |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 97.7 (90.8 - 99.4) | All | 14 to 69 days |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 92.6 (81.6 - 97.0) | Elderly | 14 to 69 days |
| 8 | M | Primary series (no prior infection) | Pre-Omicron | 87.8 (-15.4 - 98.7) | Elderly | 10+ weeks |
| 9 | D | Primary series (no prior infection) | Pre-Omicron | 90.9 (89.6 - 92.0) | Adult/Elderly | 14 to 34 days |
| 9 | D | Primary series (no prior infection) | Pre-Omicron | 85.5 (84.5 - 86.5) | Adult/Elderly | 35 to 69 days |
| 9 | D | Primary series (no prior infection) | Pre-Omicron | 78.7 (78.0 - 79.4) | Adult/Elderly | 70 to 104 days |
| 9 | D | Primary series (no prior infection) | Pre-Omicron | 74.4 (73.8 - 74.9) | Adult/Elderly | 105 to 139 days |
| 9 | D | Primary series (no prior infection) | Pre-Omicron | 67.4 (66.5 - 68.2) | Adult/Elderly | 140 to 174 days |
| 9 | D | Primary series (no prior infection) | Pre-Omicron | 62.7 (61.6 - 63.7) | Adult/Elderly | 25+ weeks |
| 9 | D | Primary series (no prior infection) | Pre-Omicron | 94.5 (90.5 - 96.9) | Adult/Elderly | 14 to 34 days |
| 9 | D | Primary series (no prior infection) | Pre-Omicron | 91.8 (89.6 - 93.6) | Adult/Elderly | 35 to 69 days |
| 9 | D | Primary series (no prior infection) | Pre-Omicron | 84.1 (82.7 - 85.3) | Adult/Elderly | 70 to 104 days |
| 9 | D | Primary series (no prior infection) | Pre-Omicron | 82.8 (81.8 - 83.7) | Adult/Elderly | 105 to 139 days |
| 9 | D | Primary series (no prior infection) | Pre-Omicron | 76.2 (74.7 - 77.7) | Adult/Elderly | 140 to 174 days |
| 9 | D | Primary series (no prior infection) | Pre-Omicron | 80.4 (67.3 - 88.2) | Adult/Elderly | 25+ weeks |
| 9 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 92.3 (91.6 - 92.9) | Adult/Elderly | 7 to 13 days |
| 9 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 95.1 (94.8 - 95.4) | Adult/Elderly | 14 to 34 days |
| 9 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 91.8 (91.4 - 92.1) | Adult/Elderly | 35 to 69 days |
| 9 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 89.9 (89.2 - 90.5) | Adult/Elderly | 10+ weeks |
| 9 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 93.7 (92.7 - 94.6) | Adult/Elderly | 7 to 13 days |
| 9 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 96.6 (96.0 - 97.1) | Adult/Elderly | 14 to 34 days |
| 9 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 94.9 (93.0 - 96.2) | Adult/Elderly | 35 to 69 days |
| 9 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 95.5 (92.5 - 97.3) | Adult/Elderly | 7 to 13 days |
| 9 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 94.7 (89.3 - 97.3) | Adult/Elderly | 14 to 34 days |
| 9 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 95.3 (92.1 - 97.2) | Adult/Elderly | 7 to 13 days |
| 9 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 96.4 (91.4 - 98.5) | Adult/Elderly | 14 to 34 days |
| 9 | D | Primary series (no prior infection) | Omicron | 65.5 (63.9 - 67.0) | Adult/Elderly | 14 to 34 days |
| 9 | D | Primary series (no prior infection) | Omicron | 48.7 (47.1 - 50.2) | Adult/Elderly | 35 to 69 days |
| 9 | D | Primary series (no prior infection) | Omicron | 30.1 (28.7 - 31.5) | Adult/Elderly | 70 to 104 days |
| 9 | D | Primary series (no prior infection) | Omicron | 15.4 (14.2 - 16.6) | Adult/Elderly | 105 to 139 days |
| 9 | D | Primary series (no prior infection) | Omicron | 11.5 (10.1 - 12.9) | Adult/Elderly | 140 to 174 days |
| 9 | D | Primary series (no prior infection) | Omicron | 8.8 (7.0 - 10.5) | Adult/Elderly | 25+ weeks |
| 9 | D | Primary series (no prior infection) | Omicron | 75.1 (70.8 - 78.7) | Adult/Elderly | 14 to 34 days |
| 9 | D | Primary series (no prior infection) | Omicron | 52.8 (48.2 - 57.1) | Adult/Elderly | 35 to 69 days |
| 9 | D | Primary series (no prior infection) | Omicron | 35.6 (32.7 - 38.4) | Adult/Elderly | 70 to 104 days |
| 9 | D | Primary series (no prior infection) | Omicron | 25.3 (23.2 - 27.4) | Adult/Elderly | 105 to 139 days |
| 9 | D | Primary series (no prior infection) | Omicron | 15.0 (11.6 - 18.2) | Adult/Elderly | 140 to 174 days |
| 9 | D | Primary series (no prior infection) | Omicron | 14.9 (3.9 - 24.7) | Adult/Elderly | 25+ weeks |
| 9 | D | Primary series + booster dose (no prior infection) | Omicron | 66.9 (66.1 - 67.6) | Adult/Elderly | 7 to 13 days |
| 9 | D | Primary series + booster dose (no prior infection) | Omicron | 67.2 (66.5 - 67.8) | Adult/Elderly | 14 to 34 days |
| 9 | D | Primary series + booster dose (no prior infection) | Omicron | 55.0 (54.2 - 55.8) | Adult/Elderly | 35 to 69 days |
| 9 | D | Primary series + booster dose (no prior infection) | Omicron | 45.7 (44.7 - 46.7) | Adult/Elderly | 10+ weeks |
| 9 | D | Primary series + booster dose (no prior infection) | Omicron | 74.0 (73.1 - 74.9) | Adult/Elderly | 7 to 13 days |
| 9 | D | Primary series + booster dose (no prior infection) | Omicron | 73.9 (73.1 - 74.6) | Adult/Elderly | 14 to 34 days |
| 9 | D | Primary series + booster dose (no prior infection) | Omicron | 64.4 (62.6 - 66.1) | Adult/Elderly | 35 to 69 days |
| 9 | D | Primary series + booster dose (no prior infection) | Omicron | 64.3 (61.7 - 66.8) | Adult/Elderly | 7 to 13 days |
| 9 | D | Primary series + booster dose (no prior infection) | Omicron | 64.9 (62.3 - 67.3) | Adult/Elderly | 14 to 34 days |
| 9 | D | Primary series + booster dose (no prior infection) | Omicron | 68.1 (65.6 - 70.5) | Adult/Elderly | 7 to 13 days |
| 9 | D | Primary series + booster dose (no prior infection) | Omicron | 66.3 (63.7 - 68.8) | Adult/Elderly | 14 to 34 days |
| 10 | D | Primary series (no prior infection) | Pre-Omicron | 65.3 (64.7 - 65.9) | Adult | 2+ weeks |
| 10 | D | Primary series (no prior infection) | Pre-Omicron | 61.2 (59.8 - 62.5) | Adult | 2+ weeks |
| 10 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 93.9 (93.6 - 94.2) | Adult | 14 to 34 days |
| 10 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 94.4 (94.1 - 94.7) | Adult | 14 to 34 days |
| 10 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 92.9 (92.5 - 93.3) | Adult | 35 to 69 days |
| 10 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 92.1 (91.6 - 92.5) | Adult | 35 to 69 days |
| 10 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 92.1 (91.5 - 92.7) | Adult | 7 to 13 days |
| 10 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 88.9 (88.2 - 89.5) | Adult | 7 to 13 days |
| 10 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 93.0 (88.8 - 95.6) | Adult | 10+ weeks |
| 10 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 92.0 (87.5 - 94.8) | Adult | 10+ weeks |
| 10 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 94.8 (92.7 - 96.3) | Adult | 14 to 34 days |
| 10 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 96.7 (94.4 - 98.1) | Adult | 14 to 34 days |
| 10 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 89.9 (87.3 - 92.0) | Adult | 7 to 13 days |
| 10 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 91.9 (89.0 - 94.0) | Adult | 7 to 13 days |
| 10 | M | Primary series (no prior infection) | Pre-Omicron | 92.1 (90.8 - 93.2) | Adult | 2+ weeks |
| 10 | M | Primary series (no prior infection) | Pre-Omicron | 94.8 (93.3 - 96.0) | Adult | 2+ weeks |
| 10 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 98.6 (98.0 - 99.0) | Adult | 14 to 34 days |
| 10 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 98.5 (97.6 - 99.0) | Adult | 7 to 13 days |
| 10 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 98.7 (97.8 - 99.2) | Adult | 35 to 69 days |
| 10 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 98.8 (97.2 - 99.5) | Adult | 14 to 34 days |
| 10 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 99.1 (96.4 - 99.8) | Adult | 35 to 69 days |
| 10 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 98.9 (95.8 - 99.7) | Adult | 7 to 13 days |
| 11 | D | Primary series (no prior infection) | Pre-Omicron | 88.0 (82.0 - 93.0) | Adult/Elderly | 2 to 12 weeks |
| 11 | D | Primary series (no prior infection) | Pre-Omicron | 87.0 (38.0 - 97.0) | Adult/Elderly | 12 to 24 weeks |
| 11 | D | Primary series (no prior infection) | Omicron | 52.0 (40.0 - 62.0) | Adult/Elderly | 2 to 12 weeks |
| 11 | D | Primary series (no prior infection) | Omicron | 49.0 (34.0 - 61.0) | Adult/Elderly | 12 to 24 weeks |
| 11 | D | Primary series + booster dose (no prior infection) | Omicron | 74.0 (62.0 - 83.0) | Adult/Elderly | 2+ weeks |
| 12 | S | Primary series (no prior infection) | Pre-Omicron | 74.0 (65.0 - 82.0) | All | 2+ weeks |
| 13 | S | Primary series (no prior infection) | Pre-Omicron | 86.0 (79.0 - 91.0) | Adult/Elderly | 2 to 5 weeks |
| 13 | S | Primary series (no prior infection) | Pre-Omicron | 53.0 (47.0 - 59.0) | Adult/Elderly | 22 to 25 weeks |
| 13 | S | Primary series (no prior infection) | Pre-Omicron | 45.0 (39.0 - 51.0) | Adult/Elderly | 26+ weeks |
| 13 | S | Primary series (no prior infection) | Pre-Omicron | 77.0 (69.0 - 83.0) | Adult/Elderly | 6 to 13 weeks |
| 13 | S | Primary series (no prior infection) | Pre-Omicron | 57.0 (50.0 - 64.0) | Adult/Elderly | 18 to 21 weeks |
| 13 | S | Primary series (no prior infection) | Pre-Omicron | 60.0 (48.0 - 69.0) | Adult/Elderly | 14 to 17 weeks |
| 14 | M | Primary series (no prior infection) | Pre-Omicron | 93.5 (86.0 - 97.0) | Adult/Elderly | 2+ weeks |
| 14 | M | Primary series (no prior infection) | Pre-Omicron | 89.8 (89.2 - 90.5) | Adult/Elderly | 2+ weeks |
| 14 | M | Primary series (no prior infection) | Pre-Omicron | 78.0 (69.0 - 84.4) | Adult/Elderly | 2+ weeks |
| 14 | M | Primary series (no prior infection) | Pre-Omicron | 84.3 (83.6 - 84.9) | Adult/Elderly | 2+ weeks |
| 14 | S | Primary series (no prior infection) | Pre-Omicron | 91.5 (90.3 - 92.4) | Adult/Elderly | 2+ weeks |
| 14 | S | Primary series (no prior infection) | Pre-Omicron | 80.3 (80.1 - 80.6) | Adult/Elderly | 2+ weeks |
| 15 | S | Prior pre-Omicron 2infection | Pre-Omicron | 97.0 (97.0 - 97.0) | All | 8 to 16 weeks |
| 15 | S | Prior pre-Omicron 2infection | Pre-Omicron | 91.0 (90.0 - 91.0) | All | 20 to 24 weeks |
| 15 | S | Prior pre-Omicron 2infection | Pre-Omicron | 83.0 (82.0 - 84.0) | All | 4 to 8 weeks |
| 15 | S | Prior pre-Omicron 2infection | Pre-Omicron | 72.0 (65.0 - 78.0) | All | 68 to 72 weeks |
| 15 | M | Primary series (no prior infection) | Pre-Omicron | 96.0 (91.0 - 98.0) | All | 0 to 8 weeks |
| 15 | M | Primary series (no prior infection) | Pre-Omicron | 88.0 (82.0 - 92.0) | All | 32+ weeks |
| 15 | M | Primary series (no prior infection) | Pre-Omicron | 92.0 (90.0 - 93.0) | All | 0 to 8 weeks |
| 15 | M | Primary series (no prior infection) | Pre-Omicron | 83.0 (81.0 - 86.0) | All | 28 to 32 weeks |
| 15 | M | Primary series (no prior infection) | Pre-Omicron | 94.0 (92.0 - 96.0) | All | 0 to 8 weeks |
| 15 | M | Primary series (no prior infection) | Pre-Omicron | 81.0 (78.0 - 84.0) | All | 28 to 32 weeks |
| 15 | M | Primary series (no prior infection) | Pre-Omicron | 90.0 (89.0 - 91.0) | All | 0 to 8 weeks |
| 15 | M | Primary series (no prior infection) | Pre-Omicron | 75.0 (73.0 - 76.0) | All | 28 to 32 weeks |
| 15 | S | Primary series (no prior infection) | Pre-Omicron | 90.0 (89.0 - 91.0) | All | 0 to 8 weeks |
| 15 | S | Primary series (no prior infection) | Pre-Omicron | 65.0 (63.0 - 67.0) | All | 28 to 32 weeks |
| 15 | S | Primary series (no prior infection) | Pre-Omicron | 87.0 (86.0 - 87.0) | All | 0 to 8 weeks |
| 15 | S | Primary series (no prior infection) | Pre-Omicron | 53.0 (52.0 - 54.0) | All | 28 to 32 weeks |
| 16 | S | Prior pre-Omicron 2infection | Pre-Omicron | 83.0 (80.0 - 88.0) | All | 14 to 50 days |
| 16 | S | Prior pre-Omicron 2infection | Pre-Omicron | 64.0 (61.0 - 65.0) | All | 150 to 200 days |
| 16 | S | Prior pre-Omicron 2infection | Pre-Omicron | 79.0 (74.0 - 83.0) | All | 14 to 50 days |
| 16 | S | Primary series (no prior infection) | Pre-Omicron | 82.0 (79.0 - 84.0) | All | 14 to 50 days |
| 16 | S | Primary series (no prior infection) | Pre-Omicron | 72.0 (70.0 - 74.0) | All | 14 to 50 days |
| 16 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 82.0 (81.0 - 83.0) | All | 150 to 200 days |
| 17 | D | Prior pre-Omicron 2infection | Omicron | 23.0 (21.0 - 26.0) | Adult/Elderly | 2 to 74 weeks |
| 17 | D | Prior pre-Omicron 2infection | Omicron | 14.0 (12.0 - 17.0) | Adult/Elderly | 26 to 126 weeks |
| 17 | D | Prior pre-Omicron 2infection | Omicron | 39.0 (37.0 - 48.0) | Adult/Elderly | 2 to 22 weeks |
| 17 | D | Prior Omicron infection | Omicron | 75.0 (72.0 - 80.0) | Adult/Elderly | 2 to 48 weeks |
| 18 | S | Primary series (no prior infection) | Pre-Omicron | 95.1 (91.8 - 97.1) | Adult | 14 to 60 days |
| 18 | S | Primary series (no prior infection) | Pre-Omicron | 89.2 (85.4 - 92.0) | Adult | 61 to 90 days |
| 18 | S | Primary series (no prior infection) | Pre-Omicron | 86.2 (80.9 - 90.1) | Adult | 91 to 120 days |
| 18 | S | Primary series (no prior infection) | Pre-Omicron | 80.4 (71.7 - 86.4) | Adult | 121 to 150 days |
| 18 | S | Primary series (no prior infection) | Pre-Omicron | 80.0 (70.2 - 86.6) | Adult | 151 to 180 days |
| 18 | S | Primary series (no prior infection) | Pre-Omicron | 79.4 (68.8 - 86.3) | Adult | 151 to 180 days |
| 18 | S | Primary series (no prior infection) | Pre-Omicron | 52.9 (0.0 - 86.6) | Elderly | 14 to 60 days |
| 18 | S | Primary series (no prior infection) | Pre-Omicron | 85.7 (57.9 - 95.1) | Elderly | 61 to 90 days |
| 18 | S | Primary series (no prior infection) | Pre-Omicron | 85.8 (68.9 - 93.5) | Elderly | 91 to 120 days |
| 18 | S | Primary series (no prior infection) | Pre-Omicron | 62.3 (32.4 - 79.0) | Elderly | 121 to 150 days |
| 18 | S | Primary series (no prior infection) | Pre-Omicron | 90.8 (25.6 - 98.9) | Elderly | 151 to 180 days |
| 19 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 100.0 (98.0 - 100.0) | Adult/Elderly | 1+ weeks |
| 19 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 99.0 (98.0 - 99.0) | Adult/Elderly | 1+ weeks |
| 19 | M | Primary series (no prior infection) | Pre-Omicron | 99.0 (98.0 - 99.0) | Adult/Elderly | 120 to 179 days |
| 19 | M | Primary series (no prior infection) | Pre-Omicron | 97.0 (96.0 - 98.0) | Adult/Elderly | 180 to 239 days |
| 19 | M | Primary series (no prior infection) | Pre-Omicron | 98.0 (94.0 - 99.0) | Adult/Elderly | 60 to 119 days |
| 19 | M | Primary series (no prior infection) | Pre-Omicron | 94.0 (84.0 - 98.0) | Adult/Elderly | 7 to 59 days |
| 19 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (85.0 - 99.0) | Adult/Elderly | 240+ days |
| 19 | M | Primary series (no prior infection) | Omicron | 82.0 (62.0 - 91.0) | Adult/Elderly | 180 to 239 days |
| 19 | M | Primary series (no prior infection) | Omicron | 75.0 (51.0 - 87.0) | Adult/Elderly | 120 to 179 days |
| 19 | M | Primary series + booster dose (no prior infection) | Omicron | 93.0 (74.0 - 98.0) | Adult/Elderly | 1+ weeks |
| 19 | M | Primary series + booster dose (no prior infection) | Omicron | 95.0 (87.0 - 98.0) | Adult/Elderly | 1+ weeks |
| 19 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 97.0 (95.0 - 98.0) | Adult/Elderly | 1+ weeks |
| 19 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 97.0 (96.0 - 98.0) | Adult/Elderly | 1+ weeks |
| 19 | D | Primary series (no prior infection) | Pre-Omicron | 88.0 (87.0 - 89.0) | Adult/Elderly | 120 to 179 days |
| 19 | D | Primary series (no prior infection) | Pre-Omicron | 89.0 (87.0 - 90.0) | Adult/Elderly | 60 to 119 days |
| 19 | D | Primary series (no prior infection) | Pre-Omicron | 85.0 (83.0 - 87.0) | Adult/Elderly | 180 to 239 days |
| 19 | D | Primary series (no prior infection) | Pre-Omicron | 89.0 (86.0 - 92.0) | Adult/Elderly | 7 to 59 days |
| 19 | D | Primary series (no prior infection) | Pre-Omicron | 80.0 (74.0 - 84.0) | Adult/Elderly | 240+ days |
| 19 | D | Primary series + booster dose (no prior infection) | Omicron | 65.0 (55.0 - 72.0) | Adult/Elderly | 1+ weeks |
| 19 | D | Primary series + booster dose (no prior infection) | Omicron | 60.0 (55.0 - 65.0) | Adult/Elderly | 1+ weeks |
| 19 | D | Primary series (no prior infection) | Omicron | 15.0 (8.0 - 22.0) | Adult/Elderly | 120 to 179 days |
| 19 | D | Primary series (no prior infection) | Omicron | 12.0 (3.0 - 21.0) | Adult/Elderly | 60 to 119 days |
| 19 | D | Primary series (no prior infection) | Omicron | 1.0 (-8.0 - 10.0) | Adult/Elderly | 180 to 239 days |
| 19 | D | Primary series (no prior infection) | Omicron | 36.0 (24.0 - 45.0) | Adult/Elderly | 7 to 59 days |
| 19 | D | Primary series (no prior infection) | Omicron | 2.0 (-17.0 - 17.0) | Adult/Elderly | 240+ days |
| 20 | D | Primary series (no prior infection) | Pre-Omicron | 92.2 (87.8 - 95.1) | Adult/Elderly | 1+ weeks |
| 20 | M | Primary series (no prior infection) | Pre-Omicron | 92.6 (87.1 - 95.8) | Adult/Elderly | 1+ weeks |
| 20 | S | Primary series (no prior infection) | Pre-Omicron | 84.1 (34.9 - 96.1) | Adult/Elderly | 1+ weeks |
| 20 | S | Primary series (no prior infection) | Pre-Omicron | 85.5 (80.4 - 89.3) | Adult/Elderly | 1+ weeks |
| 21 | S | Prior pre-Omicron 2infection | Omicron | 38.0 (19.0 - 53.0) | Adult/Elderly | 2+ weeks |
| 21 | D | Prior pre-Omicron 2infection | Omicron | 51.0 (22.0 - 69.0) | Adult/Elderly | 2+ weeks |
| 21 | S | Prior Omicron infection | Omicron | 72.0 (65.0 - 78.0) | Adult/Elderly | 2+ weeks |
| 21 | D | Prior Omicron infection | Omicron | 86.0 (79.0 - 91.0) | Adult/Elderly | 2+ weeks |
| 21 | D | Primary series (prior pre-Omicron infection) | Omicron | 81.0 (76.0 - 85.0) | Adult/Elderly | 2+ weeks |
| 21 | D | Primary series (no prior infection) | Omicron | 61.0 (52.0 - 69.0) | Adult/Elderly | 2+ weeks |
| 21 | D | Primary series + booster dose (prior Omicron infection) | Omicron | 98.0 (98.0 - 99.0) | Adult/Elderly | 2+ weeks |
| 21 | D | Primary series + booster dose (prior pre-Omicron infection) | Omicron | 83.0 (78.0 - 86.0) | Adult/Elderly | 2+ weeks |
| 21 | D | Primary series + booster dose (no prior infection) | Omicron | 70.0 (62.0 - 75.0) | Adult/Elderly | 2+ weeks |
| 21 | D | Primary series (prior Omicron infection) | Omicron | 98.0 (97.0 - 98.0) | Adult/Elderly | 2+ weeks |
| 21 | S | Primary series (prior Omicron infection) | Omicron | 96.0 (95.0 - 96.0) | Adult/Elderly | 2+ weeks |
| 21 | S | Primary series (no prior infection) | Omicron | 35.0 (27.0 - 42.0) | Adult/Elderly | 2+ weeks |
| 21 | S | Primary series (prior pre-Omicron infection) | Omicron | 69.0 (64.0 - 73.0) | Adult/Elderly | 2+ weeks |
| 21 | S | Primary series + booster dose (prior Omicron infection) | Omicron | 96.0 (95.0 - 97.0) | Adult/Elderly | 2+ weeks |
| 21 | S | Primary series + booster dose (prior pre-Omicron infection) | Omicron | 70.0 (66.0 - 74.0) | Adult/Elderly | 2+ weeks |
| 21 | S | Primary series + booster dose (no prior infection) | Omicron | 46.0 (40.0 - 52.0) | Adult/Elderly | 2+ weeks |
| 22 | S | Primary series (no prior infection) | Pre-Omicron | 74.8 (71.3 - 77.9) | Child Adolescent | 15 to 30 days |
| 22 | S | Primary series (no prior infection) | Pre-Omicron | 64.9 (60.3 - 68.9) | Child Adolescent | 31 to 45 days |
| 22 | S | Primary series (no prior infection) | Pre-Omicron | 58.7 (53.0 - 63.7) | Child Adolescent | 45 to 60 days |
| 22 | S | Primary series (no prior infection) | Pre-Omicron | 56.3 (50.2 - 61.7) | Child Adolescent | 60+ days |
| 22 | S | Primary series (no prior infection) | Omicron | 55.8 (52.4 - 59.0) | Child Adolescent | 15 to 30 days |
| 22 | S | Primary series (no prior infection) | Omicron | 43.7 (40.3 - 46.9) | Child Adolescent | 31 to 45 days |
| 22 | S | Primary series (no prior infection) | Omicron | 29.6 (25.9 - 33.1) | Child Adolescent | 45 to 60 days |
| 22 | S | Primary series (no prior infection) | Omicron | 12.4 (8.6 - 16.1) | Child Adolescent | 60+ days |
| 23 | D | Primary series (no prior infection) | Pre-Omicron | 91.3 (90.1 - 92.5) | Adult | 15 to 30 days |
| 23 | D | Primary series (no prior infection) | Pre-Omicron | 87.0 (85.8 - 88.3) | Adult | 30 to 61 days |
| 23 | D | Primary series (no prior infection) | Pre-Omicron | 84.0 (81.8 - 86.2) | Adult | 61 to 91 days |
| 23 | D | Primary series (no prior infection) | Pre-Omicron | 74.0 (73.1 - 74.8) | Adult | 30 to 61 days |
| 23 | D | Primary series (no prior infection) | Pre-Omicron | 64.6 (63.6 - 65.5) | Adult | 91 to 122 days |
| 23 | D | Primary series (no prior infection) | Pre-Omicron | 68.6 (67.6 - 69.5) | Adult | 61 to 91 days |
| 23 | D | Primary series (no prior infection) | Pre-Omicron | 56.3 (55.2 - 57.4) | Adult | 122 to 152 days |
| 23 | D | Primary series (no prior infection) | Pre-Omicron | 53.8 (52.7 - 54.9) | Adult | 152 to 182 days |
| 23 | D | Primary series (no prior infection) | Pre-Omicron | 78.6 (77.4 - 79.9) | Adult | 15 to 30 days |
| 23 | D | Primary series (no prior infection) | Pre-Omicron | 52.4 (51.1 - 53.7) | Adult | 26+ weeks |
| 23 | D | Primary series (no prior infection) | Pre-Omicron | 91.9 (88.3 - 95.5) | Adult | 15 to 30 days |
| 23 | D | Primary series (no prior infection) | Pre-Omicron | 84.5 (78.5 - 90.6) | Adult | 30 to 61 days |
| 23 | D | Primary series (no prior infection) | Pre-Omicron | 88.7 (78.9 - 98.5) | Adult | 61 to 91 days |
| 23 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 91.9 (91.5 - 92.3) | Adult | 1+ weeks |
| 23 | M | Primary series (no prior infection) | Pre-Omicron | 95.2 (94.0 - 96.4) | Adult | 30 to 61 days |
| 23 | M | Primary series (no prior infection) | Pre-Omicron | 96.9 (95.4 - 98.3) | Adult | 61 to 91 days |
| 23 | M | Primary series (no prior infection) | Pre-Omicron | 93.7 (91.8 - 95.6) | Adult | 15 to 30 days |
| 23 | M | Primary series (no prior infection) | Pre-Omicron | 92.0 (91.4 - 92.6) | Adult | 152 to 182 days |
| 23 | M | Primary series (no prior infection) | Pre-Omicron | 91.5 (90.7 - 92.2) | Adult | 122 to 152 days |
| 23 | M | Primary series (no prior infection) | Pre-Omicron | 92.2 (91.4 - 93.0) | Adult | 91 to 122 days |
| 23 | M | Primary series (no prior infection) | Pre-Omicron | 89.5 (88.7 - 90.3) | Adult | 26+ weeks |
| 23 | M | Primary series (no prior infection) | Pre-Omicron | 92.7 (91.9 - 93.6) | Adult | 61 to 91 days |
| 23 | M | Primary series (no prior infection) | Pre-Omicron | 94.1 (93.3 - 95.0) | Adult | 30 to 61 days |
| 23 | M | Primary series (no prior infection) | Pre-Omicron | 89.3 (87.2 - 91.4) | Adult | 15 to 30 days |
| 23 | M | Primary series (no prior infection) | Pre-Omicron | 97.2 (93.1 - 101.3) | Adult | 30 to 61 days |
| 23 | M | Primary series (no prior infection) | Pre-Omicron | 95.8 (91.6 - 100.0) | Adult | 15 to 30 days |
| 23 | M | Primary series (no prior infection) | Pre-Omicron | 93.3 (78.7 - 107.9) | Adult | 61 to 91 days |
| 23 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 98.7 (98.5 - 99.0) | Adult | 1+ weeks |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 93.5 (82.1 - 97.7) | Adult/Elderly | 30+ days |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 93.4 (78.8 - 97.9) | Adult/Elderly | 61+ days |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 96.1 (72.1 - 99.5) | Adult/Elderly | 14 to 29 days |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 92.1 (67.3 - 98.1) | Adult/Elderly | 91+ days |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 90.4 (59.2 - 97.8) | Adult/Elderly | 122+ days |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 92.7 (91.0 - 94.0) | Adult/Elderly | 14 to 29 days |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 92.8 (91.1 - 94.1) | Adult/Elderly | 30+ days |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 89.0 (84.4 - 92.3) | Adult/Elderly | 61+ days |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 89.7 (83.6 - 93.5) | Adult/Elderly | 61+ days |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 91.2 (84.5 - 95.0) | Adult/Elderly | 30+ days |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 88.4 (80.1 - 93.3) | Adult/Elderly | 91+ days |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 95.3 (85.1 - 98.5) | Adult/Elderly | 14 to 29 days |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 86.6 (72.3 - 94.5) | Adult/Elderly | 91+ days |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 78.6 (64.4 - 87.1) | Adult/Elderly | 122+ days |
| 24 | M | Primary series + booster dose (no prior infection) | Omicron | 74.1 (9.1 - 92.6) | Adult/Elderly | 122+ days |
| 24 | M | Primary series (no prior infection) | Omicron | 84.9 (84.0 - 85.7) | Adult/Elderly | 61 to 122 days |
| 24 | M | Primary series (no prior infection) | Omicron | 82.6 (80.7 - 84.3) | Adult/Elderly | 152+ days |
| 24 | M | Primary series (no prior infection) | Omicron | 82.9 (80.6 - 85.0) | Adult/Elderly | 14 to 59 days |
| 24 | M | Primary series (no prior infection) | Omicron | 84.8 (70.1 - 92.3) | Adult/Elderly | 61 to 122 days |
| 24 | M | Primary series (no prior infection) | Omicron | 72.9 (57.9 - 82.5) | Adult/Elderly | 152+ days |
| 24 | M | Primary series (no prior infection) | Omicron | 90.4 (30.4 - 98.7) | Adult/Elderly | 14 to 59 days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 64.8 (62.9 - 66.5) | Adult/Elderly | 30 to 61 days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 71.9 (70.0 - 73.7) | Adult/Elderly | 14 to 29 days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 59.4 (57.3 - 61.4) | Adult/Elderly | 61 to 91 days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 55.6 (52.9 - 58.2) | Adult/Elderly | 91 to 122 days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 49.3 (45.1 - 53.2) | Adult/Elderly | 122+ days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 69.2 (46.5 - 82.3) | Adult/Elderly | 7 to 29 days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 55.1 (33.3 - 69.7) | Adult/Elderly | 30+ days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 44.6 (43.4 - 45.8) | Adult/Elderly | 14 to 29 days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 63.0 (61.6 - 64.3) | Adult/Elderly | 30 to 61 days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 69.1 (67.6 - 70.5) | Adult/Elderly | 14 to 29 days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 56.9 (55.4 - 58.4) | Adult/Elderly | 61 to 91 days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 34.6 (33.0 - 36.2) | Adult/Elderly | 30 to 61 days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 53.6 (51.7 - 55.4) | Adult/Elderly | 91 to 122 days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 49.3 (47.0 - 51.5) | Adult/Elderly | 122+ days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 23.4 (19.9 - 26.7) | Adult/Elderly | 61 to 91 days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 2.8 (-5.5 - 10.5) | Adult/Elderly | 91 to 122 days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | -11.8 (-35.9 - 8.0) | Adult/Elderly | 122+ days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 49.0 (34.3 - 60.4) | Adult/Elderly | 30+ days |
| 24 | D | Primary series + booster dose (no prior infection) | Omicron | 61.1 (43.6 - 73.2) | Adult/Elderly | 7 to 29 days |
| 24 | D | Primary series (no prior infection) | Omicron | 49.2 (48.5 - 49.9) | Adult/Elderly | 14 to 59 days |
| 24 | D | Primary series (no prior infection) | Omicron | 19.4 (18.7 - 20.1) | Adult/Elderly | 61 to 122 days |
| 24 | D | Primary series (no prior infection) | Omicron | 9.6 (8.1 - 11.0) | Adult/Elderly | 152+ days |
| 24 | D | Primary series (no prior infection) | Omicron | 21.3 (18.6 - 23.9) | Adult/Elderly | 61 to 122 days |
| 24 | D | Primary series (no prior infection) | Omicron | 17.8 (15.1 - 20.5) | Adult/Elderly | 152+ days |
| 24 | D | Primary series (no prior infection) | Omicron | 57.7 (54.5 - 60.6) | Adult/Elderly | 14 to 59 days |
| 25 | M | Primary series (prior pre-Omicron infection) | Pre-Omicron | 88.8 (50.0 - 97.5) | Adult/Elderly | 14 to 90 days |
| 25 | M | Primary series (prior pre-Omicron infection) | Pre-Omicron | 89.7 (54.3 - 97.7) | Adult/Elderly | 2+ weeks |
| 25 | D | Primary series (prior pre-Omicron infection) | Pre-Omicron | 64.2 (54.2 - 72.0) | Adult/Elderly | 14 to 90 days |
| 26 | S | Primary series (no prior infection) | Pre-Omicron | 82.0 (74.0 - 88.0) | Adult/Elderly | 2+ weeks |
| 26 | D | Primary series (no prior infection) | Pre-Omicron | 93.0 (79.0 - 98.0) | Adult/Elderly | 2+ weeks |
| 26 | M | Primary series (no prior infection) | Pre-Omicron | 97.0 (80.0 - 99.0) | Adult/Elderly | 2+ weeks |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 88.6 (79.2 - 93.7) | All | 61+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 77.1 (67.5 - 83.8) | All | 30+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 80.7 (63.2 - 89.9) | All | 91+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 60.7 (21.1 - 80.4) | All | 122+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 33.3 (-48.3 - 70.0) | All | 152+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 80.0 (-71.2 - 97.7) | All | 182+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 87.6 (79.7 - 92.3) | All | 30+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 73.3 (63.6 - 80.4) | All | 61+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 62.4 (50.2 - 71.6) | All | 91+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 35.1 (14.7 - 50.6) | All | 122+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 20.4 (-1.9 - 37.8) | All | 152+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 17.9 (-12.9 - 40.3) | All | 182+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 77.5 (76.4 - 78.6) | Adult | 30+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 73.2 (71.3 - 75.0) | Adult | 61+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 69.6 (66.7 - 72.3) | Adult | 91+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 51.7 (45.0 - 57.6) | Adult | 122+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 22.5 (10.6 - 32.7) | Adult | 152+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 17.3 (2.2 - 30.1) | Adult | 182+ days |
| 27 | S | Primary series (no prior infection) | Pre-Omicron | 22.3 (-1.7 - 40.7) | Adult | 213+ days |
| 27 | M | Primary series (no prior infection) | Pre-Omicron | 96.0 (93.9 - 97.4) | Adult | 30+ days |
| 27 | M | Primary series (no prior infection) | Pre-Omicron | 96.8 (93.9 - 98.3) | Adult | 61+ days |
| 27 | M | Primary series (no prior infection) | Pre-Omicron | 94.3 (89.1 - 97.0) | Adult | 91+ days |
| 27 | M | Primary series (no prior infection) | Pre-Omicron | 83.7 (65.5 - 92.3) | Adult | 122+ days |
| 27 | M | Primary series (no prior infection) | Pre-Omicron | 88.9 (52.1 - 97.4) | Adult | 182+ days |
| 27 | M | Primary series (no prior infection) | Pre-Omicron | 55.6 (-44.3 - 86.3) | Adult | 213+ days |
| 27 | D | Primary series (no prior infection) | Pre-Omicron | 81.5 (79.9 - 83.0) | Adult | 30+ days |
| 27 | D | Primary series (no prior infection) | Pre-Omicron | 72.5 (69.6 - 75.1) | Adult | 61+ days |
| 27 | D | Primary series (no prior infection) | Pre-Omicron | 70.6 (66.4 - 74.3) | Adult | 91+ days |
| 27 | D | Primary series (no prior infection) | Pre-Omicron | 57.0 (48.6 - 64.0) | Adult | 122+ days |
| 27 | D | Primary series (no prior infection) | Pre-Omicron | 12.0 (-6.1 - 27.1) | Adult | 152+ days |
| 27 | D | Primary series (no prior infection) | Pre-Omicron | 12.8 (-9.1 - 30.3) | Adult | 182+ days |
| 27 | D | Primary series (no prior infection) | Pre-Omicron | 27.8 (-1.4 - 48.7) | Adult | 213+ days |
| 28 | S | Prior Omicron infection | Omicron | 94.2 (89.2 - 96.9) | Adult | 2+ weeks |
| 28 | S | Prior Omicron infection | Omicron | 80.9 (73.1 - 86.4) | Adult | 2+ weeks |
| 29 | S | Prior pre-Omicron 2infection | Omicron | 69.4 (68.8 - 70.3) | Adult | 2+ weeks |
| 29 | S | Prior pre-Omicron 2infection | Omicron | 38.1 (36.3 - 39.8) | Adult | 2+ weeks |
| 29 | S | Prior pre-Omicron 2infection | Pre-Omicron | 85.5 (84.8 - 86.3) | Adult | 2+ weeks |
| 29 | M | Prior pre-Omicron 2infection | Omicron | 97.3 (94.9 - 98.6) | Adult | 2+ weeks |
| 29 | M | Prior pre-Omicron 2infection | Omicron | 88.6 (70.9 - 95.5) | Adult | 2+ weeks |
| 29 | M | Prior pre-Omicron 2infection | Pre-Omicron | 98.0 (95.7 - 99.0) | Adult | 2+ weeks |
| 30 | M | Primary series (no prior infection) | Omicron | 68.4 (46.1 - 81.5) | Adult | 28+ weeks |
| 30 | M | Primary series (no prior infection) | Omicron | 87.1 (40.2 - 97.2) | Adult | 4 to 24 weeks |
| 30 | M | Primary series (no prior infection) | Omicron | 77.5 (67.8 - 84.3) | Adult | 28+ weeks |
| 30 | M | Primary series (no prior infection) | Omicron | 70.4 (45.0 - 84.0) | Adult | 4 to 24 weeks |
| 30 | M | Primary series + booster dose (no prior infection) | Omicron | 81.8 (-49.5 - 97.8) | Adult | 4 to 24 weeks |
| 30 | M | Primary series + booster dose (no prior infection) | Omicron | 90.1 (80.6 - 95.0) | Adult | 28+ weeks |
| 30 | M | Primary series + booster dose (no prior infection) | Omicron | 90.9 (78.6 - 96.1) | Adult | 4 to 24 weeks |
| 30 | D | Primary series (no prior infection) | Omicron | 18.7 (11.3 - 25.5) | Adult | 16 to 24 weeks |
| 30 | D | Primary series (no prior infection) | Omicron | -13.7 (-21.3 - -6.6) | Adult | 28+ weeks |
| 30 | D | Primary series (no prior infection) | Omicron | 43.2 (15.0 - 62.1) | Adult | 4 to 12 weeks |
| 30 | D | Primary series (no prior infection) | Omicron | -9.0 (-14.5 - -3.7) | Adult | 28+ weeks |
| 30 | D | Primary series (no prior infection) | Omicron | 16.3 (9.7 - 22.5) | Adult | 16 to 24 weeks |
| 30 | D | Primary series (no prior infection) | Omicron | 47.8 (40.8 - 53.9) | Adult | 4 to 12 weeks |
| 30 | D | Primary series + booster dose (no prior infection) | Omicron | 53.7 (41.5 - 63.3) | Adult | 2 to 3 weeks |
| 30 | D | Primary series + booster dose (no prior infection) | Omicron | 53.7 (39.6 - 64.6) | Adult | 4 to 5 weeks |
| 30 | D | Primary series + booster dose (no prior infection) | Omicron | 34.9 (14.6 - 50.4) | Adult | 6+ weeks |
| 30 | D | Primary series + booster dose (no prior infection) | Omicron | 19.7 (-9.7 - 41.2) | Adult | 1+ weeks |
| 30 | D | Primary series + booster dose (no prior infection) | Omicron | 55.5 (49.3 - 61.0) | Adult | 2 to 3 weeks |
| 30 | D | Primary series + booster dose (no prior infection) | Omicron | 51.5 (45.0 - 57.2) | Adult | 4 to 5 weeks |
| 30 | D | Primary series + booster dose (no prior infection) | Omicron | 43.6 (36.5 - 49.9) | Adult | 6 to 7 weeks |
| 30 | D | Primary series + booster dose (no prior infection) | Omicron | 31.5 (20.3 - 41.1) | Adult | 8 to 9 weeks |
| 30 | D | Primary series + booster dose (no prior infection) | Omicron | 37.3 (25.4 - 47.3) | Adult | 10 to 11 weeks |
| 30 | D | Primary series + booster dose (no prior infection) | Omicron | 21.9 (7.7 - 33.9) | Adult | 14+ weeks |
| 30 | D | Primary series + booster dose (no prior infection) | Omicron | 32.6 (17.8 - 44.8) | Adult | 12 to 13 weeks |
| 30 | D | Primary series + booster dose (no prior infection) | Omicron | 17.7 (2.5 - 30.6) | Adult | 1+ weeks |
| 31 | S | Primary series (no prior infection) | Omicron | 25.7 (10.0 - 38.6) | Child Adolescent | 2+ weeks |
| 31 | S | Primary series (no prior infection) | Omicron | 30.6 (26.9 - 34.1) | Child Adolescent | 2+ weeks |
| 31 | S | Primary series (no prior infection) | Pre-Omicron | 87.6 (84.0 - 90.4) | Child Adolescent | 2+ weeks |
| 32 | D | Primary series (no prior infection) | Omicron | 61.9 (49.9 - 71.1) | Adult | 30+ days |
| 32 | D | Primary series (no prior infection) | Omicron | 45.9 (33.8 - 55.8) | Adult | 61+ days |
| 32 | D | Primary series (no prior infection) | Omicron | 36.3 (25.1 - 45.8) | Adult | 91+ days |
| 32 | D | Primary series (no prior infection) | Omicron | 28.5 (18.0 - 37.8) | Adult | 122+ days |
| 32 | D | Primary series (no prior infection) | Omicron | 10.6 (-2.3 - 21.9) | Adult | 152+ days |
| 32 | D | Primary series (no prior infection) | Omicron | 14.3 (6.2 - 21.8) | Adult | 182+ days |
| 32 | D | Primary series (no prior infection) | Omicron | 9.6 (2.4 - 16.3) | Adult | 213+ days |
| 32 | D | Primary series (no prior infection) | Omicron | -7.5 (-15.3 - -0.2) | Adult | 243+ days |
| 32 | D | Primary series (no prior infection) | Omicron | 1.5 (-6.2 - 8.7) | Adult | 273+ days |
| 32 | D | Primary series (no prior infection) | Omicron | -17.7 (-25.6 - -10.3) | Adult | 304+ days |
| 32 | D | Primary series (no prior infection) | Omicron | -0.3 (-10.2 - 8.6) | Adult | 334+ days |
| 32 | D | Primary series (no prior infection) | Omicron | 16.5 (3.1 - 28.1) | Adult | 365+ days |
| 32 | D | Primary series (no prior infection) | Omicron | 44.8 (16.0 - 63.8) | Adult | 0 to 91 days |
| 32 | D | Primary series (no prior infection) | Omicron | 20.8 (13.7 - 27.4) | Adult | 91 to 182 days |
| 32 | D | Primary series (no prior infection) | Omicron | -9.3 (-16.3 - -2.8) | Adult | 213+ days |
| 32 | D | Primary series + booster dose (no prior infection) | Omicron | 53.6 (47.4 - 59.1) | Adult | 2 to 3 weeks |
| 32 | D | Primary series + booster dose (no prior infection) | Omicron | 56.6 (50.8 - 61.7) | Adult | 4 to 5 weeks |
| 32 | D | Primary series + booster dose (no prior infection) | Omicron | 46.2 (39.7 - 52.0) | Adult | 6 to 7 weeks |
| 32 | D | Primary series + booster dose (no prior infection) | Omicron | 38.0 (28.1 - 46.5) | Adult | 8 to 9 weeks |
| 32 | D | Primary series + booster dose (no prior infection) | Omicron | 43.7 (32.9 - 52.7) | Adult | 10 to 11 weeks |
| 32 | D | Primary series + booster dose (no prior infection) | Omicron | 37.6 (28.8 - 45.4) | Adult | 12+ weeks |
| 32 | D | Primary series + booster dose (no prior infection) | Omicron | 53.1 (40.7 - 62.8) | Adult | 2 to 3 weeks |
| 32 | D | Primary series + booster dose (no prior infection) | Omicron | 54.6 (41.1 - 65.0) | Adult | 4 to 5 weeks |
| 32 | D | Primary series + booster dose (no prior infection) | Omicron | 38.6 (19.4 - 53.1) | Adult | 6+ weeks |
| 32 | M | Primary series (no prior infection) | Omicron | 73.7 (46.8 - 87.0) | Adult | 30 to 213 days |
| 32 | M | Primary series (no prior infection) | Omicron | 80.7 (71.3 - 87.0) | Adult | 213+ days |
| 32 | M | Primary series (no prior infection) | Omicron | 76.9 (19.2 - 93.4) | Adult | 30 to 182 days |
| 32 | M | Primary series (no prior infection) | Omicron | 64.0 (39.1 - 78.7) | Adult | 213+ days |
| 32 | M | Primary series + booster dose (no prior infection) | Omicron | 90.6 (77.8 - 96.0) | Adult | 1 to 7 weeks |
| 32 | M | Primary series + booster dose (no prior infection) | Omicron | 90.8 (81.5 - 95.5) | Adult | 7+ weeks |
| 32 | M | Primary series + booster dose (no prior infection) | Omicron | 80.8 (-51.9 - 97.6) | Adult | 0 to 7 weeks |
| 33 | S | Prior pre-Omicron 2infection | Omicron | 5.6 (-6.0 - 15.9) | Adult | 14 to 486 days |
| 33 | S | Prior pre-Omicron 2infection | Omicron | 7.3 (1.2 - 13.0) | Adult | 516 to 729 days |
| 33 | S | Prior pre-Omicron 2infection | Omicron | 4.7 (-3.3 - 12.2) | Adult | 729+ days |
| 33 | S | Prior Omicron infection | Omicron | 76.1 (69.4 - 81.4) | Adult | 14 to 182 days |
| 33 | S | Prior Omicron infection | Omicron | 49.3 (46.9 - 51.5) | Adult | 182+ days |
| 33 | S | Prior Omicron infection | Omicron | 82.6 (64.0 - 91.6) | Adult | 14 to 182 days |
| 33 | S | Prior Omicron infection | Omicron | 55.9 (49.9 - 61.2) | Adult | 182+ days |
| 34 | M | Primary series (no prior infection) | Pre-Omicron | 83.0 (74.0 - 89.0) | Child Adolescent | 8+ days |
| 34 | M | Primary series (no prior infection) | Omicron | 75.0 (56.0 - 86.0) | Child Adolescent | 8+ days |
| 34 | M | Primary series + booster dose (no prior infection) | Omicron | 94.0 (86.0 - 97.0) | Child Adolescent | 8+ days |
| 34 | S | Primary series (no prior infection) | Pre-Omicron | 66.0 (63.0 - 69.0) | Child Adolescent | 8+ days |
| 34 | S | Primary series (no prior infection) | Omicron | 25.0 (21.0 - 29.0) | Child Adolescent | 8+ days |
| 34 | S | Primary series + booster dose (no prior infection) | Omicron | 56.0 (53.0 - 58.0) | Child Adolescent | 8+ days |
| 35 | S | Prior pre-Omicron 2infection | Omicron | 48.9 (41.6 - 55.3) | Adult/Elderly | 2+ weeks |
| 35 | S | Prior pre-Omicron 2infection | Omicron | 16.3 (8.1 - 23.7) | Adult/Elderly | 2+ weeks |
| 35 | S | Prior pre-Omicron 2infection | Omicron | 27.5 (14.8 - 38.4) | Adult/Elderly | 2+ weeks |
| 35 | S | Prior pre-Omicron 2infection | Omicron | 38.3 (6.5 - 59.3) | Adult/Elderly | 2+ weeks |
| 35 | S | Primary series (prior pre-Omicron infection) | Omicron | 83.2 (77.7 - 87.4) | Adult/Elderly | 2+ weeks |
| 35 | S | Primary series (prior pre-Omicron infection) | Omicron | 55.8 (49.6 - 61.2) | Adult/Elderly | 2+ weeks |
| 35 | S | Primary series (prior pre-Omicron infection) | Omicron | 51.2 (41.5 - 59.2) | Adult/Elderly | 2+ weeks |
| 35 | S | Primary series (prior pre-Omicron infection) | Omicron | 68.7 (38.5 - 84.1) | Adult/Elderly | 2+ weeks |
| 35 | S | Primary series (no prior infection) | Omicron | 40.1 (34.0 - 45.6) | Adult/Elderly | 2+ weeks |
| 35 | S | Primary series (no prior infection) | Omicron | 18.6 (7.7 - 28.1) | Adult/Elderly | 2+ weeks |
| 35 | S | Primary series + booster dose (no prior infection) | Omicron | 72.1 (67.2 - 76.2) | Adult/Elderly | 2+ weeks |
| 35 | S | Primary series + booster dose (no prior infection) | Omicron | 40.9 (31.9 - 48.7) | Adult/Elderly | 2+ weeks |
| 35 | S | Primary series + booster dose (prior pre-Omicron infection) | Omicron | 77.6 (71.7 - 82.2) | Adult/Elderly | 2+ weeks |
| 35 | S | Primary series + booster dose (prior pre-Omicron infection) | Omicron | 57.7 (50.8 - 63.6) | Adult/Elderly | 2+ weeks |
| 35 | S | Primary series + booster dose (prior pre-Omicron infection) | Omicron | 87.9 (76.0 - 93.9) | Adult/Elderly | 2+ weeks |
| 35 | S | Primary series + booster dose (prior pre-Omicron infection) | Omicron | 84.6 (70.7 - 91.9) | Adult/Elderly | 2+ weeks |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 97.0 (94.0 - 99.0) | Elderly | 60 to 119 days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 94.0 (90.0 - 97.0) | Elderly | 7 to 59 days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 96.0 (90.0 - 99.0) | Adult | 60 to 119 days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 87.0 (78.0 - 93.0) | Adult | 7 to 59 days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 98.0 (95.0 - 99.0) | Adult | 7 to 59 days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (93.0 - 97.0) | Adult | 60 to 119 days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 97.0 (94.0 - 98.0) | Adult | 120 to 179 days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 98.0 (95.0 - 99.0) | Adult | 180 to 239 days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 99.0 (95.0 - 100.0) | Adult | 240+ days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 97.0 (91.0 - 99.0) | Elderly | 60 to 119 days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 91.0 (86.0 - 94.0) | Elderly | 180 to 239 days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 90.0 (85.0 - 94.0) | Elderly | 120 to 179 days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 94.0 (81.0 - 98.0) | Elderly | 240+ days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 84.0 (66.0 - 92.0) | Elderly | 7 to 59 days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (89.0 - 98.0) | Elderly | 7 to 59 days |
| 36 | M | Primary series (no prior infection) | Pre-Omicron | 88.0 (67.0 - 95.0) | Adult | 7 to 59 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 96.0 (93.0 - 98.0) | Elderly | 60 to 119 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 84.0 (80.0 - 87.0) | Adult | 60 to 119 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 92.0 (88.0 - 95.0) | Elderly | 7 to 59 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 88.0 (83.0 - 91.0) | Adult | 7 to 59 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 84.0 (74.0 - 90.0) | Adult | 120 to 179 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 95.0 (61.0 - 99.0) | Elderly | 120 to 179 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 92.0 (91.0 - 93.0) | Adult | 7 to 59 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 89.0 (88.0 - 91.0) | Adult | 60 to 119 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 86.0 (84.0 - 88.0) | Adult | 120 to 179 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 82.0 (79.0 - 85.0) | Adult | 180 to 239 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 87.0 (84.0 - 90.0) | Adult | 240+ days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 89.0 (85.0 - 93.0) | Elderly | 120 to 179 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 90.0 (84.0 - 94.0) | Elderly | 60 to 119 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 85.0 (79.0 - 89.0) | Elderly | 180 to 239 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 85.0 (71.0 - 92.0) | Elderly | 7 to 59 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 88.0 (74.0 - 95.0) | Elderly | 240+ days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 92.0 (87.0 - 95.0) | Adult | 7 to 59 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 91.0 (85.0 - 95.0) | Elderly | 7 to 59 days |
| 36 | D | Primary series (no prior infection) | Pre-Omicron | 93.0 (79.0 - 98.0) | Adult | 60 to 119 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 92.0 (91.0 - 93.0) | Adult | 14 to 34 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 82.0 (81.0 - 84.0) | Adult | 60 to 119 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 89.0 (87.0 - 91.0) | Elderly | 14 to 34 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 88.0 (86.0 - 90.0) | Elderly | 60 to 119 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 82.0 (78.0 - 85.0) | Adult | 120 to 179 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 75.0 (53.0 - 86.0) | Elderly | 120 to 179 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 88.0 (87.0 - 88.0) | Adult | 14 to 34 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 83.0 (82.0 - 84.0) | Adult | 60 to 119 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 82.0 (80.0 - 83.0) | Adult | 120 to 179 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 77.0 (75.0 - 81.0) | Adult | 180 to 239 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 78.0 (75.0 - 81.0) | Adult | 240+ days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 78.0 (73.0 - 83.0) | Elderly | 120 to 179 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 85.0 (79.0 - 90.0) | Elderly | 60 to 119 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 71.0 (65.0 - 77.0) | Elderly | 180 to 239 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 74.0 (62.0 - 82.0) | Elderly | 14 to 34 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 81.0 (65.0 - 89.0) | Elderly | 240+ days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 88.0 (86.0 - 89.0) | Adult | 14 to 34 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 89.0 (86.0 - 91.0) | Elderly | 14 to 34 days |
| 36 | S | Primary series (no prior infection) | Pre-Omicron | 80.0 (75.0 - 84.0) | Adult | 60 to 119 days |
| 37 | D | Primary series (no prior infection) | Pre-Omicron | 81.0 (73.0 - 86.0) | All | 2+ weeks |
| 37 | D | Primary series (no prior infection) | Pre-Omicron | 66.0 (56.0 - 73.0) | All | 2+ weeks |
| 37 | D | Primary series (no prior infection) | Pre-Omicron | 70.0 (59.0 - 78.0) | Adult | 2+ weeks |
| 37 | D | Primary series (no prior infection) | Pre-Omicron | 80.0 (68.0 - 88.0) | Adult | 2+ weeks |
| 37 | D | Primary series (no prior infection) | Pre-Omicron | 61.0 (29.0 - 79.0) | Elderly | 2+ weeks |
| 37 | D | Primary series (no prior infection) | Pre-Omicron | 59.0 (45.0 - 69.0) | All | 2+ weeks |
| 37 | D | Primary series (no prior infection) | Pre-Omicron | 86.0 (77.0 - 92.0) | All | 2+ weeks |
| 38 | S | Primary series (no prior infection) | Pre-Omicron | 64.0 (62.0 - 66.0) | Adult/Elderly | 2+ weeks |
| 38 | S | Primary series (no prior infection) | Pre-Omicron | 50.0 (47.0 - 52.0) | Adult/Elderly | 2+ weeks |
| 38 | S | Primary series (no prior infection) | Pre-Omicron | 92.7 (92.3 - 93.1) | Adult/Elderly | 2+ weeks |
| 38 | S | Primary series (no prior infection) | Pre-Omicron | 91.4 (91.0 - 92.8) | Adult/Elderly | 2+ weeks |
| 39 | M | Primary series (no prior infection) | Pre-Omicron | 89.0 (85.0 - 92.0) | Adult | 2+ weeks |
| 39 | M | Primary series (no prior infection) | Pre-Omicron | 88.0 (82.0 - 92.0) | Adult | 2+ weeks |
| 39 | M | Primary series (no prior infection) | Pre-Omicron | 64.0 (47.0 - 76.0) | Elderly | 2+ weeks |
| 39 | M | Primary series (no prior infection) | Pre-Omicron | 99.0 (98.0 - 99.0) | Adult | 2+ weeks |
| 39 | M | Primary series (no prior infection) | Pre-Omicron | 99.0 (98.0 - 100.0) | Adult | 2+ weeks |
| 39 | M | Primary series (no prior infection) | Pre-Omicron | 92.0 (90.0 - 93.0) | Elderly | 2+ weeks |
| 40 | D | Primary series (no prior infection) | Pre-Omicron | 29.0 (26.0 - 32.0) | Elderly | 26+ weeks |
| 40 | D | Primary series (no prior infection) | Pre-Omicron | 64.0 (62.0 - 65.0) | Elderly | 26+ weeks |
| 40 | D | Primary series (no prior infection) | Pre-Omicron | 46.0 (44.0 - 49.0) | Adult | 26+ weeks |
| 40 | D | Primary series (no prior infection) | Pre-Omicron | 62.0 (60.0 - 64.0) | Adult | 26+ weeks |
| 40 | D | Primary series (no prior infection) | Pre-Omicron | 49.0 (47.0 - 51.0) | Adult | 26+ weeks |
| 40 | D | Primary series (no prior infection) | Pre-Omicron | 59.0 (57.0 - 61.0) | Adult | 26+ weeks |
| 40 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 85.0 (83.0 - 86.0) | Elderly | 26+ weeks |
| 40 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 89.0 (87.0 - 91.0) | Elderly | 26+ weeks |
| 40 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 86.0 (85.0 - 88.0) | Adult | 26+ weeks |
| 40 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 90.0 (87.0 - 92.0) | Adult | 26+ weeks |
| 40 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 90.0 (88.0 - 91.0) | Adult | 26+ weeks |
| 40 | D | Primary series + booster dose (no prior infection) | Pre-Omicron | 93.0 (89.0 - 95.0) | Adult | 26+ weeks |
| 40 | M | Primary series (no prior infection) | Pre-Omicron | 42.0 (37.0 - 47.0) | Elderly | 26+ weeks |
| 40 | M | Primary series (no prior infection) | Pre-Omicron | 59.0 (55.0 - 62.0) | Elderly | 26+ weeks |
| 40 | M | Primary series (no prior infection) | Pre-Omicron | 85.0 (83.0 - 87.0) | Adult | 26+ weeks |
| 40 | M | Primary series (no prior infection) | Pre-Omicron | 85.0 (83.0 - 87.0) | Adult | 26+ weeks |
| 40 | M | Primary series (no prior infection) | Pre-Omicron | 84.0 (81.0 - 87.0) | Adult | 26+ weeks |
| 40 | M | Primary series (no prior infection) | Pre-Omicron | 87.0 (84.0 - 89.0) | Adult | 26+ weeks |
| 40 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 88.0 (86.0 - 90.0) | Elderly | 26+ weeks |
| 40 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 86.0 (80.0 - 90.0) | Elderly | 26+ weeks |
| 40 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 92.0 (88.0 - 94.0) | Adult | 26+ weeks |
| 40 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 90.0 (84.0 - 94.0) | Adult | 26+ weeks |
| 40 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 92.0 (86.0 - 96.0) | Adult | 26+ weeks |
| 41 | M | Primary series (no prior infection) | Pre-Omicron | 94.0 (92.0 - 95.0) | Adult/Elderly | 14 to 149 days |
| 41 | M | Primary series (no prior infection) | Pre-Omicron | 89.0 (88.0 - 90.0) | Adult/Elderly | 150+ days |
| 41 | M | Primary series (no prior infection) | Pre-Omicron | 90.0 (88.0 - 91.0) | Adult/Elderly | 14 to 149 days |
| 41 | M | Primary series (no prior infection) | Pre-Omicron | 80.0 (79.0 - 82.0) | Adult/Elderly | 150+ days |
| 41 | M | Primary series (no prior infection) | Pre-Omicron | 81.0 (69.0 - 88.0) | Adult/Elderly | 14 to 149 days |
| 41 | M | Primary series (no prior infection) | Pre-Omicron | 73.0 (68.0 - 77.0) | Adult/Elderly | 150+ days |
| 41 | M | Primary series (no prior infection) | Pre-Omicron | 68.0 (58.0 - 75.0) | Adult/Elderly | 14 to 149 days |
| 41 | M | Primary series (no prior infection) | Pre-Omicron | 64.0 (58.0 - 69.0) | Adult/Elderly | 150+ days |
| 41 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 96.0 (95.0 - 97.0) | Adult/Elderly | 1+ weeks |
| 41 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 95.0 (94.0 - 96.0) | Adult/Elderly | 1+ weeks |
| 41 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 87.0 (79.0 - 92.0) | Adult/Elderly | 1+ weeks |
| 41 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 76.0 (69.0 - 82.0) | Adult/Elderly | 1+ weeks |
| 42 | M | Primary series (no prior infection) | Pre-Omicron | 55.7 (53.7 - 57.6) | Elderly | 2+ weeks |
| 42 | M | Primary series (no prior infection) | Pre-Omicron | 70.5 (69.4 - 71.5) | Elderly | 2+ weeks |
| 42 | S | Primary series (no prior infection) | Pre-Omicron | 29.8 (28.3 - 31.4) | Elderly | 2+ weeks |
| 42 | S | Primary series (no prior infection) | Pre-Omicron | 55.6 (54.7 - 56.5) | Elderly | 2+ weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 90.1 (88.1 - 91.7) | All | 7 to 10 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 90.1 (87.9 - 91.9) | All | 5 to 6 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 88.2 (86.0 - 90.0) | All | 3 to 4 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 78.6 (75.8 - 81.1) | All | 0 to 2 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 89.7 (85.9 - 92.4) | All | 11 to 14 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 94.9 (89.7 - 97.4) | All | 15 to 18 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 93.9 (92.9 - 94.7) | All | 7 to 10 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 96.3 (95.0 - 97.3) | All | 3 to 4 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 95.5 (94.0 - 96.6) | All | 5 to 6 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 87.0 (85.1 - 88.5) | All | 15 to 18 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 84.9 (83.0 - 86.5) | All | 19 to 22 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 83.3 (81.3 - 85.0) | All | 23 to 26 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 91.1 (90.0 - 94.7) | All | 11 to 14 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 91.5 (87.5 - 94.3) | All | 0 to 2 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 79.6 (75.5 - 83.0) | All | 27 to 30 weeks |
| 43 | M | Primary series (no prior infection) | Pre-Omicron | 76.5 (70.9 - 81.0) | All | 31 to 42 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 81.5 (79.3 - 83.5) | All | 3 to 4 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 77.6 (75.3 - 79.7) | All | 7 to 10 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 81.8 (79.2 - 84.0) | All | 5 to 6 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 71.6 (68.9 - 74.0) | All | 0 to 2 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 89.7 (86.2 - 92.3) | All | 19 to 21 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 74.6 (71.2 - 77.7) | All | 11 to 14 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 81.1 (76.5 - 84.8) | All | 15 to 18 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 74.2 (72.8 - 75.5) | All | 0 to 2 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 77.4 (75.9 - 78.7) | All | 5 to 6 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 84.1 (82.6 - 85.5) | Adult | 3 to 4 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 76.7 (75.2 - 78.1) | Adult | 0 to 2 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 79.3 (77.7 - 80.7) | Adult | 5 to 6 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 82.0 (80.5 - 83.5) | All | 3 to 4 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 73.8 (72.1 - 75.4) | All | 7 to 10 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 77.3 (75.5 - 79.0) | Adult | 7 to 10 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 67.3 (65.2 - 69.3) | All | 11 to 14 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 71.4 (69.3 - 73.4) | Adult | 11 to 14 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 62.1 (58.8 - 65.1) | Adult | 15 to 18 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 58.4 (55.1 - 61.4) | All | 15 to 18 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 52.1 (48.7 - 55.3) | All | 19 to 22 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 60.2 (55.9 - 64.2) | Adult | 19 to 22 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 39.5 (34.3 - 44.2) | All | 23 to 26 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 51.6 (45.9 - 56.7) | Adult | 23 to 26 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 50.1 (44.4 - 55.4) | Adult | 27 to 30 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 33.2 (26.8 - 39.0) | All | 27 to 30 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 46.1 (37.2 - 53.7) | Adult | 31 to 42 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 21.1 (12.3 - 29.1) | All | 31 to 42 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 62.0 (50.1 - 71.2) | Elderly | 3 to 4 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 54.9 (40.6 - 65.8) | Elderly | 7 to 10 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 53.5 (38.5 - 64.8) | Elderly | 11 to 14 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 46.8 (31.7 - 58.6) | Elderly | 15 to 18 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 60.6 (44.8 - 71.8) | Elderly | 5 to 6 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 41.2 (24.9 - 54.0) | Elderly | 19 to 22 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 39.2 (22.3 - 52.5) | Elderly | 0 to 2 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 25.6 (5.1 - 41.7) | Elderly | 23 to 26 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | 10.8 (-15.2 - 30.9) | Elderly | 27 to 30 weeks |
| 43 | S | Primary series (no prior infection) | Pre-Omicron | -29.4 (-66.6 - -0.5) | Elderly | 31 to 42 weeks |
| 44 | S | Primary series (no prior infection) | Pre-Omicron | 99.7 (99.5 - 99.9) | Adult | 120 to 179 days |
| 44 | S | Primary series (no prior infection) | Pre-Omicron | 82.7 (82.2 - 83.3) | Adult | 60 to 119 days |
| 44 | S | Primary series (no prior infection) | Pre-Omicron | 89.7 (89.4 - 90.0) | Adult | 0 to 59 days |
| 44 | S | Primary series (no prior infection) | Pre-Omicron | 78.8 (76.9 - 80.6) | Adult | 180 to 240 days |
| 44 | S | Primary series (no prior infection) | Pre-Omicron | 66.1 (62.5 - 69.4) | Adult | 2+ weeks |
| 45 | D | Primary series (no prior infection) | Omicron | 28.9 (24.5 - 33.1) | Child Adolescent | 4 to 8 weeks |
| 45 | D | Primary series (no prior infection) | Omicron | 60.1 (54.7 - 64.8) | Child Adolescent | 0 to 4 weeks |
| 45 | D | Primary series (no prior infection) | Omicron | 16.6 (8.1 - 24.3) | Child Adolescent | 4 to 8 weeks |
| 45 | D | Primary series (no prior infection) | Omicron | 59.5 (44.3 - 70.6) | Child Adolescent | 0 to 4 weeks |
| 46 | M | Primary series (no prior infection) | Omicron | 83.7 (76.0 - 88.9) | Child Adolescent | 56 to 69 days |
| 46 | M | Primary series (no prior infection) | Omicron | 84.2 (76.3 - 89.5) | Child Adolescent | 42 to 55 days |
| 46 | M | Primary series (no prior infection) | Omicron | 82.7 (72.6 - 88.2) | Child Adolescent | 70 to 83 days |
| 46 | M | Primary series (no prior infection) | Omicron | 82.8 (72.1 - 89.4) | Child Adolescent | 28 to 41 days |
| 46 | M | Primary series (no prior infection) | Omicron | 86.4 (75.2 - 92.6) | Child Adolescent | 84 to 97 days |
| 46 | M | Primary series (no prior infection) | Omicron | 82.7 (68.8 - 90.4) | Child Adolescent | 14+ weeks |
| 46 | M | Primary series (no prior infection) | Omicron | 75.6 (58.1 - 85.8) | Child Adolescent | 14 to 27 days |
| 46 | D | Primary series (no prior infection) | Pre-Omicron | 80.7 (77.8 - 83.3) | Child Adolescent | 14 to 27 days |
| 46 | D | Primary series (no prior infection) | Pre-Omicron | 68.0 (63.2 - 72.3) | Child Adolescent | 28 to 41 days |
| 46 | D | Primary series (no prior infection) | Pre-Omicron | 92.8 (85.7 - 96.4) | Child Adolescent | 14 to 27 days |
| 46 | D | Primary series (no prior infection) | Pre-Omicron | 91.2 (81.8 - 95.8) | Child Adolescent | 28 to 41 days |
| 46 | D | Primary series (no prior infection) | Pre-Omicron | 37.6 (27.0 - 46.7) | Child Adolescent | 42 to 55 days |
| 46 | D | Primary series (no prior infection) | Pre-Omicron | 86.5 (72.2 - 93.4) | Child Adolescent | 56 to 69 days |
| 46 | D | Primary series (no prior infection) | Pre-Omicron | 82.6 (63.9 - 91.6) | Child Adolescent | 42 to 55 days |
| 46 | D | Primary series (no prior infection) | Pre-Omicron | 26.6 (4.1 - 43.9) | Child Adolescent | 56 to 69 days |
| 46 | D | Primary series (no prior infection) | Omicron | 64.7 (63.0 - 66.3) | Child Adolescent | 14 to 27 days |
| 46 | D | Primary series (no prior infection) | Omicron | 53.0 (51.3 - 54.7) | Child Adolescent | 28 to 41 days |
| 46 | D | Primary series (no prior infection) | Omicron | 40.6 (38.8 - 42.4) | Child Adolescent | 42 to 55 days |
| 46 | D | Primary series (no prior infection) | Omicron | 32.0 (30.0 - 33.9) | Child Adolescent | 56 to 69 days |
| 46 | D | Primary series (no prior infection) | Omicron | 82.6 (80.6 - 84.5) | Child Adolescent | 14 to 27 days |
| 46 | D | Primary series (no prior infection) | Omicron | 25.3 (22.9 - 27.6) | Child Adolescent | 70 to 83 days |
| 46 | D | Primary series (no prior infection) | Omicron | 77.4 (74.7 - 79.8) | Child Adolescent | 28 to 41 days |
| 46 | D | Primary series (no prior infection) | Omicron | 17.0 (13.8 - 20.0) | Child Adolescent | 84 to 97 days |
| 46 | D | Primary series (no prior infection) | Omicron | 69.6 (66.3 - 72.6) | Child Adolescent | 42 to 55 days |
| 46 | D | Primary series (no prior infection) | Omicron | 65.4 (61.9 - 68.7) | Child Adolescent | 56 to 69 days |
| 46 | D | Primary series (no prior infection) | Omicron | 5.9 (2.2 - 9.4) | Child Adolescent | 14+ weeks |
| 46 | D | Primary series (no prior infection) | Omicron | 58.0 (52.9 - 62.6) | Child Adolescent | 70 to 83 days |
| 46 | D | Primary series (no prior infection) | Omicron | 50.6 (42.7 - 57.4) | Child Adolescent | 14+ weeks |
| 46 | D | Primary series (no prior infection) | Omicron | 45.3 (37.2 - 52.4) | Child Adolescent | 84 to 97 days |
| 47 | S | Prior pre-Omicron 2infection | Pre-Omicron | 82.0 (72.0 - 89.0) | Adult | 1 to 6 weeks |
| 48 | M | Prior pre-Omicron 2infection | Pre-Omicron | 92.8 (87.3 - 95.9) | Adult | 2+ weeks |
| 48 | M | Prior pre-Omicron 2infection | Pre-Omicron | 95.4 (87.7 - 98.3) | Adult | 2+ weeks |
| 48 | M | Prior pre-Omicron 2infection | Pre-Omicron | 93.9 (87.1 - 97.1) | Adult | 2+ weeks |
| 48 | M | Prior pre-Omicron 2infection | Pre-Omicron | 95.7 (89.6 - 98.2) | Adult | 2+ weeks |
| 48 | M | Prior pre-Omicron 2infection | Pre-Omicron | 94.1 (86.8 - 97.3) | Adult | 2+ weeks |
| 48 | M | Prior pre-Omicron 2infection | Pre-Omicron | 94.2 (84.5 - 97.8) | Elderly | 2+ weeks |
| 48 | M | Prior pre-Omicron 2infection | Pre-Omicron | 96.1 (87.8 - 98.7) | Adult | 2+ weeks |
| 48 | M | Prior pre-Omicron 2infection | Pre-Omicron | 98.7 (90.5 - 99.8) | Adult | 2+ weeks |
| 48 | M | Prior pre-Omicron 2infection | Pre-Omicron | 94.2 (81.9 - 98.1) | Elderly | 2+ weeks |
| 48 | S | Prior pre-Omicron 2infection | Pre-Omicron | 94.5 (94.1 - 94.9) | Adult | 2+ weeks |
| 48 | S | Prior pre-Omicron 2infection | Pre-Omicron | 95.1 (94.2 - 95.9) | Adult | 2+ weeks |
| 48 | S | Prior pre-Omicron 2infection | Pre-Omicron | 95.2 (94.1 - 96.1) | Adult | 2+ weeks |
| 48 | S | Prior pre-Omicron 2infection | Pre-Omicron | 96.1 (94.6 - 97.2) | Adult | 2+ weeks |
| 48 | S | Prior pre-Omicron 2infection | Pre-Omicron | 97.0 (94.7 - 98.3) | Adult | 2+ weeks |
| 48 | S | Prior pre-Omicron 2infection | Pre-Omicron | 91.4 (85.5 - 94.9) | Elderly | 2+ weeks |
| 48 | M | Primary series (no prior infection) | Pre-Omicron | 97.1 (95.8 - 98.0) | Adult | 2+ weeks |
| 48 | M | Primary series (no prior infection) | Pre-Omicron | 96.8 (95.8 - 97.6) | Adult | 2+ weeks |
| 48 | M | Primary series (no prior infection) | Pre-Omicron | 95.4 (94.1 - 96.4) | Elderly | 2+ weeks |
| 48 | M | Primary series (no prior infection) | Pre-Omicron | 95.4 (91.7 - 97.5) | Adult | 2+ weeks |
| 48 | M | Primary series (no prior infection) | Pre-Omicron | 94.3 (91.1 - 96.3) | Adult | 2+ weeks |
| 48 | M | Primary series (no prior infection) | Pre-Omicron | 95.8 (93.9 - 97.1) | Adult | 2+ weeks |
| 48 | M | Primary series (no prior infection) | Pre-Omicron | 97.2 (96.1 - 97.9) | Adult | 2+ weeks |
| 48 | M | Primary series (no prior infection) | Pre-Omicron | 96.2 (95.2 - 96.9) | Adult | 2+ weeks |
| 48 | M | Primary series (no prior infection) | Pre-Omicron | 94.5 (93.3 - 95.5) | Elderly | 2+ weeks |
| 48 | S | Primary series (no prior infection) | Pre-Omicron | 95.7 (95.3 - 96.0) | Adult | 2+ weeks |
| 48 | S | Primary series (no prior infection) | Pre-Omicron | 93.7 (93.2 - 94.2) | Adult | 2+ weeks |
| 48 | S | Primary series (no prior infection) | Pre-Omicron | 94.7 (94.2 - 95.1) | Adult | 2+ weeks |
| 48 | S | Primary series (no prior infection) | Pre-Omicron | 94.9 (94.4 - 95.3) | Adult | 2+ weeks |
| 48 | S | Primary series (no prior infection) | Pre-Omicron | 94.2 (93.6 - 94.7) | Adult | 2+ weeks |
| 48 | S | Primary series (no prior infection) | Pre-Omicron | 90.3 (89.2 - 91.3) | Elderly | 2+ weeks |
| 49 | M | Primary series (no prior infection) | Omicron | 81.0 (59.9 - 90.1) | Child Adolescent | 2+ weeks |
| 49 | M | Primary series (no prior infection) | Omicron | 78.2 (42.0 - 90.3) | Child Adolescent | 2+ weeks |
| 50 | M | Primary series (no prior infection) | Pre-Omicron | 98.1 (94.7 - 99.3) | Elderly | 14 to 30 days |
| 50 | M | Primary series (no prior infection) | Pre-Omicron | 94.0 (89.6 - 96.6) | Elderly | 31 to 60 days |
| 50 | M | Primary series (no prior infection) | Pre-Omicron | 94.0 (84.9 - 97.6) | Elderly | 91 to 120 days |
| 50 | M | Primary series (no prior infection) | Pre-Omicron | 86.5 (77.4 - 91.9) | Elderly | 61 to 90 days |
| 50 | M | Primary series (no prior infection) | Pre-Omicron | 96.5 (73.4 - 99.5) | Elderly | 121+ days |
| 50 | M | Primary series (no prior infection) | Pre-Omicron | 99.4 (98.7 - 99.7) | Adult | 31 to 60 days |
| 50 | M | Primary series (no prior infection) | Pre-Omicron | 99.2 (98.4 - 99.6) | Adult | 61 to 90 days |
| 50 | M | Primary series (no prior infection) | Pre-Omicron | 99.5 (98.4 - 99.8) | Adult | 14 to 30 days |
| 50 | M | Primary series (no prior infection) | Pre-Omicron | 97.9 (96.9 - 98.6) | Adult | 91 to 120 days |
| 50 | M | Primary series (no prior infection) | Pre-Omicron | 97.2 (95.9 - 98.1) | Elderly | 91 to 120 days |
| 50 | M | Primary series (no prior infection) | Pre-Omicron | 97.7 (96.3 - 98.6) | Elderly | 61 to 90 days |
| 50 | M | Primary series (no prior infection) | Pre-Omicron | 93.5 (91.6 - 95.0) | Adult | 121+ days |
| 50 | M | Primary series (no prior infection) | Pre-Omicron | 97.5 (85.6 - 89.2) | Elderly | 121+ days |
| 50 | M | Primary series (no prior infection) | Pre-Omicron | 97.5 (94.8 - 98.8) | Elderly | 31 to 60 days |
| 50 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 97.2 (94.6 - 98.5) | Elderly | 14 to 30 days |
| 50 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 91.8 (87.7 - 94.6) | Elderly | 31 to 60 days |
| 50 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 93.2 (81.7 - 97.5) | Adult/Elderly | 14 to 30 days |
| 50 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 91.7 (78.7 - 96.7) | Elderly | 61 to 90 days |
| 50 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 61.5 (23.4 - 80.6) | Adult/Elderly | 31 to 60 days |
| 50 | M | Primary series (no prior infection) | Omicron | 77.6 (72.6 - 81.6) | Adult | 121+ days |
| 50 | M | Primary series (no prior infection) | Omicron | 85.8 (73.8 - 92.3) | Adult | 91 to 120 days |
| 50 | M | Primary series (no prior infection) | Omicron | 96.2 (72.9 - 99.5) | Adult | 14 to 30 days |
| 50 | M | Primary series (no prior infection) | Omicron | 79.0 (57.5 - 89.6) | Adult | 31 to 60 days |
| 50 | M | Primary series (no prior infection) | Omicron | 70.5 (40.3 - 85.5) | Adult | 61 to 90 days |
| 50 | M | Primary series + booster dose (no prior infection) | Omicron | 96.4 (95.5 - 97.1) | Elderly | 31 to 60 days |
| 50 | M | Primary series + booster dose (no prior infection) | Omicron | 96.7 (95.6 - 97.6) | Elderly | 14 to 30 days |
| 50 | M | Primary series + booster dose (no prior infection) | Omicron | 94.0 (92.5 - 95.1) | Elderly | 61 to 90 days |
| 50 | M | Primary series + booster dose (no prior infection) | Omicron | 95.5 (93.5 - 96.8) | Adult/Elderly | 14 to 30 days |
| 50 | M | Primary series + booster dose (no prior infection) | Omicron | 94.5 (91.9 - 96.2) | Adult/Elderly | 31 to 60 days |
| 50 | M | Primary series + booster dose (no prior infection) | Omicron | 88.7 (86.2 - 90.8) | Elderly | 91 to 120 days |
| 50 | M | Primary series + booster dose (no prior infection) | Omicron | 83.3 (77.3 - 87.8) | Elderly | 121+ days |
| 50 | M | Primary series + booster dose (no prior infection) | Omicron | 85.8 (79.4 - 90.2) | Adult/Elderly | 61 to 90 days |
| 50 | M | Primary series + booster dose (no prior infection) | Omicron | 67.5 (50.4 - 78.7) | Adult/Elderly | 91 to 120 days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 90.7 (88.2 - 92.7) | Elderly | 14 to 30 days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 83.2 (79.7 - 86.1) | Elderly | 31 to 60 days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 82.6 (76.5 - 87.2) | Elderly | 91 to 120 days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 73.0 (66.8 - 78.1) | Elderly | 61 to 90 days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 73.2 (57.1 - 83.3) | Elderly | 121+ days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 92.2 (91.8 - 92.6) | Adult | 14 to 30 days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 88.1 (87.7 - 88.5) | Adult | 31 to 60 days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 80.8 (80.2 - 81.2) | Adult | 61 to 90 days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 72.2 (71.5 - 72.8) | Adult | 91 to 120 days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 64.8 (63.9 - 65.8) | Adult | 121+ days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 77.3 (74.4 - 79.9) | Elderly | 61 to 90 days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 69.6 (66.5 - 72.4) | Elderly | 91 to 120 days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 50.0 (46.7 - 53.0) | Elderly | 121+ days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 74.4 (70.1 - 78.2) | Elderly | 31 to 60 days |
| 50 | S | Primary series (no prior infection) | Pre-Omicron | 82.3 (75.5 - 87.2) | Elderly | 14 to 30 days |
| 50 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 89.5 (87.6 - 91.1) | Adult | 14 to 30 days |
| 50 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 86.1 (83.3 - 88.4) | Elderly | 14 to 30 days |
| 50 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 83.8 (80.4 - 86.7) | Elderly | 31 to 60 days |
| 50 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 77.0 (70.9 - 81.9) | Adult | 31 to 60 days |
| 50 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 83.7 (75.2 - 89.2) | Elderly | 61 to 90 days |
| 50 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 85.1 (66.8 - 93.3) | Adult | 61 to 90 days |
| 50 | S | Primary series (no prior infection) | Omicron | 12.6 (12.0 - 13.3) | Adult | 121+ days |
| 50 | S | Primary series (no prior infection) | Omicron | 31.3 (30.3 - 32.4) | Adult | 91 to 120 days |
| 50 | S | Primary series (no prior infection) | Omicron | 31.9 (30.7 - 33.0) | Adult | 31 to 60 days |
| 50 | S | Primary series (no prior infection) | Omicron | 40.0 (38.6 - 41.3) | Adult | 14 to 30 days |
| 50 | S | Primary series (no prior infection) | Omicron | 32.3 (30.9 - 33.7) | Adult | 61 to 90 days |
| 50 | S | Primary series (no prior infection) | Omicron | 4.4 (-0.1 - 8.7) | Elderly | 121+ days |
| 50 | S | Primary series (no prior infection) | Omicron | 39.0 (27.6 - 48.7) | Elderly | 31 to 60 days |
| 50 | S | Primary series (no prior infection) | Omicron | 24.0 (11.4 - 34.8) | Elderly | 91 to 120 days |
| 50 | S | Primary series (no prior infection) | Omicron | 39.9 (26.3 - 50.9) | Elderly | 14 to 30 days |
| 50 | S | Primary series (no prior infection) | Omicron | 25.2 (9.0 - 38.6) | Elderly | 61 to 90 days |
| 50 | S | Primary series + booster dose (no prior infection) | Omicron | 55.1 (54.6 - 55.5) | Adult | 14 to 30 days |
| 50 | S | Primary series + booster dose (no prior infection) | Omicron | 51.1 (50.4 - 51.7) | Adult | 31 to 60 days |
| 50 | S | Primary series + booster dose (no prior infection) | Omicron | 52.7 (51.8 - 53.6) | Adult | 61 to 90 days |
| 50 | S | Primary series + booster dose (no prior infection) | Omicron | 51.3 (49.8 - 52.7) | Adult | 91 to 120 days |
| 50 | S | Primary series + booster dose (no prior infection) | Omicron | 54.5 (52.7 - 56.0) | Elderly | 31 to 60 days |
| 50 | S | Primary series + booster dose (no prior infection) | Omicron | 57.9 (56.1 - 59.6) | Elderly | 61 to 90 days |
| 50 | S | Primary series + booster dose (no prior infection) | Omicron | 57.7 (55.9 - 59.5) | Elderly | 14 to 30 days |
| 50 | S | Primary series + booster dose (no prior infection) | Omicron | 53.7 (53.7 - 58.1) | Elderly | 91 to 120 days |
| 50 | S | Primary series + booster dose (no prior infection) | Omicron | 53.2 (49.6 - 56.6) | Elderly | 121+ days |
| 50 | S | Primary series + booster dose (no prior infection) | Omicron | 52.3 (48.0 - 56.2) | Adult | 121+ days |
| 51 | M | Primary series + booster dose (no prior infection) | Omicron | 81.0 (74.0 - 86.0) | Elderly | 2+ weeks |
| 51 | M | Primary series + booster dose (no prior infection) | Omicron | 77.0 (67.0 - 83.0) | Elderly | 2+ weeks |
| 51 | M | Primary series + booster dose (no prior infection) | Omicron | 81.0 (67.0 - 89.0) | Elderly | 2+ weeks |
| 51 | M | Primary series + booster dose (no prior infection) | Omicron | 77.0 (69.0 - 82.0) | Elderly | 12+ weeks |
| 51 | M | Primary series + booster dose (no prior infection) | Omicron | 80.0 (72.0 - 86.0) | Elderly | 14 to 83 days |
| 51 | M | Primary series + booster dose (no prior infection) | Omicron | 86.0 (81.0 - 90.0) | Elderly | 1+ weeks |
| 51 | M | Primary series (no prior infection) | Omicron | 52.0 (33.0 - 65.0) | Elderly | 2+ weeks |
| 51 | D | Primary series + booster dose (no prior infection) | Omicron | 61.0 (50.0 - 69.0) | Elderly | 2+ weeks |
| 51 | D | Primary series + booster dose (no prior infection) | Omicron | 53.0 (39.0 - 63.0) | Elderly | 2+ weeks |
| 51 | D | Primary series + booster dose (no prior infection) | Omicron | 57.0 (40.0 - 69.0) | Elderly | 2+ weeks |
| 51 | D | Primary series + booster dose (no prior infection) | Omicron | 55.0 (45.0 - 64.0) | Elderly | 12+ weeks |
| 51 | D | Primary series + booster dose (no prior infection) | Omicron | 62.0 (51.0 - 71.0) | Elderly | 14 to 83 days |
| 51 | D | Primary series + booster dose (no prior infection) | Omicron | 69.0 (61.0 - 76.0) | Elderly | 1+ weeks |
| 51 | D | Primary series (no prior infection) | Omicron | 23.0 (1.0 - 40.0) | Elderly | 2+ weeks |
| 51 | S | Primary series + booster dose (no prior infection) | Omicron | 44.0 (38.0 - 49.0) | Elderly | 2+ weeks |
| 51 | S | Primary series + booster dose (no prior infection) | Omicron | 32.0 (24.0 - 38.0) | Elderly | 2+ weeks |
| 51 | S | Primary series + booster dose (no prior infection) | Omicron | 36.0 (28.0 - 44.0) | Elderly | 2+ weeks |
| 51 | S | Primary series + booster dose (no prior infection) | Omicron | 37.0 (31.0 - 43.0) | Elderly | 12+ weeks |
| 51 | S | Primary series + booster dose (no prior infection) | Omicron | 39.0 (33.0 - 45.0) | Elderly | 14 to 83 days |
| 51 | S | Primary series + booster dose (no prior infection) | Omicron | 49.0 (43.0 - 54.0) | Elderly | 1+ weeks |
| 51 | S | Primary series (no prior infection) | Omicron | 6.0 (-5.0 - 15.0) | Elderly | 2+ weeks |
| 52 | M | Primary series (no prior infection) | Omicron | 79.0 (60.0 - 89.0) | Adult | 7 to 59 days |
| 52 | M | Primary series (no prior infection) | Omicron | 77.0 (65.0 - 84.0) | Adult | 60 to 119 days |
| 52 | M | Primary series (no prior infection) | Omicron | 85.0 (79.0 - 89.0) | Adult | 120 to 179 days |
| 52 | M | Primary series (no prior infection) | Omicron | 86.0 (82.0 - 89.0) | Adult | 180 to 239 days |
| 52 | M | Primary series (no prior infection) | Omicron | 82.0 (75.0 - 87.0) | Adult | 240 to 299 days |
| 52 | M | Primary series (no prior infection) | Omicron | 77.0 (69.0 - 83.0) | Adult | 300+ days |
| 52 | M | Primary series (no prior infection) | Omicron | 80.0 (62.0 - 90.0) | Adult | 7 to 59 days |
| 52 | M | Primary series (no prior infection) | Omicron | 81.0 (69.0 - 88.0) | Adult | 60 to 119 days |
| 52 | M | Primary series (no prior infection) | Omicron | 79.0 (73.0 - 84.0) | Adult | 120 to 179 days |
| 52 | M | Primary series (no prior infection) | Omicron | 84.0 (80.0 - 87.0) | Adult | 180 to 239 days |
| 52 | M | Primary series (no prior infection) | Omicron | 72.0 (64.0 - 78.0) | Adult | 240 to 299 days |
| 52 | M | Primary series (no prior infection) | Omicron | 70.0 (62.0 - 77.0) | Adult | 300+ days |
| 52 | M | Primary series (no prior infection) | Omicron | 84.0 (57.0 - 94.0) | Adult | 7 to 59 days |
| 52 | M | Primary series (no prior infection) | Omicron | 86.0 (78.0 - 92.0) | Adult | 60 to 119 days |
| 52 | M | Primary series (no prior infection) | Omicron | 76.0 (67.0 - 82.0) | Adult | 120 to 179 days |
| 52 | M | Primary series (no prior infection) | Omicron | 69.0 (62.0 - 75.0) | Adult | 180 to 239 days |
| 52 | M | Primary series (no prior infection) | Omicron | 75.0 (67.0 - 80.0) | Adult | 240 to 299 days |
| 52 | M | Primary series (no prior infection) | Omicron | 71.0 (63.0 - 78.0) | Adult | 300+ days |
| 52 | M | Primary series (no prior infection) | Omicron | 84.0 (61.0 - 93.0) | Elderly | 7 to 59 days |
| 52 | M | Primary series (no prior infection) | Omicron | 57.0 (27.0 - 75.0) | Elderly | 60 to 119 days |
| 52 | M | Primary series (no prior infection) | Omicron | 60.0 (47.0 - 70.0) | Elderly | 120 to 179 days |
| 52 | M | Primary series (no prior infection) | Omicron | 46.0 (34.0 - 56.0) | Elderly | 180 to 239 days |
| 52 | M | Primary series (no prior infection) | Omicron | 68.0 (59.0 - 75.0) | Elderly | 240 to 299 days |
| 52 | M | Primary series (no prior infection) | Omicron | 64.0 (55.0 - 71.0) | Elderly | 300+ days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 97.0 (96.0 - 98.0) | Adult | 7 to 59 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 95.0 (93.0 - 96.0) | Adult | 60 to 119 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 94.0 (91.0 - 96.0) | Adult | 120 to 179 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 88.0 (83.0 - 92.0) | Adult | 180 to 239 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 87.0 (81.0 - 92.0) | Adult | 240+ days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 97.0 (91.0 - 99.0) | Adult | 7 to 59 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 93.0 (72.0 - 98.0) | Adult | 60 to 119 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 86.0 (44.0 - 96.0) | Adult | 120+ days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 98.0 (97.0 - 98.0) | Adult | 7 to 59 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 94.0 (92.0 - 95.0) | Adult | 60 to 119 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 91.0 (88.0 - 93.0) | Adult | 120 to 179 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 82.0 (77.0 - 87.0) | Adult | 180 to 239 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 85.0 (78.0 - 90.0) | Adult | 240+ days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 94.0 (91.0 - 96.0) | Adult | 7 to 59 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 89.0 (84.0 - 93.0) | Adult | 60 to 119 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 88.0 (79.0 - 93.0) | Adult | 120+ days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 96.0 (95.0 - 97.0) | Adult | 7 to 59 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 92.0 (90.0 - 94.0) | Adult | 60 to 119 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 89.0 (86.0 - 91.0) | Adult | 120 to 179 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 79.0 (73.0 - 84.0) | Adult | 180 to 239 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 79.0 (71.0 - 85.0) | Adult | 240+ days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 93.0 (91.0 - 95.0) | Adult | 7 to 59 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 92.0 (89.0 - 94.0) | Adult | 60 to 119 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 89.0 (84.0 - 92.0) | Adult | 120+ days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 91.0 (89.0 - 92.0) | Elderly | 7 to 59 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 86.0 (84.0 - 89.0) | Elderly | 60 to 119 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 82.0 (79.0 - 86.0) | Elderly | 120 to 179 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 75.0 (68.0 - 80.0) | Elderly | 180 to 239 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 76.0 (68.0 - 82.0) | Elderly | 240+ days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 92.0 (90.0 - 94.0) | Elderly | 7 to 59 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 90.0 (87.0 - 92.0) | Elderly | 60 to 119 days |
| 52 | M | Primary series + booster dose (no prior infection) | Omicron | 88.0 (85.0 - 91.0) | Elderly | 120+ days |
| 53 | S | Prior pre-Omicron 2infection | Pre-Omicron | 86.0 (81.0 - 89.0) | Adult/Elderly | 0 to 52 weeks |
| 53 | S | Prior pre-Omicron 2infection | Pre-Omicron | 69.0 (38.0 - 84.0) | Adult/Elderly | 52+ weeks |
| 53 | S | Primary series (no prior infection) | Pre-Omicron | 89.0 (78.0 - 94.0) | Adult/Elderly | 14 to 73 days |
| 53 | S | Primary series (no prior infection) | Pre-Omicron | 50.0 (26.0 - 67.0) | Adult/Elderly | 134 to 193 days |
| 53 | S | Primary series (no prior infection) | Pre-Omicron | 53.0 (28.0 - 69.0) | Adult/Elderly | 194 to 239 days |
| 53 | S | Primary series (no prior infection) | Pre-Omicron | 58.0 (18.0 - 79.0) | Adult/Elderly | 74 to 133 days |
| 53 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 97.0 (93.0 - 98.0) | Adult/Elderly | 74 to 133 days |
| 53 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 93.0 (89.0 - 96.0) | Adult/Elderly | 134 to 193 days |
| 53 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 92.0 (85.0 - 95.0) | Adult/Elderly | 134 to 193 days |
| 53 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 92.0 (83.0 - 96.0) | Adult/Elderly | 74 to 133 days |
| 53 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 95.0 (82.0 - 99.0) | Adult/Elderly | 194 to 262 days |
| 53 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 94.0 (75.0 - 99.0) | Adult/Elderly | 14 to 73 days |
| 53 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 84.0 (67.0 - 92.0) | Adult/Elderly | 14 to 73 days |
| 53 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 86.0 (27.0 - 97.0) | Adult/Elderly | 194 to 262 days |
| 54 | S | Primary series (no prior infection) | Pre-Omicron | 86.7 (84.6 - 88.6) | Adult | 1 to 30 days |
| 54 | S | Primary series (no prior infection) | Pre-Omicron | 80.9 (79.0 - 82.6) | Adult | 31 to 60 days |
| 54 | S | Primary series (no prior infection) | Pre-Omicron | 72.8 (71.7 - 73.8) | Adult | 61 to 90 days |
| 54 | S | Primary series (no prior infection) | Pre-Omicron | 53.8 (52.9 - 54.6) | Adult | 91 to 150 days |
| 54 | S | Primary series (no prior infection) | Pre-Omicron | 88.2 (83.1 - 91.8) | Adult | 1 to 30 days |
| 54 | S | Primary series (no prior infection) | Pre-Omicron | 81.5 (77.7 - 84.6) | Adult | 31 to 60 days |
| 54 | S | Primary series (no prior infection) | Pre-Omicron | 72.2 (70.4 - 74.0) | Adult | 61 to 90 days |
| 54 | S | Primary series (no prior infection) | Pre-Omicron | 65.0 (63.6 - 66.3) | Adult | 91 to 150 days |
| 54 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 81.2 (79.2 - 82.9) | Adult | 1 to 30 days |
| 54 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 82.8 (58.8 - 92.9) | Adult | 1 to 30 days |
| 54 | S | Primary series (no prior infection) | Omicron | 55.2 (23.5 - 73.7) | Adult | 1 to 30 days |
| 54 | S | Primary series (no prior infection) | Omicron | 16.1 (-20.8 - 41.7) | Adult | 31 to 60 days |
| 54 | S | Primary series (no prior infection) | Omicron | 9.8 (-10.0 - 26.1) | Adult | 61 to 90 days |
| 54 | S | Primary series (no prior infection) | Omicron | -76.5 (-95.3 - -59.5) | Adult | 91 to 150 days |
| 54 | S | Primary series (no prior infection) | Omicron | 36.7 (-69.9 - 76.4) | Adult | 1 to 30 days |
| 54 | S | Primary series (no prior infection) | Omicron | 30.0 (-41.3 - 65.4) | Adult | 31 to 60 days |
| 54 | S | Primary series (no prior infection) | Omicron | 4.2 (-30.8 - 29.8) | Adult | 61 to 90 days |
| 54 | S | Primary series (no prior infection) | Omicron | -39.3 (-61.6 - -20.0) | Adult | 91 to 150 days |
| 54 | S | Primary series + booster dose (no prior infection) | Omicron | 54.6 (30.4 - 70.4) | Adult | 1 to 30 days |
| 55 | S | Prior pre-Omicron 2infection | Pre-Omicron | 79.3 (74.4 - 83.3) | Adult | 91 to 213 days |
| 55 | S | Prior pre-Omicron 2infection | Pre-Omicron | 77.7 (70.9 - 82.9) | Adult | 213+ days |
| 56 | M | Primary series (no prior infection) | Pre-Omicron | 94.3 (92.1 - 95.9) | All | 91 to 122 days |
| 56 | M | Primary series (no prior infection) | Pre-Omicron | 92.3 (89.5 - 94.3) | All | 30 to 61 days |
| 56 | M | Primary series (no prior infection) | Pre-Omicron | 91.2 (88.3 - 93.4) | All | 152 to 182 days |
| 56 | M | Primary series (no prior infection) | Pre-Omicron | 86.5 (80.5 - 90.7) | All | 213 to 243 days |
| 56 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (94.0 - 95.8) | All | 91 to 122 days |
| 56 | M | Primary series (no prior infection) | Pre-Omicron | 94.6 (93.6 - 95.5) | All | 30 to 61 days |
| 56 | M | Primary series (no prior infection) | Pre-Omicron | 91.2 (89.8 - 92.5) | All | 152 to 182 days |
| 56 | M | Primary series (no prior infection) | Pre-Omicron | 83.3 (79.9 - 86.2) | All | 213 to 243 days |
| 56 | M | Primary series (no prior infection) | Pre-Omicron | 86.2 (71.1 - 93.5) | All | 273 to 304 days |
| 56 | S | Primary series (no prior infection) | Pre-Omicron | 91.4 (91.0 - 91.8) | All | 30 to 61 days |
| 56 | S | Primary series (no prior infection) | Pre-Omicron | 89.6 (89.2 - 90.0) | All | 91 to 122 days |
| 56 | S | Primary series (no prior infection) | Pre-Omicron | 85.4 (84.8 - 86.0) | All | 152 to 182 days |
| 56 | S | Primary series (no prior infection) | Pre-Omicron | 75.7 (74.2 - 77.1) | All | 213 to 243 days |
| 56 | S | Primary series (no prior infection) | Pre-Omicron | 61.9 (57.5 - 65.9) | All | 273 to 304 days |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 91.0 (88.0 - 93.0) | Elderly | 11 to 14 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 87.0 (84.0 - 90.0) | Elderly | 15 to 18 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 93.0 (89.0 - 96.0) | Elderly | 7 to 10 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 85.0 (81.0 - 88.0) | Elderly | 19 to 22 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 92.0 (87.0 - 95.0) | Elderly | 3 to 6 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 80.0 (75.0 - 83.0) | Elderly | 23 to 26 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (88.0 - 98.0) | Vulnerable adult | 3 to 6 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 96.0 (94.0 - 98.0) | Vulnerable adult | 7 to 10 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (94.0 - 96.0) | Vulnerable adult | 11 to 14 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 92.0 (90.0 - 94.0) | Vulnerable adult | 15 to 18 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 92.0 (90.0 - 94.0) | Vulnerable adult | 19 to 22 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 91.0 (88.0 - 93.0) | Vulnerable adult | 23 to 26 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 96.0 (93.0 - 98.0) | Adult | 3 to 6 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 91.0 (86.0 - 94.0) | Adult | 7 to 10 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 89.0 (84.0 - 96.0) | Adult | 11 to 14 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 90.0 (85.0 - 93.0) | Adult | 15 to 18 weeks |
| 57 | M | Primary series (no prior infection) | Pre-Omicron | 82.0 (71.0 - 90.0) | Adult | 19 to 22 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 59.0 (53.0 - 65.0) | Elderly | 11 to 14 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 44.0 (36.0 - 50.0) | Elderly | 15 to 18 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 34.0 (26.0 - 42.0) | Elderly | 19 to 22 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 65.0 (56.0 - 72.0) | Elderly | 7 to 10 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 13.0 (3.0 - 22.0) | Elderly | 23 to 26 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 81.0 (63.0 - 87.0) | Elderly | 3 to 6 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 78.0 (73.0 - 82.0) | Vulnerable adult | 3 to 6 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 62.0 (59.0 - 65.0) | Vulnerable adult | 7 to 10 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 55.0 (52.0 - 58.0) | Vulnerable adult | 11 to 14 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 43.0 (39.0 - 47.0) | Vulnerable adult | 15 to 18 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 19.0 (13.0 - 24.0) | Vulnerable adult | 19 to 22 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 10.0 (5.0 - 16.0) | Vulnerable adult | 23 to 26 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 73.0 (69.0 - 77.0) | Adult | 3 to 6 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 55.0 (49.0 - 59.0) | Adult | 7 to 10 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 25.0 (18.0 - 32.0) | Adult | 11 to 14 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 5.0 (-2.0 - 12.0) | Adult | 15 to 18 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | -21.0 (-29.0 - -13.0) | Adult | 19 to 22 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | -1.0 (-14.0 - 10.0) | Adult | 23 to 26 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 76.0 (74.0 - 77.0) | Adult | 3 to 6 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 59.0 (57.0 - 60.0) | Adult | 7 to 10 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 42.0 (40.0 - 42.0) | Adult | 11 to 14 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | 4.0 (1.0 - 4.0) | Adult | 15 to 18 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | -42.0 (-49.0 - -42.0) | Adult | 19 to 22 weeks |
| 57 | S | Primary series (no prior infection) | Pre-Omicron | -72.0 (-168.0 - -72.0) | Adult | 23 to 26 weeks |
| 58 | S | Primary series (no prior infection) | Pre-Omicron | 65.7 (64.4 - 66.9) | Child Adolescent | 2+ weeks |
| 58 | S | Primary series (no prior infection) | Pre-Omicron | 60.6 (23.7 - 81.5) | Child Adolescent | 12+ weeks |
| 59 | S | Primary series (no prior infection) | Pre-Omicron | 93.6 (54.3 - 99.1) | Adult | 0+ weeks |
| 59 | S | Primary series (no prior infection) | Pre-Omicron | 84.8 (70.1 - 92.3) | Adult | 0+ weeks |
| 59 | S | Primary series (no prior infection) | Pre-Omicron | 57.6 (26.2 - 75.6) | Adult | 0+ weeks |
| 59 | S | Primary series (no prior infection) | Pre-Omicron | 85.8 (85.1 - 86.4) | Adult | 0+ weeks |
| 59 | S | Primary series (no prior infection) | Pre-Omicron | 80.9 (80.1 - 81.7) | Adult | 0+ weeks |
| 59 | S | Primary series (no prior infection) | Pre-Omicron | 76.8 (76.2 - 77.3) | Adult | 0+ weeks |
| 59 | S | Primary series (no prior infection) | Pre-Omicron | 5.5 (-20.6 - 25.9) | Adult | 0+ weeks |
| 60 | S | Primary series (no prior infection) | Pre-Omicron | 91.9 (79.8 - 96.8) | Adult/Elderly | 12 to 120 days |
| 60 | S | Primary series (no prior infection) | Pre-Omicron | 63.7 (40.4 - 77.9) | Adult/Elderly | 121 to 240 days |
| 60 | S | Primary series (no prior infection) | Pre-Omicron | 37.2 (-5.1 - 62.5) | Adult/Elderly | 241+ days |
| 61 | S | Primary series (no prior infection) | Pre-Omicron | 85.0 (80.0 - 89.0) | Child Adolescent | 2+ weeks |
| 61 | S | Primary series (no prior infection) | Omicron | 19.0 (16.0 - 22.0) | Child Adolescent | 2+ weeks |
| 61 | S | Primary series (no prior infection) | Omicron | 45.0 (41.0 - 49.0) | Child Adolescent | 4+ weeks |
| 61 | S | Primary series (no prior infection) | Omicron | 26.0 (20.0 - 31.0) | Child Adolescent | 8+ weeks |
| 61 | S | Primary series (no prior infection) | Omicron | -6.0 (-14.0 - 2.0) | Child Adolescent | 24+ weeks |
| 61 | S | Primary series (no prior infection) | Omicron | 4.0 (-6.0 - 13.0) | Child Adolescent | 12+ weeks |
| 61 | S | Primary series (no prior infection) | Omicron | -12.0 (-22.0 - -3.0) | Child Adolescent | 20+ weeks |
| 61 | S | Primary series (no prior infection) | Omicron | -14.0 (-25.0 - -4.0) | Child Adolescent | 16+ weeks |
| 61 | S | Primary series (prior Omicron infection) | Omicron | 59.0 (45.0 - 69.0) | Child Adolescent | 30 to 61 days |
| 61 | S | Primary series (prior Omicron infection) | Omicron | 54.0 (37.0 - 67.0) | Child Adolescent | 61 to 91 days |
| 61 | S | Primary series (prior Omicron infection) | Omicron | 33.0 (16.0 - 46.0) | Child Adolescent | 182 to 213 days |
| 61 | S | Primary series (prior Omicron infection) | Omicron | 27.0 (9.0 - 41.0) | Child Adolescent | 152 to 182 days |
| 61 | S | Primary series (prior Omicron infection) | Omicron | 24.0 (2.0 - 41.0) | Child Adolescent | 213 to 243 days |
| 61 | S | Primary series (prior Omicron infection) | Omicron | 40.0 (16.0 - 57.0) | Child Adolescent | 243 to 273 days |
| 61 | S | Primary series (prior Omicron infection) | Omicron | 31.0 (4.0 - 50.0) | Child Adolescent | 91 to 122 days |
| 61 | S | Primary series (prior Omicron infection) | Omicron | 6.0 (-20.0 - 26.0) | Child Adolescent | 122 to 152 days |
| 61 | S | Primary series (prior pre-Omicron infection) | Omicron | 30.0 (-17.0 - 58.0) | Child Adolescent | 273+ days |
| 61 | S | Primary series + booster dose (no prior infection) | Omicron | 51.0 (44.0 - 57.0) | Child Adolescent | 2+ weeks |
| 61 | S | Primary series + booster dose (no prior infection) | Omicron | 52.0 (43.0 - 60.0) | Child Adolescent | 4+ weeks |
| 61 | S | Primary series + booster dose (no prior infection) | Omicron | 51.0 (38.0 - 62.0) | Child Adolescent | 8+ weeks |
| 61 | S | Primary series + booster dose (no prior infection) | Omicron | 47.0 (23.0 - 64.0) | Child Adolescent | 12+ weeks |
| 61 | S | Primary series + booster dose (no prior infection) | Omicron | 51.0 (-16.0 - 79.0) | Child Adolescent | 16+ weeks |
| 61 | S | Primary series + booster dose (prior Omicron infection) | Omicron | 76.0 (62.0 - 85.0) | Child Adolescent | 30 to 61 days |
| 61 | S | Primary series + booster dose (prior Omicron infection) | Omicron | 69.0 (44.0 - 83.0) | Child Adolescent | 61 to 91 days |
| 61 | S | Primary series + booster dose (prior Omicron infection) | Omicron | 76.0 (19.0 - 93.0) | Child Adolescent | 91 to 122 days |
| 61 | S | Primary series + booster dose (prior Omicron infection) | Omicron | 59.0 (-238.0 - 95.0) | Child Adolescent | 122 to 152 days |
| 62 | S | Primary series (no prior infection) | Omicron | 33.5 (18.9 - 45.2) | All | 2+ weeks |
| 62 | S | Primary series + booster dose (no prior infection) | Omicron | 63.1 (37.0 - 78.3) | Adult | 2+ weeks |
| 63 | M | Primary series (no prior infection) | Pre-Omicron | 90.0 (85.0 - 93.0) | Adult/Elderly | 2+ weeks |
| 63 | M | Primary series (no prior infection) | Pre-Omicron | 82.0 (77.0 - 86.0) | Adult/Elderly | 2+ weeks |
| 63 | M | Primary series (no prior infection) | Pre-Omicron | 87.0 (82.0 - 91.0) | Adult | 2+ weeks |
| 63 | M | Primary series (no prior infection) | Pre-Omicron | 85.0 (80.0 - 89.0) | Elderly | 2+ weeks |
| 63 | M | Primary series (no prior infection) | Pre-Omicron | 88.0 (86.0 - 90.0) | Adult/Elderly | 2+ weeks |
| 63 | M | Primary series (no prior infection) | Pre-Omicron | 82.0 (80.0 - 84.0) | Adult/Elderly | 2+ weeks |
| 63 | M | Primary series (no prior infection) | Pre-Omicron | 88.0 (86.0 - 89.0) | Adult | 2+ weeks |
| 63 | M | Primary series (no prior infection) | Pre-Omicron | 88.0 (86.0 - 90.0) | Adult/Elderly | 14 to 150 days |
| 63 | M | Primary series (no prior infection) | Pre-Omicron | 81.0 (78.0 - 84.0) | Adult/Elderly | 151+ days |
| 63 | M | Primary series (no prior infection) | Pre-Omicron | 81.0 (77.0 - 84.0) | Elderly | 2+ weeks |
| 63 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 94.0 (92.0 - 95.0) | Adult/Elderly | 1+ weeks |
| 63 | M | Primary series (no prior infection) | Omicron | 65.0 (51.0 - 75.0) | Adult/Elderly | 2+ weeks |
| 63 | M | Primary series + booster dose (no prior infection) | Omicron | 86.0 (77.0 - 91.0) | Adult/Elderly | 1+ weeks |
| 64 | S | Primary series (no prior infection) | Pre-Omicron | 75.0 (65.8 - 82.0) | Adult/Elderly | 70 to 83 days |
| 64 | S | Primary series (no prior infection) | Pre-Omicron | 81.3 (70.9 - 88.5) | Adult/Elderly | 28 to 41 days |
| 64 | S | Primary series (no prior infection) | Pre-Omicron | 75.1 (64.7 - 82.8) | Adult/Elderly | 56 to 69 days |
| 64 | S | Primary series (no prior infection) | Pre-Omicron | 71.0 (58.2 - 80.3) | Adult/Elderly | 84 to 97 days |
| 64 | S | Primary series (no prior infection) | Pre-Omicron | 63.4 (45.0 - 76.1) | Adult/Elderly | 42 to 55 days |
| 64 | S | Primary series (no prior infection) | Pre-Omicron | 58.9 (40.7 - 71.9) | Adult/Elderly | 14 to 27 days |
| 64 | S | Primary series (no prior infection) | Pre-Omicron | 31.3 (10.8 - 47.2) | Adult/Elderly | 98 to 111 days |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 98.6 (97.3 - 99.3) | Adult | 8+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 95.5 (93.4 - 96.9) | Adult | 28+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 96.0 (92.8 - 97.8) | Adult | 32+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 96.8 (93.1 - 98.5) | Adult | 16+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 92.5 (89.2 - 94.9) | Adult | 24+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 95.7 (91.9 - 97.7) | Adult | 20+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 88.3 (83.6 - 91.7) | Adult | 4+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 93.3 (87.7 - 96.4) | Adult | 12+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 98.0 (95.5 - 99.1) | Adult | 8+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 91.6 (88.6 - 93.8) | Adult | 4+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 95.5 (92.2 - 97.4) | Adult | 32+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 90.5 (87.0 - 93.0) | Adult | 28+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 91.5 (87.6 - 94.1) | Adult | 24+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 94.1 (89.5 - 96.7) | Adult | 16+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 94.6 (89.7 - 97.2) | Adult | 12+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 92.4 (87.7 - 95.3) | Adult | 20+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 97.2 (96.1 - 98.0) | Adult | 8+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 96.6 (95.3 - 97.5) | Adult | 16+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 94.3 (93.1 - 95.3) | Adult | 24+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (93.7 - 96.0) | Adult | 20+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 94.1 (92.7 - 95.2) | Adult | 28+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 95.2 (93.4 - 96.6) | Adult | 12+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 94.9 (92.4 - 96.6) | Adult | 32+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 75.2 (72.1 - 78.0) | Adult | 4+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 96.4 (95.1 - 97.4) | Adult | 8+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 91.9 (90.4 - 93.1) | Adult | 20+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 94.1 (92.6 - 95.4) | Adult | 16+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 90.5 (88.8 - 91.9) | Adult | 24+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 94.3 (92.5 - 95.7) | Adult | 12+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 87.7 (85.9 - 89.3) | Adult | 4+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 88.7 (86.9 - 90.3) | Adult | 28+ weeks |
| 65 | M | Primary series (no prior infection) | Pre-Omicron | 92.4 (89.7 - 94.4) | Adult | 32+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 95.9 (95.5 - 96.2) | Adult | 8+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 91.5 (90.9 - 92.0) | Adult | 16+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 87.6 (87.1 - 88.2) | Adult | 20+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 92.5 (91.9 - 93.1) | Adult | 12+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 83.4 (82.7 - 84.1) | Adult | 24+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 78.0 (77.2 - 78.8) | Adult | 4+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 80.3 (79.3 - 81.2) | Adult | 28+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 77.8 (75.9 - 79.6) | Adult | 32+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 94.5 (94.1 - 94.9) | Adult | 8+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 85.5 (85.0 - 86.0) | Adult | 4+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 80.4 (79.8 - 81.0) | Adult | 20+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 88.2 (87.5 - 88.8) | Adult | 12+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 84.1 (83.4 - 84.7) | Adult | 16+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 75.9 (75.1 - 76.7) | Adult | 24+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 66.6 (65.2 - 67.8) | Adult | 28+ weeks |
| 65 | S | Primary series (no prior infection) | Pre-Omicron | 67.8 (65.9 - 69.7) | Adult | 32+ weeks |
| 66 | D | Primary series (no prior infection) | Pre-Omicron | 86.6 (75.5 - 92.7) | All | 14 to 89 days |
| 66 | D | Primary series (no prior infection) | Pre-Omicron | 93.8 (55.0 - 99.1) | All | 90 to 149 days |
| 66 | D | Primary series (no prior infection) | Pre-Omicron | 56.8 (46.4 - 65.2) | All | 90 to 149 days |
| 66 | D | Primary series (no prior infection) | Pre-Omicron | 74.8 (62.9 - 82.8) | All | 14 to 89 days |
| 66 | D | Primary series (no prior infection) | Pre-Omicron | 48.4 (32.9 - 60.4) | All | 150+ days |
| 66 | M | Primary series (no prior infection) | Pre-Omicron | 85.5 (65.5 - 93.9) | All | 14 to 89 days |
| 66 | M | Primary series (no prior infection) | Pre-Omicron | 82.2 (-34.5 - 97.7) | All | 90 to 149 days |
| 66 | M | Primary series (no prior infection) | Pre-Omicron | 78.0 (63.2 - 86.8) | All | 90 to 149 days |
| 66 | M | Primary series (no prior infection) | Pre-Omicron | 85.4 (60.2 - 94.6) | All | 14 to 89 days |
| 66 | M | Primary series (no prior infection) | Pre-Omicron | 66.2 (42.5 - 80.1) | All | 150+ days |
| 66 | S | Primary series (no prior infection) | Pre-Omicron | 84.4 (75.5 - 90.0) | All | 14 to 89 days |
| 66 | S | Primary series (no prior infection) | Pre-Omicron | 96.5 (75.1 - 99.5) | All | 90 to 149 days |
| 66 | S | Primary series (no prior infection) | Pre-Omicron | 49.1 (40.4 - 56.6) | All | 90 to 149 days |
| 66 | S | Primary series (no prior infection) | Pre-Omicron | 68.9 (58.0 - 77.0) | All | 14 to 89 days |
| 66 | S | Primary series (no prior infection) | Pre-Omicron | 37.2 (24.0 - 48.1) | All | 150+ days |
| 67 | S | Primary series (no prior infection) | Omicron | 13.6 (8.7 - 18.2) | All | 150+ days |
| 67 | S | Primary series (no prior infection) | Omicron | 27.1 (18.7 - 34.6) | All | 14 to 149 days |
| 67 | S | Primary series + booster dose (no prior infection) | Omicron | 54.1 (49.2 - 58.4) | All | 2+ weeks |
| 68 | D | Primary series (no prior infection) | Pre-Omicron | 93.7 (91.6 - 95.3) | All | 2+ weeks |
| 68 | D | Primary series (no prior infection) | Pre-Omicron | 88.0 (85.3 - 90.1) | All | 2+ weeks |
| 69 | M | Primary series (no prior infection) | Pre-Omicron | 94.6 (93.1 - 95.8) | Elderly | 2+ weeks |
| 69 | M | Primary series (no prior infection) | Pre-Omicron | 96.9 (95.0 - 98.0) | Adult | 2+ weeks |
| 69 | M | Primary series (no prior infection) | Pre-Omicron | 91.0 (87.8 - 93.3) | Elderly | 2+ weeks |
| 69 | M | Primary series (no prior infection) | Pre-Omicron | 98.3 (97.6 - 98.7) | Adult | 2+ weeks |
| 69 | M | Primary series (no prior infection) | Pre-Omicron | 96.9 (96.1 - 97.6) | Elderly | 2+ weeks |
| 69 | M | Primary series (no prior infection) | Pre-Omicron | 94.4 (92.1 - 96.1) | Elderly | 2+ weeks |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 97.0 (92.0 - 98.0) | Elderly | 42 to 69 days |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 93.0 (87.0 - 96.0) | Elderly | 10+ weeks |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (88.0 - 98.0) | Elderly | 14 to 41 days |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 86.0 (78.0 - 91.0) | Elderly | 70 to 97 days |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 80.0 (71.0 - 86.0) | Elderly | 98 to 123 days |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 88.0 (78.0 - 94.0) | Elderly | 42 to 69 days |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 75.0 (64.0 - 82.0) | Elderly | 124+ days |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 87.0 (71.0 - 93.0) | Elderly | 14 to 41 days |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 97.0 (94.0 - 98.0) | Elderly | 42 to 69 days |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (90.0 - 97.0) | Elderly | 14 to 41 days |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 93.0 (86.0 - 96.0) | Elderly | 10+ weeks |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 83.0 (68.0 - 91.0) | Elderly | 14 to 41 days |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 81.0 (66.0 - 90.0) | Elderly | 42 to 69 days |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 74.0 (60.0 - 84.0) | Elderly | 70 to 97 days |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 74.0 (58.0 - 83.0) | Elderly | 98 to 123 days |
| 70 | M | Primary series (no prior infection) | Pre-Omicron | 63.0 (37.0 - 78.0) | Elderly | 124+ days |
| 70 | D | Primary series (no prior infection) | Pre-Omicron | 79.0 (76.0 - 83.0) | Elderly | 14 to 41 days |
| 70 | D | Primary series (no prior infection) | Pre-Omicron | 68.0 (64.0 - 71.0) | Elderly | 42 to 69 days |
| 70 | D | Primary series (no prior infection) | Pre-Omicron | 59.0 (53.0 - 63.0) | Elderly | 70 to 97 days |
| 70 | D | Primary series (no prior infection) | Pre-Omicron | 72.0 (61.0 - 79.0) | Elderly | 14 to 41 days |
| 70 | D | Primary series (no prior infection) | Pre-Omicron | 39.0 (29.0 - 48.0) | Elderly | 14+ weeks |
| 70 | D | Primary series (no prior infection) | Pre-Omicron | 64.0 (53.0 - 72.0) | Elderly | 42 to 69 days |
| 70 | D | Primary series (no prior infection) | Pre-Omicron | 53.0 (43.0 - 62.0) | Elderly | 70 to 97 days |
| 70 | D | Primary series (no prior infection) | Pre-Omicron | 50.0 (40.0 - 59.0) | Elderly | 98 to 123 days |
| 70 | D | Primary series (no prior infection) | Pre-Omicron | 34.0 (29.0 - 48.0) | Elderly | 124+ days |
| 71 | D | Primary series (no prior infection) | Pre-Omicron | 91.8 (80.3 - 96.6) | Adult | 14 to 91 days |
| 71 | D | Primary series (no prior infection) | Pre-Omicron | 90.3 (73.6 - 96.4) | Elderly | 2+ weeks |
| 71 | D | Primary series (no prior infection) | Pre-Omicron | 86.4 (56.9 - 95.7) | Adult | 91 to 182 days |
| 72 | S | Primary series (no prior infection) | Pre-Omicron | 89.0 (77.0 - 93.0) | Adult/Elderly | 2+ weeks |
| 72 | S | Primary series (no prior infection) | Pre-Omicron | 87.0 (77.0 - 94.0) | Adult/Elderly | 2+ weeks |
| 72 | S | Primary series (no prior infection) | Pre-Omicron | 46.0 (34.0 - 56.0) | Adult/Elderly | 2+ weeks |
| 72 | S | Primary series (no prior infection) | Pre-Omicron | 60.0 (51.0 - 67.0) | Adult/Elderly | 2+ weeks |
| 72 | M | Primary series (no prior infection) | Pre-Omicron | 78.0 (45.0 - 91.0) | Adult/Elderly | 2+ weeks |
| 72 | M | Primary series (no prior infection) | Pre-Omicron | 87.0 (65.0 - 95.0) | Adult/Elderly | 2+ weeks |
| 72 | M | Primary series (no prior infection) | Pre-Omicron | 61.0 (47.0 - 71.0) | Adult/Elderly | 2+ weeks |
| 72 | M | Primary series (no prior infection) | Pre-Omicron | 77.0 (68.0 - 83.0) | Adult/Elderly | 2+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 89.7 (84.8 - 93.0) | Adult | 4+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 77.8 (73.1 - 81.7) | Adult | 16+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 73.1 (68.4 - 77.1) | Adult | 20+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 83.3 (78.2 - 87.2) | Adult | 12+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 86.2 (79.8 - 90.6) | Adult | 8+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 66.9 (60.9 - 71.9) | Adult | 24+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 78.4 (71.1 - 83.9) | Elderly | 4+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 58.2 (51.2 - 64.2) | Elderly | 20+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 79.8 (72.2 - 85.3) | Elderly | 8+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 44.9 (37.6 - 51.3) | Elderly | 24+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 36.2 (27.7 - 43.6) | Elderly | 28+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 57.3 (48.4 - 64.7) | Adult | 28+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 71.3 (61.9 - 78.5) | Elderly | 12+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 61.7 (52.4 - 69.1) | Elderly | 16+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 81.6 (75.9 - 85.9) | Adult | 4+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 65.9 (60.2 - 70.8) | Adult | 16+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 74.8 (68.8 - 79.7) | Adult | 12+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 56.7 (50.5 - 62.1) | Adult | 20+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 75.0 (67.6 - 80.7) | Adult | 8+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 47.2 (39.3 - 54.1) | Adult | 24+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 66.3 (55.7 - 74.4) | Elderly | 4+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 22.5 (7.2 - 35.2) | Adult | 28+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | -10.6 (-25.9 - 2.8) | Elderly | 24+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 39.8 (21.6 - 53.8) | Elderly | 8+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 37.7 (19.5 - 51.8) | Elderly | 12+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | -23.3 (-40.5 - -8.2) | Elderly | 28+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | -2.4 (-20.4 - 12.9) | Elderly | 20+ weeks |
| 73 | D | Primary series (no prior infection) | Pre-Omicron | 12.8 (-7.9 - 29.5) | Elderly | 16+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 92.5 (86.1 - 95.9) | Adult | 24+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 95.3 (88.1 - 98.1) | Adult | 12+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 89.8 (82.6 - 94.0) | Adult | 20+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 90.8 (83.2 - 94.9) | Adult | 16+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 89.0 (78.8 - 94.3) | Elderly | 8+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 67.2 (58.4 - 74.2) | Elderly | 24+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 71.9 (62.2 - 79.1) | Elderly | 20+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 64.7 (55.2 - 72.3) | Elderly | 28+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 92.7 (78.0 - 97.6) | Adult | 8+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 92.0 (76.1 - 97.3) | Adult | 4+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 76.4 (61.4 - 85.5) | Elderly | 12+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 83.1 (66.8 - 91.4) | Adult | 28+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 66.7 (50.7 - 77.5) | Elderly | 16+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 66.1 (45.3 - 79.0) | Elderly | 4+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 85.4 (76.8 - 90.9) | Adult | 16+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 81.8 (73.3 - 87.6) | Adult | 20+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 89.8 (79.6 - 94.9) | Adult | 8+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 80.9 (70.5 - 87.7) | Adult | 24+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 83.4 (71.7 - 90.2) | Adult | 12+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 85.6 (72.6 - 92.4) | Adult | 4+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 61.0 (41.3 - 74.2) | Elderly | 4+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 50.8 (30.5 - 65.2) | Elderly | 16+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 16.4 (-2.7 - 32.0) | Elderly | 24+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 26.7 (4.7 - 43.6) | Elderly | 20+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 57.0 (31.2 - 73.2) | Adult | 28+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 1.7 (-22.0 - 20.8) | Elderly | 28+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 41.0 (12.2 - 60.3) | Elderly | 8+ weeks |
| 73 | M | Primary series (no prior infection) | Pre-Omicron | 48.5 (18.7 - 67.3) | Elderly | 12+ weeks |
| 74 | D | Primary series (no prior infection) | Pre-Omicron | 65.0 (38.0 - 81.0) | All | 2+ weeks |
| 74 | D | Primary series (no prior infection) | Pre-Omicron | 54.0 (26.0 - 71.0) | All | 2+ weeks |
| 74 | S | Primary series (no prior infection) | Pre-Omicron | 59.0 (24.0 - 78.0) | All | 2+ weeks |
| 74 | S | Primary series (no prior infection) | Pre-Omicron | 52.0 (20.0 - 71.0) | All | 2+ weeks |
| 74 | S | Primary series (no prior infection) | Pre-Omicron | 66.0 (38.0 - 82.0) | All | 2+ weeks |
| 74 | S | Primary series (no prior infection) | Pre-Omicron | 51.0 (22.0 - 70.0) | All | 2+ weeks |
| 75 | S | Primary series (no prior infection) | Pre-Omicron | 84.3 (81.2 - 86.9) | Adult | 20+ weeks |
| 75 | S | Primary series (no prior infection) | Pre-Omicron | 83.0 (82.0 - 83.8) | Adult | 20+ weeks |
| 75 | S | Primary series (no prior infection) | Pre-Omicron | 85.3 (83.6 - 86.9) | Adult | 0 to 12 weeks |
| 75 | S | Primary series (no prior infection) | Pre-Omicron | 76.3 (74.0 - 78.5) | Elderly | 20+ weeks |
| 75 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 95.3 (92.3 - 97.1) | Adult | 0 to 12 weeks |
| 75 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 92.5 (86.0 - 96.0) | Adult | 0 to 12 weeks |
| 76 | D | Primary series (no prior infection) | Pre-Omicron | 92.0 (87.0 - 95.0) | All | 2+ weeks |
| 76 | D | Primary series (no prior infection) | Pre-Omicron | 88.0 (86.0 - 90.0) | All | 2+ weeks |
| 76 | D | Primary series (no prior infection) | Pre-Omicron | 94.0 (90.0 - 97.0) | All | 2+ weeks |
| 76 | D | Primary series (no prior infection) | Pre-Omicron | 92.0 (89.0 - 94.0) | All | 2+ weeks |
| 76 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (92.0 - 97.0) | All | 2+ weeks |
| 76 | M | Primary series (no prior infection) | Pre-Omicron | 96.0 (94.0 - 97.0) | All | 2+ weeks |
| 76 | M | Primary series (no prior infection) | Pre-Omicron | 98.0 (93.0 - 100.0) | All | 2+ weeks |
| 76 | M | Primary series (no prior infection) | Pre-Omicron | 98.0 (96.0 - 99.0) | All | 2+ weeks |
| 77 | D | Primary series (no prior infection) | Pre-Omicron | 98.0 (96.0 - 99.0) | Adult/Elderly | 16+ weeks |
| 78 | S | Primary series + booster dose (no prior infection) | Omicron | 41.3 (39.4 - 43.1) | Adult/Elderly | 15 to 60 days |
| 78 | S | Primary series + booster dose (no prior infection) | Omicron | 26.3 (24.2 - 28.3) | Adult/Elderly | 61 to 120 days |
| 78 | S | Primary series + booster dose (no prior infection) | Omicron | 14.6 (11.0 - 18.0) | Adult/Elderly | 121 to 330 days |
| 78 | S | Primary series + booster dose (no prior infection) | Omicron | 31.7 (30.0 - 33.4) | Adult/Elderly | 15 to 60 days |
| 78 | S | Primary series + booster dose (no prior infection) | Omicron | 11.9 (9.7 - 14.0) | Adult/Elderly | 61 to 120 days |
| 78 | S | Primary series + booster dose (no prior infection) | Omicron | -2.8 (-5.4 - 0.3) | Adult/Elderly | 121 to 330 days |
| 79 | S | Primary series (no prior infection) | Pre-Omicron | 94.8 (88.0 - 97.8) | Adult/Elderly | 7 to 13 days |
| 79 | S | Primary series (no prior infection) | Pre-Omicron | 63.2 (53.7 - 70.7) | Adult/Elderly | 254 to 313 days |
| 79 | S | Primary series (no prior infection) | Pre-Omicron | 80.6 (76.9 - 83.7) | Adult/Elderly | 14 to 73 days |
| 79 | S | Primary series (no prior infection) | Pre-Omicron | 43.3 (28.8 - 54.7) | Adult/Elderly | 314 to 355 days |
| 79 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 89.1 (82.8 - 93.0) | Adult/Elderly | 314 to 339 days |
| 80 | M | Primary series (no prior infection) | Pre-Omicron | 90.0 (88.0 - 92.0) | Adult | 61 to 120 days |
| 80 | M | Primary series (no prior infection) | Pre-Omicron | 91.0 (88.0 - 93.0) | Adult | 31 to 60 days |
| 80 | M | Primary series (no prior infection) | Pre-Omicron | 89.0 (82.0 - 93.0) | Adult | 15 to 30 days |
| 80 | M | Primary series (no prior infection) | Pre-Omicron | 64.0 (44.0 - 77.0) | Adult | 120+ days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 96.0 (94.0 - 97.0) | Adult | 15 to 30 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 59.0 (18.0 - 79.0) | Adult | 180+ days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 92.0 (92.0 - 93.0) | Adult | 15 to 30 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 47.0 (39.0 - 55.0) | Adult | 121 to 180 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 23.0 (-2.0 - 41.0) | Adult | 211+ days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 90.0 (90.0 - 91.0) | Adult | 31 to 60 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 83.0 (82.0 - 83.0) | Adult | 61 to 120 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 94.0 (93.0 - 95.0) | Adult | 15 to 30 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 82.0 (80.0 - 83.0) | Adult | 31 to 60 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 87.0 (85.0 - 89.0) | Adult | 15 to 30 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 76.0 (74.0 - 78.0) | Adult | 61 to 120 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 85.0 (81.0 - 88.0) | Elderly | 15 to 30 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 78.0 (74.0 - 82.0) | Elderly | 15 to 30 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 63.0 (59.0 - 67.0) | Elderly | 61 to 120 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 73.0 (68.0 - 77.0) | Elderly | 31 to 60 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 75.0 (70.0 - 79.0) | Elderly | 31 to 60 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 49.0 (41.0 - 56.0) | Adult | 121 to 180 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 60.0 (50.0 - 67.0) | Elderly | 121 to 180 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 55.0 (45.0 - 63.0) | Elderly | 61 to 120 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 26.0 (14.0 - 37.0) | Elderly | 180+ days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 43.0 (27.0 - 56.0) | Elderly | 121 to 180 days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 35.0 (17.0 - 50.0) | Elderly | 181+ days |
| 80 | S | Primary series (no prior infection) | Pre-Omicron | 33.0 (10.0 - 50.0) | Adult | 121 to 180 days |
| 81 | M | Prior pre-Omicron 2infection | Pre-Omicron | 89.0 (86.0 - 91.0) | Adult | 12 to 26 weeks |
| 81 | M | Prior pre-Omicron 2infection | Pre-Omicron | 85.0 (78.0 - 90.0) | Adult | 26 to 39 weeks |
| 81 | M | Prior pre-Omicron 2infection | Pre-Omicron | 78.0 (66.0 - 85.0) | Adult | 39+ weeks |
| 81 | S | Prior pre-Omicron 2infection | Pre-Omicron | 96.0 (95.0 - 96.0) | Adult | 12 to 26 weeks |
| 81 | S | Prior pre-Omicron 2infection | Pre-Omicron | 92.0 (91.0 - 93.0) | Adult | 26 to 39 weeks |
| 81 | S | Prior pre-Omicron 2infection | Pre-Omicron | 93.0 (92.0 - 94.0) | Adult | 39+ weeks |
| 81 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 68.0 (63.0 - 72.0) | Adult | 2 to 36 weeks |
| 82 | M | Primary series (no prior infection) | Omicron | 76.0 (57.0 - 87.0) | Child Adolescent | 1 to 8 weeks |
| 82 | S | Primary series (no prior infection) | Omicron | 51.0 (48.0 - 55.0) | Child Adolescent | 1 to 8 weeks |
| 83 | S | Primary series (no prior infection) | Pre-Omicron | 93.2 (91.0 - 94.8) | Adult/Elderly | 2+ weeks |
| 84 | S | Primary series (no prior infection) | Pre-Omicron | 91.0 (75.0 - 97.0) | Elderly | 11 to 15 weeks |
| 84 | S | Primary series (no prior infection) | Pre-Omicron | 86.0 (67.0 - 94.0) | Elderly | 1 to 4 weeks |
| 84 | S | Primary series (no prior infection) | Pre-Omicron | 73.0 (54.0 - 84.0) | Elderly | 16 to 20 weeks |
| 84 | S | Primary series (no prior infection) | Pre-Omicron | 81.0 (30.0 - 95.0) | Elderly | 5 to 10 weeks |
| 85 | S | Prior pre-Omicron 2infection | Pre-Omicron | 89.2 (84.7 - 92.4) | Child Adolescent | 13 to 26 weeks |
| 85 | S | Prior pre-Omicron 2infection | Pre-Omicron | 88.2 (86.4 - 89.8) | Child Adolescent | 26 to 39 weeks |
| 85 | S | Prior pre-Omicron 2infection | Pre-Omicron | 82.5 (79.1 - 85.3) | Child Adolescent | 39 to 52 weeks |
| 85 | S | Prior pre-Omicron 2infection | Pre-Omicron | 79.5 (75.8 - 82.6) | Child Adolescent | 52 to 75 weeks |
| 85 | S | Prior pre-Omicron 2infection | Pre-Omicron | 78.4 (72.8 - 82.8) | Child Adolescent | 75 to 88 weeks |
| 85 | S | Prior pre-Omicron 2infection | Pre-Omicron | 57.1 (22.7 - 76.2) | Child Adolescent | 88 to 101 weeks |
| 85 | D | Prior pre-Omicron 2infection | Pre-Omicron | 93.6 (79.3 - 98.0) | Child Adolescent | 13 to 26 weeks |
| 85 | D | Prior pre-Omicron 2infection | Pre-Omicron | 85.5 (79.2 - 89.9) | Child Adolescent | 26 to 39 weeks |
| 85 | D | Prior pre-Omicron 2infection | Pre-Omicron | 78.3 (66.5 - 86.0) | Child Adolescent | 39 to 52 weeks |
| 85 | D | Prior pre-Omicron 2infection | Pre-Omicron | 76.3 (64.5 - 84.2) | Child Adolescent | 52 to 75 weeks |
| 85 | D | Prior pre-Omicron 2infection | Pre-Omicron | 69.8 (50.7 - 81.5) | Child Adolescent | 75 to 88 weeks |
| 85 | D | Prior pre-Omicron 2infection | Pre-Omicron | 93.6 (79.3 - 98.0) | Child Adolescent | 88 to 101 weeks |
| 86 | S | Primary series (no prior infection) | Pre-Omicron | 85.0 (81.0 - 88.0) | All | 14 to 90 days |
| 86 | S | Primary series (no prior infection) | Pre-Omicron | 65.0 (58.0 - 71.0) | All | 91 to 180 days |
| 86 | S | Primary series (no prior infection) | Pre-Omicron | 56.0 (46.0 - 65.0) | All | 181+ days |
| 86 | S | Primary series (no prior infection) | Pre-Omicron | 77.0 (71.0 - 82.0) | All | 14 to 90 days |
| 86 | S | Primary series (no prior infection) | Pre-Omicron | 55.0 (34.0 - 69.0) | All | 91 to 180 days |
| 87 | S | Prior pre-Omicron 2infection | Pre-Omicron | 60.0 (50.0 - 68.0) | Adult/Elderly | 2+ weeks |
| 87 | S | Prior pre-Omicron 2infection | Pre-Omicron | 72.0 (58.0 - 82.0) | Adult/Elderly | 2+ weeks |
| 87 | D | Prior pre-Omicron 2infection | Pre-Omicron | 80.0 (75.0 - 84.0) | Adult/Elderly | 2+ weeks |
| 87 | D | Prior pre-Omicron 2infection | Pre-Omicron | 82.0 (73.0 - 88.0) | Adult/Elderly | 2+ weeks |
| 87 | D | Primary series (no prior infection) | Pre-Omicron | 97.0 (96.0 - 98.0) | Adult/Elderly | 2+ weeks |
| 87 | D | Primary series (no prior infection) | Pre-Omicron | 93.0 (89.0 - 96.0) | Adult/Elderly | 2 to 2 weeks |
| 87 | D | Primary series (no prior infection) | Pre-Omicron | 92.0 (87.0 - 95.0) | Adult/Elderly | 30 to 30 days |
| 87 | D | Primary series (no prior infection) | Pre-Omicron | 86.0 (82.0 - 90.0) | Adult/Elderly | 60 to 60 days |
| 87 | D | Primary series (no prior infection) | Pre-Omicron | 78.0 (72.0 - 82.0) | Adult/Elderly | 90 to 90 days |
| 87 | S | Primary series (no prior infection) | Pre-Omicron | 78.0 (68.0 - 84.0) | Adult/Elderly | 2+ weeks |
| 87 | S | Primary series (no prior infection) | Pre-Omicron | 80.0 (76.0 - 83.0) | Adult/Elderly | 60 to 60 days |
| 87 | S | Primary series (no prior infection) | Pre-Omicron | 83.0 (78.0 - 88.0) | Adult/Elderly | 30 to 30 days |
| 87 | S | Primary series (no prior infection) | Pre-Omicron | 75.0 (70.0 - 80.0) | Adult/Elderly | 90 to 90 days |
| 87 | S | Primary series (no prior infection) | Pre-Omicron | 85.0 (79.0 - 90.0) | Adult/Elderly | 2 to 2 weeks |
| 88 | D | Primary series (no prior infection) | Pre-Omicron | 96.1 (95.2 - 96.8) | Child Adolescent | 14 to 34 days |
| 88 | D | Primary series (no prior infection) | Pre-Omicron | 91.5 (89.9 - 93.0) | Child Adolescent | 35 to 69 days |
| 88 | D | Primary series (no prior infection) | Pre-Omicron | 83.7 (72.0 - 90.5) | Child Adolescent | 10+ weeks |
| 88 | D | Primary series (no prior infection) | Omicron | 71.3 (69.3 - 73.1) | Child Adolescent | 14 to 34 days |
| 88 | D | Primary series (no prior infection) | Omicron | 49.5 (45.7 - 53.0) | Child Adolescent | 35 to 69 days |
| 88 | D | Primary series (no prior infection) | Omicron | 22.6 (14.5 - 29.9) | Child Adolescent | 10+ weeks |
| 89 | S | Prior pre-Omicron 2infection | Pre-Omicron | 92.3 (91.7 - 92.9) | Child Adolescent | 90+ days |
| 89 | D | Prior pre-Omicron 2infection | Pre-Omicron | 86.1 (85.4 - 86.8) | Child Adolescent | 90+ days |
| 89 | D | Prior pre-Omicron 2infection | Pre-Omicron | 87.6 (86.8 - 88.4) | Child Adolescent | 90+ days |
| 89 | D | Prior pre-Omicron 2infection | Omicron | 52.4 (50.9 - 53.8) | Child Adolescent | 90+ days |
| 89 | D | Prior pre-Omicron 2infection | Omicron | 36.6 (32.9 - 40.1) | Child Adolescent | 90+ days |
| 89 | D | Prior pre-Omicron 2infection | Omicron | 32.7 (27.7 - 37.4) | Child Adolescent | 90+ days |
| 89 | S | Prior Omicron infection | Omicron | 59.3 (46.7 - 69.0) | Child Adolescent | 90+ days |
| 89 | S | Primary series (no prior infection) | Pre-Omicron | 91.8 (91.2 - 92.3) | Child Adolescent | 2 to 14 weeks |
| 89 | S | Primary series (no prior infection) | Pre-Omicron | 80.9 (79.4 - 82.3) | Child Adolescent | 15 to 24 weeks |
| 89 | S | Primary series (no prior infection) | Pre-Omicron | 71.9 (67.9 - 75.4) | Child Adolescent | 25 to 39 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 98.6 (94.3 - 99.7) | Child Adolescent | 15 to 24 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 99.2 (97.8 - 99.7) | Child Adolescent | 2 to 14 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 98.7 (96.8 - 99.4) | Child Adolescent | 2 to 14 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 98.8 (96.7 - 99.5) | Child Adolescent | 2 to 14 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 97.0 (92.7 - 98.8) | Child Adolescent | 15 to 24 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 98.3 (87.9 - 99.8) | Child Adolescent | 15 to 24 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 97.3 (80.2 - 99.6) | Child Adolescent | 25 to 39 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 94.8 (78.4 - 98.8) | Child Adolescent | 25 to 39 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Pre-Omicron | 96.4 (73.2 - 99.5) | Child Adolescent | 25 to 39 weeks |
| 89 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 96.0 (92.2 - 97.9) | Child Adolescent | 2 to 14 weeks |
| 90 | D | Primary series (no prior infection) | Pre-Omicron | 95.0 (90.0 - 97.0) | Adult/Elderly | 2+ weeks |
| 90 | S | Primary series (no prior infection) | Pre-Omicron | 80.0 (73.0 - 85.0) | Adult/Elderly | 2+ weeks |
| 91 | D | Primary series (no prior infection) | Pre-Omicron | 90.0 (89.0 - 91.0) | Child Adolescent | 14 to 89 days |
| 91 | D | Primary series (no prior infection) | Pre-Omicron | 78.0 (73.0 - 82.0) | Child Adolescent | 90 to 149 days |
| 91 | D | Primary series (no prior infection) | Pre-Omicron | 65.0 (58.0 - 72.0) | Child Adolescent | 150 to 180 days |
| 91 | S | Primary series (no prior infection) | Pre-Omicron | 85.0 (84.0 - 86.0) | Child Adolescent | 14 to 89 days |
| 91 | S | Primary series (no prior infection) | Pre-Omicron | 75.0 (71.0 - 79.0) | Child Adolescent | 90 to 149 days |
| 91 | S | Primary series (no prior infection) | Pre-Omicron | 58.0 (52.0 - 64.0) | Child Adolescent | 150 to 180 days |
| 92 | D | Primary series (no prior infection) | Pre-Omicron | 95.0 (91.0 - 97.0) | Adult/Elderly | 2 to 2 weeks |
| 92 | D | Primary series (no prior infection) | Pre-Omicron | 91.0 (85.0 - 95.0) | Adult/Elderly | 64 to 64 days |
| 92 | D | Primary series (no prior infection) | Pre-Omicron | 86.0 (78.0 - 91.0) | Adult/Elderly | 114 to 114 days |
| 92 | D | Primary series (no prior infection) | Pre-Omicron | 84.0 (76.0 - 89.0) | Adult/Elderly | 164 to 164 days |
| 92 | D | Primary series (no prior infection) | Pre-Omicron | 80.0 (70.0 - 86.0) | Adult/Elderly | 214 to 214 days |
| 92 | D | Primary series (no prior infection) | Pre-Omicron | 74.0 (61.0 - 83.0) | Adult/Elderly | 264 to 264 days |
| 93 | D | Primary series (no prior infection) | Pre-Omicron | 84.0 (77.0 - 89.0) | Adult/Elderly | 2 to 2 weeks |
| 93 | D | Primary series (no prior infection) | Pre-Omicron | 61.0 (57.0 - 71.0) | Adult/Elderly | 114 to 114 days |
| 93 | D | Primary series (no prior infection) | Pre-Omicron | 74.0 (64.0 - 81.0) | Adult/Elderly | 64 to 64 days |
| 93 | D | Primary series (no prior infection) | Pre-Omicron | 55.0 (39.0 - 66.0) | Adult/Elderly | 164 to 164 days |
| 93 | D | Primary series (no prior infection) | Pre-Omicron | 50.0 (33.0 - 63.0) | Adult/Elderly | 264 to 264 days |
| 93 | D | Primary series (no prior infection) | Pre-Omicron | 48.0 (30.0 - 61.0) | Adult/Elderly | 214 to 214 days |
| 94 | D | Prior pre-Omicron 2infection | Pre-Omicron | 91.0 (86.0 - 94.0) | All | 2+ weeks |
| 94 | D | Prior pre-Omicron 2infection | Pre-Omicron | 91.0 (82.0 - 95.0) | All | 2+ weeks |
| 94 | D | Primary series (no prior infection) | Pre-Omicron | 82.0 (80.0 - 84.0) | All | 2+ weeks |
| 94 | D | Primary series (no prior infection) | Pre-Omicron | 76.0 (74.0 - 78.0) | All | 2+ weeks |
| 94 | D | Primary series (no prior infection) | Pre-Omicron | 96.0 (94.0 - 97.0) | All | 2+ weeks |
| 94 | S | Primary series (no prior infection) | Pre-Omicron | 85.0 (81.0 - 88.0) | Child Adolescent | 2+ weeks |
| 94 | S | Primary series (no prior infection) | Pre-Omicron | 54.0 (44.0 - 62.0) | All | 2+ weeks |
| 95 | S | Primary series (no prior infection) | Omicron | 17.3 (-10.8 - 38.3) | Adult | 2+ weeks |
| 95 | S | Primary series (no prior infection) | Omicron | 2.1 (-21.2 - 21.0) | Adult | 2+ weeks |
| 95 | S | Primary series + booster dose (no prior infection) | Omicron | 48.5 (25.0 - 64.7) | Adult | 1+ weeks |
| 95 | S | Primary series + booster dose (no prior infection) | Omicron | 42.8 (22.7 - 57.6) | Adult | 1+ weeks |
| 96 | S | Primary series (no prior infection) | Pre-Omicron | 73.0 (56.0 - 84.0) | Adult/Elderly | 2+ weeks |
| 96 | S | Primary series (no prior infection) | Pre-Omicron | 75.0 (52.0 - 87.0) | Adult/Elderly | 2+ weeks |
| 96 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 96.0 (82.0 - 99.0) | Adult/Elderly | 2+ weeks |
| 96 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 93.0 (78.0 - 98.0) | Adult/Elderly | 2+ weeks |
| 96 | S | Primary series (no prior infection) | Omicron | 5.0 (-69.0 - 47.0) | Adult/Elderly | 2+ weeks |
| 96 | S | Primary series (no prior infection) | Omicron | 41.0 (-17.0 - 87.0) | Adult/Elderly | 2+ weeks |
| 96 | S | Primary series + booster dose (no prior infection) | Omicron | 46.0 (6.0 - 69.0) | Adult/Elderly | 2+ weeks |
| 96 | S | Primary series + booster dose (no prior infection) | Omicron | 75.0 (50.0 - 87.0) | Adult/Elderly | 2 to 8 weeks |
| 96 | S | Primary series + booster dose (no prior infection) | Omicron | 55.0 (5.0 - 69.0) | Adult/Elderly | 16+ weeks |
| 97 | S | Primary series (no prior infection) | Pre-Omicron | 78.0 (67.0 - 83.0) | Adult/Elderly | 0 to 24 weeks |
| 97 | S | Primary series (no prior infection) | Pre-Omicron | 55.0 (39.0 - 67.0) | Adult/Elderly | 24+ weeks |
| 97 | S | Primary series (no prior infection) | Pre-Omicron | 64.0 (58.0 - 68.0) | Adult/Elderly | 0 to 24 weeks |
| 97 | S | Primary series (no prior infection) | Pre-Omicron | 22.0 (18.0 - 33.0) | Adult/Elderly | 24+ weeks |
| 97 | S | Primary series (no prior infection) | Pre-Omicron | 91.0 (87.0 - 94.0) | Adult/Elderly | 0 to 24 weeks |
| 97 | S | Primary series (no prior infection) | Pre-Omicron | 86.0 (76.0 - 92.0) | Adult/Elderly | 24+ weeks |
| 97 | S | Primary series (no prior infection) | Pre-Omicron | 87.0 (84.0 - 90.0) | Adult/Elderly | 0 to 24 weeks |
| 97 | S | Primary series (no prior infection) | Pre-Omicron | 72.0 (62.0 - 79.0) | Adult/Elderly | 24+ weeks |
| 98 | S | Primary series (no prior infection) | Pre-Omicron | 74.3 (64.8 - 81.6) | Child Adolescent | 12 to 24 weeks |
| 98 | S | Primary series (no prior infection) | Pre-Omicron | 81.9 (67.9 - 90.8) | Child Adolescent | 2 to 12 weeks |
| 98 | S | Primary series (no prior infection) | Pre-Omicron | 65.3 (34.6 - 83.8) | Child Adolescent | 24+ weeks |
| 98 | S | Primary series (no prior infection) | Omicron | 4.2 (-20.2 - 23.6) | Child Adolescent | 24+ weeks |
| 98 | S | Primary series (no prior infection) | Omicron | 54.5 (17.8 - 76.9) | Child Adolescent | 2 to 12 weeks |
| 98 | S | Primary series (no prior infection) | Omicron | -25.0 (-68.8 - -8.1) | Child Adolescent | 12 to 24 weeks |
| 99 | M | Primary series (no prior infection) | Pre-Omicron | 90.2 (82.7 - 94.5) | Adult/Elderly | 2 to 12 weeks |
| 99 | M | Primary series (no prior infection) | Pre-Omicron | 94.8 (89.8 - 97.4) | Adult/Elderly | 2 to 12 weeks |
| 99 | M | Primary series (no prior infection) | Pre-Omicron | 74.5 (42.7 - 88.9) | Adult/Elderly | 2 to 12 weeks |
| 99 | M | Primary series (no prior infection) | Pre-Omicron | 71.7 (45.1 - 85.6) | Adult/Elderly | 2 to 12 weeks |
| 99 | M | Primary series (no prior infection) | Pre-Omicron | 74.2 (0.0 - 94.7) | Adult/Elderly | 2 to 12 weeks |
| 99 | M | Primary series (no prior infection) | Pre-Omicron | 89.2 (49.5 - 97.7) | Adult/Elderly | 2 to 12 weeks |
| 99 | M | Primary series (no prior infection) | Omicron | 93.4 (5.3 - 99.6) | Adult/Elderly | 2 to 12 weeks |
| 99 | M | Primary series (no prior infection) | Omicron | 68.3 (23.6 - 87.2) | Adult/Elderly | 2 to 12 weeks |
| 99 | S | Primary series (no prior infection) | Pre-Omicron | 91.7 (89.3 - 93.5) | Adult/Elderly | 2 to 12 weeks |
| 99 | S | Primary series (no prior infection) | Pre-Omicron | 89.6 (87.6 - 91.3) | Adult/Elderly | 2 to 12 weeks |
| 99 | S | Primary series (no prior infection) | Pre-Omicron | 79.0 (70.8 - 84.9) | Adult/Elderly | 2 to 12 weeks |
| 99 | S | Primary series (no prior infection) | Pre-Omicron | 72.7 (65.4 - 78.5) | Adult/Elderly | 2 to 12 weeks |
| 99 | S | Primary series (no prior infection) | Pre-Omicron | 88.7 (74.1 - 95.1) | Adult/Elderly | 2 to 12 weeks |
| 99 | S | Primary series (no prior infection) | Pre-Omicron | 80.4 (73.4 - 85.6) | Adult/Elderly | 2 to 12 weeks |
| 99 | S | Primary series (no prior infection) | Omicron | 83.1 (68.9 - 90.9) | Adult/Elderly | 2 to 12 weeks |
| 99 | S | Primary series (no prior infection) | Omicron | 73.8 (63.6 - 81.2) | Adult/Elderly | 2 to 12 weeks |
| 100 | M | Primary series (no prior infection) | Pre-Omicron | 99.0 (96.0 - 100.0) | Adult | 2+ weeks |
| 100 | M | Primary series (no prior infection) | Pre-Omicron | 88.0 (81.0 - 95.0) | Adult | 26+ weeks |
| 100 | M | Primary series (no prior infection) | Pre-Omicron | 99.0 (97.0 - 100.0) | Adult | 2+ weeks |
| 100 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (91.0 - 98.0) | Adult | 26+ weeks |
| 100 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (92.0 - 97.0) | Adult | 2+ weeks |
| 100 | M | Primary series (no prior infection) | Pre-Omicron | 81.0 (75.0 - 86.0) | Adult | 26+ weeks |
| 100 | M | Primary series (no prior infection) | Pre-Omicron | 94.0 (91.0 - 96.0) | Adult | 2+ weeks |
| 100 | M | Primary series (no prior infection) | Pre-Omicron | 79.0 (74.0 - 84.0) | Adult | 26+ weeks |
| 100 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 94.0 (84.0 - 100.0) | Adult | 1+ weeks |
| 100 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 89.0 (82.0 - 96.0) | Adult | 1+ weeks |
| 100 | S | Primary series (no prior infection) | Pre-Omicron | 85.0 (84.0 - 86.0) | Adult | 2 to 8 weeks |
| 100 | S | Primary series (no prior infection) | Pre-Omicron | 75.0 (74.0 - 76.0) | Adult | 8 to 16 weeks |
| 100 | S | Primary series (no prior infection) | Pre-Omicron | 68.0 (66.0 - 69.0) | Adult | 16 to 24 weeks |
| 100 | S | Primary series (no prior infection) | Pre-Omicron | 61.0 (58.0 - 63.0) | Adult | 24+ weeks |
| 100 | S | Primary series (no prior infection) | Pre-Omicron | 80.0 (79.0 - 81.0) | Adult | 2 to 8 weeks |
| 100 | S | Primary series (no prior infection) | Pre-Omicron | 62.0 (61.0 - 63.0) | Adult | 8 to 16 weeks |
| 100 | S | Primary series (no prior infection) | Pre-Omicron | 58.0 (56.0 - 59.0) | Adult | 16 to 24 weeks |
| 100 | S | Primary series (no prior infection) | Pre-Omicron | 36.0 (34.0 - 39.0) | Adult | 24+ weeks |
| 100 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 87.0 (83.0 - 91.0) | Adult | 1+ weeks |
| 100 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 82.0 (79.0 - 85.0) | Adult | 1+ weeks |
| 101 | M | Primary series (no prior infection) | Pre-Omicron | 99.0 (89.0 - 100.0) | All | 2+ weeks |
| 101 | M | Primary series (no prior infection) | Pre-Omicron | 93.0 (81.0 - 97.0) | All | 144+ days |
| 101 | M | Primary series (no prior infection) | Pre-Omicron | 97.0 (87.0 - 99.0) | All | 2+ weeks |
| 101 | M | Primary series (no prior infection) | Pre-Omicron | 86.0 (76.0 - 92.0) | All | 144+ days |
| 101 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (89.0 - 97.0) | All | 2+ weeks |
| 101 | M | Primary series (no prior infection) | Pre-Omicron | 91.0 (84.0 - 95.0) | All | 144+ days |
| 101 | M | Primary series (no prior infection) | Pre-Omicron | 92.0 (86.0 - 95.0) | All | 2+ weeks |
| 101 | M | Primary series (no prior infection) | Pre-Omicron | 81.0 (74.0 - 86.0) | All | 144+ days |
| 101 | S | Primary series (no prior infection) | Pre-Omicron | 90.0 (88.0 - 91.0) | All | 2+ weeks |
| 101 | S | Primary series (no prior infection) | Pre-Omicron | 72.0 (69.0 - 75.0) | All | 144+ days |
| 101 | S | Primary series (no prior infection) | Pre-Omicron | 87.0 (85.0 - 88.0) | All | 2+ weeks |
| 101 | S | Primary series (no prior infection) | Pre-Omicron | 54.0 (51.0 - 57.0) | All | 144+ days |
| 102 | S | Primary series (no prior infection) | Pre-Omicron | 77.0 (75.4 - 78.5) | Adult | 2+ weeks |
| 102 | S | Primary series (no prior infection) | Pre-Omicron | 83.1 (81.5 - 84.7) | Elderly | 2+ weeks |
| 102 | S | Primary series (no prior infection) | Pre-Omicron | 81.8 (80.0 - 83.5) | Adult | 2+ weeks |
| 102 | S | Primary series (no prior infection) | Pre-Omicron | 66.8 (65.0 - 68.5) | Adult | 2+ weeks |
| 102 | S | Primary series (no prior infection) | Pre-Omicron | 74.7 (72.8 - 76.6) | Adult | 2+ weeks |
| 102 | S | Primary series (no prior infection) | Pre-Omicron | 76.0 (74.0 - 78.0) | Elderly | 2+ weeks |
| 102 | S | Primary series (no prior infection) | Pre-Omicron | 96.0 (95.1 - 96.6) | Elderly | 2+ weeks |
| 102 | S | Primary series (no prior infection) | Pre-Omicron | 97.3 (96.4 - 98.1) | Adult | 2+ weeks |
| 102 | S | Primary series (no prior infection) | Pre-Omicron | 96.3 (95.4 - 97.2) | Adult | 2+ weeks |
| 102 | S | Primary series (no prior infection) | Pre-Omicron | 95.0 (94.0 - 96.0) | Adult | 2+ weeks |
| 102 | S | Primary series (no prior infection) | Pre-Omicron | 93.3 (92.2 - 94.4) | Adult | 2+ weeks |
| 102 | S | Primary series (no prior infection) | Pre-Omicron | 91.4 (90.0 - 92.8) | Elderly | 2+ weeks |
| 103 | S | Primary series (no prior infection) | Pre-Omicron | 95.6 (77.0 - 99.1) | Child Adolescent | 2 to 5 weeks |
| 103 | S | Primary series (no prior infection) | Pre-Omicron | 96.7 (51.3 - 99.8) | Child Adolescent | 6 to 9 weeks |
| 103 | S | Primary series (no prior infection) | Pre-Omicron | 92.9 (42.5 - 99.1) | Child Adolescent | 6 to 9 weeks |
| 103 | S | Primary series (no prior infection) | Omicron | 81.2 (77.7 - 84.2) | Child Adolescent | 2 to 5 weeks |
| 103 | S | Primary series (no prior infection) | Omicron | 68.5 (63.4 - 72.9) | Child Adolescent | 6 to 9 weeks |
| 103 | S | Primary series (no prior infection) | Omicron | 65.5 (56.0 - 73.0) | Child Adolescent | 2 to 5 weeks |
| 103 | S | Primary series (no prior infection) | Omicron | 43.3 (30.0 - 54.2) | Child Adolescent | 10 to 13 weeks |
| 103 | S | Primary series (no prior infection) | Omicron | 43.4 (26.9 - 56.2) | Child Adolescent | 6 to 9 weeks |
| 103 | S | Primary series (no prior infection) | Omicron | 48.7 (22.0 - 66.3) | Child Adolescent | 14+ weeks |
| 103 | S | Primary series (no prior infection) | Omicron | 8.9 (-19.1 - 30.3) | Child Adolescent | 10 to 13 weeks |
| 103 | S | Primary series (no prior infection) | Omicron | 1.2 (-49.3 - 34.6) | Child Adolescent | 14+ weeks |
| 104 | S | Primary series (no prior infection) | Pre-Omicron | 92.0 (90.0 - 93.0) | All | 2+ weeks |
| 104 | S | Primary series (no prior infection) | Pre-Omicron | 79.0 (75.0 - 82.0) | All | 2+ weeks |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 96.0 (83.0 - 99.0) | Adult/Elderly | 2+ weeks |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 98.0 (94.0 - 100.0) | Adult/Elderly | 14 to 27 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 98.0 (96.0 - 99.0) | Adult/Elderly | 28 to 55 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 97.0 (96.0 - 99.0) | Adult/Elderly | 56 to 83 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 96.0 (94.0 - 97.0) | Adult/Elderly | 84 to 111 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 94.0 (91.0 - 96.0) | Adult/Elderly | 112 to 139 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 86.0 (79.0 - 91.0) | Adult/Elderly | 140 to 167 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (80.0 - 99.0) | Adult/Elderly | 168 to 195 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 91.0 (64.0 - 98.0) | Adult/Elderly | 196 to 223 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 98.0 (95.0 - 99.0) | Adult/Elderly | 14 to 27 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 98.0 (97.0 - 98.0) | Adult/Elderly | 56 to 83 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 98.0 (97.0 - 98.0) | Adult/Elderly | 84 to 111 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 97.0 (97.0 - 98.0) | Adult/Elderly | 112 to 139 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 98.0 (97.0 - 99.0) | Adult/Elderly | 28 to 55 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 96.0 (95.0 - 97.0) | Adult/Elderly | 140 to 167 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (91.0 - 97.0) | Adult/Elderly | 168 to 195 days |
| 105 | M | Primary series (no prior infection) | Pre-Omicron | 94.0 (87.0 - 97.0) | Adult/Elderly | 196 to 223 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 95.0 (84.0 - 98.0) | Adult/Elderly | 2+ weeks |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 96.0 (92.0 - 98.0) | Adult/Elderly | 2+ weeks |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 95.0 (94.0 - 96.0) | Adult/Elderly | 14 to 27 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 94.0 (93.0 - 94.0) | Adult/Elderly | 28 to 55 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 92.0 (91.0 - 93.0) | Adult/Elderly | 56 to 83 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 90.0 (89.0 - 91.0) | Adult/Elderly | 84 to 111 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 87.0 (85.0 - 88.0) | Adult/Elderly | 112 to 139 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 82.0 (80.0 - 84.0) | Adult/Elderly | 140 to 167 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 80.0 (80.0 - 84.0) | Adult/Elderly | 168 to 195 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 67.0 (60.0 - 73.0) | Adult/Elderly | 196 to 223 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 69.0 (62.0 - 75.0) | Adult/Elderly | 224 to 251 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 55.0 (41.0 - 66.0) | Adult/Elderly | 252 to 279 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 92.0 (91.0 - 92.0) | Adult/Elderly | 28 to 55 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 91.0 (90.0 - 91.0) | Adult/Elderly | 56 to 83 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 88.0 (88.0 - 89.0) | Adult/Elderly | 84 to 111 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 85.0 (84.0 - 86.0) | Adult/Elderly | 112 to 139 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 83.0 (82.0 - 84.0) | Adult/Elderly | 140 to 167 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 83.0 (81.0 - 85.0) | Adult/Elderly | 168 to 195 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 79.0 (76.0 - 82.0) | Adult/Elderly | 224 to 251 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 78.0 (74.0 - 81.0) | Adult/Elderly | 196 to 223 days |
| 105 | S | Primary series (no prior infection) | Pre-Omicron | 79.0 (75.0 - 83.0) | Adult/Elderly | 252 to 279 days |
| 106 | M | Primary series (no prior infection) | Pre-Omicron | 95.4 (93.9 - 96.5) | Adult/Elderly | 10 to 17 weeks |
| 106 | M | Primary series (no prior infection) | Pre-Omicron | 97.5 (95.6 - 98.6) | Adult/Elderly | 2 to 9 weeks |
| 106 | M | Primary series (no prior infection) | Pre-Omicron | 87.5 (84.8 - 89.7) | Adult/Elderly | 18 to 25 weeks |
| 106 | M | Primary series (no prior infection) | Pre-Omicron | 81.8 (77.7 - 85.2) | Adult/Elderly | 26 to 33 weeks |
| 106 | M | Primary series (no prior infection) | Pre-Omicron | 63.9 (54.3 - 71.5) | Adult/Elderly | 33+ weeks |
| 106 | S | Primary series (no prior infection) | Pre-Omicron | 77.7 (76.8 - 78.5) | Adult/Elderly | 2 to 9 weeks |
| 106 | S | Primary series (no prior infection) | Pre-Omicron | 60.0 (58.9 - 61.0) | Adult/Elderly | 10 to 17 weeks |
| 106 | S | Primary series (no prior infection) | Pre-Omicron | 43.9 (42.1 - 45.7) | Adult/Elderly | 18 to 25 weeks |
| 106 | S | Primary series (no prior infection) | Pre-Omicron | 34.3 (31.4 - 37.1) | Adult/Elderly | 26 to 33 weeks |
| 106 | S | Primary series (no prior infection) | Pre-Omicron | 8.2 (3.4 - 12.8) | Adult/Elderly | 33+ weeks |
| 107 | S | Primary series (no prior infection) | Pre-Omicron | 91.9 (90.2 - 93.3) | Adult | 15 to 105 days |
| 107 | S | Primary series (no prior infection) | Pre-Omicron | 86.1 (83.2 - 88.5) | Adult | 11 to 28 weeks |
| 107 | S | Primary series (no prior infection) | Pre-Omicron | 88.9 (86.5 - 90.9) | Adult | 15 to 105 days |
| 107 | S | Primary series (no prior infection) | Pre-Omicron | 77.3 (72.3 - 81.3) | Adult | 11 to 28 weeks |
| 107 | S | Primary series (no prior infection) | Pre-Omicron | 90.9 (89.1 - 92.4) | Elderly | 15 to 105 days |
| 107 | S | Primary series (no prior infection) | Pre-Omicron | 69.8 (63.7 - 74.9) | Elderly | 11 to 28 weeks |
| 108 | M | Primary series (no prior infection) | Pre-Omicron | 92.7 (81.5 - 97.1) | Adult | 2+ weeks |
| 108 | M | Primary series (no prior infection) | Pre-Omicron | 96.1 (71.6 - 99.5) | Adult | 2+ weeks |
| 108 | M | Primary series (no prior infection) | Pre-Omicron | 93.4 (85.4 - 97.0) | Adult | 2+ weeks |
| 108 | D | Primary series (no prior infection) | Pre-Omicron | 73.9 (65.9 - 79.9) | Adult | 2+ weeks |
| 108 | D | Primary series (no prior infection) | Pre-Omicron | 44.4 (37.0 - 50.9) | Adult | 2+ weeks |
| 108 | S | Primary series (no prior infection) | Pre-Omicron | 80.0 (69.0 - 88.2) | Adult | 2+ weeks |
| 108 | S | Primary series (no prior infection) | Pre-Omicron | 74.3 (70.3 - 77.7) | Adult | 2+ weeks |
| 108 | S | Primary series (no prior infection) | Pre-Omicron | 73.1 (67.5 - 77.8) | Adult | 2+ weeks |
| 108 | S | Primary series (no prior infection) | Pre-Omicron | 51.9 (47.0 - 56.4) | Adult | 2+ weeks |
| 109 | M | Primary series (no prior infection) | Pre-Omicron | 95.0 (90.0 - 98.0) | All | 2+ weeks |
| 109 | M | Primary series (no prior infection) | Pre-Omicron | 93.0 (84.0 - 96.0) | All | 2+ weeks |
| 109 | S | Primary series (no prior infection) | Pre-Omicron | 97.0 (95.0 - 99.0) | All | 7 to 36 days |
| 109 | S | Primary series (no prior infection) | Pre-Omicron | 91.0 (87.0 - 94.0) | All | 37 to 66 days |
| 109 | S | Primary series (no prior infection) | Pre-Omicron | 88.0 (81.0 - 92.0) | All | 67 to 96 days |
| 109 | S | Primary series (no prior infection) | Pre-Omicron | 80.0 (69.0 - 97.0) | All | 97 to 126 days |
| 109 | S | Primary series (no prior infection) | Pre-Omicron | 67.0 (45.0 - 80.0) | All | 127+ days |
| 109 | S | Primary series (no prior infection) | Pre-Omicron | 88.0 (81.0 - 92.0) | All | 37 to 66 days |
| 109 | S | Primary series (no prior infection) | Pre-Omicron | 93.0 (85.0 - 97.0) | All | 7 to 36 days |
| 109 | S | Primary series (no prior infection) | Pre-Omicron | 78.0 (70.0 - 83.0) | All | 67 to 96 days |
| 109 | S | Primary series (no prior infection) | Pre-Omicron | 60.0 (48.0 - 69.0) | All | 97 to 126 days |
| 109 | S | Primary series (no prior infection) | Pre-Omicron | 53.0 (39.0 - 65.0) | All | 127+ days |
| 110 | D | Primary series (no prior infection) | Pre-Omicron | 70.0 (56.0 - 80.0) | Child Adolescent | 16 to 24 weeks |
| 110 | D | Primary series (no prior infection) | Pre-Omicron | 88.0 (68.0 - 96.0) | Child Adolescent | 2 to 8 weeks |
| 110 | D | Primary series (no prior infection) | Pre-Omicron | 66.0 (44.0 - 80.0) | Child Adolescent | 8 to 16 weeks |
| 110 | D | Primary series (no prior infection) | Pre-Omicron | 47.0 (23.0 - 63.0) | Child Adolescent | 24+ weeks |
| 110 | D | Primary series (no prior infection) | Omicron | 18.0 (6.0 - 36.0) | Child Adolescent | 24+ weeks |
| 110 | D | Primary series (no prior infection) | Omicron | 46.0 (29.0 - 59.0) | Child Adolescent | 16 to 24 weeks |
| 110 | D | Primary series (no prior infection) | Omicron | 72.0 (52.0 - 84.0) | Child Adolescent | 2 to 8 weeks |
| 110 | D | Primary series (no prior infection) | Omicron | 35.0 (9.0 - 54.0) | Child Adolescent | 8 to 16 weeks |
| 111 | M | Primary series (no prior infection) | Pre-Omicron | 90.0 (89.0 - 90.0) | Adult/Elderly | 14 to 179 days |
| 111 | M | Primary series (no prior infection) | Pre-Omicron | 81.0 (80.0 - 82.0) | Adult/Elderly | 180+ days |
| 111 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 94.0 (93.0 - 95.0) | Adult/Elderly | 2+ weeks |
| 111 | M | Primary series (no prior infection) | Omicron | 81.0 (65.0 - 90.0) | Adult/Elderly | 2+ weeks |
| 111 | M | Primary series (no prior infection) | Omicron | 57.0 (39.0 - 70.0) | Adult/Elderly | 180+ days |
| 111 | M | Primary series + booster dose (no prior infection) | Omicron | 90.0 (80.0 - 94.0) | Adult/Elderly | 2+ weeks |
| 112 | M | Primary series + booster dose (no prior infection) | Omicron | 97.5 (96.3 - 98.3) | Adult/Elderly | 2+ weeks |
| 112 | M | Primary series + booster dose (no prior infection) | Omicron | 82.0 (64.5 - 90.8) | Adult/Elderly | 2+ weeks |
| 112 | M | Primary series + booster dose (no prior infection) | Omicron | 96.4 (88.4 - 98.9) | Adult/Elderly | 2+ weeks |
| 112 | M | Primary series + booster dose (no prior infection) | Omicron | 72.4 (23.9 - 90.0) | Adult/Elderly | 2+ weeks |
| 112 | M | Primary series + booster dose (no prior infection) | Omicron | 88.5 (51.8 - 97.2) | Adult/Elderly | 2+ weeks |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 76.3 (73.9 - 78.6) | Adult/Elderly | 31 to 90 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 85.8 (82.7 - 88.3) | Adult/Elderly | 14 to 30 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 67.3 (62.0 - 71.9) | Adult/Elderly | 91 to 150 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 54.9 (35.6 - 68.4) | Adult/Elderly | 151+ days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | -24.9 (-32.3 - -16.7) | Adult/Elderly | 151+ days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 10.8 (0.8 - 19.8) | Adult/Elderly | 91 to 150 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 41.2 (28.3 - 51.8) | Adult/Elderly | 31 to 90 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 61.0 (27.6 - 79.0) | Adult/Elderly | 14 to 30 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 64.3 (50.7 - 74.2) | Adult/Elderly | 14 to 30 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 51.1 (35.5 - 63.0) | Adult/Elderly | 31 to 90 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 17.3 (-45.3 - 62.6) | Adult/Elderly | 13+ weeks |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | -16.4 (-35.8 - 8.2) | Adult/Elderly | 151+ days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 23.2 (-12.3 - 48.3) | Adult/Elderly | 91 to 150 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 0.7 (-53.6 - 54.2) | Adult/Elderly | 31 to 90 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 72.6 (-54.7 - 96.6) | Adult/Elderly | 14 to 30 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 75.7 (34.7 - 91.0) | Adult/Elderly | 14 to 30 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 50.9 (13.4 - 72.1) | Adult/Elderly | 31 to 90 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 6.3 (-66.3 - 70.4) | Adult/Elderly | 13+ weeks |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | -17.9 (-29.6 - -4.2) | Adult/Elderly | 151+ days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 20.7 (-1.6 - 38.2) | Adult/Elderly | 91 to 150 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 57.0 (26.2 - 75.0) | Adult/Elderly | 31 to 90 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 90.6 (30.6 - 98.7) | Adult/Elderly | 14 to 30 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 36.7 (13.6 - 53.6) | Adult/Elderly | 31 to 90 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 30.8 (-9.2 - 56.5) | Adult/Elderly | 14 to 30 days |
| 112 | S | Primary series + booster dose (no prior infection) | Omicron | 5.0 (-56.9 - 61.1) | Adult/Elderly | 13+ weeks |
| 112 | S | Primary series + booster dose (prior Omicron infection) | Omicron | 71.4 (60.5 - 79.2) | Adult/Elderly | 31 to 90 days |
| 112 | S | Primary series + booster dose (prior Omicron infection) | Omicron | 86.2 (72.5 - 93.1) | Adult/Elderly | 14 to 30 days |
| 112 | S | Primary series + booster dose (prior Omicron infection) | Omicron | 40.0 (-4.8 - 65.7) | Adult/Elderly | 91 to 150 days |
| 112 | S | Primary series + booster dose (prior Omicron infection) | Omicron | 34.7 (-68.6 - 86.6) | Adult/Elderly | 151+ days |
| 112 | S | Primary series + booster dose (prior Omicron infection) | Omicron | 35.6 (14.5 - 51.4) | Adult/Elderly | 91 to 150 days |
| 112 | S | Primary series + booster dose (prior Omicron infection) | Omicron | -4.6 (-28.8 - 21.7) | Adult/Elderly | 151+ days |
| 112 | S | Primary series + booster dose (prior Omicron infection) | Omicron | 37.4 (-1.9 - 61.6) | Adult/Elderly | 31 to 90 days |
| 112 | S | Primary series + booster dose (prior Omicron infection) | Omicron | 83.3 (-21.1 - 97.8) | Adult/Elderly | 14 to 30 days |
| 113 | M | Primary series (no prior infection) | Pre-Omicron | 99.0 (93.3 - 99.9) | Adult/Elderly | 2+ weeks |
| 113 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 99.7 (96.5 - 100.0) | Adult/Elderly | 2+ weeks |
| 113 | M | Primary series (no prior infection) | Omicron | 84.5 (23.0 - 96.9) | Adult/Elderly | 2+ weeks |
| 113 | M | Primary series + booster dose (no prior infection) | Omicron | 99.2 (76.3 - 100.0) | Adult/Elderly | 2+ weeks |
| 113 | S | Primary series (no prior infection) | Pre-Omicron | 94.3 (92.5 - 95.7) | Adult | 2+ weeks |
| 113 | S | Primary series (no prior infection) | Pre-Omicron | 96.0 (92.3 - 97.9) | Elderly | 2+ weeks |
| 113 | S | Primary series (no prior infection) | Pre-Omicron | 63.7 (59.8 - 67.2) | Adult/Elderly | 181 to 270 days |
| 113 | S | Primary series (no prior infection) | Pre-Omicron | 61.3 (55.0 - 66.7) | Adult/Elderly | 271+ days |
| 113 | S | Primary series (no prior infection) | Pre-Omicron | 68.9 (60.1 - 75.8) | Adult/Elderly | 91 to 180 days |
| 113 | S | Primary series (no prior infection) | Pre-Omicron | 80.2 (68.2 - 87.7) | Adult/Elderly | 14 to 90 days |
| 113 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 93.7 (92.2 - 94.9) | Adult/Elderly | 14 to 60 days |
| 113 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 86.0 (78.1 - 91.1) | Adult/Elderly | 61+ days |
| 113 | S | Primary series (no prior infection) | Omicron | 70.9 (68.9 - 72.9) | Adult | 2+ weeks |
| 113 | S | Primary series (no prior infection) | Omicron | 13.8 (10.2 - 17.3) | Adult/Elderly | 181 to 270 days |
| 113 | S | Primary series (no prior infection) | Omicron | 5.9 (0.4 - 11.0) | Adult/Elderly | 271+ days |
| 113 | S | Primary series (no prior infection) | Omicron | 23.5 (16.4 - 30.0) | Adult/Elderly | 91 to 180 days |
| 113 | S | Primary series (no prior infection) | Omicron | 44.0 (35.1 - 51.6) | Adult/Elderly | 14 to 90 days |
| 113 | S | Primary series (no prior infection) | Omicron | 64.3 (55.0 - 71.7) | Elderly | 2+ weeks |
| 113 | S | Primary series + booster dose (no prior infection) | Omicron | 71.6 (69.1 - 73.4) | Adult/Elderly | 14 to 60 days |
| 113 | S | Primary series + booster dose (no prior infection) | Omicron | 47.4 (40.5 - 53.4) | Adult/Elderly | 61+ days |
| 114 | S | Prior pre-Omicron 2infection | Omicron | 44.0 (4.0 - 67.0) | Adult | 2+ weeks |
| 114 | D | Primary series (no prior infection) | Omicron | 19.0 (18.0 - 20.0) | Adult | 2 to 24 weeks |
| 114 | D | Primary series (no prior infection) | Omicron | 6.0 (5.0 - 8.0) | Adult | 25+ weeks |
| 114 | D | Primary series + booster dose (no prior infection) | Omicron | 68.0 (67.0 - 69.0) | Adult | 2 to 4 weeks |
| 114 | D | Primary series + booster dose (no prior infection) | Omicron | 58.0 (57.0 - 59.0) | Adult | 5 to 9 weeks |
| 114 | D | Primary series + booster dose (no prior infection) | Omicron | 50.0 (49.0 - 51.0) | Adult | 10+ weeks |
| 114 | M | Primary series (no prior infection) | Omicron | 64.0 (54.0 - 71.0) | Adult | 2 to 24 weeks |
| 114 | M | Primary series (no prior infection) | Omicron | 44.0 (30.0 - 54.0) | Adult | 25+ weeks |
| 114 | M | Primary series + booster dose (no prior infection) | Omicron | 88.0 (84.0 - 91.0) | Adult | 5 to 9 weeks |
| 114 | M | Primary series + booster dose (no prior infection) | Omicron | 92.0 (89.0 - 94.0) | Adult | 2 to 4 weeks |
| 114 | M | Primary series + booster dose (no prior infection) | Omicron | 83.0 (78.0 - 87.0) | Adult | 10+ weeks |
| 114 | S | Primary series (prior pre-Omicron infection) | Omicron | 60.0 (36.0 - 75.0) | Adult | 2+ weeks |
| 114 | S | Primary series + booster dose (prior pre-Omicron infection) | Omicron | 71.0 (56.0 - 82.0) | Adult | 2+ weeks |
| 115 | S | Primary series (no prior infection) | Pre-Omicron | 90.8 (89.1 - 92.3) | Child Adolescent | 7 to 34 days |
| 115 | S | Primary series (no prior infection) | Pre-Omicron | 92.8 (89.8 - 94.9) | Child Adolescent | 35 to 62 days |
| 115 | S | Primary series (no prior infection) | Pre-Omicron | 83.7 (75.9 - 89.0) | Child Adolescent | 9+ weeks |
| 115 | S | Primary series (no prior infection) | Omicron | 53.1 (42.6 - 61.7) | Child Adolescent | 7 to 34 days |
| 115 | S | Primary series (no prior infection) | Omicron | 45.7 (34.8 - 54.7) | Child Adolescent | 35 to 62 days |
| 115 | S | Primary series (no prior infection) | Omicron | 23.3 (2.7 - 39.5) | Child Adolescent | 9+ weeks |
| 116 | S | Primary series (no prior infection) | Pre-Omicron | 63.6 (62.2 - 65.1) | Adult | 121 to 180 days |
| 116 | S | Primary series (no prior infection) | Pre-Omicron | 49.4 (47.3 - 51.4) | Adult | 181 to 239 days |
| 116 | S | Primary series (no prior infection) | Pre-Omicron | 76.9 (73.3 - 80.0) | Adult | 14 to 120 days |
| 116 | S | Primary series (no prior infection) | Pre-Omicron | 22.6 (6.1 - 36.2) | Adult | 240+ days |
| 116 | S | Primary series (no prior infection) | Pre-Omicron | 48.8 (47.8 - 49.7) | Adult | 121 to 180 days |
| 116 | S | Primary series (no prior infection) | Pre-Omicron | 70.3 (69.2 - 71.3) | Adult | 14 to 120 days |
| 116 | S | Primary series (no prior infection) | Pre-Omicron | 22.5 (20.9 - 24.0) | Adult | 181 to 239 days |
| 116 | S | Primary series (no prior infection) | Pre-Omicron | 0.6 (-2.3 - 3.4) | Adult | 240+ days |
| 116 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 88.9 (86.9 - 90.6) | Adult | 14 to 120 days |
| 116 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 87.7 (85.1 - 88.4) | Adult | 14 to 120 days |
| 116 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 82.2 (81.5 - 82.8) | Adult | 14 to 120 days |
| 116 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 85.8 (82.6 - 88.4) | Adult | 14 to 120 days |
| 117 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 88.0 (48.0 - 97.0) | Adult/Elderly | 1+ weeks |
| 117 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 86.0 (70.0 - 94.0) | Adult/Elderly | 1+ weeks |
| 117 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 96.0 (72.0 - 99.0) | Adult/Elderly | 1+ weeks |
| 117 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 76.0 (47.0 - 89.0) | Adult/Elderly | 1+ weeks |
| 117 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 82.0 (20.0 - 96.0) | Adult/Elderly | 1+ weeks |
| 118 | M | Primary series (no prior infection) | Pre-Omicron | 91.0 (89.0 - 92.0) | Adult | 2+ weeks |
| 118 | M | Primary series (no prior infection) | Pre-Omicron | 92.0 (90.0 - 93.0) | Adult | 2+ weeks |
| 118 | M | Primary series (no prior infection) | Pre-Omicron | 69.0 (65.0 - 72.0) | Elderly | 2+ weeks |
| 118 | M | Primary series (no prior infection) | Pre-Omicron | 91.0 (90.0 - 93.0) | Adult | 2+ weeks |
| 118 | M | Primary series (no prior infection) | Pre-Omicron | 91.0 (89.0 - 92.0) | Adult | 2+ weeks |
| 118 | M | Primary series (no prior infection) | Pre-Omicron | 55.0 (50.0 - 59.0) | Elderly | 2+ weeks |
| 119 | M | Primary series (no prior infection) | Pre-Omicron | 94.0 (92.8 - 95.0) | Adult/Elderly | 50 to 100 days |
| 119 | M | Primary series (no prior infection) | Pre-Omicron | 80.4 (77.8 - 82.7) | Adult/Elderly | 200 to 250 days |
| 119 | M | Primary series (no prior infection) | Pre-Omicron | 78.4 (73.6 - 82.4) | Elderly | 200+ days |
| 120 | M | Primary series (no prior infection) | Pre-Omicron | 90.0 (87.0 - 92.0) | Adult/Elderly | 2+ weeks |
| 120 | M | Primary series (no prior infection) | Pre-Omicron | 52.0 (43.0 - 61.0) | Adult/Elderly | 2+ weeks |
| 120 | M | Primary series (no prior infection) | Pre-Omicron | 94.0 (93.0 - 95.0) | Adult/Elderly | 2+ weeks |
| 120 | M | Primary series (no prior infection) | Pre-Omicron | 89.0 (88.0 - 90.0) | Adult/Elderly | 2+ weeks |
| 120 | S | Primary series (no prior infection) | Pre-Omicron | 82.0 (80.0 - 83.0) | Adult/Elderly | 2+ weeks |
| 120 | S | Primary series (no prior infection) | Pre-Omicron | 71.0 (69.0 - 73.0) | Adult/Elderly | 2+ weeks |
| 120 | S | Primary series (no prior infection) | Pre-Omicron | 92.0 (91.0 - 92.0) | Adult/Elderly | 2+ weeks |
| 120 | S | Primary series (no prior infection) | Pre-Omicron | 88.0 (87.0 - 88.0) | Adult/Elderly | 2+ weeks |
| 89 | S | Primary series (no prior infection) | Omicron | 64.5 (63.6 - 65.4) | Child Adolescent | 2 to 14 weeks |
| 89 | S | Primary series (no prior infection) | Omicron | 29.8 (24.9 - 34.2) | Child Adolescent | 15 to 24 weeks |
| 89 | S | Primary series (no prior infection) | Omicron | 19.4 (11.7 - 26.4) | Child Adolescent | 25 to 39 weeks |
| 89 | S | Primary series (no prior infection) | Omicron | 25.7 (-4.2 - 47.0) | Child Adolescent | 40+ weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Omicron | 53.4 (32.7 - 67.7) | Child Adolescent | 15 to 24 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Omicron | 85.5 (84.0 - 86.9) | Child Adolescent | 2 to 14 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Omicron | 83.5 (82.5 - 84.5) | Child Adolescent | 2 to 14 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Omicron | 84.7 (82.6 - 86.5) | Child Adolescent | 2 to 14 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Omicron | 64.3 (52.4 - 73.3) | Child Adolescent | 15 to 24 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Omicron | 75.5 (65.6 - 82.5) | Child Adolescent | 15 to 24 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Omicron | 63.6 (46.0 - 75.5) | Child Adolescent | 25 to 39 weeks |
| 89 | S | Primary series (prior pre-Omicron infection) | Omicron | 28.9 (-15.5 - 56.3) | Child Adolescent | 25 to 39 weeks |
| 89 | S | Primary series + booster dose (no prior infection) | Omicron | 62.9 (60.5 - 65.1) | Child Adolescent | 2 to 14 weeks |
| 89 | S | Primary series + booster dose (no prior infection) | Omicron | 33.6 (14.6 - 48.3) | Child Adolescent | 15 to 24 weeks |
| 121 | S | Primary series (no prior infection) | Omicron | 3.0 (-7.0 - 12.0) | Elderly | 0+ weeks |
| 121 | S | Primary series + booster dose (no prior infection) | Omicron | 38.0 (32.0 - 43.0) | Elderly | 0 to 83 days |
| 121 | S | Primary series + booster dose (no prior infection) | Omicron | 34.0 (28.0 - 39.0) | Elderly | 12+ weeks |
| 121 | S | Primary series + booster dose (no prior infection) | Omicron | 49.0 (44.0 - 54.0) | Elderly | 0 to 83 days |
| 121 | S | Primary series + booster dose (no prior infection) | Omicron | 42.0 (36.0 - 48.0) | Elderly | 84 to 111 days |
| 121 | S | Primary series + booster dose (no prior infection) | Omicron | 38.0 (29.0 - 46.0) | Elderly | 112 to 139 days |
| 121 | S | Primary series + booster dose (no prior infection) | Omicron | 36.0 (26.0 - 44.0) | Elderly | 140 to 167 days |
| 121 | S | Primary series + booster dose (no prior infection) | Omicron | 18.0 (5.0 - 28.0) | Elderly | 24+ weeks |
| 121 | D | Primary series (no prior infection) | Omicron | 21.0 (1.0 - 38.0) | Elderly | 0+ weeks |
| 121 | D | Primary series + booster dose (no prior infection) | Omicron | 59.0 (48.0 - 68.0) | Elderly | 0 to 83 days |
| 121 | D | Primary series + booster dose (no prior infection) | Omicron | 51.0 (42.0 - 60.0) | Elderly | 12+ weeks |
| 121 | D | Primary series + booster dose (no prior infection) | Omicron | 69.0 (62.0 - 75.0) | Elderly | 0 to 83 days |
| 121 | D | Primary series + booster dose (no prior infection) | Omicron | 60.0 (49.0 - 69.0) | Elderly | 84 to 111 days |
| 121 | D | Primary series + booster dose (no prior infection) | Omicron | 49.0 (32.0 - 62.0) | Elderly | 112 to 139 days |
| 121 | D | Primary series + booster dose (no prior infection) | Omicron | 56.0 (41.0 - 67.0) | Elderly | 140 to 167 days |
| 121 | D | Primary series + booster dose (no prior infection) | Omicron | 44.0 (24.0 - 59.0) | Elderly | 24+ weeks |
| 121 | M | Primary series (no prior infection) | Omicron | 43.0 (24.0 - 58.0) | Elderly | 0+ weeks |
| 121 | M | Primary series + booster dose (no prior infection) | Omicron | 77.0 (68.0 - 83.0) | Elderly | 0 to 83 days |
| 121 | M | Primary series + booster dose (no prior infection) | Omicron | 72.0 (64.0 - 78.0) | Elderly | 12+ weeks |
| 121 | M | Primary series + booster dose (no prior infection) | Omicron | 82.0 (77.0 - 86.0) | Elderly | 0 to 83 days |
| 121 | M | Primary series + booster dose (no prior infection) | Omicron | 79.0 (71.0 - 84.0) | Elderly | 84 to 111 days |
| 121 | M | Primary series + booster dose (no prior infection) | Omicron | 80.0 (70.0 - 86.0) | Elderly | 112 to 139 days |
| 121 | M | Primary series + booster dose (no prior infection) | Omicron | 78.0 (69.0 - 85.0) | Elderly | 140 to 167 days |
| 121 | M | Primary series + booster dose (no prior infection) | Omicron | 74.0 (62.0 - 82.0) | Elderly | 24+ weeks |
| 122 | S | Primary series (no prior infection) | Pre-Omicron | 90.0 (86.0 - 92.0) | Adult | 7 to 30 days |
| 122 | S | Primary series (no prior infection) | Pre-Omicron | 49.0 (46.0 - 51.0) | Adult | 213+ days |
| 122 | M | Primary series (no prior infection) | Pre-Omicron | 90.0 (86.0 - 92.0) | Adult | 7 to 30 days |
| 122 | M | Primary series (no prior infection) | Pre-Omicron | 88.0 (85.0 - 90.0) | Adult | 213+ days |
| 122 | M | Primary series + booster dose (no prior infection) | Pre-Omicron | 97.0 (95.0 - 98.0) | Adult | 2+ weeks |
| 122 | S | Primary series + booster dose (no prior infection) | Pre-Omicron | 88.0 (86.0 - 89.0) | Adult | 2+ weeks |
| 123 | M | Primary series (no prior infection) | Omicron | 41.0 (21.0 - 55.0) | Adult | 273+ days |
| 123 | M | Primary series (no prior infection) | Omicron | 68.0 (48.0 - 80.0) | Adult | 7 to 91 days |
| 123 | M | Primary series + booster dose (no prior infection) | Omicron | 85.0 (80.0 - 89.0) | Adult | 7 to 91 days |
| 123 | M | Primary series + booster dose (no prior infection) | Omicron | 55.0 (28.0 - 71.0) | Adult | 91+ days |



**Supplementary Figure S1.** Funnel plot of estimates of immunity by time since immune conferring event. Ten weeks or less: maximum time of ten weeks since immune conferring event, more than ten weeks: minimum of ten weeks since immune conferring event, Other: window includes ten weeks. Vertical dashed lines indicate weighted group means on log-scale. Diagonal dashed lines indicate mean 1.96\*standard error.



**Supplementary Figure S2.** Funnel plot of estimates of vaccine-induced and hybrid immunity. Vertical dashed lines indicate weighted group means on log-scale. Diagonal dashed lines indicate mean 1.96\*standard error.

**Supplementary Table S3.** Test of funnel plot assymmetry using Egger's regression test. Low Ten weeks or less: maximum time of ten weeks since immune conferring event, more than ten weeks: minimum of ten weeks since immune conferring event, Other: window includes ten weeks.

| **Outcome** | **Strain** | **Type of Immunity** | **Timeframe** | **Intercept** | **Confidence Interval** | **t-value** | **p-value** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Infection | Omicron | Primary Vaccination | Ten weeks or less | -3.88 | (-6.97, -0.785) | -2.46 | 0.0258 |
| More than ten weeks | 1.73 | (-2.47, 5.93) | 0.806 | 0.43 |
| Other | 2.04 | (-3, 7.08) | 0.794 | 0.433 |
| Booster Vaccination | Ten weeks or less | -1.18 | (-7.34, 4.97) | -0.377 | 0.712 |
| More than ten weeks | -1.9 | (-7.23, 3.42) | -0.7 | 0.49 |
| Other | -2.36 | (-6.89, 2.16) | -1.02 | 0.314 |
| Infection and Hybrid | More than ten weeks | -2.35 | (-4.64, -0.055) | -2.01 | 0.0525 |
| Other | -2.35 | (-6.99, 2.29) | -0.991 | 0.328 |
| Pre-Omicron | Primary Vaccination | Ten weeks or less | 1.66 | (-1.69, 5) | 0.97 | 0.335 |
| More than ten weeks | -3.04 | (-6.7, 0.632) | -1.62 | 0.107 |
| Other | -6.17 | (-9.8, -2.54) | -3.33 | 0.00111 |
| Booster Vaccination | Other | -2.11 | (-3.23, -0.987) | -3.69 | 0.00183 |
| Infection and Hybrid | More than ten weeks | -1.54 | (-4.23, 1.15) | -1.12 | 0.269 |
| Other | -2.01 | (-7.35, 3.34) | -0.736 | 0.473 |
| Symptomatic Disease | Omicron | Primary Vaccination | Ten weeks or less | -6.35 | (-12.7, -0.0151) | -1.96 | 0.0635 |
| More than ten weeks | -1.03 | (-3.35, 1.29) | -0.873 | 0.389 |
| Other | -2.94 | (-5.72, -0.161) | -2.07 | 0.052 |
| Booster Vaccination | Ten weeks or less | -1.58 | (-8.89, 5.74) | -0.422 | 0.676 |
| More than ten weeks | 2.81 | (-1.55, 7.18) | 1.26 | 0.229 |
| Other | -1.31 | (-3.91, 1.28) | -0.99 | 0.332 |
| Infection and Hybrid | More than ten weeks | -5.1 | (-10.8, 0.601) | -1.75 | 0.103 |
| Other | -9.93 | (-13.2, -6.66) | -5.95 | <0.0001 |
| Pre-Omicron | Primary Vaccination | Ten weeks or less | 1.37 | (-2.52, 5.25) | 0.69 | 0.494 |
| More than ten weeks | -0.28 | (-2.8, 2.24) | -0.217 | 0.828 |
| Other | -4.73 | (-6.77, -2.7) | -4.57 | <0.0001 |
| Booster Vaccination | Ten weeks or less | -1.44 | (-5.66, 2.78) | -0.671 | 0.511 |
| Infection and Hybrid | More than ten weeks | 0.598 | (-1.54, 2.74) | 0.548 | 0.595 |
| Severe Disease | Omicron | Primary Vaccination | Ten weeks or less | 0.00977 | (-0.619, 0.639) | 0.0304 | 0.976 |
| More than ten weeks | 0.281 | (-2.78, 3.34) | 0.18 | 0.858 |
| Other | 2.15 | (0.409, 3.89) | 2.42 | 0.0225 |
| Booster Vaccination | Ten weeks or less | -0.77 | (-3.77, 2.23) | -0.503 | 0.622 |
| More than ten weeks | -0.484 | (-2.88, 1.91) | -0.396 | 0.695 |
| Other | -0.803 | (-2.58, 0.975) | -0.885 | 0.381 |
| Pre-Omicron | Primary Vaccination | Ten weeks or less | -2.91 | (-4.2, -1.62) | -4.42 | <0.0001 |
| More than ten weeks | -2.57 | (-4.18, -0.965) | -3.14 | 0.00207 |
| Other | -5.61 | (-7.24, -3.97) | -6.73 | <0.0001 |
| Booster Vaccination | Ten weeks or less | 0.383 | (-5.82, 6.58) | 0.121 | 0.907 |
| Other | 2.29 | (-3.57, 8.14) | 0.766 | 0.459 |
| Infection and Hybrid | Other | 0.375 | (-1.47, 2.22) | 0.398 | 0.698 |

**Supplementary Table S4.** Comparison of Model 1 estimates of ES using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Strain** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Pre-Omicron | study-level: X u[0] + t u[1] estimate-only: X v[0] + t v[1] | 83·5 (81·2 - 85·8) | 50·7 (41·9 - 59·5) | 5,520.928 |
| Omicron | 50·3 (43·8 - 56·7) | -8·7 (-25·6 - 8·3) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 83·4 (80·5 - 86·2) | 50·0 (40·5 - 59·6) | 5,582.454 |
| Omicron | 51·4 (47·4 - 55·4) | -6·6 (-19·8 - 6·6) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: u[0] estimate-only: v[0] | 83·8 (80·2 - 87·4) | 49·7 (44·9 - 54·6) | 5,676.000 |
| Omicron | 49·2 (44·3 - 54·1) | 3·6 (-4·5 - 11·8) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: None estimate-only: X v[0] + t v[1] | 82·9 (81·4 - 84·4) | 50·2 (44·7 - 55·7) | 5,787.853 |
| Omicron | 53·4 (49·2 - 57·6) | 9·6 (-3·8 - 22·9) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: None estimate-only: v[0] + t v[1] | 82·5 (80·5 - 84·5) | 50·3 (44·6 - 56·1) | 5,834.552 |
| Omicron | 53·8 (50·7 - 56·8) | 10·4 (-0·2 - 21·0) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: None estimate-only: v[0] | 81·9 (79·4 - 84·4) | 52·0 (47·9 - 56·2) | 5,901.432 |
| Omicron | 52·3 (48·4 - 56·1) | 15·3 (6·9 - 23·6) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: X u[0] + t u[1] estimate-only: None | 84·8 (82·5 - 87·0) | 48·6 (38·5 - 58·7) | 35,251.004 |
| Omicron | 52·0 (44·2 - 59·8) | -0·5 (-12·6 - 11·5) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: u[0] + t u[1] estimate-only: None | 85·1 (82·4 - 87·9) | 53·5 (44·1 - 63·0) | 37,210.106 |
| Omicron | 53·5 (50·7 - 56·3) | -3·9 (-13·4 - 5·6) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: u[0] estimate-only: None | 83·5 (80·4 - 86·5) | 67·2 (64·1 - 70·2) | 68,340.107 |
| Omicron | 54·3 (51·2 - 57·3) | -8·7 (-11·9 - -5·5) |
| p-value | <0·0001 | <0·0001 |

**Supplementary Table S5.** Comparison of Model 1 estimates of ED using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Strain** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Pre-Omicron | study-level: X u[0] + t u[1] estimate-only: X v[0] + t v[1] | 87·0 (84·0 - 90·1) | 54·3 (42·8 - 65·8) | 3,422.151 |
| Omicron | 60·6 (54·2 - 67·0) | 2·6 (-10·5 - 15·6) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 86·5 (82·9 - 90·1) | 56·1 (44·6 - 67·5) | 3,444.899 |
| Omicron | 57·6 (53·4 - 61·8) | -1·8 (-15·2 - 11·6) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: u[0] estimate-only: v[0] | 86·7 (82·2 - 91·3) | 54·8 (48·5 - 61·2) | 3,467.702 |
| Omicron | 55·6 (50·4 - 60·9) | 8·4 (1·0 - 15·8) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: None estimate-only: X v[0] + t v[1] | 86·9 (85·1 - 88·7) | 50·8 (44·5 - 57·1) | 3,508.069 |
| Omicron | 57·3 (53·6 - 60·9) | 9·3 (1·7 - 16·9) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: None estimate-only: v[0] + t v[1] | 86·3 (83·7 - 89·0) | 51·5 (45·2 - 57·8) | 3,526.225 |
| Omicron | 58·0 (55·0 - 61·0) | 8·1 (-0·4 - 16·7) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: None estimate-only: v[0] | 85·6 (82·5 - 88·7) | 54·1 (49·2 - 59·1) | 3,548.187 |
| Omicron | 56·9 (53·5 - 60·3) | 11·5 (5·3 - 17·7) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: X u[0] + t u[1] estimate-only: None | 88·7 (85·4 - 91·9) | 55·0 (37·0 - 72·9) | 40,076.282 |
| Omicron | 62·2 (55·1 - 69·3) | -21·7 (-39·1 - -4·3) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: u[0] + t u[1] estimate-only: None | 87·7 (84·2 - 91·2) | 61·7 (46·1 - 77·3) | 40,388.851 |
| Omicron | 60·2 (56·7 - 63·7) | -16·9 (-32·5 - -1·3) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: u[0] estimate-only: None | 89·8 (85·8 - 93·7) | 54·6 (50·7 - 58·6) | 47,279.404 |
| Omicron | 60·1 (56·1 - 64·1) | -7·8 (-11·8 - -3·7) |
| p-value | <0·0001 | <0·0001 |

**Supplementary Table S6.** Comparison of Model 1 estimates of EM using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Strain** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Pre-Omicron | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 92·0 (89·9 - 94·0) | 82·0 (78·0 - 86·1) | 4,012.327 |
| Omicron | 86·0 (83·3 - 88·6) | 67·8 (62·2 - 73·4) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: X u[0] + t u[1] estimate-only: X v[0] + t v[1] | 92·5 (90·7 - 94·3) | 82·8 (78·9 - 86·6) | 4,043.329 |
| Omicron | 84·5 (81·4 - 87·7) | 65·6 (59·5 - 71·8) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: u[0] estimate-only: v[0] | 91·2 (88·9 - 93·4) | 83·4 (80·5 - 86·3) | 4,049.369 |
| Omicron | 84·9 (81·9 - 87·9) | 70·0 (66·0 - 73·9) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: None estimate-only: v[0] + t v[1] | 93·0 (91·8 - 94·2) | 86·3 (83·6 - 89·0) | 4,229.415 |
| Omicron | 87·0 (85·1 - 88·9) | 76·5 (72·3 - 80·8) |
| p-value | <0·0001 | 0·00016 |
| Pre-Omicron | study-level: None estimate-only: X v[0] + t v[1] | 93·1 (92·0 - 94·2) | 86·8 (84·2 - 89·3) | 4,236.764 |
| Omicron | 86·3 (84·0 - 88·6) | 75·7 (71·3 - 80·1) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: None estimate-only: v[0] | 92·1 (90·8 - 93·4) | 84·9 (82·7 - 87·0) | 4,248.031 |
| Omicron | 85·9 (83·9 - 87·9) | 75·5 (72·5 - 78·5) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: u[0] + t u[1] estimate-only: None | 92·7 (90·8 - 94·5) | 83·8 (80·0 - 87·6) | 7,197.724 |
| Omicron | 90·1 (88·1 - 92·0) | 66·9 (62·5 - 71·4) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: X u[0] + t u[1] estimate-only: None | 93·6 (91·9 - 95·4) | 83·6 (79·1 - 88·2) | 7,205.138 |
| Omicron | 89·2 (86·4 - 92·0) | 64·3 (59·7 - 69·0) |
| p-value | <0·0001 | <0·0001 |
| Pre-Omicron | study-level: u[0] estimate-only: None | 92·6 (90·7 - 94·5) | 84·9 (83·0 - 86·9) | 7,907.027 |
| Omicron | 89·3 (87·3 - 91·2) | 73·4 (71·3 - 75·5) |
| p-value | <0·0001 | <0·0001 |

**Supplementary Table S7.** Comparison of Model 2 estimates of ES against pre-Omicron strains using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Dose** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 83·1 (80·8 - 85·4) | 45·9 (36·9 - 54·8) | 3,675.885 |
| Primary + Booster | 86·9 (82·2 - 91·7) | 65·2 (33·4 - 97·1) |
| p-value | 0·13 | 0·23 |
| Primary | study-level: X u[0] + t u[1] estimate-only: X v[0] + t v[1] | 83·0 (80·6 - 85·4) | 47·0 (38·3 - 55·8) | 3,690.336 |
| Primary + Booster | 88·1 (85·2 - 91·0) | 74·3 (42·7 - 100·0) |
| p-value | 0·0038 | 0·1 |
| Primary | study-level: u[0] estimate-only: v[0] | 82·9 (79·6 - 86·1) | 46·7 (42·4 - 51·1) | 3,802.661 |
| Primary + Booster | 87·3 (80·8 - 93·8) | 81·2 (64·2 - 98·3) |
| p-value | 0·18 | 0·00021 |
| Primary | study-level: u[0] + t u[1] estimate-only: None | 82·2 (80·6 - 83·8) | 47·3 (41·6 - 52·9) | 3,901.414 |
| Primary + Booster | 87·6 (82·9 - 92·2) | 77·9 (33·8 - 100·0) |
| p-value | 0·043 | 0·24 |
| Primary | study-level: X u[0] + t u[1] estimate-only: None | 82·2 (80·5 - 83·8) | 47·2 (41·6 - 52·8) | 3,901.822 |
| Primary + Booster | 87·7 (85·6 - 89·8) | 68·8 (38·8 - 98·9) |
| p-value | 0·00012 | 0·26 |
| Primary | study-level: None estimate-only: v[0] | 81·2 (78·9 - 83·6) | 48·9 (45·1 - 52·7) | 4,005.754 |
| Primary + Booster | 87·3 (80·2 - 94·4) | 87·3 (65·3 - 100·0) |
| p-value | 0·14 | 0·0023 |
| Primary | study-level: None estimate-only: v[0] + t v[1] | 81·2 (78·9 - 83·6) | 48·9 (45·1 - 52·7) |
| Primary + Booster | 87·3 (80·2 - 94·4) | 87·3 (65·3 - 100·0) |
| p-value | 0·14 | 0·0023 |
| Primary | study-level: None estimate-only: X v[0] + t v[1] | 81·2 (78·9 - 83·6) | 48·9 (45·1 - 52·7) |
| Primary + Booster | 87·3 (80·2 - 94·4) | 87·3 (65·3 - 100·0) |
| p-value | 0·14 | 0·0023 |
| Primary | study-level: u[0] estimate-only: None | 81·2 (78·9 - 83·6) | 48·9 (45·1 - 52·7) |
| Primary + Booster | 87·3 (80·2 - 94·4) | 87·3 (65·3 - 100·0) |
| p-value | 0·14 | 0·0023 |

**Supplementary Table S8.** Comparison of Model 2 estimates of ED against pre-Omicron strains using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Dose** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary | study-level: X u[0] + t u[1] estimate-only: X v[0] + t v[1] | 85·8 (82·3 - 89·2) | 48·7 (37·8 - 59·6) | 1,885.630 |
| Primary + Booster | 93·7 (92·0 - 95·4) | 80·7 (65·5 - 95·8) |
| p-value | <0·0001 | <0·0001 |
| Primary | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 85·9 (83·3 - 88·6) | 47·7 (35·3 - 60·2) | 1,913.079 |
| Primary + Booster | 93·6 (89·6 - 97·5) | 91·7 (71·5 - 100·0) |
| p-value | <0·0001 | <0·0001 |
| Primary | study-level: X u[0] + t u[1] estimate-only: None | 84·9 (82·5 - 87·2) | 49·3 (43·4 - 55·3) | 1,934.863 |
| Primary + Booster | 93·7 (92·9 - 94·6) | 85·7 (80·3 - 91·1) |
| p-value | <0·0001 | <0·0001 |
| Primary | study-level: u[0] estimate-only: v[0] | 85·0 (80·6 - 89·3) | 52·9 (47·2 - 58·6) | 1,968.689 |
| Primary + Booster | 91·4 (84·2 - 98·6) | 93·9 (79·9 - 100·0) |
| p-value | 0·056 | <0·0001 |
| Primary | study-level: u[0] + t u[1] estimate-only: None | 85·2 (83·3 - 87·1) | 48·8 (42·6 - 55·1) | 1,980.237 |
| Primary + Booster | 93·9 (90·6 - 97·1) | 88·1 (68·3 - 100·0) |
| p-value | <0·0001 | 0·00028 |
| Primary | study-level: None estimate-only: v[0] | 84·0 (81·0 - 87·0) | 51·6 (47·0 - 56·3) | 2,032.823 |
| Primary + Booster | 93·9 (88·1 - 99·7) | 87·9 (74·4 - 100·0) |
| p-value | 0·0028 | <0·0001 |
| Primary | study-level: None estimate-only: v[0] + t v[1] | 84·0 (81·0 - 87·0) | 51·6 (47·0 - 56·3) |
| Primary + Booster | 93·9 (88·1 - 99·7) | 87·9 (74·4 - 100·0) |
| p-value | 0·0028 | <0·0001 |
| Primary | study-level: None estimate-only: X v[0] + t v[1] | 84·0 (81·0 - 87·0) | 51·6 (47·0 - 56·3) |
| Primary + Booster | 93·9 (88·1 - 99·7) | 87·9 (74·4 - 100·0) |
| p-value | 0·0028 | <0·0001 |
| Primary | study-level: u[0] estimate-only: None | 84·0 (81·0 - 87·0) | 51·6 (47·0 - 56·3) |
| Primary + Booster | 93·9 (88·1 - 99·7) | 87·9 (74·4 - 100·0) |
| p-value | 0·0028 | <0·0001 |

**Supplementary Table S9.** Comparison of Model 2 estimates of EM against pre-Omicron strains using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Dose** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 92·4 (90·4 - 94·4) | 82·1 (77·9 - 86·3) | 2,683.526 |
| Primary + Booster | 92·9 (89·4 - 96·3) | 94·6 (82·5 - 100·0) |
| p-value | 0·78 | 0·036 |
| Primary | study-level: X u[0] + t u[1] estimate-only: X v[0] + t v[1] | 92·2 (90·2 - 94·3) | 82·7 (78·8 - 86·7) | 2,703.925 |
| Primary + Booster | 94·9 (92·9 - 96·9) | 90·7 (77·4 - 100·0) |
| p-value | 0·047 | 0·24 |
| Primary | study-level: u[0] estimate-only: v[0] | 91·1 (88·9 - 93·3) | 83·5 (80·8 - 86·3) | 2,712.941 |
| Primary + Booster | 93·1 (89·5 - 96·7) | 98·0 (89·3 - 100·0) |
| p-value | 0·24 | 0·00088 |
| Primary | study-level: u[0] + t u[1] estimate-only: None | 92·8 (91·7 - 94·0) | 86·9 (84·2 - 89·5) | 2,804.508 |
| Primary + Booster | 95·1 (91·8 - 98·4) | 89·0 (75·5 - 100·0) |
| p-value | 0·2 | 0·76 |
| Primary | study-level: X u[0] + t u[1] estimate-only: None | 92·8 (91·6 - 94·0) | 86·7 (84·0 - 89·4) | 2,815.186 |
| Primary + Booster | 95·9 (94·0 - 97·9) | 91·7 (77·9 - 100·0) |
| p-value | 0·0075 | 0·48 |
| Primary | study-level: None estimate-only: v[0] | 91·8 (90·5 - 93·1) | 84·9 (82·8 - 87·0) | 2,828.522 |
| Primary + Booster | 94·8 (91·3 - 98·4) | 88·8 (79·9 - 97·7) |
| p-value | 0·12 | 0·41 |
| Primary | study-level: None estimate-only: v[0] + t v[1] | 91·8 (90·5 - 93·1) | 84·9 (82·8 - 87·0) |
| Primary + Booster | 94·8 (91·3 - 98·4) | 88·8 (79·9 - 97·7) |
| p-value | 0·12 | 0·41 |
| Primary | study-level: None estimate-only: X v[0] + t v[1] | 91·8 (90·5 - 93·1) | 84·9 (82·8 - 87·0) |
| Primary + Booster | 94·8 (91·3 - 98·4) | 88·8 (79·9 - 97·7) |
| p-value | 0·12 | 0·41 |
| Primary | study-level: u[0] estimate-only: None | 91·8 (90·5 - 93·1) | 84·9 (82·8 - 87·0) |
| Primary + Booster | 94·8 (91·3 - 98·4) | 88·8 (79·9 - 97·7) |
| p-value | 0·12 | 0·41 |

**Supplementary Table S10.** Comparison of Model 2 estimates of ES against Omicron strains using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Dose** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 39·2 (31·8 - 46·6) | -35·2 (-62·9 - -7·6) | 1,793.373 |
| Primary + Booster | 58·2 (50·5 - 66·0) | 3·0 (-26·5 - 32·5) |
| p-value | <0·0001 | 0·064 |
| Primary | study-level: u[0] estimate-only: v[0] | 35·3 (27·4 - 43·2) | -11·5 (-25·0 - 2·0) | 1,793.840 |
| Primary + Booster | 58·6 (50·2 - 67·0) | 6·5 (-10·1 - 23·0) |
| p-value | <0·0001 | 0·89 |
| Primary | study-level: X u[0] + t u[1] estimate-only: X v[0] + t v[1] | 38·2 (29·0 - 47·4) | -38·6 (-65·9 - -11·3) | 1,805.414 |
| Primary + Booster | 55·7 (50·5 - 60·9) | 4·3 (-25·6 - 34·1) |
| p-value | 0·00018 | 0·016 |
| Primary | study-level: u[0] estimate-only: None | 37·7 (31·5 - 43·9) | -3·7 (-17·2 - 9·8) | 1,846.726 |
| Primary + Booster | 53·8 (47·4 - 60·1) | 3·1 (-13·8 - 19·9) |
| p-value | 0·0022 | 0·072 |
| Primary | study-level: None estimate-only: v[0] | 37·7 (31·5 - 43·9) | -3·7 (-17·2 - 9·8) |
| Primary + Booster | 53·8 (47·4 - 60·1) | 3·1 (-13·8 - 19·9) |
| p-value | 0·0022 | 0·072 |
| Primary | study-level: None estimate-only: v[0] + t v[1] | 37·7 (31·5 - 43·9) | -3·7 (-17·2 - 9·8) |
| Primary + Booster | 53·8 (47·4 - 60·1) | 3·1 (-13·8 - 19·9) |
| p-value | 0·0022 | 0·072 |
| Primary | study-level: None estimate-only: X v[0] + t v[1] | 37·7 (31·5 - 43·9) | -3·7 (-17·2 - 9·8) |
| Primary + Booster | 53·8 (47·4 - 60·1) | 3·1 (-13·8 - 19·9) |
| p-value | 0·0022 | 0·072 |
| Primary | study-level: u[0] + t u[1] estimate-only: None | 40·9 (35·1 - 46·6) | -20·4 (-40·7 - -0·1) | 1,852.204 |
| Primary + Booster | 53·4 (47·7 - 59·1) | 6·7 (-13·5 - 26·8) |
| p-value | 0·0039 | 0·29 |
| Primary | study-level: X u[0] + t u[1] estimate-only: None | 39·9 (33·1 - 46·6) | -16·7 (-38·1 - 4·6) | 1,855.501 |
| Primary + Booster | 53·2 (48·7 - 57·7) | 7·7 (-10·0 - 25·4) |
| p-value | 0·0024 | 0·21 |

**Supplementary Table S11.** Comparison of Model 2 estimates of ED against Omicron strains using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Dose** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary | study-level: u[0] estimate-only: v[0] | 44·4 (37·9 - 50·9) | 6·4 (-1·5 - 14·3) | 1,416.753 |
| Primary + Booster | 60·9 (54·5 - 67·3) | 20·7 (3·4 - 38·1) |
| p-value | <0·0001 | 0·22 |
| Primary | study-level: X u[0] + t u[1] estimate-only: X v[0] + t v[1] | 43·4 (34·0 - 52·7) | -0·3 (-5·9 - 5·4) | 1,422.745 |
| Primary + Booster | 61·0 (56·5 - 65·5) | 12·7 (-8·1 - 33·5) |
| p-value | <0·0001 | 0·17 |
| Primary | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 45·8 (38·4 - 53·1) | -0·2 (-9·4 - 9·1) | 1,428.604 |
| Primary + Booster | 60·9 (53·5 - 68·3) | 20·0 (3·5 - 36·5) |
| p-value | 0·00011 | 0·1 |
| Primary | study-level: u[0] estimate-only: None | 46·7 (41·9 - 51·6) | 6·2 (0·1 - 12·4) | 1,459.666 |
| Primary + Booster | 58·4 (53·9 - 63·0) | 18·6 (1·7 - 35·6) |
| p-value | 0·0068 | 0·43 |
| Primary | study-level: None estimate-only: v[0] | 46·7 (41·9 - 51·6) | 6·2 (0·1 - 12·4) |
| Primary + Booster | 58·4 (53·9 - 63·0) | 18·6 (1·7 - 35·6) |
| p-value | 0·0068 | 0·43 |
| Primary | study-level: None estimate-only: v[0] + t v[1] | 46·7 (41·9 - 51·6) | 6·2 (0·1 - 12·4) |
| Primary + Booster | 58·4 (53·9 - 63·0) | 18·6 (1·7 - 35·6) |
| p-value | 0·0068 | 0·43 |
| Primary | study-level: None estimate-only: X v[0] + t v[1] | 46·7 (41·9 - 51·6) | 6·2 (0·1 - 12·4) |
| Primary + Booster | 58·4 (53·9 - 63·0) | 18·6 (1·7 - 35·6) |
| p-value | 0·0068 | 0·43 |
| Primary | study-level: X u[0] + t u[1] estimate-only: None | 47·2 (41·0 - 53·4) | -1·0 (-5·1 - 3·0) | 1,466.146 |
| Primary + Booster | 59·8 (56·9 - 62·8) | 8·6 (-9·0 - 26·2) |
| p-value | 0·0052 | 0·61 |
| Primary | study-level: u[0] + t u[1] estimate-only: None | 47·1 (42·0 - 52·2) | 2·5 (-3·1 - 8·1) | 1,468.528 |
| Primary + Booster | 57·5 (52·6 - 62·5) | 22·6 (8·0 - 37·3) |
| p-value | 0·013 | 0·33 |

**Supplementary Table S12.** Comparison of Model 2 estimates of EM against Omicron strains using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Dose** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 76·0 (71·8 - 80·2) | 67·3 (58·4 - 76·1) | 1,240.578 |
| Primary + Booster | 90·0 (86·2 - 93·8) | 73·4 (64·4 - 82·4) |
| p-value | <0·0001 | 0·007 |
| Primary | study-level: u[0] estimate-only: v[0] | 75·5 (70·9 - 80·1) | 69·2 (64·5 - 74·0) | 1,242.912 |
| Primary + Booster | 89·7 (85·5 - 93·9) | 76·5 (71·4 - 81·6) |
| p-value | <0·0001 | <0·0001 |
| Primary | study-level: X u[0] + t u[1] estimate-only: X v[0] + t v[1] | 74·1 (68·0 - 80·2) | 65·6 (57·3 - 74·0) | 1,245.967 |
| Primary + Booster | 90·5 (87·1 - 93·8) | 75·4 (67·5 - 83·4) |
| p-value | <0·0001 | 0·0015 |
| Primary | study-level: None estimate-only: v[0] | 76·1 (72·5 - 79·7) | 71·9 (68·2 - 75·6) | 1,367.629 |
| Primary + Booster | 89·2 (86·8 - 91·7) | 80·7 (75·9 - 85·6) |
| p-value | <0·0001 | 0·0059 |
| Primary | study-level: None estimate-only: v[0] + t v[1] | 76·1 (72·5 - 79·7) | 71·9 (68·2 - 75·6) |
| Primary + Booster | 89·2 (86·8 - 91·7) | 80·7 (75·9 - 85·6) |
| p-value | <0·0001 | 0·0059 |
| Primary | study-level: None estimate-only: X v[0] + t v[1] | 76·1 (72·5 - 79·7) | 71·9 (68·2 - 75·6) |
| Primary + Booster | 89·2 (86·8 - 91·7) | 80·7 (75·9 - 85·6) |
| p-value | <0·0001 | 0·0059 |
| Primary | study-level: u[0] estimate-only: None | 76·1 (72·5 - 79·7) | 71·9 (68·2 - 75·6) |
| Primary + Booster | 89·2 (86·8 - 91·7) | 80·7 (75·9 - 85·6) |
| p-value | <0·0001 | 0·0059 |
| Primary | study-level: X u[0] + t u[1] estimate-only: None | 75·9 (71·3 - 80·4) | 71·4 (67·1 - 75·6) | 1,376.900 |
| Primary + Booster | 89·5 (87·5 - 91·5) | 81·4 (78·2 - 84·7) |
| p-value | <0·0001 | 0·00032 |
| Primary | study-level: u[0] + t u[1] estimate-only: None | 76·1 (72·5 - 79·6) | 71·9 (68·1 - 75·7) | 1,377.940 |
| Primary + Booster | 89·2 (86·8 - 91·7) | 80·7 (75·8 - 85·6) |
| p-value | <0·0001 | 0·0054 |

**Supplementary Table S13.** Comparison of Model 3 estimates of ES against pre-Omicron strains using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Immunity** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 83·0 (80·7 - 85·4) | 47·1 (39·4 - 54·8) | 3,791.460 |
| Natural Imm. | 84·2 (78·9 - 89·5) | 77·0 (64·3 - 89·7) |
| Hybrid | 86·7 (77·5 - 95·9) | 90·1 (73·5 - 100·0) |
| Imm. vs Pri. | 0.67 | <0.0001 |
| Hyb. vs Pri. | 0.43 | <0.0001 |
| Primary | study-level: u[0] estimate-only: v[0] | 83·1 (79·9 - 86·2) | 47·1 (42·8 - 51·3) | 3,883.370 |
| Natural Imm. | 84·6 (77·8 - 91·4) | 80·0 (73·2 - 86·8) |
| Hybrid | 85·2 (74·0 - 96·4) | 90·0 (76·5 - 100·0) |
| Imm. vs Pri. | 0.66 | <0.0001 |
| Hyb. vs Pri. | 0.71 | <0.0001 |
| Primary | study-level: None estimate-only: v[0] + t v[1] | 82·0 (80·3 - 83·6) | 47·4 (42·5 - 52·3) | 4,025.995 |
| Natural Imm. | 86·7 (81·1 - 92·3) | 85·0 (73·6 - 96·5) |
| Hybrid | 91·3 (82·1 - 100·0) | 95·6 (75·8 - 100·0) |
| Imm. vs Pri. | 0.11 | <0.0001 |
| Hyb. vs Pri. | 0.051 | <0.0001 |
| Primary | study-level: None estimate-only: v[0] | 81·2 (78·9 - 83·6) | 49·0 (45·2 - 52·7) | 4,084.441 |
| Natural Imm. | 87·9 (80·8 - 95·0) | 83·2 (77·3 - 89·2) |
| Hybrid | 91·7 (78·9 - 100·0) | 94·6 (78·5 - 100·0) |
| Imm. vs Pri. | 0.082 | <0.0001 |
| Hyb. vs Pri. | 0.11 | <0.0001 |
| Primary | study-level: None estimate-only: X v[0] + t v[1] | 81·8 (80·1 - 83·5) | 47·5 (42·5 - 52·6) | 4,609.882 |
| Natural Imm. | 88·2 (83·7 - 92·8) | 84·7 (79·6 - 89·8) |
| Hybrid | 93·6 (86·6 - 100·0) | 93·3 (86·1 - 100·0) |
| Imm. vs Pri. | 0.01 | <0.0001 |
| Hyb. vs Pri. | 0.0015 | <0.0001 |
| Primary | study-level: u[0] + t u[1] estimate-only: None | 84·7 (82·6 - 86·9) | 46·4 (38·3 - 54·6) | 24,023.981 |
| Natural Imm. | 84·9 (82·7 - 87·1) | 83·7 (75·5 - 91·9) |
| Hybrid | 90·7 (88·4 - 93·0) | 98·2 (89·7 - 100·0) |
| Imm. vs Pri. | 0.32 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: X u[0] + t u[1] estimate-only: None | 84·5 (82·3 - 86·6) | 44·7 (36·3 - 53·0) | 24,253.361 |
| Natural Imm. | 84·2 (80·4 - 88·0) | 84·9 (78·3 - 91·4) |
| Hybrid | 103·7 (93·3 - 100·0) | 87·6 (71·4 - 100·0) |
| Imm. vs Pri. | 0.87 | <0.0001 |
| Hyb. vs Pri. | 0.0011 | <0.0001 |
| Primary | study-level: u[0] estimate-only: None | 81·8 (79·2 - 84·3) | 66·5 (63·9 - 69·0) | 51,698.462 |
| Natural Imm. | 83·1 (80·6 - 85·7) | 84·7 (82·1 - 87·3) |
| Hybrid | 89·1 (86·4 - 91·8) | 91·7 (88·6 - 94·9) |
| Imm. vs Pri. | <0.0001 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |

**Supplementary Table S14.** Comparison of Model 3 estimates of ED against pre-Omicron strains using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Immunity** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 86·1 (83·2 - 89·1) | 46·0 (33·5 - 58·6) | 1,844.483 |
| Natural Imm. | 85·8 (78·9 - 92·7) | 81·0 (47·4 - 100·0) |
| Imm. vs Pri. | 0.93 | 0.054 |
| Primary | study-level: u[0] estimate-only: v[0] | 85·1 (80·7 - 89·5) | 52·1 (46·3 - 58·0) | 1,884.524 |
| Natural Imm. | 85·7 (75·9 - 95·5) | 83·9 (73·5 - 94·2) |
| Imm. vs Pri. | 0.9 | <0.0001 |
| Primary | study-level: None estimate-only: v[0] + t v[1] | 85·0 (82·8 - 87·2) | 49·1 (43·0 - 55·2) | 1,910.325 |
| Natural Imm. | 87·9 (80·6 - 95·2) | 85·6 (71·5 - 99·7) |
| Imm. vs Pri. | 0.46 | <0.0001 |
| Primary | study-level: None estimate-only: v[0] | 84·0 (80·9 - 87·1) | 51·5 (46·7 - 56·3) | 1,941.284 |
| Natural Imm. | 87·9 (78·9 - 97·0) | 85·2 (77·8 - 92·6) |
| Imm. vs Pri. | 0.42 | <0.0001 |
| Primary | study-level: None estimate-only: X v[0] + t v[1] | 84·9 (82·7 - 87·2) | 49·1 (43·0 - 55·3) | 2,442.009 |
| Natural Imm. | 91·4 (86·5 - 96·3) | 84·8 (80·4 - 89·3) |
| Imm. vs Pri. | 0.02 | <0.0001 |
| Primary | study-level: X u[0] + t u[1] estimate-only: X v[0] + t v[1] | 85·7 (82·7 - 88·8) | 45·2 (33·5 - 56·9) | 2,926.941 |
| Natural Imm. | 90·2 (83·0 - 97·3) | 88·9 (81·0 - 96·7) |
| Imm. vs Pri. | 0.31 | <0.0001 |
| Primary | study-level: u[0] + t u[1] estimate-only: None | 87·7 (84·6 - 90·9) | 48·5 (37·5 - 59·5) | 6,229.676 |
| Natural Imm. | 83·5 (79·6 - 87·4) | 62·0 (36·2 - 87·8) |
| Imm. vs Pri. | 0.0014 | 0.32 |
| Primary | study-level: X u[0] + t u[1] estimate-only: None | 86·6 (83·6 - 89·6) | 44·5 (33·0 - 55·9) | 6,718.314 |
| Natural Imm. | 91·3 (87·3 - 95·2) | 83·1 (65·0 - 100·0) |
| Imm. vs Pri. | 0.16 | 0.00021 |
| Primary | study-level: u[0] estimate-only: None | 87·4 (83·7 - 91·0) | 55·8 (52·2 - 59·5) | 7,548.793 |
| Natural Imm. | 83·0 (78·7 - 87·3) | 77·3 (72·0 - 82·5) |
| Imm. vs Pri. | 0.0011 | <0.0001 |

**Supplementary Table S15.** Comparison of Model 3 estimates of ES against Omicron using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Immunity** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary | study-level: u[0] estimate-only: v[0] | 40·0 (31·5 - 48·5) | -6·6 (-20·4 - 7·2) | 1,156.887 |
| Natural Imm. | 51·3 (40·5 - 62·1) | 36·8 (25·3 - 48·4) |
| Hybrid | 73·5 (61·7 - 85·3) | 43·1 (28·2 - 57·9) |
| Imm. vs Pri. | 0.059 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 40·1 (32·0 - 48·1) | -14·3 (-42·7 - 14·1) | 1,166.030 |
| Natural Imm. | 55·6 (44·9 - 66·2) | 9·5 (-20·7 - 39·6) |
| Hybrid | 73·3 (61·9 - 84·7) | 30·8 (1·6 - 59·9) |
| Imm. vs Pri. | 0.013 | 0.0065 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: None estimate-only: v[0] | 37·5 (31·0 - 44·1) | -3·7 (-17·9 - 10·5) | 1,187.591 |
| Natural Imm. | 57·6 (48·6 - 66·6) | 45·4 (36·6 - 54·2) |
| Hybrid | 74·9 (63·7 - 86·2) | 43·4 (28·8 - 58·1) |
| Imm. vs Pri. | 0.00056 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: None estimate-only: v[0] + t v[1] | 36·9 (30·2 - 43·5) | -2·1 (-15·3 - 11·1) | 1,196.945 |
| Natural Imm. | 57·8 (48·6 - 67·0) | 46·0 (37·3 - 54·7) |
| Hybrid | 74·9 (63·4 - 86·4) | 43·7 (30·0 - 57·3) |
| Imm. vs Pri. | 0.00043 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: None estimate-only: X v[0] + t v[1] | 39·6 (32·8 - 46·3) | -14·7 (-35·2 - 5·8) | 1,677.806 |
| Natural Imm. | 59·1 (50·7 - 67·5) | 49·5 (44·3 - 54·6) |
| Hybrid | 75·6 (66·9 - 84·4) | 43·4 (26·2 - 60·6) |
| Imm. vs Pri. | 0.00054 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: u[0] + t u[1] estimate-only: None | 49·0 (39·8 - 58·1) | -25·1 (-60·6 - 10·4) | 3,800.951 |
| Natural Imm. | 45·9 (36·4 - 55·4) | -3·8 (-39·9 - 32·3) |
| Hybrid | 70·3 (61·1 - 79·5) | 24·8 (-11·1 - 60·7) |
| Imm. vs Pri. | 0.065 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: u[0] estimate-only: None | 48·6 (38·4 - 58·9) | -2·4 (-12·8 - 8·0) | 4,074.789 |
| Natural Imm. | 40·9 (30·5 - 51·3) | 21·3 (10·9 - 31·8) |
| Hybrid | 70·2 (60·0 - 80·5) | 45·9 (34·6 - 57·2) |
| Imm. vs Pri. | <0.0001 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: X u[0] + t u[1] estimate-only: None | 39·3 (30·4 - 48·3) | -25·6 (-57·7 - 6·6) | 4,161.518 |
| Natural Imm. | 61·4 (51·8 - 70·9) | 8·9 (-31·6 - 49·4) |
| Hybrid | 78·7 (67·2 - 90·3) | 39·6 (3·1 - 76·1) |
| Imm. vs Pri. | 0.0011 | 0.00014 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |

**Supplementary Table S16.** Comparison of Model 3 estimates of ED against Omicron using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Immunity** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 44·0 (35·7 - 52·2) | -1·5 (-10·4 - 7·4) | 909.8983 |
| Natural Imm. | 60·9 (48·3 - 73·5) | 25·8 (9·7 - 41·9) |
| Hybrid | 73·4 (56·4 - 90·4) | 36·2 (17·0 - 55·3) |
| Imm. vs Pri. | 0.025 | 0.0045 |
| Hyb. vs Pri. | 0.0021 | 0.00068 |
| Primary | study-level: u[0] estimate-only: v[0] | 42·7 (35·1 - 50·4) | 0·4 (-9·3 - 10·1) | 913.0589 |
| Natural Imm. | 62·5 (51·0 - 74·0) | 29·5 (9·3 - 49·7) |
| Hybrid | 77·2 (62·3 - 92·2) | 41·9 (17·1 - 66·8) |
| Imm. vs Pri. | 0.0037 | 0.012 |
| Hyb. vs Pri. | <0.0001 | 0.0028 |
| Primary | study-level: None estimate-only: v[0] + t v[1] | 47·5 (41·6 - 53·5) | -0·3 (-5·9 - 5·2) | 913.6667 |
| Natural Imm. | 57·7 (46·6 - 68·9) | 35·4 (23·9 - 46·8) |
| Hybrid | 75·2 (58·8 - 91·6) | 50·9 (35·3 - 66·5) |
| Imm. vs Pri. | 0.12 | <0.0001 |
| Hyb. vs Pri. | 0.0024 | <0.0001 |
| Primary | study-level: None estimate-only: v[0] | 46·6 (41·2 - 52·1) | 6·4 (-0·6 - 13·3) | 926.8443 |
| Natural Imm. | 57·4 (47·4 - 67·4) | 35·2 (17·0 - 53·3) |
| Hybrid | 75·3 (60·8 - 89·7) | 53·7 (31·0 - 76·3) |
| Imm. vs Pri. | 0.066 | 0.0045 |
| Hyb. vs Pri. | 0.00043 | 0.00016 |
| Primary | study-level: None estimate-only: X v[0] + t v[1] | 47·2 (41·1 - 53·3) | -1·0 (-5·0 - 3·0) | 1,378.4816 |
| Natural Imm. | 57·2 (46·8 - 67·6) | 35·4 (19·3 - 51·5) |
| Hybrid | 76·6 (62·9 - 90·3) | 48·6 (33·9 - 63·3) |
| Imm. vs Pri. | 0.11 | <0.0001 |
| Hyb. vs Pri. | 0.00021 | <0.0001 |
| Primary | study-level: X u[0] + t u[1] estimate-only: X v[0] + t v[1] | 44·5 (35·4 - 53·5) | -1·5 (-7·8 - 4·9) | 1,846.8005 |
| Natural Imm. | 58·5 (47·6 - 69·4) | 25·4 (2·2 - 48·6) |
| Hybrid | 79·8 (64·7 - 94·9) | 23·1 (-3·1 - 49·3) |
| Imm. vs Pri. | 0.05 | 0.031 |
| Hyb. vs Pri. | <0.0001 | 0.077 |
| Primary | study-level: u[0] + t u[1] estimate-only: None | 39·3 (29·8 - 48·9) | -23·0 (-57·3 - 11·2) | 4,826.3921 |
| Natural Imm. | 77·0 (66·7 - 87·2) | 7·2 (-58·0 - 72·5) |
| Hybrid | 89·2 (79·1 - 99·2) | 25·0 (-40·6 - 90·5) |
| Imm. vs Pri. | <0.0001 | 0.42 |
| Hyb. vs Pri. | <0.0001 | 0.2 |
| Primary | study-level: X u[0] + t u[1] estimate-only: None | 40·3 (29·3 - 51·4) | -28·4 (-63·0 - 6·1) | 5,282.0911 |
| Natural Imm. | 70·3 (63·0 - 77·6) | 5·7 (-58·9 - 70·2) |
| Hybrid | 83·6 (75·5 - 91·7) | 21·8 (-44·0 - 87·6) |
| Imm. vs Pri. | <0.0001 | 0.36 |
| Hyb. vs Pri. | <0.0001 | 0.19 |
| Primary | study-level: u[0] estimate-only: None | 39·4 (31·0 - 47·9) | -15·1 (-23·6 - -6·6) | 7,512.9717 |
| Natural Imm. | 75·5 (66·4 - 84·6) | 45·2 (35·9 - 54·6) |
| Hybrid | 89·2 (80·2 - 98·2) | 61·4 (50·0 - 72·9) |
| Imm. vs Pri. | <0.0001 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |

**Supplementary Table S17.** Comparison of Model 4 estimates of ES following prior infection with a pre-Omicron strain against Omicron using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Immunity** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary | study-level: u[0] estimate-only: v[0] | 39·6 (31·5 - 47·7) | -6·6 (-19·4 - 6·3) | 1,125.781 |
| Natural Imm. | 37·4 (25·5 - 49·3) | 30·0 (18·7 - 41·3) |
| Hybrid | 70·2 (57·6 - 82·8) | 48·1 (31·3 - 64·9) |
| Imm. vs Pri. | 0.73 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 40·1 (32·6 - 47·6) | -13·3 (-43·9 - 17·4) | 1,139.878 |
| Natural Imm. | 38·8 (27·2 - 50·4) | 2·1 (-32·8 - 37·0) |
| Hybrid | 72·1 (60·1 - 84·2) | 27·5 (-5·5 - 60·5) |
| Imm. vs Pri. | 0.84 | 0.25 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: None estimate-only: v[0] | 37·7 (31·6 - 43·8) | -3·7 (-17·0 - 9·6) | 1,154.868 |
| Natural Imm. | 43·2 (32·0 - 54·4) | 37·0 (27·4 - 46·5) |
| Hybrid | 73·9 (61·4 - 86·4) | 58·2 (40·3 - 76·1) |
| Imm. vs Pri. | 0.4 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: None estimate-only: v[0] + t v[1] | 38·0 (31·9 - 44·0) | -5·1 (-18·7 - 8·5) | 1,164.109 |
| Natural Imm. | 42·0 (30·7 - 53·3) | 39·0 (27·8 - 50·2) |
| Hybrid | 73·8 (61·5 - 86·2) | 58·5 (40·3 - 76·7) |
| Imm. vs Pri. | 0.54 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: None estimate-only: X v[0] + t v[1] | 39·1 (32·3 - 45·8) | -10·8 (-29·8 - 8·2) | 1,226.560 |
| Natural Imm. | 44·4 (33·8 - 55·0) | 43·8 (36·2 - 51·5) |
| Hybrid | 75·9 (66·5 - 85·4) | 63·5 (55·8 - 71·3) |
| Imm. vs Pri. | 0.41 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: X u[0] + t u[1] estimate-only: None | 42·0 (33·0 - 51·0) | -20·4 (-52·9 - 12·1) | 3,005.337 |
| Natural Imm. | 40·7 (31·7 - 49·7) | -12·2 (-45·3 - 21·0) |
| Hybrid | 72·3 (67·5 - 77·2) | 34·2 (1·3 - 67·1) |
| Imm. vs Pri. | 0.64 | 0.071 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: u[0] + t u[1] estimate-only: None | 46·2 (38·0 - 54·3) | -19·7 (-57·3 - 18·0) | 3,142.951 |
| Natural Imm. | 30·4 (21·6 - 39·1) | -19·4 (-57·8 - 19·1) |
| Hybrid | 66·8 (58·6 - 75·1) | 34·4 (-3·8 - 72·6) |
| Imm. vs Pri. | <0.0001 | 0.95 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: u[0] estimate-only: None | 45·5 (36·5 - 54·4) | -5·5 (-14·6 - 3·6) | 3,439.299 |
| Natural Imm. | 28·6 (19·3 - 37·9) | 20·4 (11·2 - 29·7) |
| Hybrid | 66·3 (57·3 - 75·3) | 62·1 (51·6 - 72·5) |
| Imm. vs Pri. | <0.0001 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |

**Supplementary Table S18.** Comparison of Model 4 estimates of ED following prior infection with a pre-Omicron strain against Omicron using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Immunity** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 44·0 (36·2 - 51·8) | -1·4 (-10·6 - 7·8) | 890.0107 |
| Natural Imm. | 52·4 (38·2 - 66·5) | 28·6 (11·8 - 45·4) |
| Hybrid | 66·0 (46·4 - 85·7) | 39·1 (19·3 - 58·9) |
| Imm. vs Pri. | 0.3 | 0.0022 |
| Hyb. vs Pri. | 0.036 | 0.00028 |
| Primary | study-level: u[0] estimate-only: v[0] | 42·7 (35·5 - 49·9) | 0·5 (-8·6 - 9·6) | 890.0250 |
| Natural Imm. | 51·9 (39·2 - 64·6) | 36·8 (16·8 - 56·8) |
| Hybrid | 70·4 (53·1 - 87·8) | 49·3 (24·0 - 74·7) |
| Imm. vs Pri. | 0.19 | 0.0012 |
| Hyb. vs Pri. | 0.0024 | 0.00039 |
| Primary | study-level: None estimate-only: v[0] + t v[1] | 47·5 (41·9 - 53·1) | 0·2 (-5·4 - 5·7) | 890.2949 |
| Natural Imm. | 46·0 (32·9 - 59·1) | 38·5 (26·5 - 50·4) |
| Hybrid | 62·8 (42·8 - 82·7) | 54·7 (38·7 - 70·6) |
| Imm. vs Pri. | 0.84 | <0.0001 |
| Hyb. vs Pri. | 0.15 | <0.0001 |
| Primary | study-level: None estimate-only: v[0] | 46·7 (41·6 - 51·8) | 6·3 (-0·2 - 12·8) | 898.1293 |
| Natural Imm. | 44·1 (32·2 - 56·0) | 38·6 (21·1 - 56·0) |
| Hybrid | 62·8 (45·3 - 80·3) | 55·9 (34·3 - 77·4) |
| Imm. vs Pri. | 0.7 | 0.00069 |
| Hyb. vs Pri. | 0.084 | <0.0001 |
| Primary | study-level: None estimate-only: X v[0] + t v[1] | 47·2 (41·3 - 53·2) | -1·0 (-4·9 - 3·0) | 951.0023 |
| Natural Imm. | 43·0 (33·9 - 52·2) | 41·2 (23·7 - 58·8) |
| Hybrid | 63·9 (45·9 - 81·9) | 53·2 (39·3 - 67·1) |
| Imm. vs Pri. | 0.45 | <0.0001 |
| Hyb. vs Pri. | 0.085 | <0.0001 |
| Primary | study-level: u[0] + t u[1] estimate-only: None | 37·8 (28·4 - 47·2) | -21·3 (-55·5 - 12·8) | 4,347.4699 |
| Natural Imm. | 62·6 (52·3 - 72·9) | 13·2 (-51·7 - 78·1) |
| Hybrid | 83·2 (73·1 - 93·4) | 30·4 (-34·7 - 95·6) |
| Imm. vs Pri. | <0.0001 | 0.35 |
| Hyb. vs Pri. | <0.0001 | 0.16 |
| Primary | study-level: u[0] estimate-only: None | 38·1 (29·7 - 46·5) | -16·4 (-24·9 - -8·0) | 7,036.4680 |
| Natural Imm. | 63·9 (54·7 - 73·0) | 49·3 (39·9 - 58·8) |
| Hybrid | 82·9 (73·7 - 92·0) | 67·8 (56·2 - 79·5) |
| Imm. vs Pri. | <0.0001 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |

**Supplementary Table S19.** Comparison of Model 4 estimates of ES following prior infection with Omicron subsequent Omicron reinfection using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Immunity** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary | study-level: u[0] estimate-only: v[0] | 39·6 (31·5 - 47·7) | -6·6 (-19·4 - 6·3) | 1,125.781 |
| Natural Imm. | 71·1 (57·3 - 84·9) | 42·7 (17·9 - 67·5) |
| Hybrid | 78·3 (62·1 - 94·4) | 39·3 (19·1 - 59·5) |
| Imm. vs Pri. | <0.0001 | 0.00028 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 40·1 (32·6 - 47·6) | -13·3 (-43·9 - 17·4) | 1,139.878 |
| Natural Imm. | 73·3 (60·2 - 86·4) | 19·6 (-19·0 - 58·2) |
| Hybrid | 79·4 (63·7 - 95·2) | 31·7 (-4·2 - 67·7) |
| Imm. vs Pri. | <0.0001 | 0.035 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: None estimate-only: v[0] | 37·7 (31·6 - 43·8) | -3·7 (-17·0 - 9·6) | 1,154.868 |
| Natural Imm. | 78·5 (64·4 - 92·6) | 43·5 (13·9 - 73·2) |
| Hybrid | 77·6 (58·2 - 97·0) | 22·7 (1·1 - 44·3) |
| Imm. vs Pri. | <0.0001 | 0.0044 |
| Hyb. vs Pri. | 0.00012 | 0.041 |
| Primary | study-level: None estimate-only: v[0] + t v[1] | 38·0 (31·9 - 44·0) | -5·1 (-18·7 - 8·5) | 1,164.109 |
| Natural Imm. | 78·5 (64·6 - 92·4) | 43·3 (13·3 - 73·2) |
| Hybrid | 78·0 (58·8 - 97·1) | 21·9 (-0·3 - 44·0) |
| Imm. vs Pri. | <0.0001 | 0.004 |
| Hyb. vs Pri. | <0.0001 | 0.042 |
| Primary | study-level: None estimate-only: X v[0] + t v[1] | 39·1 (32·3 - 45·8) | -10·8 (-29·8 - 8·2) | 1,226.560 |
| Natural Imm. | 77·9 (72·4 - 83·4) | 37·9 (23·9 - 51·8) |
| Hybrid | 75·9 (54·8 - 96·9) | 22·3 (0·5 - 44·0) |
| Imm. vs Pri. | <0.0001 | <0.0001 |
| Hyb. vs Pri. | 0.0011 | 0.025 |
| Primary | study-level: X u[0] + t u[1] estimate-only: None | 42·0 (33·0 - 51·0) | -20·4 (-52·9 - 12·1) | 3,005.337 |
| Natural Imm. | 82·8 (77·9 - 87·7) | 0·9 (-29·1 - 30·9) |
| Hybrid | 54·9 (37·2 - 72·5) | 24·7 (-25·9 - 75·4) |
| Imm. vs Pri. | <0.0001 | 0.0013 |
| Hyb. vs Pri. | 0.17 | <0.0001 |
| Primary | study-level: u[0] + t u[1] estimate-only: None | 46·2 (38·0 - 54·3) | -19·7 (-57·3 - 18·0) | 3,142.951 |
| Natural Imm. | 69·9 (61·1 - 78·6) | -0·5 (-39·0 - 38·1) |
| Hybrid | 90·3 (81·7 - 98·8) | 15·0 (-23·5 - 53·5) |
| Imm. vs Pri. | <0.0001 | 0.001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |
| Primary | study-level: u[0] estimate-only: None | 45·5 (36·5 - 54·4) | -5·5 (-14·6 - 3·6) | 3,439.299 |
| Natural Imm. | 64·4 (55·0 - 73·8) | 36·8 (26·4 - 47·1) |
| Hybrid | 85·5 (76·2 - 94·8) | 35·1 (23·3 - 47·0) |
| Imm. vs Pri. | <0.0001 | <0.0001 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |

**Supplementary Table S20.** Comparison of Model 4 estimates of ED following prior infection with Omicron subsequent Omicron disease using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Immunity** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 44·0 (36·2 - 51·8) | -1·4 (-10·6 - 7·8) | 890.0107 |
| Natural Imm. | 81·6 (61·5 - 100·0) | -10·8 (-77·4 - 55·8) |
| Hybrid | 90·3 (58·9 - 100·0) | 28·4 (-136·7 - 100·0) |
| Imm. vs Pri. | 0.00056 | 0.78 |
| Hyb. vs Pri. | 0.0047 | 0.72 |
| Primary | study-level: u[0] estimate-only: v[0] | 42·7 (35·5 - 49·9) | 0·5 (-8·6 - 9·6) | 890.0250 |
| Natural Imm. | 83·2 (66·6 - 99·8) | -7·3 (-86·0 - 71·5) |
| Hybrid | 90·0 (64·7 - 100·0) | 36·3 (-122·7 - 100·0) |
| Imm. vs Pri. | <0.0001 | 0.85 |
| Hyb. vs Pri. | 0.00033 | 0.66 |
| Primary | study-level: None estimate-only: v[0] + t v[1] | 47·5 (41·9 - 53·1) | 0·2 (-5·4 - 5·7) | 890.2949 |
| Natural Imm. | 80·6 (60·0 - 100·0) | 11·8 (-56·1 - 79·7) |
| Hybrid | 94·8 (61·5 - 100·0) | 36·3 (-141·0 - 100·0) |
| Imm. vs Pri. | 0.0024 | 0.74 |
| Hyb. vs Pri. | 0.0061 | 0.69 |
| Primary | study-level: None estimate-only: v[0] | 46·7 (41·6 - 51·8) | 6·3 (-0·2 - 12·8) | 898.1293 |
| Natural Imm. | 81·0 (64·2 - 97·8) | 9·4 (-70·9 - 89·6) |
| Hybrid | 95·3 (68·2 - 100·0) | 32·2 (-140·3 - 100·0) |
| Imm. vs Pri. | 0.00013 | 0.94 |
| Hyb. vs Pri. | 0.00056 | 0.77 |
| Primary | study-level: None estimate-only: X v[0] + t v[1] | 47·2 (41·3 - 53·2) | -1·0 (-4·9 - 3·0) | 951.0023 |
| Natural Imm. | 80·7 (74·9 - 86·4) | 4·9 (-23·2 - 32·9) |
| Hybrid | 93·6 (84·0 - 100·0) | 40·9 (-7·0 - 88·7) |
| Imm. vs Pri. | <0.0001 | 0.69 |
| Hyb. vs Pri. | <0.0001 | 0.088 |
| Primary | study-level: u[0] + t u[1] estimate-only: None | 37·8 (28·4 - 47·2) | -21·3 (-55·5 - 12·8) | 4,347.4699 |
| Natural Imm. | 100·0 (91·7 - 100·0) | -32·5 (-99·7 - 34·8) |
| Hybrid | 100·0 (91·0 - 100·0) | 46·5 (-28·2 - 100·0) |
| Imm. vs Pri. | <0.0001 | 0.77 |
| Hyb. vs Pri. | <0.0001 | 0.1 |
| Primary | study-level: u[0] estimate-only: None | 38·1 (29·7 - 46·5) | -16·4 (-24·9 - -8·0) | 7,036.4680 |
| Natural Imm. | 100·0 (93·0 - 100·0) | -6·5 (-25·8 - 12·8) |
| Hybrid | 100·0 (91·3 - 100·0) | 63·3 (25·1 - 100·0) |
| Imm. vs Pri. | <0.0001 | 0.28 |
| Hyb. vs Pri. | <0.0001 | <0.0001 |

**Supplementary Table S21.** Comparison of Model 5 estimates of ESagainst Omicron using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Dose** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary + Booster | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 53·6 (48·1 - 59·1) | 17·2 (-8·8 - 43·2) | 824.0628 |
| Primary + Booster + Prior Infection | 77·0 (68·3 - 85·7) | 17·1 (-27·1 - 61·2) |
| p-value | <0.0001 | 1 |
| Primary + Booster | study-level: None estimate-only: v[0] + t v[1] | 53·3 (48·9 - 57·7) | 8·2 (-9·5 - 25·9) | 828.0532 |
| Primary + Booster + Prior Infection | 79·7 (71·6 - 87·8) | 9·5 (-32·1 - 51·1) |
| p-value | <0.0001 | 0.96 |
| Primary + Booster | study-level: u[0] estimate-only: v[0] | 54·7 (48·4 - 61·1) | 3·5 (-11·0 - 18·1) | 828.4996 |
| Primary + Booster + Prior Infection | 80·6 (70·0 - 91·2) | -6·7 (-43·7 - 30·3) |
| p-value | <0.0001 | 0.6 |
| Primary + Booster | study-level: None estimate-only: v[0] | 53·8 (48·5 - 59·0) | 3·4 (-10·6 - 17·4) | 830.7022 |
| Primary + Booster + Prior Infection | 80·6 (70·7 - 90·4) | -3·3 (-40·5 - 33·9) |
| p-value | <0.0001 | 0.74 |
| Primary + Booster | study-level: None estimate-only: X v[0] + t v[1] | 53·3 (48·7 - 57·9) | 8·1 (-10·1 - 26·3) | 840.6450 |
| Primary + Booster + Prior Infection | 80·0 (73·1 - 87·0) | 13·4 (-22·8 - 49·6) |
| p-value | <0.0001 | 0.8 |
| Primary + Booster | study-level: X u[0] + t u[1] estimate-only: X v[0] + t v[1] | 52·8 (47·1 - 58·6) | 15·2 (-9·8 - 40·2) | 843.5206 |
| Primary + Booster + Prior Infection | 80·3 (73·7 - 86·9) | 31·0 (-7·1 - 69·1) |
| p-value | <0.0001 | 0.4 |
| Primary + Booster | study-level: X u[0] + t u[1] estimate-only: None | 55·6 (49·3 - 61·9) | 11·1 (-7·4 - 29·7) | 1,604.8192 |
| Primary + Booster + Prior Infection | 82·7 (76·5 - 88·9) | 38·7 (11·2 - 66·2) |
| p-value | <0.0001 | 0.048 |
| Primary + Booster | study-level: u[0] + t u[1] estimate-only: None | 57·1 (51·1 - 63·2) | 18·4 (-6·3 - 43·1) | 1,729.5429 |
| Primary + Booster + Prior Infection | 77·8 (71·2 - 84·4) | -3·8 (-36·0 - 28·4) |
| p-value | <0.0001 | 0.075 |
| Primary + Booster | study-level: u[0] estimate-only: None | 56·4 (50·8 - 62·1) | 31·4 (25·4 - 37·4) | 2,725.9356 |
| Primary + Booster + Prior Infection | 77·6 (71·4 - 83·8) | 3·3 (-14·1 - 20·6) |
| p-value | <0.0001 | 0.0013 |

**Supplementary Table S22.** Comparison of Model 5 estimates of ED against Omicron using different random effects. Grayed row shows main analysis. BIC = Bayesian information criterion

| **Dose** | **Random effects** | **Initial (Week 2)** | **Waned (Week 30)** | **BIC** |
| --- | --- | --- | --- | --- |
| Primary + Booster | study-level: u[0] estimate-only: v[0] | 60·1 (54·7 - 65·4) | 21·7 (7·6 - 35·7) | 621.8019 |
| Primary + Booster + Prior Infection | 83·4 (71·5 - 95·2) | 48·3 (-21·5 - 100·0) |
| p-value | 0.00039 | 0.47 |
| Primary + Booster | study-level: None estimate-only: v[0] + t v[1] | 59·8 (56·7 - 62·8) | 5·8 (-12·9 - 24·6) | 627.0982 |
| Primary + Booster + Prior Infection | 84·1 (75·0 - 93·2) | 45·3 (-25·7 - 100·0) |
| p-value | <0.0001 | 0.3 |
| Primary + Booster | study-level: u[0] + t u[1] estimate-only: v[0] + t v[1] | 60·7 (56·0 - 65·3) | 14·8 (-3·3 - 32·9) | 627.5343 |
| Primary + Booster + Prior Infection | 83·5 (74·0 - 93·1) | 47·3 (-30·7 - 100·0) |
| p-value | <0.0001 | 0.43 |
| Primary + Booster | study-level: None estimate-only: v[0] | 58·7 (55·2 - 62·3) | 18·8 (5·3 - 32·4) | 629.8657 |
| Primary + Booster + Prior Infection | 84·1 (72·8 - 95·4) | 46·7 (-18·1 - 100·0) |
| p-value | <0.0001 | 0.41 |
| Primary + Booster | study-level: None estimate-only: X v[0] + t v[1] | 59·8 (56·8 - 62·8) | 6·6 (-12·0 - 25·2) | 637.8717 |
| Primary + Booster + Prior Infection | 83·8 (75·8 - 91·9) | 49·9 (17·9 - 81·8) |
| p-value | <0.0001 | 0.024 |
| Primary + Booster | study-level: X u[0] + t u[1] estimate-only: X v[0] + t v[1] | 60·7 (56·1 - 65·3) | 15·5 (-2·6 - 33·7) | 650.9824 |
| Primary + Booster + Prior Infection | 83·4 (75·1 - 91·7) | 49·5 (8·1 - 90·9) |
| p-value | <0.0001 | 0.14 |
| Primary + Booster | study-level: u[0] + t u[1] estimate-only: None | 61·7 (57·5 - 65·8) | 15·4 (-3·2 - 34·0) | 3,465.3891 |
| Primary + Booster + Prior Infection | 86·8 (81·7 - 91·9) | 46·2 (-4·5 - 96·8) |
| p-value | <0.0001 | 0.27 |
| Primary + Booster | study-level: X u[0] + t u[1] estimate-only: None | 61·4 (57·7 - 65·2) | 15·3 (-3·3 - 34·0) | 3,476.2741 |
| Primary + Booster + Prior Infection | 86·8 (80·5 - 93·2) | 48·6 (-2·2 - 99·5) |
| p-value | <0.0001 | 0.23 |
| Primary + Booster | study-level: u[0] estimate-only: None | 62·2 (58·0 - 66·4) | 14·8 (10·2 - 19·4) | 4,386.7691 |
| Primary + Booster + Prior Infection | 87·2 (82·1 - 92·4) | 52·1 (28·4 - 75·8) |
| p-value | <0.0001 | 0.0029 |

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