

Supplementary data S1. Serum IgG level of piglets.

| Commercial PCV2 ELISA(PCV2a-based) | | | | | | | | | | | | | | | | | | | | |
|------------------------------------|---------|--------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|--------|-------|-------|--------|-------|-------|--|
| | | farm H | | | | | | farm M | | | | | | farm Y | | | | | | |
| groups | number | 3 | 7 | 11 | 15 | 19 | 23 | 3 | 7 | 11 | 15 | 19 | 23 | 3 | 7 | 11 | 15 | 19 | 23 | |
| | | 0wpv | 4wpv | 8wpv | 12wpv | 16wpv | 20wpv | 0wpv | 4wpv | 8wpv | 12wpv | 16wpv | 20wpv | 0wpv | 4wpv | 8wpv | 12wpv | 16wpv | 20wpv | |
| vaccine | 1 | 0.293 | 0.554 | 0.562 | 0.502 | 0.447 | 1.092 | 1.997 | 1.431 | 0.558 | 0.650 | 2.147 | 1.946 | 0.587 | 0.208 | 0.217 | 0.315 | 0.392 | 1.534 | |
| | 2 | 0.609 | 1.129 | 0.977 | 0.937 | 0.795 | 1.190 | 1.889 | 1.281 | 0.366 | 0.364 | 1.419 | 1.648 | 1.012 | 0.360 | 0.190 | 0.553 | 0.517 | 1.026 | |
| | 3 | 0.440 | 0.138 | 0.140 | 0.256 | 0.156 | 0.245 | 1.977 | 1.565 | 0.681 | 0.572 | 1.525 | 1.691 | 0.452 | 0.116 | 0.111 | 0.389 | 0.400 | 1.201 | |
| | 4 | 0.303 | 0.168 | 0.560 | 0.609 | 1.429 | 1.466 | 1.285 | 0.449 | 0.164 | 0.416 | 1.613 | 1.722 | 0.461 | 0.143 | 0.106 | 0.078 | 0.276 | 1.058 | |
| | 5 | 0.486 | 0.225 | 0.322 | 0.284 | 0.785 | 0.902 | 0.384 | 0.440 | 0.461 | 0.530 | 1.420 | 1.555 | 0.909 | 0.288 | 0.148 | 0.382 | 0.829 | 1.224 | |
| | 6 | 0.492 | 0.171 | 0.384 | 0.585 | 1.101 | 0.999 | 0.267 | 1.219 | 0.485 | 0.530 | 1.484 | 1.604 | 0.949 | 0.498 | 0.529 | 0.469 | 1.621 | 1.644 | |
| | 7 | 0.525 | 0.179 | 0.385 | 0.424 | 0.200 | 0.463 | 1.869 | 1.380 | 0.610 | 0.480 | 1.584 | 1.713 | 0.806 | 0.243 | 0.265 | 0.271 | 1.028 | 1.157 | |
| | 8 | 0.309 | 0.360 | 0.482 | 0.313 | 0.345 | 0.771 | 1.662 | 1.033 | 0.644 | 0.632 | 1.628 | 1.732 | 0.424 | 0.242 | 0.293 | 0.312 | 0.591 | 1.181 | |
| | 9 | 0.251 | 0.187 | 0.481 | 0.883 | 1.459 | 1.556 | 1.742 | 1.280 | 0.498 | 0.474 | 1.631 | 1.558 | 0.539 | 0.213 | 0.216 | 0.192 | 0.311 | 1.562 | |
| | 10 | 0.171 | 0.426 | 0.745 | 0.768 | 1.325 | 1.564 | 1.433 | 0.851 | 0.663 | 1.270 | 1.715 | 1.475 | 0.884 | 0.366 | 0.281 | 0.222 | 0.364 | 1.542 | |
| | 11 | 0.124 | 0.483 | 0.178 | 0.680 | 1.382 | 1.328 | 1.513 | 0.687 | 0.355 | 1.181 | 1.620 | 1.773 | 0.520 | 0.832 | 0.479 | 0.389 | 0.477 | 0.396 | |
| | 12 | 0.353 | 0.238 | 0.406 | 0.288 | 0.824 | 1.197 | 1.554 | 0.742 | 0.487 | 0.917 | 1.724 | 1.581 | 0.382 | 0.148 | 0.203 | 0.367 | 0.437 | 0.881 | |
| | 13 | 0.354 | 1.019 | 0.796 | 0.846 | 0.709 | 0.681 | 1.591 | 0.793 | 0.252 | 1.182 | 1.649 | 1.415 | 0.655 | 0.236 | 0.198 | 0.302 | 0.378 | 0.272 | |
| | 14 | 0.353 | 0.203 | 0.637 | 0.623 | 1.638 | 1.491 | 1.530 | 0.983 | 0.602 | 0.834 | 1.786 | 1.558 | 0.900 | 0.310 | 0.169 | 0.124 | 1.484 | 1.663 | |
| | 15 | 0.383 | 0.180 | 0.301 | 0.238 | 1.312 | 1.303 | 0.918 | 0.432 | 0.275 | 0.398 | 0.678 | 1.636 | 0.627 | 0.186 | 0.235 | 0.302 | 1.072 | 1.456 | |
| control | 16 | 0.056 | 0.013 | 0.469 | 0.963 | 1.668 | 1.731 | 1.646 | 0.771 | 0.126 | 1.327 | 1.702 | 1.874 | 0.719 | 0.150 | 0.026 | 0.010 | 0.582 | 1.541 | |
| | 17 | 0.458 | 0.103 | 0.313 | 0.762 | 1.644 | 1.732 | 2.097 | 2.224 | 1.244 | 1.386 | 1.655 | 1.695 | 0.532 | 0.150 | 0.034 | 0.010 | 1.168 | 1.663 | |
| | 18 | 0.043 | 0.013 | 0.141 | 0.745 | 1.734 | 1.677 | 0.702 | 0.220 | 0.041 | 0.036 | 1.847 | 1.765 | 0.459 | 0.128 | 0.033 | 0.447 | 1.491 | 1.634 | |
| | 19 | 0.055 | 0.014 | 0.416 | 0.822 | 1.573 | 1.545 | 1.798 | 1.369 | 0.309 | 0.147 | 1.558 | 1.743 | 1.463 | 0.691 | 0.133 | 0.034 | 0.643 | 1.330 | |
| | 20 | 0.067 | 0.019 | 0.323 | 0.712 | 1.665 | 1.743 | 2.099 | 2.232 | 1.236 | 0.916 | 1.581 | 1.701 | 1.418 | 0.592 | 0.129 | 0.025 | 1.490 | 1.650 | |
| vaccine | ave | 0.363 | 0.377 | 0.490 | 0.549 | 0.927 | 1.083 | 1.441 | 0.971 | 0.473 | 0.695 | 1.575 | 1.641 | 0.674 | 0.293 | 0.243 | 0.311 | 0.678 | 1.187 | |
| | geomean | 0.337 | 0.297 | 0.436 | 0.496 | 0.759 | 0.982 | 1.279 | 0.893 | 0.442 | 0.640 | 1.538 | 1.636 | 0.641 | 0.257 | 0.220 | 0.282 | 0.577 | 1.077 | |
| control | ave | 0.136 | 0.032 | 0.332 | 0.801 | 1.657 | 1.685 | 1.668 | 1.363 | 0.591 | 0.762 | 1.669 | 1.756 | 0.918 | 0.342 | 0.071 | 0.105 | 1.075 | 1.564 | |
| | geomean | 0.083 | 0.021 | 0.308 | 0.796 | 1.656 | 1.684 | 1.557 | 1.029 | 0.300 | 0.388 | 1.666 | 1.754 | 0.817 | 0.260 | 0.055 | 0.033 | 0.994 | 1.558 | |
| in-house ELISA(PCV2d-based) | | | | | | | | | | | | | | | | | | | | |
| | | farm H | | | | | | farm M | | | | | | farm Y | | | | | | |
| groups | number | 3 | 7 | 11 | 15 | 19 | 23 | 3 | 7 | 11 | 15 | 19 | 23 | 3 | 7 | 11 | 15 | 19 | 23 | |
| | | 0wpv | 4wpv | 8wpv | 12wpv | 16wpv | 20wpv | 0wpv | 4wpv | 8wpv | 12wpv | 16wpv | 20wpv | 0wpv | 4wpv | 8wpv | 12wpv | 16wpv | 20wpv | |
| vaccine | 1 | 0.175 | 1.186 | 2.355 | 1.181 | 0.771 | 1.950 | 1.651 | 0.626 | 1.638 | 1.102 | 3.368 | 3.039 | 0.787 | 1.076 | 1.953 | 1.318 | 1.224 | 3.151 | |
| | 2 | 0.304 | 2.098 | 3.037 | 1.878 | 1.374 | 2.139 | 1.351 | 1.267 | 2.671 | 1.362 | 2.271 | 2.870 | 0.704 | 0.801 | 1.763 | 1.801 | 1.505 | 2.013 | |
| | 3 | 0.232 | 0.954 | 2.369 | 1.581 | 0.996 | 1.165 | 2.678 | 1.752 | 2.528 | 1.568 | 2.489 | 3.114 | 0.584 | 0.585 | 1.195 | 1.257 | 1.062 | 2.282 | |
| | 4 | 0.155 | 1.582 | 2.687 | 1.586 | 2.665 | 2.517 | 0.435 | 1.486 | 2.688 | 1.634 | 2.473 | 3.106 | 0.532 | 0.581 | 1.117 | 0.451 | 1.027 | 2.169 | |
| | 5 | 0.252 | 1.024 | 2.249 | 1.023 | 2.031 | 1.793 | 0.244 | 2.302 | 2.902 | 1.749 | 2.199 | 2.773 | 0.623 | 2.238 | 2.456 | 1.475 | 2.433 | 3.018 | |
| | 6 | 0.256 | 1.650 | 2.331 | 1.465 | 2.178 | 1.740 | 0.110 | 1.447 | 2.508 | 1.209 | 2.060 | 2.595 | 0.654 | 0.803 | 1.931 | 0.954 | 3.138 | 3.329 | |
| | 7 | 0.270 | 1.543 | 2.396 | 1.218 | 0.670 | 0.882 | 1.479 | 0.743 | 1.420 | 0.791 | 2.303 | 2.766 | 0.543 | 0.508 | 1.784 | 1.252 | 1.736 | 1.776 | |
| | 8 | 0.150 | 1.380 | 2.458 | 0.946 | 0.899 | 1.905 | 2.054 | 0.968 | 1.961 | 1.116 | 2.444 | 2.337 | 0.250 | 0.830 | 1.689 | 1.041 | 1.251 | 2.020 | |
| | 9 | 0.127 | 1.506 | 2.602 | 2.152 | 2.768 | 2.960 | 1.732 | 1.461 | 2.458 | 1.348 | 2.900 | 2.774 | 0.495 | 0.689 | 1.341 | 1.034 | 0.971 | 3.094 | |
| | 10 | 0.114 | 2.489 | 3.026 | 1.897 | 2.683 | 3.242 | 1.392 | 0.665 | 1.818 | 0.668 | 3.038 | 3.129 | 0.689 | 1.464 | 2.116 | 1.300 | 1.221 | 2.995 | |
| | 11 | 0.085 | 1.075 | 1.923 | 1.770 | 2.568 | 2.372 | 1.104 | 2.145 | 2.884 | 3.193 | 2.459 | 3.330 | 0.311 | 0.819 | 1.969 | 1.341 | 0.913 | 0.595 | |
| | 12 | 0.177 | 1.111 | 2.596 | 1.026 | 1.697 | 2.243 | 0.756 | 1.943 | 2.892 | 2.634 | 3.188 | 2.951 | 0.198 | 0.948 | 1.811 | 1.611 | 1.315 | 1.617 | |
| | 13 | 0.151 | 1.703 | 2.637 | 1.893 | 1.128 | 0.933 | 1.475 | 1.491 | 1.825 | 0.677 | 3.220 | 2.880 | 0.299 | 0.968 | 2.391 | 1.865 | 1.246 | 0.698 | |
| | 14 | 0.155 | 1.141 | 2.668 | 1.551 | 2.951 | 2.740 | 0.573 | 1.988 | 2.806 | 2.122 | 3.256 | 3.011 | 0.711 | 0.860 | 1.560 | 0.802 | 2.854 | 3.013 | |
| | 15 | 0.182 | 1.794 | 2.816 | 1.390 | 2.923 | 2.754 | 0.874 | 1.856 | 2.495 | 1.594 | 0.349 | 3.010 | 0.342 | 0.993 | 1.835 | 1.376 | 2.000 | 2.740 | |
| control | 16 | 0.067 | 0.112 | 2.243 | 3.204 | 3.335 | 3.358 | 0.631 | 0.212 | 0.242 | 3.279 | 2.465 | 3.148 | 0.450 | 0.196 | 0.172 | 0.145 | 3.358 | 3.313 | |
| | 17 | 0.184 | 0.156 | 1.397 | 3.131 | 3.351 | 3.397 | 3.059 | 2.942 | 2.434 | 2.055 | 2.464 | 2.998 | 0.446 | 0.204 | 0.170 | 0.104 | 3.207 | 3.284 | |
| | 18 | 0.063 | 0.120 | 1.735 | 3.126 | 3.358 | 3.340 | 0.655 | 0.296 | 0.309 | 0.194 | 3.300 | 3.295 | 0.284 | 0.169 | 0.151 | 0.3050 | 3.364 | 3.312 | |
| | 19 | 0.066 | 0.110 | 1.799 | 3.153 | 3.309 | 3.301 | 1.907 | 0.867 | 0.389 | 0.155 | 2.768 | 3.264 | 1.426 | 0.580 | 0.332 | 0.126 | 3.038 | 3.253 | |
| | 20 | 0.070 | 0.110 | 1.919 | 3.110 | 3.277 | 3.267 | 3.084 | 2.744 | 2.195 | 0.965 | 2.422 | 2.441 | 1.408 | 0.535 | 0.313 | 0.166 | 3.242 | 3.338 | |
| vaccine | ave | 0.186 | 1.482 | 2.543 | 1.504 | 1.887 | 2.089 | 1.194 | 1.476 | 2.366 | 1.518 | 2.535 | 2.912 | 0.515 | 0.944 | 1.794 | 1.258 | 1.593 | 2.301 | |
| | geomean | 0.176 | 1.429 | 2.527 | 1.459 | 1.678 | 1.954 | 0.926 | 1.368 | 2.311 | 1.379 | 2.320 | 2.902 | 0.476 | 0.879 | 1.753 | 1.196 | 1.474 | 2.078 | |
| control | ave | 0.090 | 0.122 | 1.818 | 3.145 | 3.326 | 3.333 | 1.867 | 1.412 | 1.114 | 1.330 | 2.684 | 3.029 | 0.803 | 0.337 | 0.227 | 0.718 | 3.242 | 3.300 | |
| | geomean | 0.081 | 0.120 | 1.797 | 3.145 | 3.326 | 3.332 | 1.494 | 0.848 | 0.690 | 0.722 | 2.665 | 3.012 | 0.648 | 0.291 | 0.215 | 0.249 | 3.239 | 3.300 | |

Supplementary data S2. NA titers.

| | | vaccine | | | | | | | | | | | | | | | control | | | | | vaccine | | control | |
|--------|-------|---------|------|------|------|------|------|------|-----|------|------|------|------|------|------|-----|---------|------|------|------|------|---------|--------|---------|--------|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | mean | sd | mean | sd |
| farm H | 0wpv | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8.00 | 0.00 | 8.00 | 0.00 |
| | 4wpv | 64 | 128 | 32 | 32 | 64 | 64 | 64 | 64 | 128 | 256 | 64 | 64 | 256 | 128 | 256 | 8 | 8 | 8 | 8 | 8 | 110.93 | 81.01 | 8.00 | 0.00 |
| | 8wpv | 128 | 256 | 128 | 64 | 64 | 128 | 128 | 128 | 128 | 512 | 64 | 256 | 64 | 64 | 64 | 8 | 8 | 8 | 8 | 8 | 145.07 | 119.65 | 8.00 | 0.00 |
| | 12wpv | 64 | 128 | 128 | 128 | 64 | 128 | 64 | 64 | 128 | 128 | 128 | 64 | 256 | 128 | 128 | 2048 | 256 | 512 | 128 | 1024 | 115.20 | 49.57 | 793.60 | 780.70 |
| | 16wpv | 32 | 128 | 64 | 512 | 256 | 256 | 32 | 64 | 512 | 256 | 256 | 256 | 64 | 512 | 512 | 2048 | 1024 | 512 | 2048 | 2048 | 247.47 | 186.77 | 1536.00 | 724.08 |
| | 20wpv | 256 | 256 | 32 | 256 | 256 | 16 | 64 | 256 | 1024 | 256 | 256 | 512 | 64 | 256 | 256 | 2048 | 2048 | 2048 | 2048 | 2048 | 267.73 | 244.19 | 2048.00 | 0.00 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | vaccine | | | | | | | | | | | | | | | control | | | | | vaccine | | control | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | mean | sd | mean | sd |
| farm M | 0wpv | 8 | 8 | 8 | 8 | 8 | 8 | 16 | 32 | 16 | 8 | 8 | 16 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 16 | 11.20 | 6.62 | 9.60 | 3.58 |
| | 4wpv | 64 | 64 | 64 | 64 | 64 | 128 | 16 | 128 | 128 | 64 | 128 | 128 | 128 | 64 | 128 | 16 | 256 | 16 | 64 | 256 | 90.67 | 38.09 | 121.60 | 124.24 |
| | 8wpv | 64 | 256 | 64 | 128 | 256 | 32 | 16 | 64 | 128 | 64 | 128 | 128 | 128 | 512 | 256 | 8 | 128 | 8 | 8 | 8 | 148.27 | 127.78 | 32.00 | 53.67 |
| | 12wpv | 32 | 128 | 128 | 128 | 128 | 64 | 8 | 128 | 128 | 64 | 1024 | 512 | 16 | 128 | 128 | 2048 | 512 | 8 | 8 | 8 | 182.93 | 260.41 | 516.80 | 883.35 |
| | 16wpv | 1024 | 512 | 2048 | 2048 | 512 | 512 | 256 | 512 | 1024 | 512 | 1024 | 1024 | 1024 | 1024 | 8 | 2048 | 2048 | 2048 | 256 | 2048 | 836.80 | 583.49 | 1689.60 | 801.41 |
| | 20wpv | 2048 | 1024 | 2048 | 2048 | 1024 | 512 | 1024 | 256 | 256 | 256 | 2048 | 1024 | 512 | 1024 | 256 | 2048 | 512 | 2048 | 2048 | 2048 | 1024.00 | 711.03 | 1740.80 | 686.92 |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | vaccine | | | | | | | | | | | | | | | control | | | | | vaccine | | control | |
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | mean | sd | mean | sd |
| farm Y | 0wpv | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8 | 8.00 | 0.00 | 8.00 | 0.00 |
| | 4wpv | 16 | 16 | 32 | 16 | 128 | 32 | 32 | 32 | 32 | 128 | 256 | 16 | 64 | 16 | 16 | 8 | 8 | 8 | 32 | 32 | 55.47 | 67.03 | 17.60 | 13.15 |
| | 8wpv | 64 | 128 | 64 | 64 | 128 | 64 | 64 | 64 | 64 | 128 | 128 | 128 | 64 | 32 | 32 | 8 | 8 | 8 | 8 | 8 | 81.07 | 36.01 | 8.00 | 0.00 |
| | 12wpv | 64 | 128 | 128 | 32 | 64 | 64 | 64 | 64 | 64 | 64 | 128 | 128 | 128 | 32 | 64 | 8 | 8 | 1024 | 8 | 8 | 81.07 | 36.01 | 211.20 | 454.37 |
| | 16wpv | 128 | 128 | 128 | 128 | 128 | 512 | 128 | 128 | 64 | 64 | 128 | 128 | 128 | 512 | 256 | 2048 | 512 | 2048 | 256 | 128 | 179.20 | 141.46 | 998.40 | 968.07 |
| | 20wpv | 512 | 256 | 256 | 128 | 512 | 2048 | 256 | 256 | 512 | 1024 | 32 | 128 | 64 | 512 | 256 | 2048 | 2048 | 1024 | 2048 | 2048 | 450.13 | 508.34 | 1843.20 | 457.95 |

Supplementary data S3. Viremia (Ct value).

[illegible]

Supplementary data S4. Body weight.

| body weight(unit; Kg) | | | | | | | | | | | | | |
|-----------------------|--------|--------|-------|-------|-------|--------|-------|-------|-------|--------|-------|-------|-------|
| | | farm H | | | | farm M | | | | farm Y | | | |
| | | 3 | 7 | 11 | 15 | 3 | 7 | 11 | 15 | 3 | 7 | 11 | 15 |
| groups | number | 0wpv | 4wpv | 8wpv | 12wpv | 0wpv | 4wpv | 8wpv | 12wpv | 0wpv | 4wpv | 8wpv | 12wpv |
| vaccine | 1 | 8.8 | 15.4 | 28.8 | 41.3 | 8.0 | 14.5 | 32.8 | 56.2 | 7.6 | 19.5 | 33.1 | 48.2 |
| | 2 | 8.9 | 22.2 | 36.8 | 43.9 | 8.2 | 14.4 | 30.4 | 45.9 | 7.0 | 15.6 | 26.3 | 48.0 |
| | 3 | 6.6 | 17.3 | 35.2 | 56.5 | 7.6 | 19.1 | 30.9 | 49.8 | 7.3 | 19.9 | 27.6 | 52.8 |
| | 4 | 7.7 | 22.2 | 26.4 | 57.1 | 6.2 | 17.0 | 29.6 | 42.8 | 7.4 | 19.0 | 31.6 | 42.8 |
| | 5 | 7.0 | 16.0 | 30.6 | 39.9 | 6.5 | 15.8 | 29.3 | 45.6 | 7.3 | 17.3 | 26.0 | 44.7 |
| | 6 | 7.3 | 20.1 | 37.0 | 54.0 | 7.7 | 18.8 | 26.9 | 46.8 | 8.1 | 18.5 | 31.7 | 48.5 |
| | 7 | 6.6 | 17.5 | 29.8 | 47.3 | 7.6 | 15.7 | 35.5 | 45.5 | 7.0 | 19.5 | 29.5 | 41.1 |
| | 8 | 7.6 | 15.7 | 27.5 | 47.9 | 6.7 | 13.0 | 32.3 | 57.0 | 6.5 | 18.5 | 28.4 | 41.5 |
| | 9 | 6.2 | 16.5 | 25.2 | 42.3 | 6.1 | 16.3 | 31.0 | 47.9 | 7.6 | 16.2 | 31.1 | 43.6 |
| | 10 | 6.1 | 15.3 | 31.1 | 46.4 | 7.2 | 12.8 | 35.1 | 49.5 | 6.9 | 18.0 | 32.2 | 52.0 |
| control | 1 | 7.1 | 18.6 | 27.8 | 44.0 | 7.3 | 13.7 | 26.5 | 44.2 | 6.8 | 15.9 | 27.3 | 35.2 |
| | 2 | 6.8 | 19.1 | 24.9 | 43.5 | 6.9 | 14.2 | 28.3 | 47.1 | 7.2 | 16.8 | 26.7 | 40.2 |
| | 3 | 6.9 | 13.6 | 28.4 | 47.7 | 6.6 | 13.2 | 27.8 | 45.1 | 6.3 | 16.8 | 25.1 | 42.6 |
| | 4 | 6.5 | 17.8 | 26.9 | 45.8 | 8.3 | 12.2 | 26.7 | 46.8 | 7.9 | 17.2 | 25.4 | 42.5 |
| | 5 | 7.7 | 17.1 | 24.7 | 41.3 | 6.2 | 15.9 | 31.1 | 42.5 | 7.1 | 14.4 | 27.1 | 45.6 |
| | 6 | 5.9 | 16.4 | 31.5 | 45.1 | 6.2 | 15.4 | 26.8 | 47.4 | 7.2 | 13.0 | 21.9 | 40.5 |
| | 7 | 7.9 | 17.1 | 30.6 | 42.1 | 6.1 | 14.9 | 28.9 | 43.9 | 7.6 | 18.7 | 25.7 | 47.1 |
| | 8 | 7.5 | 17.4 | 30.6 | 44.2 | 6.6 | 13.1 | 29.9 | 48.1 | 6.8 | 15.4 | 28.4 | 45.7 |
| | 9 | 7.5 | 15.5 | 31.7 | 46.6 | 6.7 | 14.5 | 29.5 | 43.2 | 7.2 | 16.7 | 31.1 | 42.1 |
| | 10 | 7.6 | 16.3 | 31.5 | 43.5 | 7.3 | 14.8 | 27.5 | 43.2 | 8.1 | 17.6 | 33.0 | 42.0 |
| | | 0wpv | 4wpv | 8wpv | 12wpv | 0wpv | 4wpv | 8wpv | 12wpv | 0wpv | 4wpv | 8wpv | 12wpv |
| vaccine | sum | 72.5 | 178.2 | 308.4 | 476.6 | 71.6 | 157.4 | 313.8 | 487.0 | 72.5 | 182.0 | 297.5 | 463.2 |
| | mean | 7.2 | 17.8 | 30.8 | 47.7 | 7.2 | 15.7 | 31.4 | 48.7 | 7.2 | 18.2 | 29.8 | 46.3 |
| | sd | 1.0 | 2.7 | 4.2 | 6.3 | 0.8 | 2.2 | 2.6 | 4.6 | 0.4 | 1.4 | 2.6 | 4.2 |
| control | sum | 71.4 | 168.9 | 288.6 | 443.8 | 68.0 | 141.9 | 283.0 | 451.5 | 72.2 | 162.5 | 271.7 | 423.5 |
| | mean | 7.1 | 16.9 | 28.9 | 44.4 | 6.8 | 14.2 | 28.3 | 45.2 | 7.2 | 16.3 | 27.2 | 42.4 |
| | sd | 0.6 | 1.6 | 2.7 | 2.0 | 0.6 | 1.6 | 2.7 | 2.0 | 0.5 | 1.6 | 3.1 | 3.4 |