**Supplement:**



Supplement Figure 1: Correlation between anti-SARS-CoV-2 Spike IgGs measured in serum using SARS-CoV-2 IgG II Quant assay (Abott) and Anti-SARS-CoV-2 ELISA in saliva (Euroimmun). N=10, red dots = infected individuals after second booster vaccination (Suppl, Table 1), Correlation – two-tailed, non-parametric.

**Supplement Table 1: Characteristics of study population after second booster vaccination**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | age | sex | regime | 1st booster(b1)  | 2nd booster(b2)­ | Diff. b1/b2(months) | t1weeks since b2 | t2weeks sinceb2 | t3weeks infection/b2 | IgGt1(BAU/ml) | IgG t2(BAU/ml) | IgGt3(BAU/ml) | IGRA(mlE/ml) |
| 1 | 45 | m | BNT/BNT | BNT | 1273 | 4 | 2 | 8.6 |  | 1018.2 | 13640 | 8242.2 | 1542 |
| 2 | 43 | f | BNT/BNT | BNT | 1273 | 4 | 2 | 8.6 |  | 638.8 | 2761.4 | 1468 | 3485 |
| 3 | 79 | m | ChAd/ChAd | BNT | 1273 | 3.6 | 2 |  |  | 125.4 | 691.4 |  |  |
| 4 | 72 | f | ChAd/ChAd | BNT | 1273 | 3.6 | 2 |  |  | 262.1 | 3541.8 |  |  |
| 5 | 44 | m | BNT/BNT | BNT | 1273 | 3 | 2 | 8.6 | 6 | 1155.7 | *4799.1* | 9477.8 |  |
| 6 | 63 | f | ChAd/ChAd | BNT | 1273 | 3.6 | 2 | 8.6 | 4 | *485.2* | *2708.8* | 8948.4 | >10.000 |
| 7 | 41 | m | J&J | BNT | 1273 | 3.6 | 2 | 8.6 |  | 199.7 | 1851.4 | 1044.7 | 1463 |
| 8 | 64 | m | BNT/BNT | BNT | 1273 | 5.4 | 2 | 8.7 |  | 124.7 | 942.3 | 521.7 | 169 |
| 9 | 46 | f | BNT/BNT | BNT | 1273 | 4.3 | 2 | 6.0 |  | 630.3 | 2955.4 | 1802.4 | 7206 |
| 10 | 44 | f | BNT/BNT | BNT | 1273 | 4.8 | 2.6 | 6.6 |  | 407.1 | 18910 | 9219.7 |  |
| 11 | 54 | m | BNT/BNT | BNT | BNT | 5 | 2 | 6.0 |  | 535 | 2597.9 | 1542.7 | 1113 |
| 12 | 65 | m | BNT/BNT | BNT | 1273 | 3.6 | 5 | 8.9 |  | 796.2 | 2437.9 | 2114.2 | 1690 |
| 13 | 43 | f | BNT/BNT | BNT | BNT | 4.3 | 2 |  |  | 611.5 | 3473.8 |  |  |
| 14 | 48 | f | BNT/BNT | BNT | 1273 | 3.6 | 1.6 |  |  | 692.8 | 2523.4 |  |  |
| 15 | 51 | m | BNT/BNT | BNT | 1273 | 3.6 | 4 |  |  |  | 3049.2 |  |  |
| 16 | 44 | f | BNT/BNT | BNT | 1273 | 3.6 | 2 | 6.0 |  |  | 4333.4 | 3478.1 | 4911 |
| 17 | 57 | f | BNT/BNT | BNT | 1273 | 4.3 | 2 | 6.0 |  |  | 6814.1 | 7536.5 | 8863 |
| 18 | 34 | m | BNT/BNT | BNT | 1273 | 4.3 | 2.7. |  |  |  | 5188.1 |  |  |
| 19 | 28 | f | BNT/BNT | BNT | BNT | 4.1 | 1.6 | 5.6 |  |  | 1560.8 | 1009.2 | 3113 |
| 20 | 46 | f | BNT/BNT | BNT | BNT | 4.3 | 5 | 8.9 |  |  | 3579.5 | 3302 |  |
| 21 | 41 | m | BNT/BNT | BNT | BNT | 3.6 | 1.9 | 5.9 |  |  | 1321.7 | 1057.5 | 4300 |
| 22 | 31 | f | BNT/BNT | BNT | BNT | 4.3 | 2.6 |  |  |  | 1004.3 |  | 2873 |
| 23 | 70 | f | BNT/BNT | BNT | BNT | 4.1 | 5 | 8.9 |  |  | 718.7 | 532.7 | 1213 |
| 24 | 57 | m | BNT/BNT | BNT | BNT | 3.6 | 2 | 6 |  |  | 3527.4 | 2100 | 7717 |
| 25 | 32 | f | BNT/BNT | BNT | BNT | 4.3 | 2.3 |  |  |  | 10620.7 |  |  |
| 26 | 49 | f | BNT/BNT | BNT | BNT | 4.4 | 1.6 | 5.6 | 1.1 |  | 2330.8 | 8652.8 | 2960 |
| Mean(range) | 49.6(28-79) |  |  |  |  | 4(3.0-5.4) | 2.5(1.6-5) | 7.3(5.6-8.9) | 3.7(1.1-6.0) | 1220(124-11360) | 3497(691.4-11360) | 4003(512-9478) | 3914(169-10.000) |

**Supplement Table 2: Characteristics of study population after booster vaccination followed by Omicron BA.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | age | sex | regime | 1st booster(b1)  | vacc/b1(months) | b1/infection(weeks) | analysis after infection(weeks) | IgG t2(BAU/ml) |
| 27 | 59 | m | 1273/1273 | 1273 | 5.6 | 0.7 | 4.7 | 14000 |
| 28 | 31 | f | BNT/BNT | BNT | 8.0 | 9.1 | 7.9 | 10.537.8 |
| 29 | 31 | m | BNT/BNT | BNT | 7.6 | 9.4 | 7.6 | 4292.6 |
| 30 | 45 | m | BNT/BNT | BNT | 8.4 | 1.4 | 6.1 | 5257 |
| 31 | 54 | m | BNT/BNT | BNT | 7.0 | 1.4 | 6.7 | 31840 |
| 32 | 28 | f | BNT/BNT | BNT | 6.2 | 0.4 | 6.6 | *7461.8* |
| 33 | 63 | m | BNT/BNT | BNT | 5.9 | 1.7 | 8.4 | 4923.4 |
| 34 | 27 | m | 1273/1273 | BNT | 9.2 | 3.0 | 5.9 | 1544.9 |
| 35 | 32 | m | 1273/1273 | BNT | 5.0 | 1.7 | 6.1 | 7535.7 |
| 36 | 22 | m | BNT/BNT | BNT | 5.2 | 4.7 | 5.4 | 2637.4 |
| 37 | 50 | f | BNT/BNT | BNT | 5.5 | 5.0 | 4 | 3612.1 |
| 38 | 50 | m | 1273/1273 | BNT | 8.4 | 6.9 | 4 | 16240.0 |
| 39 | 52 | m | BNT/BNT | BNT | 2.0 | 3.0 | 3.9 | 3285.6 |
| 40 | 51 | m | BNT/BNT | BNT | 5.5 | 6.3 | 4.4 | 1998.5 |
| 41 | 30 | m | BNT/BNT | BNT | 5.4 | 2.9 | 6.7 | 9324.3 |
| 42 | 31 | f | BNT/BNT | 1273 | 7.3 | -4.9 | 7.3 | 8667 |
| 43 | 51 | f | BNT/BNT | BNT | 5.6 | 1.4 | 9.2 | 1687.21 |
| Mean(range) | 41.6(22-63) |  |  |  | 6.3(2-7.2) | 3.2(-4.9-9.4) | 6.2(3.9-9.2) | 7932(1545-31840) |

Abbrevations: BNT = BNT162b2, Pfizer-BioNtech vaccine; 1273 = mRNA-1273, Moderna vaccine, JJ = Johnson&Johnson vaccine, ChAD = ChAdOx-1S = AstraZeneca vaccine