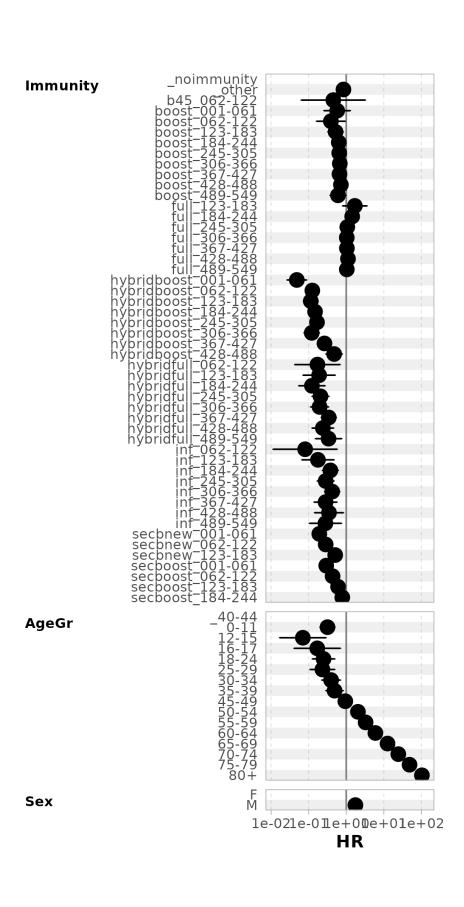
## Vyvanuti III

Results of Statistical Estimation  ${\rm May}\ 1,\ 2023$ 

1 Serious Course BA45+

5,551 (<0.1%) 2,190,732 (4.2%) 1,570,280 (3.0%) 13,252 (<0.1%)
1,570,280 (3.0%)
1,570,280 (3.0%)
13,252 (<0.1%)
84,695 (0.2%)
180,269 (0.3%)
1,440,039 (2.8%)
3,025,527 (5.8%)
2,979,044 (5.8%)
2,656,963 (5.1%)
2,286,622 (4.4%)
1,582,076 (3.1%)
187,715 (0.4%)
212,041 (0.4%)
489,693 (0.9%)
728,875 (1.4%)
1,259,132 (2.4%)
1,317,836 (2.5%)
1,210,870 (2.3%)
907,075 (1.8%)
916,712 (1.8%)
1,142,659 (2.2%)
1,930,279 (3.7%)
1,981,956 (3.8%)
1,508,009 (2.9%)
1,253,928 (2.4%)
904,298 (1.7%)
307,951 (0.6%)
345,785 (0.7%)
1,133,345 (2.2%)
1,666,168 (3.2%)
1,756,829 (3.4%)
1,806,966 (3.5%)
1,451,552 (2.8%)
631,791 (1.2%)
293,336 (0.6%)
215,700 (0.4%)
754,747 (1.5%)
1,145,860 (2.2%)
1,141,466 (2.2%)
1,121,379 (2.2%)
1,068,250 (2.1%)
682,001 (1.3%)
425,171 (0.8%)
287,147 (0.6%)
277,716 (0.5%)
205,232 (0.4%)
323,771 (0.6%)
317,146 (0.6%)
299,789 (0.6%)
156,770 (0.3%)
130,770 (0.3%)
26 560 142 /57
26,568,142 (51% 25,208,303 (49%



Immunitybeh.00212		boto	10,,,,,,,,,		IID	lowen		no		10,,,,,,,,
Immunitybost.00-102	Immunity other	beta -0.17	lower -0.31	-0.03	HR 0.84	lower 0.73	upper 0.97	eff 0.16	upper 0.27	lower 0.03
Immunityhosos 602-192   0-94   0-182   0-06   0-182   0-06   0-182   0-06   0-182   0-06   0-182   0-06   0-182   0-06   0-182   0-06   0-182   0-06   0-182   0-06   0-182   0-06   0-182	· ·									
Immunityboost.142-1483										
Immunity boost 148-244   -0.46   -0.69   -0.32   -0.33   -0.55   -0.73   -0.37   -0.45   -0.27	· ·									
Immunityboest.245.305   0.43   0.52   0.34   0.65   0.59   0.71   0.35   0.44   0.29   1mmunityboest.267.427   0.41   0.45   0.29   0.66   0.58   0.75   0.34   0.42   0.25   1mmunityboest.267.427   0.41   0.45   0.29   0.66   0.58   0.75   0.34   0.42   0.25   1mmunityboest.248-9.49   0.51   0.99   0.03   0.60   0.37   0.97   0.40   0.63   0.03   1mmunityfull.132-183   0.35   0.42   0.25   1.77   0.81   3.37   0.70   0.19   0.25   1mmunityfull.132-183   0.36   0.66   0.20   0.33   1.07   0.82   1.39   0.04   0.40   0.40   0.69   1.00   0.69   1.00   0.69   1.00   0.20   0.33   1.07   0.82   1.39   0.07   0.18   0.39   0.34   0.28   0.38	· ·									
Immunityboost.306-366   0.39   0.49   0.30   0.67   0.61   0.74   0.33   0.49   0.26   Immunityboost.429-488   0.33   0.45   0.18   0.72   0.62   0.84   0.28   0.38   0.16   Immunityboost.439-488   0.53   0.22   1.27   1.70   0.81   3.57   0.40   0.63   0.03   0.16   Immunityfull.231-818   0.53   0.22   1.27   1.70   0.81   3.57   0.70   0.19   0.257   Immunityfull.391-895   0.06   0.20   0.33   1.04   0.86   1.34   0.03   0.20   0.33   Immunityfull.390-366   0.20   0.33   0.10   0.80   1.34   0.03   0.20   0.34   Immunityfull.396-366   0.15   0.23   0.25   0.10   0.80   0.80   1.34   0.03   0.20   0.34   Immunityfull.396-366   0.15   0.23   0.25   0.10   0.80   0.80   1.34   0.03   0.20   0.34   Immunityfull.396-366   0.15   0.23   0.10   0.86   0.25   0.36   0.10   0.80   0.14   0.05   0.25   Immunityfull.396-369   0.04   0.16   0.23   0.25   0.35   0.09   0.95   0.09   0.34   Immunityfull.496-486   0.04   0.16   0.23   0.04   0.86   0.25   0.35   0.09   0.95   0.09   0.95   0.09   0.95   Immunityfull.496-400-501-601   0.33   0.62   2.44   0.05   0.03   0.09   0.95   0.09   0.95   Immunityfull.496-400-51-184-244   0.15   0.26   1.73   0.11   0.07   0.18   0.89   0.93   0.82   Immunityfull.496-400-51-184-244   0.15   0.26   1.73   0.11   0.07   0.18   0.89   0.93   0.82   Immunityfull.496-605-134-234   0.17   0.26   1.75   0.15   0.15   0.10   0.21   0.85   0.99   0.79   Immunityfull.496-605-134-234   0.17   0.17   0.12   0.35   0.36   0.38   0.88   0.73   0.79   Immunityfull.496-605-134-247   1.33   1.05   0.16   0.25   0.08   0.19   0.88   0.35   0.89   0.79   Immunityfull.496-605-134-247   1.33   1.05   0.08   0.17   0.04   0.05   0.0										
Immunityhosost.367-427   0.41   0.54   0.29   0.66   0.58   0.75   0.34   0.42   0.25   0.48   0.4	v									
Immunityhosest.428-488   -0.33   -0.48   -0.18   0.72   0.62   0.84   0.28   0.38   0.08   Immunityhosest.438-549   -0.51   -0.99   -0.03   0.06   0.37   0.97   -0.70   0.19   -2.57   Immunityholl.134-1345   0.63   0.04   0.69   1.44   1.04   1.09   -0.44   -0.04   -0.99   -0.03   Immunityholl.134-2345   0.06   -0.20   0.33   1.07   0.82   1.39   -0.07   0.18   -0.39   Immunityholl.136-366   0.03   -0.23   0.29   1.03   0.80   1.34   -0.03   0.20   -0.34   Immunityholl.136-366   0.03   -0.23   0.29   1.03   0.80   1.26   -0.04   0.14   -0.26   Immunityholl.428-488   0.11   -0.06   0.27   1.11   0.94   1.31   -0.11   0.06   0.31   Immunityholl.428-488   0.11   -0.06   0.27   1.11   0.94   1.31   -0.11   0.06   0.31   Immunityholl.428-488   0.14   -0.16   0.23   1.01   0.86   1.25   -0.04   0.14   -0.25   Immunityholl.428-488   0.15   -0.16   0.23   1.01   0.86   1.25   -0.04   0.14   -0.25   Immunityholl.4050-50.101-61   3.03   3.62   -2.44   0.05   0.03   0.09   0.95   0.97   0.91   Immunityhybridboost.001-61   3.03   3.62   -2.44   0.05   0.03   0.09   0.95   0.97   0.91   Immunityhybridboost.138-183   2.17   -2.26   -1.73   0.11   0.07   0.18   0.89   0.33   0.28   Immunityhybridboost.138-183   2.17   -2.26   -1.56   0.15   0.10   0.21   0.85   0.99   0.37   Immunityhybridboost.306-366   -2.12   -2.88   -1.65   0.15   0.10   0.21   0.88   0.92   0.31   Immunityhybridboost.306-366   -2.12   -2.88   -1.65   0.15   0.10   0.21   0.88   0.92   0.31   Immunityhybridfull.133-183   -1.66   -2.44   -0.24   0.48   0.29   0.78   0.52   0.71   0.22   Immunityhybridfull.133-183   -1.66   -2.44   -0.68   0.19   0.07   0.51   0.81   0.33   0.49   Immunityhybridfull.136-365   -1.88   -2.99   -1.07   0.12   0.12   0.14   0.75   0.88   0.95   0.73   Immunityhybridfull.136-427   -1.07   -1.52   -0.61   0.34   0.22   0.54   0.66   0.78   0.38   0.35   0.34   Immunityhybridfull.138-1488   -1.06   -2.44   -0.68   0.19   0.07   0.75   0.92   0.99   0.34   Immunityhybridfull.136-365   -1.89   -2.18   -0.99   0.30   0.10   0.66	· ·									
Immunityfull 123-183   0.53   0.22   1.27   1.70   0.81   3.57   0.70   0.19   0.257										
Immunityfull.184-244   0.36   0.04   0.69   1.44   1.04   1.99   0.044   0.04   0.09   1.000	Immunityboost_489-549	-0.51	-0.99	-0.03	0.60	0.37	0.97	0.40	0.63	0.03
Immunityfull 245-305   0.06   -0.20   0.33   1.07   0.82   1.39   -0.07   0.18   -0.39   1.09   1.										
Immunityfull 366-366   0.03   -0.23   0.29   1.03   0.80   1.34   -0.03   0.20   -0.24   Immunityfull 367-427   0.04   -0.15   0.23   1.04   0.86   1.26   -0.04   0.14   -0.26   Immunityfull 489-549   0.04   -0.16   0.23   1.04   0.86   1.25   -0.04   0.14   -0.26   Immunityfull 489-549   0.04   -0.16   0.23   1.04   0.86   1.25   -0.04   0.14   -0.26   Immunityfulpridosos.062-122   2.08   -3.60   -1.66   0.13   0.08   0.19   0.87   0.97   0.91   Immunityfulpridosos.062-122   2.08   -2.50   -1.66   0.13   0.08   0.19   0.87   0.92   0.81   Immunityfulpridosos.134-244   -1.91   -2.26   -1.56   0.15   0.10   0.21   0.85   0.90   0.79   Immunityfulpridosos.136-427   -1.33   -1.76   -0.91   0.26   0.17   0.23   0.83   0.88   0.77   0.71   Immunityfulpridosos.367-427   -1.33   -1.76   -0.91   0.26   0.17   0.40   0.74   0.83   0.96   0.32   Immunityfulpridfull062-122   -1.77   -3.15   -0.38   0.19   0.05   0.32   Immunityfulpridfull.123-183   -1.66   -2.64   -0.68   0.19   0.07   0.51   0.38   0.95   0.32   Immunityfulpridfull.482-345   -1.58   -2.99   -1.07   0.21   0.12   0.34   0.79   0.88   0.95   0.73   Immunityfulpridfull.482-365   -1.58   -2.99   -1.07   0.21   0.12   0.34   0.79   0.88   0.95   0.73   Immunityfulpridfull.482-488   -1.45   -2.99   -1.07   0.21   0.12   0.34   0.79   0.88   0.66   Immunityfulpridfull.482-488   -1.45   -2.99   -1.07   0.21   0.12   0.34   0.79   0.88   0.66   Immunityfulpridfull.482-488   -1.45   -2.99   -0.78   0.24   0.11   0.34   0.50   0.89   0.66   Immunityfulpridfull.482-488   -1.45   -0.49   0.20   0.11   0.34   0.79   0.88   0.36   Immunityfulpridfull.482-488   -1.45   -0.49   0.20   0.11   0.34   0.79   0.88   0.36   Immunityfulpridfull.482-488   -1.65   -0.49   0.78   0.24   0.15   0.76   0.66   0.78   0.34   Immunityfulpridfull.482-448   -0.67   0.75   0.28   0.17   0.76   0.66   0.78   0.34   Immunityfulpridfull.482-448   -0.67   0.70   0.80   0.80   0.66   0.78   0.46   Immunityfulpridfull.482-44   -0.70   0.79   0.80   0.80   0.80   0.80   0.80   0.80   0.80   0										
Immunityfull.467-427   0.04   -0.15   0.23   1.04   0.86   1.26   -0.04   0.14   -0.25										
Immunityfull.428-488   0.11   0.06   0.27   1.11   0.94   1.31   0.11   0.06   0.31     Immunityfull.489-549   0.04   0.16   0.23   1.04   0.65   0.25   0.04   0.14   0.25     Immunityhybridboost.001-01   3.03   3.62   2.44   0.05   0.03   0.09   0.95   0.97   0.91     Immunityhybridboost.062-122   2.08   2.50   1.66   0.13   0.08   0.19   0.85   0.93   0.82     Immunityhybridboost.181-283   2.17   2.62   1.73   0.11   0.07   0.18   0.89   0.93   0.82     Immunityhybridboost.184-244   1.91   2.26   1.56   0.15   0.10   0.21   0.85   0.90   0.75     Immunityhybridboost.367-305   1.79   2.21   1.147   0.17   0.12   0.23   0.83   0.88   0.97     Immunityhybridboost.367-427   1.33   1.76   0.91   0.26   0.17   0.40   0.74   0.83   0.86     Immunityhybridboost.367-427   1.33   1.76   0.91   0.26   0.17   0.40   0.74   0.83   0.96   0.81     Immunityhybridflul.062-122   1.77   3.15   0.38   0.17   0.04   0.68   0.83   0.96   0.32     Immunityhybridfull.184-244   2.10   2.21   1.30   0.12   0.05   0.27   0.88   0.95   0.73     Immunityhybridfull.245-305   1.58   2.09   1.07   0.21   0.12   0.34   0.79   0.88   0.95   0.73     Immunityhybridfull.367-427   1.52   0.61   0.34   0.22   0.54   0.66   0.78   0.46     Immunityhybridfull.368-549   1.08   1.29   0.78   0.24   0.11   0.34   0.80   0.89   0.66     Immunityhybridfull.380-549   1.08   1.99   0.28   0.34   0.15   0.76   0.66   0.78   0.44     Immunityinful.367-368   0.86   1.32   0.41   0.80   0.30   0.77   0.58   0.73     Immunityinful.368-549   1.08   1.89   0.28   0.34   0.15   0.76   0.66   0.85   0.24     Immunityinful.367-369   0.86   1.32   0.41   0.80   0.30   0.75   0.72   0.80   0.33     Immunityinful.368-549   1.28   2.26   0.29   0.28   0.10   0.57   0.29   0.93   0.33     Immunityinful.368-549   1.28   2.26   0.29   0.28   0.10   0.75   0.72   0.80   0.33     Immunityinful.368-549   1.28   2.26   0.29   0.28   0.10   0.75   0.72   0.80   0.30     Immunitysechoeost.01-061   1.23   1.43   1.02   0.99   0.24   0.36   0.77   0.76   0.46     Immunitysech										
Immunityhphridhoost.001-061   -3.03   -3.62   -2.44   -0.55   -0.03   -0.09   -0.95   -0.97   -0.91										
Immunityhybridboost.123-183   -2.17   -2.62   -1.73   0.11   0.07   0.18   0.89   0.93   0.82     Immunityhybridboost.184-244   -1.91   -2.26   -1.56   0.15   0.10   0.21   0.85   0.90   0.79     Immunityhybridboost.345-305   -1.79   -2.11   -1.47   0.17   0.12   0.23   0.83   0.88   0.77     Immunityhybridboost.36-366   -2.12   -2.58   -1.65   0.15   0.08   0.19   0.88   0.92   0.81     Immunityhybridboost.367-427   -1.33   -1.76   -0.91   0.26   0.17   0.40   0.74   0.83   0.60     Immunityhybridboost.367-427   -1.33   -1.76   -0.91   0.26   0.17   0.40   0.74   0.83   0.60     Immunityhybridfull.062-122   -1.77   -3.15   -0.38   0.17   0.04   0.68   0.83   0.96   0.32     Immunityhybridfull.123-183   1.66   -2.64   -0.68   0.19   0.07   0.51   0.81   0.93   0.49     Immunityhybridfull.245-305   -1.58   -2.09   -1.07   0.21   0.05   0.27   0.88   0.95   0.73     Immunityhybridfull.367-427   -1.07   -1.52   -0.61   0.34   0.22   0.54   0.66   0.78   0.66     Immunityhybridfull.488-488   -1.33   -2.09   -0.78   0.24   0.12   0.46   0.76   0.88   0.56     Immunityhybridfull.489-489   -1.08   -1.89   -0.28   0.34   0.15   0.76   0.66   0.78   0.46     Immunityhybridfull.489-489   -1.08   -1.89   -0.28   0.34   0.15   0.76   0.66   0.85   0.24     Immunityinf.23-183   -1.73   -2.72   -0.75   0.18   0.07   0.47   0.82   0.99   0.43     Immunityinf.245-305   -1.26   -1.77   -0.75   0.28   0.14   0.56   0.72   0.86   0.44     Immunityinf.367-427   -1.27   -1.97   -0.57   0.28   0.14   0.56   0.72   0.86   0.44     Immunityinf.369-489   -1.08   -1.32   -0.41   0.42   0.27   0.67   0.58   0.73     Immunityinf.369-480   -1.08   -1.32   -0.41   0.42   0.27   0.67   0.58   0.73     Immunityinf.369-480   -1.28   -1.39   -1.31   0.19   0.14   0.56   0.72   0.86   0.44     Immunityinf.369-480   -1.68   -1.32   -1.41   0.18   0.35   0.14   0.84   0.65   0.86   0.35     Immunityinf.369-480   -1.28   -1.43   -1.02   0.25   0.13   0.49   0.75   0.80   0.35     Immunitysechoest.124   -1.39   -0.65   0.06   0.78   0.35   0.14										
Immunityhybridboost.123-183   -2.17   -2.62   -1.73   -1.16   -1.56   -1.56   -1.57   -1.56   -1.57   -1.56   -1.57										
Immunityhybridhoost.184-244   -1.91   -2.26   -1.56   0.15   0.10   0.21   0.85   0.90   0.79   Immunityhybridhoost.306-366   -2.12   -2.58   -1.65   0.12   0.08   0.19   0.88   0.92   0.81   Immunityhybridhoost.367-427   -1.33   -1.76   -0.91   0.26   0.17   0.40   0.74   0.83   0.60   Immunityhybridhoost.428-488   -0.74   -1.24   -0.24   0.48   0.29   0.78   0.52   0.71   0.22   Immunityhybridhill.062-122   -1.77   -3.15   -0.38   0.17   0.04   0.68   0.83   0.96   0.32   Immunityhybridhill.123-183   -1.66   -2.64   -0.68   0.19   0.07   0.51   0.81   0.93   0.49   Immunityhybridhill.148-244   -2.10   -2.91   -1.30   0.12   0.05   0.27   0.88   0.95   0.73   Immunityhybridhill.306-366   -1.63   -2.18   -1.09   0.20   0.11   0.34   0.80   0.89   0.66   Immunityhybridhill.306-366   -1.63   -2.18   -1.09   0.20   0.11   0.34   0.80   0.89   0.66   Immunityhybridhill.489-549   -1.08   -1.89   -0.28   0.34   0.15   0.76   0.66   0.78   0.46   Immunityhybridhill.489-549   -1.08   -1.89   -0.28   0.34   0.15   0.76   0.66   0.78   0.46   Immunityinf.123-183   -1.73   -2.72   -0.75   0.18   0.07   0.47   0.82   0.93   0.33   Immunityinf.184-244   -0.97   -1.45   -0.49   0.38   0.27   0.67   0.58   0.73   0.33   Immunityinf.245-305   -1.26   -1.77   -0.75   0.28   0.17   0.47   0.72   0.83   0.53   Immunityinf.245-305   -1.26   -1.77   -0.75   0.28   0.17   0.47   0.72   0.83   0.33   Immunityinf.245-305   -1.26   -1.77   -0.75   0.28   0.10   0.75   0.72   0.86   0.44   Immunityinf.489-549   -1.28   -1.69   -1.75   0.75   0.28   0.10   0.75   0.70   0.99   0.25   Immunityinf.245-305   -1.26   -1.77   -0.75   0.28   0.17   0.47   0.72   0.83   0.33   Immunityinf.245-305   -1.26   -1.77   -0.75   0.28   0.17   0.47   0.72   0.86   0.44   Immunityinf.245-305   -1.26   -1.77   -0.75   0.28   0.10   0.75   0.72   0.86   0.44   Immunityinf.245-305   -1.26   -1.77   -0.75   0.28   0.10   0.75   0.72   0.86   0.44   Immunityinf.245-305   -1.26   -1.77   0.75   0.28   0.10   0.75   0.72   0.80   0.30   0.35   Immunityinf.24	v v									
Immunityhybridboost.245-305   -1.79   -2.11   -1.47   0.17   0.12   0.23   0.83   0.88   0.92   0.81										
Immunityhybridhoost 306-366   -2.12   -2.58   -1.65   -0.12   -0.08   -0.19   -0.88   -0.92   -0.81										
Immunityhybridbloost.428-488   -0.74   -1.24   -0.24   0.48   0.29   0.78   0.52   0.71   0.26   Immunityhybridfbloost.428-488   -0.74   -1.24   -0.24   0.48   0.29   0.78   0.52   0.71   0.22   Immunityhybridfblofbl.123-183   -1.66   -2.64   -0.68   0.19   0.07   0.51   0.81   0.93   0.93   Immunityhybridfbl.123-183   -1.66   -2.64   -0.68   0.19   0.07   0.51   0.81   0.93   0.93   Immunityhybridfbl.1245-305   -1.58   -2.09   -1.07   0.21   0.12   0.34   0.79   0.88   0.66   Immunityhybridfbl.1265-305   -1.65   -2.09   -1.07   0.21   0.12   0.34   0.79   0.88   0.66   Immunityhybridfbl.1367-427   -1.07   -1.52   -0.61   0.34   0.22   0.54   0.66   0.78   0.46   Immunityhybridfbl.1489-549   -1.08   -1.89   -0.28   0.34   0.15   0.76   0.66   0.85   0.24   Immunityinf.062-122   -2.52   -4.48   -0.56   0.08   0.01   0.57   0.92   0.99   0.43   Immunityinf.123-183   -1.73   -2.72   -0.75   0.18   0.07   0.47   0.82   0.93   0.53   Immunityinf.245-305   -1.45   -0.49   0.38   0.23   0.61   0.62   0.77   0.39   Immunityinf.306-366   0.86   -1.32   -0.41   0.42   0.27   0.67   0.58   0.73   0.33   Immunityinf.489-549   -1.28   -1.97   -0.75   0.28   0.17   0.47   0.72   0.83   0.53   Immunityinf.367-427   -1.27   -1.97   -0.75   0.28   0.17   0.47   0.72   0.83   0.53   Immunityinf.367-427   -1.27   -1.97   -0.75   0.28   0.17   0.47   0.72   0.86   0.44   Immunityinf.489-549   -1.28   -2.26   -0.29   0.28   0.14   0.56   0.72   0.86   0.44   Immunityinf.489-549   -1.28   -2.26   -0.29   0.28   0.10   0.75   0.72   0.90   0.25   Immunitysechnew.001-061   -1.65   -1.99   -1.31   0.19   0.14   0.77   0.72   0.80   0.61   Immunityinf.489-549   -1.28   -2.26   -0.29   0.28   0.14   0.56   0.72   0.86   0.44   Immunitysechnew.123-183   -0.68   -1.07   -0.29   0.51   0.34   0.75   0.99   0.72   0.86   0.46   Immunitysechnew.123-183   -0.68   -1.07   -0.29   0.51   0.34   0.75   0.99   0.50   0.66   0.25   Immunitysechoost.123-183   -0.68   -1.07   -0.29   0.51   0.40   0.75   0.99   0.51   0.75   0.99   0.51   0.75   0.										
Immunityhybridfull.d6c2-122 -1.77 -3.15 -0.38										
Immunityhybridfull.123-183										
Immunityhybridfull.184-244   2.10   2.91   1.30   0.12   0.05   0.27   0.88   0.95   0.73   Immunityhybridfull.245-305   -1.58   -2.09   -1.07   0.21   0.12   0.34   0.79   0.88   0.66   Immunityhybridfull.366-366   -1.63   -2.18   -1.09   0.20   0.11   0.34   0.80   0.89   0.66   Immunityhybridfull.367-427   -1.07   -1.52   -0.61   0.34   0.22   0.54   0.66   0.78   0.46   Immunityhybridfull.428-488   -1.43   -2.09   -0.78   0.24   0.12   0.46   0.76   0.88   0.54   Immunityhybridfull.489-549   -1.08   -1.89   -0.28   0.34   0.15   0.76   0.66   0.85   0.24   Immunityinf.062-122   -2.52   -4.48   -0.56   0.08   0.01   0.57   0.92   0.99   0.43   Immunityinf.123-183   -1.73   -2.72   -0.75   0.18   0.07   0.47   0.82   0.93   0.53   Immunityinf.245-305   -1.26   -1.77   -0.75   0.28   0.17   0.47   0.72   0.83   0.53   Immunityinf.245-305   -1.26   -1.77   -0.75   0.28   0.17   0.47   0.72   0.83   0.53   Immunityinf.367-427   -1.27   -1.97   -0.57   0.28   0.14   0.56   0.72   0.86   0.44   Immunityinf.489-549   -1.28   -2.26   -0.29   0.28   0.10   0.75   0.72   0.90   0.25   Immunitysecbnew.001-061   -1.65   -1.99   -1.31   0.19   0.14   0.27   0.81   0.86   0.73   Immunitysecbnew.062-122   -1.26   -1.59   -0.93   0.28   0.20   0.39   0.72   0.80   0.61   Immunitysecbost.002-102   -1.65   -1.59   -0.93   0.28   0.20   0.39   0.72   0.80   0.61   Immunitysecboost.002-122   -0.84   -1.04   -0.63   0.43   0.35   0.53   0.57   0.65   0.47   Immunitysecboost.184-244   -0.24   -0.55   0.06   0.78   0.58   1.06   0.22   0.42   -0.06   0.46   0.49   0.75   0.49   0.66   0.25   0.49   0.66   0.25   0.49   0.66   0.25   0.49   0.66   0.25   0.49   0.66   0.25   0.49   0.66   0.25   0.49   0.66   0.25   0.49   0.66   0.25   0.40   0.40   0.75   0.83   0.50   0.50   0.68   0.50   0.50   0.68   0.50   0.50   0.68   0.50   0.50   0.68   0.50   0.50   0.68   0.50   0.50   0.68   0.50   0.50   0.68   0.50   0.50   0.68   0.50   0.50   0.68   0.50   0.50   0.68   0.50   0.50   0.68   0.50   0.50   0.68   0.50   0.50   0.68										
Immunityhybridfull_245-305										
Immunityhybridfull.306-366										
Immunityhybridfull.467-427   1.07   1.52   0.61   0.34   0.22   0.54   0.66   0.78   0.46   Immunityhybridfull.489-488   1.43   2.09   0.78   0.24   0.12   0.46   0.76   0.66   0.85   0.24   Immunityhybridfull.489-549   1.08   -1.89   0.28   0.34   0.15   0.76   0.66   0.85   0.24   Immunityinf.062-122   2.52   4.48   0.56   0.08   0.01   0.57   0.92   0.99   0.43   Immunityinf.123-183   -1.73   2.72   0.75   0.18   0.07   0.47   0.82   0.93   0.53   Immunityinf.245-305   1.26   -1.77   0.75   0.28   0.17   0.47   0.72   0.83   0.53   Immunityinf.366-366   0.86   -1.32   0.41   0.42   0.27   0.67   0.58   0.73   0.33   Immunityinf.428-488   1.06   -1.94   0.18   0.35   0.14   0.56   0.72   0.86   0.44   Immunityinf.489-549   -1.28   -2.26   -0.29   0.28   0.10   0.75   0.72   0.90   0.25   Immunitysechnew.062-122   -1.26   -1.59   -0.93   0.28   0.20   0.39   0.72   0.80   0.61   Immunitysechnew.010-161   -1.63   -1.99   -1.31   0.19   0.14   0.27   0.81   0.86   0.73   Immunitysechost.021-122   -0.84   -1.04   -0.63   0.43   0.35   0.57   0.49   0.66   0.25   Immunitysechost.021-22   -0.84   -1.04   -0.63   0.43   0.35   0.53   0.57   0.66   0.25   Immunitysechost.021-22   -0.84   -1.04   -0.63   0.43   0.35   0.53   0.57   0.65   0.47   0.66   0.25   Immunitysechost.123-183   -0.68   -1.07   -0.29   0.51   0.34   0.75   0.49   0.66   0.25   Immunitysechost.123-183   -0.68   -1.07   -0.29   0.51   0.34   0.75   0.49   0.66   0.25   Immunitysechost.123-183   -0.68   -0.71   -0.29   0.51   0.34   0.75   0.39   0.51   0.25   Immunitysechost.123-183   -0.68   -0.71   -0.29   0.51   0.34   0.75   0.39   0.51   0.25   Immunitysechost.123-183   -0.68   -0.71   -0.29   0.51   0.34   0.75   0.39   0.51   0.25   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.47   0.65   0.6										
Immunityhybridfull.428-488										
Immunityinf_062-122										
Immunityinf.123-183	* *									
Immunityinf.184-244	v									
Immunityinf_245-305   -1.26   -1.77   -0.75   0.28   0.17   0.47   0.72   0.83   0.53   Immunityinf_306-366   -0.86   -1.32   -0.41   0.42   0.27   0.67   0.58   0.73   0.33   Immunityinf_366-427   -1.27   -1.97   -0.57   0.28   0.14   0.56   0.72   0.86   0.44   Immunityinf_428-488   -1.06   -1.94   -0.18   0.35   0.14   0.45   0.65   0.86   0.16   Immunityinf_428-488   -1.06   -1.94   -0.18   0.35   0.14   0.45   0.65   0.86   0.16   Immunityinf_489-549   -1.28   -2.26   -0.29   0.28   0.10   0.75   0.72   0.90   0.25   Immunitysechnew_001-061   -1.65   -1.99   -1.31   0.19   0.14   0.27   0.81   0.86   0.73   Immunitysechnew_1021-123   -1.26   -1.59   -0.93   0.28   0.20   0.39   0.72   0.80   0.61   Immunitysechoost_001-061   -1.23   -1.43   -1.02   0.29   0.24   0.36   0.71   0.76   0.64   Immunitysechoost_002-122   -0.84   -1.04   -0.63   0.43   0.35   0.53   0.57   0.65   0.47   Immunitysechoost_102-122   -0.84   -1.04   -0.63   0.43   0.35   0.53   0.57   0.65   0.47   Immunitysechoost_1123-183   -0.50   -0.71   -0.29   0.61   0.49   0.75   0.39   0.51   0.25   Immunitysechoost_1142-144   -0.24   -0.55   0.06   0.78   0.58   1.06   0.22   0.42   -0.06   0.46   0.46   0.46   0.46   0.40   0.75   0.49   0.66   0.50   0.68   0.80   0.50   0.6										
Immunityinf.306-366										
Immunityinf.367-427   -1.27   -1.97   -0.57   0.28   0.14   0.56   0.72   0.86   0.44										
Immunityinf.428-488										
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										
Immunitysechnew_062-122										
Immunitysecbnew_123-183         -0.68         -1.07         -0.29         0.51         0.34         0.75         0.49         0.66         0.25           Immunitysecboost_001-061         -1.23         -1.43         -1.02         0.29         0.24         0.36         0.71         0.76         0.64           Immunitysecboost_062-122         -0.84         -1.04         -0.63         0.43         0.35         0.53         0.57         0.65         0.47           Immunitysecboost_123-183         -0.50         -0.71         -0.29         0.61         0.49         0.75         0.39         0.51         0.25           Immunitysecboost_184-244         -0.24         -0.55         0.06         0.78         0.58         1.06         0.22         0.42         -0.06           AgeGr10-11         -1.15         -1.60         -0.70         0.32         0.20         0.50         0.68         0.80         0.50           AgeGr12-15         -2.66         -4.08         -1.24         0.07         0.02         0.29         0.93         0.98         0.71           AgeGr16-17         -1.78         -3.19         -0.36         0.17         0.04         0.70         0.83         0.96         0.30	v									
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$\begin{array}{c ccccccccccccccccccccccccccccccccccc$										
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Immunitysecboost_184-244	-0.24	-0.55	0.06	0.78	0.58	1.06	0.22	0.42	-0.06
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	_									
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AgeGr30-34       -0.93       -1.50       -0.36       0.40       0.22       0.70       0.60       0.78       0.30         AgeGr35-39       -0.72       -1.24       -0.19       0.49       0.29       0.82       0.51       0.71       0.18         AgeGr45-49       -0.06       -0.47       0.35       0.94       0.63       1.42       0.06       0.37       -0.42         AgeGr50-54       0.72       0.35       1.08       2.05       1.42       2.95       -1.05       -0.42       -1.95         AgeGr55-59       1.19       0.85       1.53       3.28       2.33       4.61       -2.28       -1.33       -3.61         AgeGr60-64       1.79       1.47       2.11       5.97       4.33       8.24       -4.97       -3.33       -7.24         AgeGr65-69       2.53       2.23       2.83       12.56       9.27       17.02       -11.56       -8.27       -16.02         AgeGr70-74       3.19       2.89       4 3.49       24.34       18.07       32.80       -23.34       -17.07       -31.80         AgeGr75-79       3.88       3.58       4.18       48.43       36.01       65.13       -47.43       -35.01 </td <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	_									
AgeGr35-39       -0.72       -1.24       -0.19       0.49       0.29       0.82       0.51       0.71       0.18         AgeGr45-49       -0.06       -0.47       0.35       0.94       0.63       1.42       0.06       0.37       -0.42         AgeGr50-54       0.72       0.35       1.08       2.05       1.42       2.95       -1.05       -0.42       -1.95         AgeGr55-59       1.19       0.85       1.53       3.28       2.33       4.61       -2.28       -1.33       -3.61         AgeGr60-64       1.79       1.47       2.11       5.97       4.33       8.24       -4.97       -3.33       -7.24         AgeGr65-69       2.53       2.23       2.83       12.56       9.27       17.02       -11.56       -8.27       -16.02         AgeGr70-74       3.19       2.89       4       3.49       24.34       18.07       32.80       -23.34       -17.07       -31.80         AgeGr75-79       3.88       3.58       4.18       48.43       36.01       65.13       -47.43       -35.01       -64.13	_									
AgeGr45-49       -0.06       -0.47       0.35       0.94       0.63       1.42       0.06       0.37       -0.42         AgeGr50-54       0.72       0.35       1.08       2.05       1.42       2.95       -1.05       -0.42       -1.95         AgeGr55-59       1.19       0.85       1.53       3.28       2.33       4.61       -2.28       -1.33       -3.61         AgeGr60-64       1.79       1.47       2.11       5.97       4.33       8.24       -4.97       -3.33       -7.24         AgeGr65-69       2.53       2.23       2.83       12.56       9.27       17.02       -11.56       -8.27       -16.02         AgeGr70-74       3.19       2.89       4       3.49       24.34       18.07       32.80       -23.34       -17.07       -31.80         AgeGr75-79       3.88       3.58       4.18       48.43       36.01       65.13       -47.43       -35.01       -64.13	_									
AgeGr55-59       1.19       0.85       1.53       3.28       2.33       4.61       -2.28       -1.33       -3.61         AgeGr60-64       1.79       1.47       2.11       5.97       4.33       8.24       -4.97       -3.33       -7.24         AgeGr65-69       2.53       2.23       2.83       12.56       9.27       17.02       -11.56       -8.27       -16.02         AgeGr70-74       3.19       2.89       4       3.49       24.34       18.07       32.80       -23.34       -17.07       -31.80         AgeGr75-79       3.88       3.58       4.18       48.43       36.01       65.13       -47.43       -35.01       -64.13	AgeGr45-49	-0.06	-0.47	0.35	0.94	0.63	1.42	0.06	0.37	-0.42
AgeGr60-64       1.79       1.47       2.11       5.97       4.33       8.24       -4.97       -3.33       -7.24         AgeGr65-69       2.53       2.23       2.83       12.56       9.27       17.02       -11.56       -8.27       -16.02         AgeGr70-74       3.19       2.89       4       3.49       24.34       18.07       32.80       -23.34       -17.07       -31.80         AgeGr75-79       3.88       3.58       4.18       48.43       36.01       65.13       -47.43       -35.01       -64.13	_									
AgeGr65-69       2.53       2.23       2.83       12.56       9.27       17.02       -11.56       -8.27       -16.02         AgeGr70-74       3.19       2.89       4 3.49       24.34       18.07       32.80       -23.34       -17.07       -31.80         AgeGr75-79       3.88       3.58       4.18       48.43       36.01       65.13       -47.43       -35.01       -64.13	_									
AgeGr70-74       3.19       2.89       4       3.49       24.34       18.07       32.80       -23.34       -17.07       -31.80         AgeGr75-79       3.88       3.58       4.18       48.43       36.01       65.13       -47.43       -35.01       -64.13	_									
$\label{eq:conditional_age} AgeGr75\text{-}79  3.88  3.58  4.18  48.43  36.01  65.13  \text{-}47.43  \text{-}35.01  \text{-}64.13$	_									
· · · · · · · · · · · · · · · · · · ·										
100.00 100.00 100.00 100.00 100.00 -104.00 -104.00 -104.00	AgeGr80+	4.64	4.34	4.93	103.36	77.09	138.59	-102.36	-76.09	-137.59
SexM 0.56 0.51 0.62 1.76 1.66 1.85 -0.76 -0.66 -0.85										

	immunities	deltas	lower_of_deltas	upper_of_deltas
2	Immunityfull	-0.01	-0.04	0.02
3	Immunityboost	0.07	0.05	0.08
4	Immunitysecboost	0.09	0.06	0.11
5	Immunitysecbnew	0.06	0.02	0.10
6	Immunityinf	0.01	-0.01	0.03
7	Immunityhybridfull	0.02	0.00	0.03
8	Immunityhybridboost	0.04	0.03	0.05

Table 2: Monthly percentage decrease of effectiveness/protection

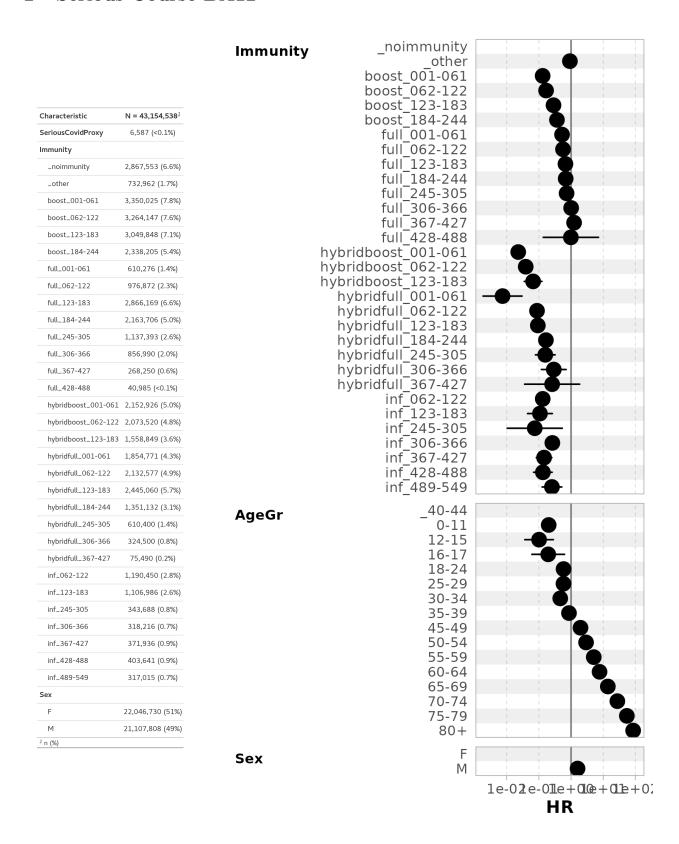
	1	2	3	4	5	6	7
1		41.70%	71.64%	118.80%	76.75%	83.03%	84.59%
2	-41.70%		-5.93%	12.02%	32.48%	44.09%	47.98%
3	-71.64%	5.93%		11.52%	38.75%	43.85%	30.54%
4	-118.80%	-12.02%	-11.52%		24.48%	20.87%	16.62%
5	-76.75%	-32.48%	-38.75%	-24.48%		8.42%	9.91%
6	-83.03%	-44.09%	-43.85%	-20.87%	-8.42%		2.62%
7	-84.59%	-47.98%	-30.54%	-16.62%	-9.91%	-2.62%	

Table 3: Effectiveness/protection differences

1	2	3	4	5	6	7
	7.22	2.90	1.82	10.56	12.83	12.15
-7.22		-0.73	1.12	7.68	13.88	19.25
-2.90	0.73		3.29	5.93	5.97	11.51
-1.82	-1.12	-3.29		3.17	2.19	5.67
-10.56	-7.68	-5.93	-3.17		1.92	2.66
-12.83	-13.88	-5.97	-2.19	-1.92		0.90
-12.15	-19.25	-11.51	-5.67	-2.66	-0.90	

Table 4: Z-scores of effectiveness/protection differences

## 2 Serious Course BA12



	beta	lower	upper	HR	lower	upper	eff	upper	lower
Immunity_other	-0.08	-0.27	0.11	0.92	0.76	1.11	0.08	0.24	-0.11
Immunityboost_001-061	-2.03	-2.14	-1.92	0.13	0.12	0.15	0.87	0.88	0.85
Immunityboost_062-122	-1.79	-1.86	-1.72	0.17	0.16	0.18	0.83	0.84	0.82
Immunityboost_123-183	-1.26	-1.36	-1.15	0.29	0.26	0.32	0.71	0.74	0.68
Immunityboost_184-244 Immunityfull_001-061	-1.01 -0.64	-1.47 -0.84	-0.54 -0.44	$0.36 \\ 0.53$	$0.23 \\ 0.43$	$0.58 \\ 0.64$	$0.64 \\ 0.47$	$0.77 \\ 0.57$	$0.42 \\ 0.36$
Immunityfull_062-122	-0.58	-0.75	-0.44	0.56	0.43 $0.47$	0.64	0.47 $0.44$	0.57	0.30
Immunityfull_123-183	-0.40	-0.76	-0.40	0.67	0.47	0.78	0.44 $0.33$	0.43	0.33 $0.22$
Immunityfull_184-244	-0.38	-0.49	-0.28	0.68	0.61	0.76	0.32	0.39	0.24
Immunityfull_245-305	-0.32	-0.44	-0.20	0.73	0.64	0.82	0.27	0.36	0.18
Immunityfull_306-366	0.01	-0.15	0.16	1.01	0.86	1.17	-0.01	0.14	-0.17
Immunityfull_367-427	0.22	-0.10	0.53	1.24	0.90	1.71	-0.24	0.10	-0.71
$Immunityfull\_428-488$	-0.01	-1.98	1.95	0.99	0.14	7.05	0.01	0.86	-6.05
Immunityhybridboost_001-061	-3.78	-4.21	-3.35	0.02	0.01	0.04	0.98	0.99	0.96
Immunityhybridboost_062-122	-3.24	-3.60	-2.88	0.04	0.03	0.06	0.96	0.97	0.94
Immunityhybridboost_123-183	-2.71	-3.34	-2.09	0.07	0.04	0.12	0.93	0.96	0.88
Immunityhybridfull_001-061	-4.90	-6.29	-3.51	0.01	0.00	0.03	0.99	1.00	0.97
Immunityhybridfull_062-122 Immunityhybridfull_123-183	-2.44 -2.38	-2.80 -2.87	-2.08 -1.88	$0.09 \\ 0.09$	$0.06 \\ 0.06$	$0.13 \\ 0.15$	$0.91 \\ 0.91$	$0.94 \\ 0.94$	$0.87 \\ 0.85$
Immunityhybridfull_184-244	-2.38 -1.80	-2.87 -2.25	-1.35	0.09 $0.17$	0.00	$0.15 \\ 0.26$	0.91 $0.83$	0.94 $0.89$	$0.83 \\ 0.74$
Immunityhybridfull_245-305	-1.84	-2.23 -2.54	-1.15	0.17	0.11	0.20 $0.32$	0.84	0.89 $0.92$	0.68
Immunityhybridfull_306-366	-1.24	-2.11	-0.36	0.10	0.12	0.70	0.71	0.88	0.30
Immunityhybridfull_367-427	-1.35	-3.32	0.61	0.26	0.04	1.83	0.74	0.96	-0.83
Immunityinf_062-122	-2.03	-2.45	-1.61	0.13	0.09	0.20	0.87	0.91	0.80
Immunityinf_123-183	-2.22	-3.10	-1.35	0.11	0.04	0.26	0.89	0.96	0.74
$Immunity inf \_245 - 305$	-2.60	-4.56	-0.64	0.07	0.01	0.53	0.93	0.99	0.47
Immunityinf_306-366	-1.34	-1.77	-0.91	0.26	0.17	0.40	0.74	0.83	0.60
Immunityinf_367-427	-1.93	-2.47	-1.38	0.15	0.08	0.25	0.85	0.92	0.75
Immunityinf_428-488	-2.02	-2.67	-1.36	0.13	0.07	0.26	0.87	0.93	0.74
Immunityinf_489-549	-1.37	-2.06	-0.67	0.25	0.13	0.51	0.75	0.87	0.49
AgeGr0-11	-1.60 -2.29	-2.00 -3.30	-1.20 -1.28	$0.20 \\ 0.10$	$0.14 \\ 0.04$	$0.30 \\ 0.28$	$0.80 \\ 0.90$	$0.86 \\ 0.96$	$0.70 \\ 0.72$
AgeGr12-15 AgeGr16-17	-2.29	-3.30 -2.79	-0.48	0.10 $0.20$	0.04 $0.06$	0.28 $0.62$	0.90	0.90 $0.94$	$0.72 \\ 0.38$
AgeGr18-24	-0.54	-2.19 -0.97	-0.40	0.20 $0.58$	0.38	0.02	0.30 $0.42$	0.62	0.38
AgeGr25-29	-0.54	-0.98	-0.11	0.58	0.38	0.90	0.42	0.62	0.10
AgeGr30-34	-0.77	-1.23	-0.32	0.46	0.29	0.73	0.54	0.71	0.27
AgeGr35-39	-0.15	-0.53	0.23	0.86	0.59	1.26	0.14	0.41	-0.26
AgeGr45-49	0.67	0.36	0.99	1.96	1.44	2.68	-0.96	-0.44	-1.68
AgeGr50-54	1.07	0.77	1.38	2.92	2.16	3.96	-1.92	-1.16	-2.96
AgeGr55-59	1.62	1.34	1.90	5.07	3.82	6.72	-4.07	-2.82	-5.72
AgeGr60-64	2.04	1.76	2.31	7.66	5.83	10.06	-6.66	-4.83	-9.06
AgeGr65-69	2.63	2.37	2.89	13.86	10.66	18.02	-12.86	-9.66	-17.02
AgeGr70-74	3.31	3.05	3.57	27.35	21.15	35.37	-26.35	-20.15	-34.37
AgeGr75-79	3.99	3.73	4.24	53.94	41.75	69.70	-52.94	-40.75	-68.70
AgeGr80+ SexM	4.44	4.19	4.69	84.64 $1.59$	65.71 $1.51$	109.01	-83.64 -0.59	-64.71 0.51	-108.01
Sexivi	0.46	0.41	0.51	1.59	1.6.1	1.67	-0.59	-0.51	-0.67

Table 5: Cox model summary

	immunities	deltas	$lower\_of\_deltas$	$upper\_of\_deltas$
2	Immunityfull	-0.00	-0.01	0.01
3	Immunityboost	-0.01	-0.02	-0.00
4	Immunitysecboost			
5	Immunitysecbnew			
6	Immunityinf	-0.01	-0.01	0.00
7	Immunityhybridfull	0.02	0.01	0.02
8	Immunityhybridboost	-0.01	-0.01	0.00

Table 6: Monthly percentage decrease of effectiveness/protection

	1	2	3	4	5	6	7
1		38.43%			56.39%	53.16%	53.92%
2	-38.43%				7.02%	12.07%	12.31%
3							
4							
5	-56.39%	-7.02%				2.35%	8.09%
6	-53.16%	-12.07%			-2.35%		-0.46%
7	-53.92%	-12.31%			-8.09%	0.46%	

Table 7: Effectiveness/protection differences

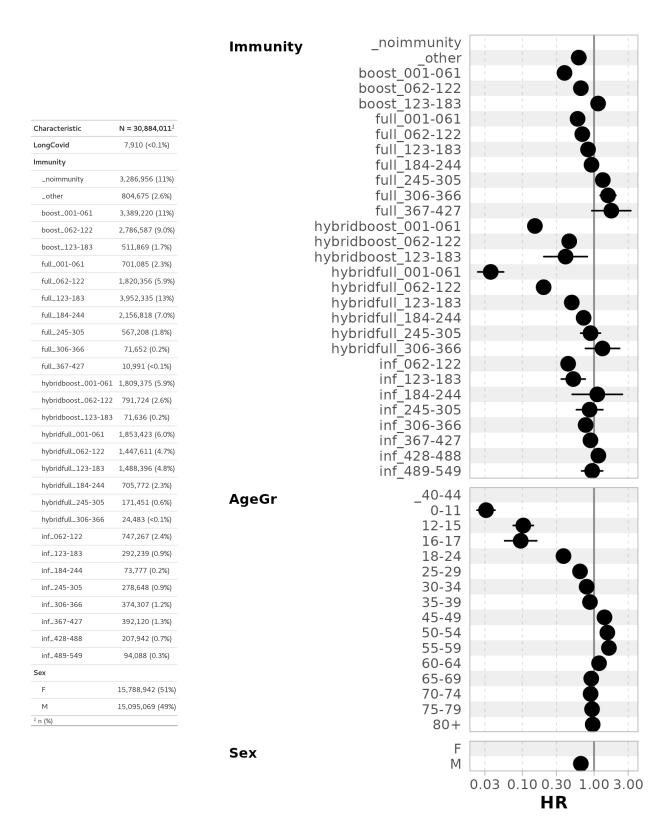
1	2	3	4	5	6	7
	12.82			15.10	20.05	16.65
-12.82				2.82	15.85	19.53
-15.10	-2.82				0.90	3.17
-10.10	-2.62				0.90	5.17
-20.05	-15.85			-0.90		-0.70
-16.65	-19.53			-3.17	0.70	

Table 8: Z-scores of effectiveness/protection differences

## 3 Long Covid BA12 - Population

Immunityboost.001-061   0.95   1.02   0.87   0.39   0.36   0.42   0.61   0.64   0.58   Immunityboost.062-122   0.42   0.50   0.35   0.66   0.61   0.71   0.34   0.39   0.29   Immunityboost.062-123-183   0.13   0.03   0.29   1.14   0.97   0.33   0.14   0.03   0.33   Immunityfull.001-061   0.53   0.69   0.37   0.59   0.50   0.69   0.41   0.50   0.31   Immunityfull.123-183   0.19   0.30   0.09   0.82   0.74   0.92   0.18   0.26   0.08   Immunityfull.123-183   0.19   0.30   0.09   0.82   0.74   0.92   0.18   0.26   0.08   Immunityfull.245-305   0.28   0.15   0.01   0.15   1.50   0.08   Immunityfull.306-366   0.45   0.20   0.70   1.57   1.22   0.10   0.57   0.022   1.01   Immunityfull.367-427   0.55   0.07   1.18   1.74   0.93   3.24   0.74   0.07   2.24   Immunityhybridboost.062-122   0.80   0.97   0.63   0.45   0.38   0.53   0.55   0.62   0.47   Immunityhybridboost.062-122   0.80   0.97   0.63   0.45   0.38   0.53   0.55   0.62   0.47   Immunityhybridfull.062-122   1.62   1.84   1.40   0.20   0.16   0.25   0.96   0.80   0.20   Immunityhybridfull.123-183   0.91   1.61   0.22   0.40   0.02   0.65   0.96   0.80   0.20   Immunityhybridfull.368-365   0.17   0.91   0.55   0.96   0.80   0.50   0.50   0.96   0.50   0.										
Immunityboost.001-061   0.95   1.02   0.87   0.39   0.36   0.42   0.61   0.64   0.58   Immunityboost.062-122   0.42   0.50   0.35   0.66   0.61   0.71   0.34   0.39   0.29   Immunityboost.062-123-183   0.13   0.03   0.29   1.14   0.97   0.33   0.14   0.03   0.33   Immunityfull.001-061   0.53   0.69   0.37   0.59   0.50   0.69   0.41   0.50   0.31   Immunityfull.123-183   0.19   0.30   0.09   0.82   0.74   0.92   0.18   0.26   0.08   Immunityfull.123-183   0.19   0.30   0.09   0.82   0.74   0.92   0.18   0.26   0.08   Immunityfull.245-305   0.28   0.15   0.01   0.15   1.50   0.08   Immunityfull.306-366   0.45   0.20   0.70   1.57   1.22   0.10   0.57   0.022   1.01   Immunityfull.367-427   0.55   0.07   1.18   1.74   0.93   3.24   0.74   0.07   2.24   Immunityhybridboost.062-122   0.80   0.97   0.63   0.45   0.38   0.53   0.55   0.62   0.47   Immunityhybridboost.062-122   0.80   0.97   0.63   0.45   0.38   0.53   0.55   0.62   0.47   Immunityhybridfull.062-122   1.62   1.84   1.40   0.20   0.16   0.25   0.96   0.80   0.20   Immunityhybridfull.123-183   0.91   1.61   0.22   0.40   0.02   0.65   0.96   0.80   0.20   Immunityhybridfull.368-365   0.17   0.91   0.55   0.96   0.80   0.50   0.50   0.96   0.50   0.		beta	lower	upper	HR	lower	upper	eff	upper	lower
Immunityboost.062-122	Immunity_other	-0.49	-0.72	-0.26	0.61	0.49	0.77	0.39	0.51	0.23
Immunityboost.123-183	Immunityboost_001-061	-0.95	-1.02	-0.87	0.39	0.36	0.42	0.61	0.64	0.58
Immunityfull.001-061   -0.53   -0.69   -0.37   0.59   0.50   0.69   0.41   0.50   0.31   Immunityfull.020-122   -0.38   -0.52   -0.24   0.69   0.60   0.79   0.31   0.40   0.21   Immunityfull.23-183   -0.19   -0.30   -0.09   0.82   0.74   0.92   0.18   0.26   0.08   Immunityfull.245-305   0.28   0.15   0.41   1.33   1.16   1.51   -0.33   -0.16   -0.51   Immunityfull.366-366   0.45   0.20   0.70   1.57   1.22   2.01   -0.57   -0.22   -1.01   Immunityfull.366-427   0.55   -0.07   1.18   1.74   0.93   3.24   -0.74   0.07   -2.24   Immunityhybridboost.001-061   -1.90   -2.07   -1.73   0.15   0.13   0.18   0.85   0.87   0.82   Immunityhybridboost.001-061   -1.90   -2.07   -1.73   0.15   0.13   0.18   0.85   0.67   0.82   Immunityhybridboost.2123-183   -0.91   -1.61   -0.22   0.40   0.20   0.80   0.60   0.80   0.20   Immunityhybridfull.001-061   -3.32   -3.33   -2.91   0.04   0.02   0.05   0.96   0.98   0.95   Immunityhybridfull.23-183   -0.72   -0.91   -0.52   0.49   0.40   0.02   0.55   0.80   0.80   0.80   0.50   Immunityhybridfull.123-183   -0.72   -0.91   -0.52   0.49   0.40   0.25   0.50   0.51   0.60   0.41   Immunityhybridfull.364-366   0.27   -0.27   0.82   1.31   0.76   2.26   0.31   0.24   -1.26   Immunityhybridfull.366-366   0.27   -0.27   0.82   1.31   0.76   2.26   0.31   0.24   -1.26   Immunityinf.366-122   0.83   -1.00   -0.66   0.43   0.37   0.52   0.57   0.63   0.48   Immunityinf.366-366   0.27   -0.46   -0.08   0.76   0.63   0.93   0.24   0.37   0.07   0.91   I.11   0.50   -1.47   Immunityinf.367-427   -0.12   -0.31   0.08   0.89   0.73   0.08   0.14   0.00   0.04   0.00   0.04   0.00   0.04   0.00   0.04   0.00	Immunityboost_062-122	-0.42	-0.50	-0.35	0.66	0.61	0.71	0.34	0.39	0.29
Immunityfull.062-122   0-38   0-52   0-24   0.69   0.60   0.79   0.31   0.40   0.21	Immunityboost_123-183	0.13	-0.03	0.29	1.14	0.97	1.33	-0.14	0.03	-0.33
Immunityfull.123-183	Immunityfull_001-061	-0.53	-0.69	-0.37	0.59	0.50	0.69	0.41	0.50	0.31
Immunityfull.184-244   -0.08   -0.16   -0.00   0.92   0.85   1.00   0.08   0.15   0.00   Immunityfull.245-305   0.28   0.15   0.41   1.33   1.16   1.51   -0.33   -0.16   -0.51   Immunityfull.366-366   0.45   0.20   0.70   1.18   1.74   0.93   3.24   -0.74   0.07   -2.24   Immunityfull.367-427   0.55   -0.07   1.18   1.74   0.93   3.24   -0.74   0.07   -2.24   Immunityhybridboost.001-061   -1.90   -2.07   -1.73   0.15   0.13   0.18   0.85   0.87   0.82   Immunityhybridboost.123-183   -0.91   -1.61   -0.22   0.40   0.20   0.80   0.60   0.80   0.20   Immunityhybridfull.010-061   -3.32   -3.73   -2.91   0.04   0.02   0.05   0.96   0.98   0.95   Immunityhybridfull.123-183   -0.72   -0.91   -0.52   0.49   0.40   0.25   0.80   0.60   0.84   0.75   Immunityhybridfull.184-244   -0.33   -0.50   -0.17   0.72   0.61   0.84   0.28   0.39   0.16   Immunityhybridfull.366-366   0.27   -0.27   0.82   1.31   0.76   2.26   -0.31   0.35   -0.22   Immunityhybridfull.662-122   -0.83   -1.00   -0.66   0.43   0.37   0.52   0.57   0.63   0.48   Immunityinf.123-183   -0.67   -1.05   -0.29   0.51   0.35   0.75   0.49   0.65   0.25   Immunityinf.164-244   0.10   -0.70   0.91   1.11   0.50   2.47   -0.11   0.50   -1.47   Immunityinf.367-427   -0.12   -0.31   0.08   0.89   0.73   1.08   0.11   0.50   -1.47   Immunityinf.367-427   -0.12   -0.31   0.08   0.89   0.73   1.08   0.11   0.27   -0.08   Immunityinf.489-549   -0.06   -0.40   0.27   0.94   0.67   1.32   0.13   0.06   0.34   0.34   0.34   AgeGr16-17   -2.36   -2.87   -1.95   0.10   0.07   0.14   0.90   0.93   0.86   0.96	$Immunityfull\_062-122$	-0.38	-0.52	-0.24	0.69	0.60	0.79	0.31	0.40	0.21
Immunityfull_245-305   0.28   0.15   0.41   1.33   1.16   1.51   0.33   0.16   0.51	Immunityfull_123-183	-0.19	-0.30	-0.09	0.82	0.74	0.92	0.18	0.26	0.08
Immunityfull.306-366	Immunityfull_184-244	-0.08	-0.16	-0.00	0.92	0.85	1.00	0.08	0.15	0.00
Immunityfull.367-427   0.55   0.07   1.18   1.74   0.93   3.24   0.74   0.07   0.224   Immunityfulpridboost.001-061   -1.90   -2.07   -1.73   0.15   0.13   0.18   0.85   0.87   0.82   Immunityfulpridboost.062-122   0.80   0.97   -0.63   0.45   0.38   0.53   0.55   0.62   0.47   Immunityfulpridboost.123-183   -0.91   -1.61   -0.22   0.40   0.20   0.05   0.06   0.80   0.20   Immunityfulpridfull.001-061   -3.32   -3.73   -2.91   0.04   0.02   0.05   0.96   0.98   0.95   Immunityfulpridfull.123-183   -0.72   -0.91   -0.52   0.49   0.40   0.59   0.51   0.60   0.41   Immunityfulpridfull.134-244   -0.33   -0.55   -0.17   0.72   0.61   0.84   0.28   0.39   0.16   Immunityfulpridfull.36-366   0.27   -0.27   0.82   1.31   0.76   2.26   -0.31   0.24   -1.26   Immunityfulpridfull.36-366   0.27   -0.27   0.82   1.31   0.76   2.26   -0.31   0.24   -1.26   Immunityfulpridfull.38-244   0.10   -0.70   0.91   1.11   0.50   2.47   -0.11   0.50   0.48   Immunityfulpridfull.36-366   0.27   -0.45   0.28   0.87   0.57   0.49   0.65   0.25   Immunityfulpridfull.36-366   0.27   -0.46   0.28   0.87   0.57   0.49   0.65   0.25   Immunityfulpridfull.36-366   0.27   -0.46   0.28   0.87   0.57   0.49   0.65   0.25   Immunityfulpridfull.36-366   0.27   -0.46   0.28   0.87   0.57   0.49   0.65   0.25   Immunityfulpridfull.36-366   0.67   -0.56   0.28   0.87   0.57   0.49   0.65   0.25   Immunityfulpridfull.36-366   0.24   0.40   0.89   0.75   0.57   0.63   0.48   Immunityfulf.36-305   0.14   0.56   0.28   0.87   0.57   0.32   0.13   0.43   0.32   Immunityfulf.36-366   0.27   0.46   0.08   0.76   0.58   0.50   0.34   0.35   0.75   0.49   0.65   0.25   0.35	Immunityfull_245-305	0.28	0.15	0.41	1.33	1.16	1.51	-0.33	-0.16	-0.51
Immunityhybridboost_001-061   -1.90   -2.07   -1.73   0.15   0.13   0.18   0.85   0.87   0.82   Immunityhybridboost_062-122   -0.80   -0.97   -0.63   0.45   0.38   0.53   0.55   0.62   0.47   Immunityhybridboost_1023-183   -0.91   -1.61   -0.22   0.40   0.20   0.80   0.60   0.80   0.20   Immunityhybridfull_001-061   -3.32   -3.73   -2.91   0.04   0.02   0.05   0.96   0.98   0.95   Immunityhybridfull_062-122   -1.62   -1.84   -1.40   0.20   0.16   0.25   0.80   0.84   0.75   Immunityhybridfull_123-183   -0.72   -0.91   -0.52   0.49   0.40   0.59   0.51   0.60   0.41   Immunityhybridfull_244-24   -0.33   -0.55   -0.17   0.72   0.61   0.84   0.28   0.39   0.16   Immunityhybridfull_245-305   -0.11   -0.43   0.20   0.89   0.65   1.22   0.11   0.35   -0.22   Immunityinf_062-122   -0.83   -1.00   -0.66   0.43   0.37   0.52   0.57   0.63   0.48   Immunityinf_184-244   0.10   -0.70   0.91   1.11   0.50   2.47   -0.11   0.50   -1.47   Immunityinf_184-244   0.10   -0.70   0.91   1.11   0.50   2.47   -0.11   0.50   -1.47   Immunityinf_366-366   -0.27   -0.46   -0.08   0.89   0.73   1.32   0.13   0.43   -0.32   Immunityinf_367-427   -0.12   -0.31   0.08   0.89   0.73   1.08   0.11   0.27   -0.08   Immunityinf_489-549   -0.06   -0.40   0.27   0.94   0.67   1.32   0.06   0.33   -0.32   AgeGro1-11   -3.47   -3.76   -3.18   0.09   0.06   0.16   0.91   0.94   0.84   AgeGra2-19   -0.45   -0.58   -0.28   0.37   0.32   0.44   0.63   0.68   0.56   AgeGra3-34   -0.24   -0.35   -0.25   0.10   0.07   0.14   0.90   0.93   0.86   0.56   AgeGra3-34   -0.24   -0.35   -0.12   0.79   0.70   0.89   0.10   0.91   0.94   0.84   AgeGra3-34   -0.24   -0.35   -0.12   0.79   0.70   0.89   0.12   0.22   0.02   0.94   0.96   0.94	Immunityfull_306-366	0.45	0.20	0.70	1.57	1.22	2.01	-0.57	-0.22	-1.01
Immunityhybridboost_062-122   0.80   0.97   0.63   0.45   0.38   0.53   0.55   0.62   0.47   Immunityhybridboost_123-183   0.91   -1.61   0.02   0.40   0.20   0.80   0.60   0.80   0.20   Immunityhybridfull_001-061   3.32   -3.73   -2.91   0.04   0.02   0.05   0.96   0.98   0.95   Immunityhybridfull_062-122   -1.62   -1.84   -1.40   0.20   0.16   0.25   0.80   0.84   0.75   Immunityhybridfull_123-183   0.72   -0.91   -0.52   0.49   0.40   0.59   0.51   0.60   0.41   Immunityhybridfull_184-244   0.33   -0.50   -0.17   0.72   0.61   0.84   0.28   0.39   0.16   Immunityhybridfull_306-366   0.27   -0.27   0.82   1.31   0.76   2.26   -0.31   0.24   -1.26   Immunityinf_062-122   0.83   -1.00   -0.66   0.43   0.37   0.52   0.57   0.63   0.48   Immunityinf_062-122   0.83   -1.00   -0.66   0.43   0.37   0.52   0.57   0.63   0.48   Immunityinf_123-183   0.67   -1.05   -0.29   0.51   0.35   0.75   0.49   0.65   0.25   Immunityinf_306-366   0.27   -0.46   -0.08   0.67   0.35   0.75   0.49   0.65   0.25   Immunityinf_306-366   -0.27   -0.46   -0.08   0.67   0.63   0.33   0.24   0.37   0.07   Immunityinf_306-366   -0.27   -0.46   -0.08   0.67   0.63   0.93   0.24   0.37   0.07   Immunityinf_367-427   -0.12   -0.31   0.08   0.89   0.73   1.08   0.11   0.27   -0.08   Immunityinf_489-488   0.14   -0.06   0.34   1.15   0.94   1.40   -0.15   0.06   0.40   Immunityinf_489-549   -0.06   -0.40   0.27   0.94   0.67   1.32   0.06   0.33   -0.32   0.34   AgeGr12-15   -2.27   -2.59   -1.95   0.10   0.07   0.14   0.90   0.93   0.86   AgeGr32-39   -0.45   -0.58   -0.32   0.64   0.56   0.72   0.36   0.48   0.56   AgeGr35-39   -0.45   -0.58   -0.32   0.64   0.56   0.72   0.36   0.44   0.28   AgeGr36-69   0.44   -0.28   0.32   0.44   0.56   0.63   0.94   0.91   0.94   0.40   0.27   0.36   0.44   0.28   0.36   0.56   0.44   0.28   0.36   0.56   0.44   0.28   0.36   0.56   0.44   0.28   0.36   0.56	Immunityfull_367-427	0.55	-0.07	1.18	1.74	0.93	3.24	-0.74	0.07	-2.24
Immunityhybridboost_123-183   0-91   -1.61   -0.22   0.40   0.20   0.80   0.60   0.80   0.20   Immunityhybridfull_001-061   -3.32   -3.73   -2.91   0.04   0.02   0.05   0.96   0.98   0.95   Immunityhybridfull_062-122   -1.62   -1.84   -1.40   0.20   0.16   0.25   0.80   0.84   0.75   Immunityhybridfull_123-183   -0.72   -0.91   -0.52   0.49   0.40   0.59   0.51   0.60   0.41   Immunityhybridfull_184-244   -0.33   -0.50   -0.17   0.72   0.61   0.84   0.28   0.39   0.16   Immunityhybridfull_245-305   -0.11   -0.43   0.20   0.89   0.65   1.22   0.11   0.35   -0.22   Immunityhybridfull_306-366   0.27   -0.27   0.82   1.31   0.76   2.26   -0.31   0.24   -1.26   Immunityinf_1062-122   -0.83   -1.00   -0.66   0.43   0.37   0.52   0.57   0.63   0.48   Immunityinf_184-244   0.10   -0.70   0.91   1.11   0.50   2.47   -0.11   0.50   -1.47   Immunityinf_184-244   0.10   -0.70   0.91   1.11   0.50   2.47   -0.11   0.50   -1.47   Immunityinf_367-427   -0.12   -0.31   0.08   0.89   0.73   1.08   0.11   0.27   -0.08   Immunityinf_428-488   0.14   -0.66   0.34   1.15   0.94   1.40   -0.15   0.06   -0.40   Immunityinf_489-549   -0.06   -0.40   0.27   0.94   0.67   1.32   0.06   0.33   -0.32   AgeGr12-15   -2.27   -2.59   -1.95   0.10   0.07   0.14   0.90   0.93   0.86   AgeGr12-15   -2.27   -2.59   -1.95   0.10   0.07   0.14   0.90   0.93   0.86   AgeGr36-39   -0.13   -0.24   -0.83   0.37   0.32   0.44   0.63   0.68   0.56   AgeGr35-39   -0.13   -0.24   -0.35   -0.12   0.79   0.70   0.89   0.21   0.30   0.11   AgeGr35-39   -0.45   -0.58   -0.32   0.64   0.56   0.72   0.36   0.44   0.28   AgeGr36-69   0.09   0.24   0.33   0.53   1.53   1.39   1.69   -0.53   -0.39   -0.69   AgeGr6-69   0.09   0.24   0.02   0.02   0.04   0.15   0.05   0.05   0.04   0.06   0.07   0.06   0.06   0.07   0.06   0.06   0.07   0.06   0.06   0.07   0.06   0.07   0.06   0.07   0.06   0.07   0.06   0.07   0.06   0.07   0.06   0.07   0.06   0.07   0.06   0.07   0.06   0.07   0.06   0.07   0.06   0.07   0.06   0.07   0.06   0.07   0.06   0.07   0.07   0.06	Immunityhybridboost_001-061	-1.90	-2.07	-1.73	0.15	0.13	0.18	0.85	0.87	0.82
Immunityhybridfull_001-061	Immunityhybridboost_062-122	-0.80	-0.97	-0.63	0.45	0.38	0.53	0.55	0.62	0.47
Immunityhybridfull_1062-122	Immunityhybridboost_123-183	-0.91	-1.61	-0.22	0.40	0.20	0.80	0.60	0.80	0.20
Immunityhybridfull_123-183	Immunityhybridfull_001-061	-3.32	-3.73	-2.91	0.04	0.02	0.05	0.96	0.98	0.95
Immunityhybridfull_184-244	Immunityhybridfull_062-122	-1.62	-1.84	-1.40	0.20	0.16	0.25	0.80	0.84	0.75
Immunityhybridfull_245-305	Immunityhybridfull_123-183	-0.72	-0.91	-0.52	0.49	0.40	0.59	0.51	0.60	0.41
Immunityhybridfull.306-366	Immunityhybridfull_184-244	-0.33	-0.50	-0.17	0.72	0.61	0.84	0.28	0.39	0.16
Immunityinf_062-122	Immunityhybridfull_245-305	-0.11	-0.43	0.20	0.89	0.65	1.22	0.11	0.35	-0.22
Immunityinf_123-183	Immunityhybridfull_306-366	0.27	-0.27	0.82	1.31	0.76	2.26	-0.31	0.24	-1.26
Immunityinf_184-244	Immunityinf_062-122	-0.83	-1.00	-0.66	0.43	0.37	0.52	0.57	0.63	0.48
Immunityinf_184-244	Immunityinf_123-183	-0.67	-1.05	-0.29	0.51	0.35	0.75	0.49	0.65	0.25
Immunityinf.306-366         -0.27         -0.46         -0.08         0.76         0.63         0.93         0.24         0.37         0.07           Immunityinf.367-427         -0.12         -0.31         0.08         0.89         0.73         1.08         0.11         0.27         -0.08           Immunityinf.428-488         0.14         -0.06         0.34         1.15         0.94         1.40         -0.15         0.06         -0.40           Immunityinf.489-549         -0.06         -0.40         0.27         0.94         0.67         1.32         0.06         0.33         -0.32           AgeGr0-11         -3.47         -3.76         -3.18         0.03         0.02         0.04         0.97         0.98         0.96           AgeGr12-15         -2.27         -2.59         -1.95         0.10         0.07         0.14         0.90         0.93         0.86           AgeGr18-24         -0.98         -1.14         -0.83         0.37         0.32         0.44         0.63         0.68         0.56           AgeGr35-39         -0.45         -0.58         -0.32         0.64         0.56         0.72         0.36         0.44         0.28           AgeG		0.10	-0.70	0.91	1.11	0.50	2.47	-0.11	0.50	-1.47
Immunityinf_367-427         -0.12         -0.31         0.08         0.89         0.73         1.08         0.11         0.27         -0.08           Immunityinf_428-488         0.14         -0.06         0.34         1.15         0.94         1.40         -0.15         0.06         -0.40           Immunityinf_489-549         -0.06         -0.40         0.27         0.94         0.67         1.32         0.06         0.33         -0.32           AgeGr0-11         -3.47         -3.76         -3.18         0.03         0.02         0.04         0.97         0.98         0.96           AgeGr12-15         -2.27         -2.59         -1.95         0.10         0.07         0.14         0.90         0.93         0.86           AgeGr16-17         -2.36         -2.87         -1.84         0.09         0.06         0.16         0.91         0.94         0.84           AgeGr18-24         -0.98         -1.14         -0.83         0.37         0.32         0.44         0.63         0.68         0.56           AgeGr30-34         -0.24         -0.35         -0.12         0.79         0.70         0.89         0.21         0.30         0.11           AgeGr35-39 <td>Immunityinf_245-305</td> <td>-0.14</td> <td>-0.56</td> <td>0.28</td> <td>0.87</td> <td>0.57</td> <td>1.32</td> <td>0.13</td> <td>0.43</td> <td>-0.32</td>	Immunityinf_245-305	-0.14	-0.56	0.28	0.87	0.57	1.32	0.13	0.43	-0.32
Immunityinf.428-488         0.14         -0.06         0.34         1.15         0.94         1.40         -0.15         0.06         -0.40           Immunityinf.489-549         -0.06         -0.40         0.27         0.94         0.67         1.32         0.06         0.33         -0.32           AgeGr0-11         -3.47         -3.76         -3.18         0.03         0.02         0.04         0.97         0.98         0.96           AgeGr12-15         -2.27         -2.59         -1.95         0.10         0.07         0.14         0.90         0.93         0.86           AgeGr16-17         -2.36         -2.87         -1.84         0.09         0.06         0.16         0.91         0.94         0.84           AgeGr18-24         -0.98         -1.14         -0.83         0.37         0.32         0.44         0.63         0.68         0.56           AgeGr30-34         -0.24         -0.58         -0.32         0.64         0.56         0.72         0.36         0.44         0.28           AgeGr35-39         -0.13         -0.24         -0.02         0.88         0.78         0.98         0.12         0.22         0.02           AgeGr50-54	Immunityinf_306-366	-0.27	-0.46	-0.08	0.76	0.63	0.93	0.24	0.37	0.07
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Immunityinf_367-427	-0.12	-0.31	0.08	0.89	0.73	1.08	0.11	0.27	-0.08
AgeGr0-11       -3.47       -3.76       -3.18       0.03       0.02       0.04       0.97       0.98       0.96         AgeGr12-15       -2.27       -2.59       -1.95       0.10       0.07       0.14       0.90       0.93       0.86         AgeGr16-17       -2.36       -2.87       -1.84       0.09       0.06       0.16       0.91       0.94       0.84         AgeGr18-24       -0.98       -1.14       -0.83       0.37       0.32       0.44       0.63       0.68       0.56         AgeGr25-29       -0.45       -0.58       -0.32       0.64       0.56       0.72       0.36       0.44       0.28         AgeGr30-34       -0.24       -0.35       -0.12       0.79       0.70       0.89       0.21       0.30       0.11         AgeGr35-39       -0.13       -0.24       -0.02       0.88       0.78       0.98       0.12       0.22       0.02         AgeGr45-49       0.34       0.24       0.43       1.40       1.27       1.54       -0.40       -0.27       -0.54         AgeGr50-54       0.43       0.33       0.53       1.53       1.39       1.69       -0.53       -0.39       -0.6	Immunityinf_428-488	0.14	-0.06	0.34	1.15	0.94	1.40	-0.15	0.06	-0.40
AgeGr0-11       -3.47       -3.76       -3.18       0.03       0.02       0.04       0.97       0.98       0.96         AgeGr12-15       -2.27       -2.59       -1.95       0.10       0.07       0.14       0.90       0.93       0.86         AgeGr16-17       -2.36       -2.87       -1.84       0.09       0.06       0.16       0.91       0.94       0.84         AgeGr18-24       -0.98       -1.14       -0.83       0.37       0.32       0.44       0.63       0.68       0.56         AgeGr25-29       -0.45       -0.58       -0.32       0.64       0.56       0.72       0.36       0.44       0.28         AgeGr30-34       -0.24       -0.35       -0.12       0.79       0.70       0.89       0.21       0.30       0.11         AgeGr35-39       -0.13       -0.24       -0.02       0.88       0.78       0.98       0.12       0.22       0.02         AgeGr45-49       0.34       0.24       0.43       1.40       1.27       1.54       -0.40       -0.27       -0.54         AgeGr50-54       0.43       0.33       0.53       1.53       1.39       1.69       -0.53       -0.39       -0.6	Immunityinf_489-549	-0.06	-0.40	0.27	0.94	0.67	1.32	0.06	0.33	-0.32
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-3.47	-3.76	-3.18	0.03	0.02	0.04	0.97	0.98	0.96
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	_		-2.59	-1.95	0.10	0.07	0.14	0.90	0.93	0.86
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	AgeGr16-17	-2.36	-2.87	-1.84	0.09	0.06	0.16	0.91	0.94	0.84
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	AgeGr18-24	-0.98	-1.14	-0.83	0.37	0.32	0.44	0.63	0.68	0.56
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	AgeGr25-29	-0.45	-0.58	-0.32	0.64	0.56	0.72	0.36	0.44	0.28
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	AgeGr30-34	-0.24	-0.35	-0.12	0.79	0.70	0.89	0.21	0.30	0.11
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	_	-0.13	-0.24	-0.02	0.88	0.78	0.98	0.12	0.22	0.02
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		0.34	0.24	0.43	1.40			-0.40	-0.27	-0.54
AgeGr55-59       0.48       0.38       0.58       1.61       1.46       1.78       -0.61       -0.46       -0.78         AgeGr60-64       0.16       0.05       0.27       1.17       1.05       1.31       -0.17       -0.05       -0.31         AgeGr65-69       -0.09       -0.20       0.02       0.91       0.82       1.02       0.09       0.18       -0.02         AgeGr70-74       -0.11       -0.23       0.00       0.89       0.80       1.00       0.11       0.20       -0.00         AgeGr75-79       -0.06       -0.19       0.06       0.94       0.83       1.06       0.06       0.17       -0.06         AgeGr80+       -0.04       -0.16       0.07       0.96       0.85       1.08       0.04       0.15       -0.08	AgeGr50-54		0.33	0.53	1.53	1.39	1.69	-0.53	-0.39	-0.69
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	9									
$\begin{array}{cccccccccccccccccccccccccccccccccccc$										
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	9									
AgeGr75-79       -0.06       -0.19       0.06       0.94       0.83       1.06       0.06       0.17       -0.06         AgeGr80+       -0.04       -0.16       0.07       0.96       0.85       1.08       0.04       0.15       -0.08										
AgeGr80+ -0.04 -0.16 0.07 0.96 0.85 1.08 0.04 0.15 -0.08										
· ·	9									
	SexM	-0.42	-0.47	-0.38	0.65	0.63	0.68	0.35	0.37	0.32

Table 9: Cox model summary



	immunities	deltas	lower_of_deltas	upper_of_deltas
2	Immunityfull	0.08	0.06	0.09
3	Immunityboost	0.14	0.12	0.16
4	Immunitysecboost			
5	Immunitysecbnew			
6	Immunityinf	0.06	0.04	0.07
7	Immunityhybridfull	0.12	0.11	0.14
8	Immunityhybridboost	0.14	0.10	0.17

Table 10: Monthly percentage decrease of effectiveness/protection

	1	2	3	4	5	6	7
1		7.45%			30.24%	42.17%	36.02%
2	-7.45%				25.25%	37.17%	23.63%
3							
4							
5	-30.24%	-25.25%				19.50%	-0.47%
6	-42.17%	-37.17%			-19.50%		-12.52%
7	-36.02%	-23.63%			0.47%	12.52%	

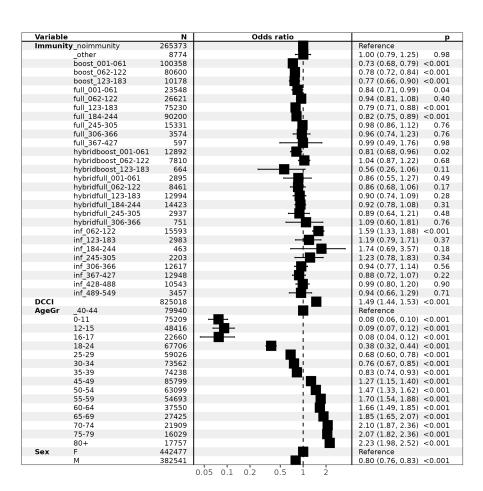
Table 11: Effectiveness/protection differences

1	2	3	4	5	6	7
	2.19			6.19	14.61	9.51
-2.19				6.19	24.12	13.97
-6.19	-6.19				5.01	-0.09
-14.61	-24.12			-5.01		-8.88
-9.51	-13.97			0.09	8.88	

Table 12: Z-scores of effectiveness/protection differences

## 4 Long Covid BA12 - Infected

Characteristic	N = 825,018 <sup>1</sup>					
LongCovid	7,910 (1.0%)					
Immunity						
_noimmunity	265,373 (32%)					
_other	8,774 (1.1%)					
boost_001-061	100,358 (12%)					
boost_062-122	80,600 (9.8%)					
boost_123-183	10,178 (1.2%)					
full_001-061	23,548 (2.9%)					
full_062-122	26,621 (3.2%)					
full_123-183	75,230 (9.1%)					
full_184-244	90,200 (11%)					
full_245-305	15,331 (1.9%)					
full_306-366	3,574 (0.4%)					
full_367-427	597 (<0.1%)					
hybridboost_001-061	12,892 (1.6%)					
hybridboost_062-122	7,810 (0.9%)					
hybridboost_123-183	664 (<0.1%)					
hybridfull_001-061	2,895 (0.4%)					
hybridfull_062-122	8,461 (1.0%)					
hybridfull_123-183	12,994 (1.6%)					
hybridfull_184-244	14,423 (1.7%)					
hybridfull_245-305	2,937 (0.4%)					
hybridfull_306-366	751 (<0.1%)					
inf_062-122	15,593 (1.9%)					
inf_123-183	2,983 (0.4%)					
inf_184-244	463 (<0.1%)					
inf_245-305	2,203 (0.3%)					
inf_306-366	12,617 (1.5%)					
inf_367-427	12,948 (1.6%)					
inf_428-488	10,543 (1.3%)					
inf_489-549	3,457 (0.4%)					
Sex						
F	442,477 (54%)					
М	382,541 (46%)					
<sup>1</sup> n (%)						



	Estimate	Std. Error	z value	$\Pr(> z )$
(Intercept)	-4.7046	0.0443	-106.13	0.0000
Immunity_other	0.0034	0.1173	0.03	0.9767
Immunityboost_001-061	-0.3123	0.0390	-8.01	0.0000
Immunityboost_062-122	-0.2496	0.0380	-6.57	0.0000
Immunityboost_123-183	-0.2598	0.0785	-3.31	0.0009
Immunityfull_001-061	-0.1704	0.0840	-2.03	0.0426
Immunityfull_062-122	-0.0607	0.0721	-0.84	0.3998
Immunityfull_123-183	-0.2309	0.0547	-4.22	0.0000
$Immunityfull\_184-244$	-0.2019	0.0413	-4.89	0.0000
$Immunityfull\_245-305$	-0.0207	0.0676	-0.31	0.7593
$Immunityfull\_306-366$	-0.0394	0.1293	-0.30	0.7606
$Immunityfull\_367-427$	-0.0069	0.3210	-0.02	0.9827
Immunityhybridboost_001-061	-0.2052	0.0874	-2.35	0.0190
Immunityhybridboost_062-122	0.0353	0.0867	0.41	0.6838
Immunityhybridboost_123-183	-0.5753	0.3574	-1.61	0.1075
Immunityhybridfull_001-061	-0.1461	0.2111	-0.69	0.4890
Immunityhybridfull_062-122	-0.1542	0.1130	-1.37	0.1722
Immunityhybridfull_123-183	-0.1055	0.0983	-1.07	0.2834
Immunityhybridfull_184-244	-0.0832	0.0826	-1.01	0.3138
Immunityhybridfull_245-305	-0.1133	0.1613	-0.70	0.4825
Immunityhybridfull_306-366	0.0858	0.2817	0.30	0.7606
Immunityinf_062-122 Immunityinf_123-183	$0.4620 \\ 0.1767$	0.0877 $0.1955$	$5.27 \\ 0.90$	$0.0000 \\ 0.3661$
Immunityinf_184-244	0.1707 $0.5534$	0.1933 $0.4138$	1.34	0.3001 $0.1812$
Immunityinf_245-305	0.3034 $0.2077$	0.4156 $0.2164$	0.96	0.1312 $0.3371$
Immunityinf_306-366	-0.0587	0.0996	-0.59	0.5571
Immunityinf_367-427	-0.1227	0.0992	-1.24	0.2159
Immunityinf_428-488	-0.0131	0.1020	-0.13	0.8974
Immunityinf_489-549	-0.0643	0.1720	-0.37	0.7086
DCCI	0.3969	0.0149	26.61	0.0000
AgeGr0-11	-2.5640	0.1460	-17.56	0.0000
AgeGr12-15	-2.3934	0.1631	-14.67	0.0000
AgeGr16-17	-2.5572	0.2612	-9.79	0.0000
AgeGr18-24	-0.9688	0.0787	-12.30	0.0000
AgeGr25-29	-0.3802	0.0660	-5.76	0.0000
AgeGr30-34	-0.2775	0.0594	-4.67	0.0000
AgeGr35-39	-0.1894	0.0573	-3.31	0.0009
AgeGr45-49	0.2379	0.0493	4.83	0.0000
AgeGr50-54	0.3837	0.0508	7.56	0.0000
AgeGr55-59	0.5304	0.0506	10.49	0.0000
AgeGr60-64	0.5062	0.0556	9.10	0.0000
AgeGr65-69	0.6142	0.0587	10.46	0.0000
AgeGr70-74	0.7422	0.0603	12.31	0.0000
AgeGr75-79	0.7292	0.0658	11.08	0.0000
AgeGr80+	0.8039	0.0619	12.98	0.0000
SexM	-0.2282	0.0234	-9.77	0.0000

Table 13: Logistic regression summary

	immunities	deltas	$lower\_of\_deltas$	$upper\_of\_deltas$
2	Immunityfull	0.01	-0.00	0.03
3	Immunityboost	0.03	0.00	0.05
4	Immunitysecboost			
5	Immunitysecbnew			
6	Immunityinf	-0.05	-0.07	-0.03
7	Immunityhybridfull	0.01	-0.03	0.05
8	Immunityhybridboost	0.02	-0.06	0.10

Table 14: Monthly percentage decrease of effectiveness/protection

	1	2	3	4	5	6	7
1		9.98%			-30.27%	-4.78%	0.21%
2	-9.98%				-71.26%	-10.57%	-12.73%
3							
4							
5	30.27%	71.26%				46.66%	56.83%
6	4.78%	10.57%			-46.66%		-2.29%
7	-0.21%	12.73%			-56.83%	2.29%	

 ${\bf Table~15:~Effectiveness/protection~differences}$ 

1	2	3	4	5	6	7
	2.39			-3.44	-0.99	0.03
-2.39				-5.92	-1.58	-2.34
3.44	5.92				4.05	3.98
0					1.00	0.00
0.99	1.58			-4.05		-0.24
-0.03	2.34			-3.98	0.24	

Table 16: Z-scores of effectiveness/protection differences