Supplementary Table XX: Assay based statistical comparison of fold changes from WT/D614G to BA.1. A t-test was performed to compare
pseudovirus (PV) and live virus (LV) assessed Geometric Mean Titers
(GMTs) in different serum groups. Normality was checked with a
Shapiro-Wilk test and these serum groups were found to not differ
significantly from a normal distribution. Results are ordered by
increasing p-value. A statistic above 0 indicates higher values in Group
1 than in Group 2. The effect size was calculated with Cohen's d for unequal variances and Hedge's correction due to small sample sizes. All tests were performed with the rstatix package.

| Serum group | n(PV) | n(LV) | statistic | 95%CI (lower;upper) | df | p | Significance | Effect size | Magnitude |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 3x Vax | 61 | 28 | -4.39 | -1.11;-0.42 | 51.4 | 0.00 | \*\*\*\* | -1.00 | large |
| WT conv | 19 | 14 | 2.99 | 0.35;1.83 | 30.9 | 0.01 | \*\* | 1.01 | large |
| 2x Vax | 69 | 39 | -1.58 | -0.98;0.11 | 88.1 | 0.12 | ns | -0.31 | small |
| Beta conv | 3 | 3 | -0.97 | -3.51;2.02 | 2.5 | 0.42 | ns | -0.64 | moderate |
| Vax + Inf | 10 | 5 | -0.84 | -2.31;1.1 | 6.9 | 0.43 | ns | -0.45 | small |
| Vax + BA.1 | 25 | 7 | -0.59 | -1.4;0.83 | 8.2 | 0.57 | ns | -0.26 | small |
| Delta conv | 7 | 3 | 0.47 | -2.14;3.12 | 5.2 | 0.66 | ns | 0.28 | small |

Supplementary Table XX: Assay based statistical comparison of fold changes from WT/D614G to BA.1.
A
Wilcoxon-test was performed to compare pseudovirus (PV) and live virus
(LV) assessed fold changes in different serum groups. Normality was
checked with a Shapiro-Wilk test and these serum groups were found to
differ significantly from a normal distribution. Results are ordered by
increasing p-value. A statistic above 0 indicates higher values in Group
1 than in Group 2. The effect size was calculated with Wilcoxon effect size. All tests were performed with the rstatix package

| Serum group | n(PV) | n(LV) | statistic | 95%CI (lower;upper) | p | Significance | Effect size | Magnitude |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Inf + Vax | 17 | 23 | 138.5 | -2.03;0.2 | 0.12 | ns | 0.25 | small |
| BA.1 conv | 6 | 5 | 12.0 | -6.99;2.9 | 0.65 | ns | 0.17 | small |
| Alpha conv | 5 | 3 | 9.0 | -1.74;3.65 | 0.79 | ns | 0.16 | small |

Supplementary Table XX:
Assay-based statistical comparison of live
virus vs pseudo virus variant GMTs.} A t-test was performed to compare
pseudovirus (PV) and live virus (LV) assessed Geometric Mean Titers
(GMTs) in different serum groups. Normality was checked with a
Shapiro-Wilk test and these serum groups were found to not differ
significantly from a normal distribution. Results are ordered by
increasing p-value. A statistic above 0 indicates higher values in Group
1 than in Group 2. The effect size was calculated with Cohen's d for unequal variances and Hedge's correction due to small sample sizes. All tests were performed with the rstatix package

| Variant | Serum group | n(PV) | n(LV) | statistic | 95%CI (lower;upper) | df | p | Significance | Effect size | Magnitude |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BA.1 | 3x Vax | 58 | 23 | 4.48 | 1.12;2.95 | 38.8 | 0.0001 | \*\*\*\* | 1.10 | large |
| WT | Delta conv | 6 | 3 | 8.56 | 3.85;6.96 | 5.8 | 0.0002 | \*\*\* | 5.05 | large |
| BA.1 | Vax + BA.1 | 24 | 12 | 3.74 | 0.76;2.56 | 32.2 | 0.0007 | \*\*\* | 1.19 | large |
| BA.1 | Inf + Vax | 17 | 15 | 3.65 | 1.27;4.52 | 29.3 | 0.0010 | \*\* | 1.26 | large |
| WT | 3x Vax | 62 | 24 | 3.24 | 0.52;2.22 | 41.8 | 0.0024 | \*\* | 0.77 | moderate |
| WT | WT conv | 20 | 12 | 3.24 | 0.75;3.37 | 25.1 | 0.0033 | \*\* | 1.14 | large |
| Delta | WT conv | 10 | 8 | 2.59 | 0.42;4.2 | 15.3 | 0.0201 | \* | 1.14 | large |
| WT | 2x Vax | 61 | 32 | 2.35 | 0.15;1.83 | 58.7 | 0.0220 | \* | 0.52 | moderate |
| Delta | Delta conv | 6 | 3 | 5.27 | 1.2;9.06 | 2.1 | 0.0293 | \* | 3.76 | large |
| Beta | 3x Vax | 16 | 11 | 2.26 | 0.13;3.04 | 20.9 | 0.0346 | \* | 0.86 | large |
| Alpha | WT conv | 5 | 3 | 2.62 | 0.21;7.6 | 5.7 | 0.0415 | \* | 1.59 | large |
| Beta | Inf + Vax | 3 | 6 | 3.18 | -0.96;7.3 | 2.1 | 0.0819 | ns | 2.29 | large |
| Delta | Alpha conv | 3 | 3 | 2.92 | -2.55;13.64 | 2.0 | 0.0989 | ns | 1.91 | large |
| Beta | Delta conv | 3 | 3 | 2.54 | -1.7;9.85 | 2.5 | 0.1020 | ns | 1.66 | large |
| WT | Alpha conv | 3 | 3 | 2.69 | -2.12;11.47 | 2.2 | 0.1030 | ns | 1.76 | large |
| Delta | Vax + Inf | 5 | 6 | 1.83 | -0.47;4.21 | 8.4 | 0.1030 | ns | 0.99 | large |
| WT | BA.1 conv | 7 | 5 | 1.85 | -0.93;5.66 | 5.0 | 0.1240 | ns | 1.05 | large |
| WT | Vax + Inf | 7 | 4 | 1.60 | -0.68;4.01 | 9.0 | 0.1430 | ns | 0.85 | large |
| BA.1 | Vax + Inf | 6 | 6 | 1.56 | -0.92;5.09 | 9.1 | 0.1520 | ns | 0.83 | large |
| Beta | WT conv | 6 | 3 | 1.57 | -0.91;4.42 | 6.7 | 0.1620 | ns | 0.85 | large |
| Delta | 2x Vax | 25 | 19 | 1.40 | -0.36;1.93 | 34.1 | 0.1700 | ns | 0.42 | small |
| Delta | BA.1 conv | 5 | 4 | 1.31 | -2.23;6 | 3.7 | 0.2650 | ns | 0.81 | large |
| Beta | 2x Vax | 24 | 17 | 0.76 | -0.67;1.45 | 29.2 | 0.4540 | ns | 0.24 | small |
| Beta | BA.1 conv | 4 | 3 | 0.81 | -3.89;6.49 | 2.9 | 0.4780 | ns | 0.54 | moderate |
| Alpha | 2x Vax | 4 | 7 | -0.69 | -4;2.29 | 5.1 | 0.5180 | ns | -0.41 | small |
| Delta | 3x Vax | 18 | 13 | 0.65 | -1.02;1.97 | 25.1 | 0.5190 | ns | 0.23 | small |
| Delta | Vax + BA.1 | 9 | 7 | -0.24 | -2.3;1.84 | 10.2 | 0.8120 | ns | -0.11 | negligible |

Supplementary Table XX: Assay-based statistical comparison of live
virus vs pseudovirus variant GMTs..
A Wilcoxon-test was performed to
compare pseudovirus (PV) and live virus (LV) assessed Geometric Mean
Titers (GMTs) in different serum groups. Normality was checked with a
Shapiro-Wilk test and these serum groups were found to differ
significantly from a normal distribution. Results are ordered by
increasing p-value. A statistic above 0 indicates higher values in Group
1 than in Group 2. The effect size was calculated with Wilcoxon effect size. All tests were performed with the rstatix package

| Variant | Serum group | n(PV) | n(LV) | statistic | 95%CI (lower;upper) | p | Significance | Effect size | Magnitude |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| BA.1 | 2x Vax | 55 | 26 | 1095.5 | 0.5;1.56 | 0.0001 | \*\*\* | 0.43 | moderate |
| WT | Inf + Vax | 17 | 15 | 200.0 | 0.58;3.1 | 0.0053 | \*\* | 0.48 | moderate |
| BA.1 | BA.1 conv | 6 | 8 | 42.0 | 0.14;5.74 | 0.0200 | \* | 0.62 | large |
| BA.1 | Delta conv | 5 | 3 | 15.0 | 1.87;5.6 | 0.0358 | \* | 0.80 | large |
| BA.1 | Alpha conv | 3 | 3 | 9.0 | 0.04;3.83 | 0.0765 | ns | 0.81 | large |
| Alpha | Delta conv | 3 | 3 | 9.0 | 3.52;7.5 | 0.1000 | ns | 0.80 | large |
| WT | Vax + BA.1 | 27 | 7 | 133.0 | -0.28;2.66 | 0.1070 | ns | 0.28 | small |
| Beta | Vax + BA.1 | 7 | 3 | 16.0 | -2.8;4.17 | 0.2670 | ns | 0.40 | moderate |
| Delta | Inf + Vax | 7 | 9 | 36.0 | -1.42;1.6 | 0.6810 | ns | 0.12 | small |
| BA.1 | WT conv | 15 | 13 | 102.5 | -0.88;1.49 | 0.8350 | ns | 0.04 | small |