Population homogeneity for the antibody response to COVID-19 BNT162b2 / Comirnaty vaccine is only reached after the second dose across all adult age ranges.

Inventory of supporting information

Pdf file containing:

- Supplemental References Reference list for R, R studio, and main package ggplot2 used for data management, graphical design, and statistical analysis (described in Methods section)
- **Supplemental Table 1** Median and [IQR] for all semi-quantitative data on Ig levels presented in Figures 2-5
- Supplemental Table 2- Anti-Spike IgG Positivity in HCW and NHR as in Figure 2 and stratified by age and sex as in Figure 4
- Supplemental Table 3- Median and [IQR] for ECLIA and ELISA data, and corresponding anti-spike IgG positivity at each time point, for HCW participants who contributed samples only at 1 or 2 of the 3 collection times (t0 only, t0 and t1, or t0 and t2)
- Supplementary Figure 1- Effect of delayed administration of 2nd vaccine dose in the NHR cohort
- **Supplementary Figure 2** Infections after the 1st dose.

Supplementary References

Software for data management, graphical design, and statistical analysis

- R, version 4.0.4; GUI 1.74 (R Core Team (2021). R: A language and environment for statisticalcomputing. R Foundation for Statistical Computing, Vienna, Austria. URL https://www.R-project.org/.)
- RStudio, version 1.1.463; (RStudio Team (2020). RStudio: Integrated Development for R. RStudio, PBC, Boston, MA URL http://www.rstudio.com/.)
- R package ggplot2, (version 3.3.5); H. Wickham. ggplot2: Elegant Graphics for Data Analysis. Springer-Verlag New York, 2016. https://ggplot2.tidyverse.org

Supplemental Table 1. Median and [IQR] for all semi-quantitative data presented in **Figures 2-5**.

HCW Anti-RBD Ig 19-69 948 0.39 0.39 0.39 63 23-138 2207 1238-2500 19-29 171 0.39 0.39 0.39 112 47-208 2500 1887-2500 40-49 204 0.39 0.39-0.39 31 17-127 1971 1171-2500 50-59 216 0.39 0.39-0.39 31 17-127 1971 1171-2500 19-29 170 0.39 0.39-0.39 34 14-102 19-127 1971 1171-2500 19-29 170 0.39 0.39-0.39 28 12-85 1599 1997-2500 1908 19		A (137				.1	
HCW Anti-RBD Ig		Anti-N	Age	n	t0	t1	t2
HCW		neg - -					
Anti-RBD Ig							
Anni-RBDIg							
Pos							
Pos							
HCW Anti-S IgG							
HCW		pos					
F 751 0.17 0.15-0.23							
HCW							
HCW							
HCW Anti-S 1gG F 140 0.18 0.16-0.22 1.55 1.41-1.62 1.86 1.76-1.94 1.87 1.72-1.92 1.48 1.34-1.58 1.83 1.72-1.92 1.48 1.34-1.58 1.83 1.72-1.92 1.49 1.29-1.57 1.48 1.21-1.27 1.49 1.29-1.57 1.48 1.21-1.27 1.49 1.29-1.57 1.48 1.21-1.27 1.49 1.29-1.57 1.48 1.21-1.27 1.49 1.29-1.57 1.48 1.21-1.29 1.40 1.29-1.57 1.48 1.21-1.29 1.40 1.29-1.57 1.48 1.21-1.29 1.40 1.29-1.57 1.48 1.69-1.87 1.40 1.17-1.56 1.83 1.73-1.90 1.40 1.11-1.156 1.83 1.73-1.90 1.40 1.11-1.156 1.83 1.73-1.90 1.40 1.11-1.156 1.83 1.73-1.90 1.4							
HCW Anti-S IgG neg 30.39 (4) (2) (3) (1) (1) (1) (1) (2) (2) (1) (1) (1) (1) (1) (1) (1) (1) (1) (1							
HCW							
Anti-S IgG							
Anti-S IgG Anti-S IgA Anti-S	HCW						=
Mathematical Region	Anti-S IgG	neg					
F							
Solution							
M							
F 171 0.17 0.15 0.23 1.37 1.17 1.49 1.83 1.70 1.89 1.40							
HCW No							
M							
F 77 0.17 [0.15-0.24] 1.36 [1.21-1.56] 1.79 [1.70-1.89] pos 24-66 23 0.94 [0.61-1.41] 1.85 [1.72-1.95] 1.91 [1.80-2.02] 70-99 118 0.20 [0.16-0.26] 0.50 [0.35-1.06] 1.83 [1.68-1.96] M 31 0.21 [0.16-0.26] 0.48 [0.36-1.16] 1.80 [1.62-1.84] F 87 0.20 [0.16-0.27] 0.52 [0.34-0.91] 1.85 [1.71-1.98] NHR 70-85 51 0.20 [0.16-0.27] 0.53 [0.42-1.21] 1.83 [1.69-1.91] Anti-S IgG n/a M 18 0.23 [0.17-0.26] 0.51 [0.46-1.26] 1.81 [1.64-1.88] F 33 0.19 [0.16-0.28] 0.53 [0.41-1.18] 1.83 [1.69-1.94] R6-99 66 0.20 [0.16-0.26] 0.46 [0.30-0.85] 1.84 [1.69-1.94] M 13 0.20 [0.16-0.25] 0.36 [0.26-0.95] 1.78 [1.63-1.81] F 53 0.21 [0.16-0.26] 0.48 [0.31-0.79] 1.87 [1.72-1.98] HCW Anti-S IgM neg 19-69 949 0.62 [0.47-0.83] 0.92 [0.70-1.20] 0.95 [0.71-1.28] Anti-S IgM neg 19-69 949 0.62 [0.47-0.83] 0.99 [0.90-1.27] 0.98 [0.75-1.31] Anti-S IgM neg 24-66 23 0.48 [0.30-0.74] 0.86 [0.66-1.12] 0.90 [0.65-1.20] F 70-99 118 0.43 [0.30-0.53] 0.36 [0.26-0.48] 0.39 [0.26-0.58] Anti-S IgM neg 24-66 23 0.47 [0.33-0.63] 1.11 [0.91-1.23] 1.08 [0.99-1.19] HCW neg 19-29 173 0.49 [0.32-0.51] 0.36 [0.26-0.48] 0.39 [0.26-0.58] Anti-S IgM neg 19-29 173 0.43 [0.30-0.53] 0.36 [0.24-0.48] 0.39 [0.26-0.58] Anti-S IgA neg 19-29 173 0.43 [0.33-0.63] 1.11 [0.91-1.23] 1.08 [0.99-1.19] HCW neg 19-29 173 0.43 [0.33-0.63] 1.11 [0.91-1.23] 1.08 [0.99-1.19] HCW neg 19-29 173 0.43 [0.33-0.63] 1.11 [0.91-1.23] 1.08 [0.99-1.19] HCW neg 19-29 173 0.43 [0.33-0.63] 1.11 [0.91-1.23] 1.08 [0.99-1.19] HCW neg 19-29 173 0.43 [0.33-0.63] 1.11 [0.91-1.23] 1.08 [0.99-1.19] HCW neg 19-29 173 0.43 [0.33-0.63] 1.11 [0.91-1.24] 1.07 [0.99-1.16] HCW neg 19-29 173 0.43 [0.33-0.63] 1.11 [0.91-1.24] 1.07 [0.99-1.16] HCW neg 19-29							
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NHR Anti-S IgM NHR Anti-S IgA NHR Anti-S IgA		1200					
NHR Anti-S IgM HCW Anti-S IgA HCW An		pos					
NHR F 87 0.20 [0.16-0.27] 0.52 [0.34-0.91] 1.85 [1.71-1.98] Anti-S IgG n/a M 18 0.23 [0.17-0.26] 0.53 [0.42-1.21] 1.83 [1.69-1.91] Anti-S IgG n/a M 18 0.23 [0.17-0.26] 0.51 [0.46-1.26] 1.81 [1.64-1.88] F 33 0.19 [0.16-0.26] 0.53 [0.41-1.18] 1.83 [1.69-1.94] M 13 0.20 [0.16-0.26] 0.46 [0.30-0.85] 1.84 [1.69, 1.97] M 13 0.20 [0.16-0.26] 0.48 [0.31-0.79] 1.87 [1.72-1.98] HCW F 53 0.21 [0.16-0.26] 0.48 [0.31-0.79] 1.87 [1.72-1.98] HCW 19-69 949 0.62 [0.47-0.83] 0.92 [0.70-1.20] 0.95 [0.71-1.28] HCW 19-69 949 0.62 [0.47-0.83] 0.92 [0.70-1.20] 0.95 [0.71-1.28] Anti-S IgM 19-69 949 0.62 [0.47-0.83] 0.92 [0.70-1.20] 0.95 [0.75-1.31] NHR 19-69 197 0.68 [0.54-0.89] 0.99 [0.90-1.27] 0.98 [0.75-1.31] NHR							
NHR Anti-S IgG n/a M 18 0.20 [0.16-0.27] 0.53 [0.42-1.21] 1.83 [1.69-1.91] Anti-S IgG n/a M 18 0.23 [0.17-0.26] 0.51 [0.46-1.26] 1.81 [1.64-1.88] F 33 0.19 [0.16-0.28] 0.53 [0.41-1.18] 1.83 [1.69-1.94] 86-99 66 0.20 [0.16-0.26] 0.46 [0.30-0.85] 1.84 [1.69, 1.97] M 13 0.20 [0.16-0.26] 0.48 [0.31-0.79] 1.87 [1.72-1.98] F 53 0.21 [0.16-0.26] 0.48 [0.31-0.79] 1.87 [1.72-1.98] HCW 19-69 949 0.62 [0.47-0.83] 0.92 [0.70-1.20] 0.95 [0.71-1.28] HCW 19-29 173 0.69 [0.51-0.89] 0.99 [0.83-1.35] 1.03 [0.78-1.32] Anti-S IgM 19-29 173 0.69 [0.54-0.89] 0.99 [0.90-1.27] 0.98 [0.75-1.31] MCW 19-69 294 0.62 [0.47-0.83] 0.99 [0.90-1.27] 0.98 [0.75-1.31] MCW 19-69 107 0.50 [0.39-0.66] 0.99 [0.66-1.17] 0.98 [0.75-1.31] NHR <t< td=""><td></td><td></td><td></td><td></td><td></td><td>•</td><td></td></t<>						•	
Anti-S IgG	NHR						
HCW Anti-S IgM		n/a					
HCW Anti-S IgM HCW Anti-S IgA HCW	711111 5 150	II/ G					=
HCW Anti-S IgM							
HCW Anti-S IgM The color of		neg -					
HCW Anti-S IgM 19-69 949 173 0.62 [0.47-0.83] 0.92 [0.70-1.20] 0.95 [0.71-1.28] 19-29 173 0.69 [0.51-0.89] 0.99 [0.83-1.35] 1.03 [0.78-1.32] 1.03 [0.78-1.32] 1.03 [0.78-1.32] 1.03 [0.78-1.32] 1.03 [0.78-1.32] 1.03 [0.78-1.32] 1.03 [0.78-1.32] 1.03 [0.78-1.31] 1.03 [0.68-1.20] 1.09 [0.65-1.20] 1.09 [0.65-1.20] 1.09 [0.65-1.20] 1.09 [0.65-1.20] 1.09 [0.65-1.20] 1.09 [0.65-1.20] 1.09 [0.65-1.20] 1.08 [0.66-1.12] 1.09 [0.65-1.20] 1.08 [0.73-1.18] 1.08 [0.73-1.18] 1.08 [0.73-1.18] 1.08 [0.73-1.18] 1.08 [0.73-1.18] 1.08 [0.73-1.18] 1.08 [0.73-1.18] 1.08 [0.73-1.18] 1.08 [0.73-1.18] 1.08 [0.78-1.24] 1.09 [0.78-1.24]							
HCW Anti-S IgM neg 19-29 173 0.69 [0.51-0.89] 0.99 [0.83-1.35] 1.03 [0.78-1.32] Anti-S IgM 40-49 203 0.64 [0.46-0.86] 0.91 [0.68-1.17] 0.93 [0.70-1.31] 50-59 217 0.56 [0.43-0.74] 0.86 [0.66-1.12] 0.90 [0.65-1.20] 60-69 107 0.50 [0.39-0.66] 0.72 [0.54-0.98] 0.85 [0.58-1.24] NHR n/a 70-99 118 0.43 [0.30-0.53] 0.36 [0.24-0.48] 0.39 [0.26-0.58] NHR Anti-S IgM n/a 70-85 51 0.42 [0.32-0.51] 0.36 [0.26-0.48] 0.39 [0.28-0.48] HCW Anti-S IgA 19-69 949 0.45 [0.33-0.63] 1.11 [0.91-1.23] 1.08 [0.99-1.19] HCW Anti-S IgA 19-29 173 0.43 [0.30-0.59] 1.11 [0.91-1.23] 1.08 [0.99-1.19] HCW Anti-S IgA 19-29 173 0.45 [0.35-0.62] 1.12 [0.97-1.24] 1.07 [0.99-1.16] HCW Anti-S IgA 19-29 173 0.45 [0.35-0.62] 1.12 [0.97-1.24] 1.07 [0.99-1.16] HCW Anti-S IgA 19-29 173			19-69				
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Anti-S IgM NHR Anti-S IgM Anti-S IgA A	HOW						
Anti-S IgM			40-49				
NHR Anti-S IgA NHR Anti-S IgA NHR Anti-S IgA NHR Anti-S IgA NHR Anti-S IgA	Antı-S IgM		50-59	217	0.56 [0.43-0.74]		
NHR Anti-S IgM NEW Anti-S IgA NHCW Anti-S IgA							
NHR Anti-S IgM n/a 70-99 118 0.43 [0.30-0.53] 0.36 [0.24-0.48] 0.39 [0.26-0.58] 70-85 51 0.42 [0.32-0.51] 0.36 [0.26-0.48] 0.39 [0.28-0.48] 86-99 66 0.43 [0.28-0.56] 0.34 [0.22-0.48] 0.40 [0.24-0.65] 19-69 949 0.45 [0.33-0.63] 1.11 [0.91-1.23] 1.08 [0.99-1.19] 19-29 173 0.43 [0.30-0.59] 1.11 [0.93-1.24] 1.07 [0.94-1.17] 30-39 251 0.45 [0.35-0.62] 1.12 [0.97-1.24] 1.07 [0.99-1.16] 40-49 203 0.47 [0.34-0.61] 1.13 [0.90-1.24] 1.09 [0.98-1.22] 50-59 217 0.45 [0.33-0.65] 1.08 [0.86-1.22] 1.10 [1.01-1.20] 60-69 107 0.45 [0.32-0.65] 1.11 [0.88-1.20] 1.10 [1.04-1.27] pos 24-66 23 0.74 [0.60-0.95] 1.54 [1.30 1.95] 1.33 [1.10 1.61] NHR		pos	24-66	23			
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HCW Anti-S IgA		n/a	70-85	51		0.36 [0.26-0.48]	
HCW Anti-S IgA neg 19-29 173 0.43 [0.30-0.59] 1.11 [0.93-1.24] 1.07 [0.94-1.17] Anti-S IgA 40-49 203 0.45 [0.35-0.62] 1.12 [0.97-1.24] 1.07 [0.99-1.16] 50-59 217 0.45 [0.33-0.65] 1.08 [0.86-1.22] 1.10 [1.01-1.20] 60-69 107 0.45 [0.32-0.65] 1.11 [0.88-1.20] 1.10 [1.04-1.27] pos 24-66 23 0.74 [0.60-0.95] 1.54 [1.30 1.95] 1.33 [1.10 1.61] NHR Anti-S IgA n/a 70-99 118 0.63 [0.44-0.86] 0.81 [0.53-1.09] 1.15 [0.96-1.39] 86-99 66 0.62 [0.43-0.80] 0.75 [0.50-1.07] 1.12 [0.94-1.37]	Anti-S Igivi		86-99	66	0.43 [0.28-0.56]	0.34 [0.22-0.48]	0.40 [0.24-0.65]
HCW Anti-S IgA neg 19-29 173 0.43 [0.30-0.59] 1.11 [0.93-1.24] 1.07 [0.94-1.17] Anti-S IgA 40-49 203 0.45 [0.35-0.62] 1.12 [0.97-1.24] 1.07 [0.99-1.16] 50-59 217 0.45 [0.33-0.65] 1.08 [0.86-1.22] 1.10 [1.01-1.20] 60-69 107 0.45 [0.32-0.65] 1.11 [0.88-1.20] 1.10 [1.04-1.27] pos 24-66 23 0.74 [0.60-0.95] 1.54 [1.30 1.95] 1.33 [1.10 1.61] NHR Anti-S IgA n/a 70-85 51 0.64 [0.47-0.89] 0.82 [0.59-1.12] 1.15 [1.02-1.36] 86-99 66 0.62 [0.43-0.80] 0.75 [0.50-1.07] 1.12 [0.94-1.37]		neg - -	19-69	949			
HCW Anti-S IgA neg 30-39 251 0.45 [0.35-0.62] 1.12 [0.97-1.24] 1.07 [0.99-1.16] 40-49 203 0.47 [0.34-0.61] 1.13 [0.90-1.24] 1.09 [0.98-1.22] 50-59 217 0.45 [0.33-0.65] 1.08 [0.86-1.22] 1.10 [1.01-1.20] 60-69 107 0.45 [0.32-0.65] 1.11 [0.88-1.20] 1.10 [1.04-1.27] pos 24-66 23 0.74 [0.60-0.95] 1.54 [1.30 1.95] 1.33 [1.10 1.61] NHR Anti-S IgA n/a 70-99 118 0.63 [0.44-0.86] 0.81 [0.53-1.09] 1.13 [0.96-1.39] Anti-S IgA 86-99 66 0.62 [0.43-0.80] 0.75 [0.50-1.07] 1.12 [0.94-1.37]			19-29	173			
Anti-S IgA Anti-S			30-39	251	0.45 [0.35-0.62]	1.12 [0.97-1.24]	1.07 [0.99-1.16]
NHR Anti-S IgA 30-39 217 0.43 [0.33-0.05] 1.06 [0.60-1.22] 1.10 [1.01-1.20] 1.06 [0.60-1.22] 1.10 [1.01-1.20] 1.10 [1.01-1.20] 1.10 [1.01-1.20] 1.11 [0.88-1.20] 1.10 [1.04-1.27] 1.12 [0.44-1.27] 1.13 [1.01-1.01] 1.13 [0.96-1.39] 1.14 [0.31-1.09] 1.13 [0.96-1.39] 1.15 [1.02-1.36] 1.16 [1.01-1.20] 1.10 [1.			40-49	203	0.47 [0.34-0.61]	1.13 [0.90-1.24]	1.09 [0.98-1.22]
NHR Anti-S IgA n/a 24-66 70-99 23 118 0.63 [0.44-0.86] 0.63 [0.44-0.86] 0.81 [0.53-1.09] 0.82 [0.59-1.12] 1.13 [0.96-1.39] 1.15 [1.02-1.36] 86-99 66 0.62 [0.43-0.80] 0.75 [0.50-1.07] 1.12 [0.94-1.37]			50-59	217	0.45 [0.33-0.65]	1.08 [0.86-1.22]	1.10 [1.01-1.20]
NHR Anti-S IgA n/a 70-99 118 0.63 [0.44-0.86] 0.81 [0.53-1.09] 1.13 [0.96-1.39] 70-85 51 0.64 [0.47-0.89] 0.82 [0.59-1.12] 1.15 [1.02-1.36] 86-99 66 0.62 [0.43-0.80] 0.75 [0.50-1.07] 1.12 [0.94-1.37]			60-69	107	0.45 [0.32-0.65]	1.11 [0.88-1.20]	1.10 [1.04-1.27]
Anti-S IgA n/a 70-85 51 0.64 [0.47-0.89] 0.82 [0.59-1.12] 1.15 [1.02-1.36] 86-99 66 0.62 [0.43-0.80] 0.75 [0.50-1.07] 1.12 [0.94-1.37]		pos	24-66	23	0.74 [0.60-0.95]	1.54 [1.30 1.95]	1.33 [1.10 1.61]
Anti-S IgA $ \frac{\frac{1}{4}}{86-99} \frac{\frac{70-85}{66}}{66} \frac{51}{0.64} \frac{0.64 [0.47-0.89]}{0.47-0.89]} \frac{0.82 [0.59-1.12]}{0.52 [0.59-1.12]} \frac{1.15 [1.02-1.36]}{1.12 [0.94-1.37]} $	NHD		70-99	118	0.63 [0.44-0.86]	0.81 [0.53-1.09]	1.13 [0.96-1.39]
- 80-77 00 0.02 [0.43-0.80] 0.73 [0.50-1.07] 1.12 [0.74-1.57]		n/a		51			
* When determined on 1/F0 dilution of camples +1 10742 [7E60 1E929] +2 1E241 [9279 22E02]*	Ann-5 igA						

^{*} When determined on 1/50 dilution of samples, t1 10743 [7560-15838], t2 15341 [8378-23593]*

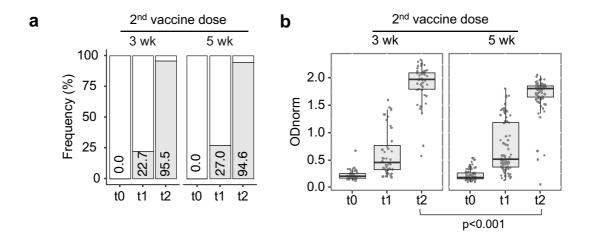
Supplemental Table 2. Anti-Spike IgG Positivity in HCW and NHR as in **Figure 2** and stratified by age and sex as in **Figure 4**

		Positivity; n (%; 95% CI)			
	Anti-N	Age	n	t1	t2
	neg	19-69	948	845 (89.1;86.9-91.0)	947 (99.9; 99.3-100.0)
		M	197	166 (84.3; 78.4-88.7)	196 (99.5; 96.4-99.9)
		F	751	679 (90.4; 88.1-92.3)	751 (100; 99.5-100)
		19-29	171	168 (98.2; 94.6-99.4)	171 (100; 97.8-100)
		M	31	30 (96.8; 78.4-99.6)	31 (100; 89.0-100)
	_	F	140	138 (98.6; 94,4-99.6)	140 (100; 97.3-100)
		30-39	251	241 (96; 92.7-97.9)	251 (100; 98.5-100)
		M	51	50 (98; 86.6-99.7)	51 (100; 93.0-100)
	_	<u>F</u>	200	191 (95.5; 91.5-97.7)	200 (100; 98.1-100)
HCW		40-49	204	175 (85.8; 80.2-90.0)	204 (100; 98.1-100)
110 11		M	41	33 (80.5; 64.8-90.2)	41 (100; 91.4.100)
	_	F	163	142 (87.1; 81.0-91.5)	163 (100; 97.7-100)
		50-59	216	182 (84.3; 78.7-88.6)	215 (99.5; 96.7-99.9)
		M	45	37 (82.2; 67.6-91.1)	44 (97.8; 84.9-99.7)
	_	F	171	145 (84.8; 78.5-89.5)	171 (100; 97.8-100)
		60-69	106	79 (74.5; 65.2-82.0)	106 (100; 96.5-100)
		M	29	16 (55.2; 36.1-72.86)	29 (100; 88.3-100)
		F	77	63 (81.8; 71.3-89.0)	77 (100; 95.3.100)
	pos	24-66	23	22 (95.7; 79.0-99.2)	23 (100; 85.7-100)
		70-99	118	30 (25.4; 18.4-34.0)	112 (94.9; 89.4-98.0)
	n/a	M	31	9 (29; 16.1-46.6)	28 (90.3; 75.1-96.7)
		F	87	21 (24.1; 16.4-34.1)	84 (96.6; 90.3-98.8)
		70-85	51	15 (29.4; 18.3-43.7)	49 (96.1; 85.0-99.1)
NHR		M	18	6 (33.3; 14.4-59.7)	17 (94.4; 64.5-99.4)
		F	33	9 (27.3; 14.3-20.3)	32 (97.0; 80.0-99.6)
		86-99	66	14 (25.4; 18.4-34.0)	62 (93.4; 84.6-97.8)
		M	13	3 (23.1; 6.3-57.2)	11 (84.6; 49.0-96.9)
		F	53	11 (20.8; 11.7-34.2)	51 (96.2; 85.6-99.1)

Supplemental Table 3. Median and [IQR] for ECLIA and ELISA data, and corresponding anti-spike IgG positivity at each time point, for HCW participants who contributed samples only at 1 or 2 of the 3 collection times (t0 only, t0 and t1, or t0 and t2).

	t0 (n=220)	t1 (n=79)	t2 (n=61)
median [IQR]			
Anti-RBD Ig	0.39 [0.39-0.39]	75.72 [34.66-152.55]	2500 [1355-2500]
Anti-S IgG	0.18 [0.15-0.23]	1.47 [1.35-1.56]	1.79 [1.72-1.93]
Anti-S IgM	0.67 [0.52-0.86]	0.96 [0.72-1.22]	0.88 [0.69-1.17]
Anti-S IgA	0.48 [0.35-0.69]	1.16 [1.01-1.31]	1.09 [0.93-1.15]
Positivity; n (%; 95 CI)			
Anti-S IgG	9 (4.1%; 2.2-7.6)	77 (97.5%; 91.2-99.3)	61 (98.4%; 91.3-99.7)

Supplementary Figure S1.

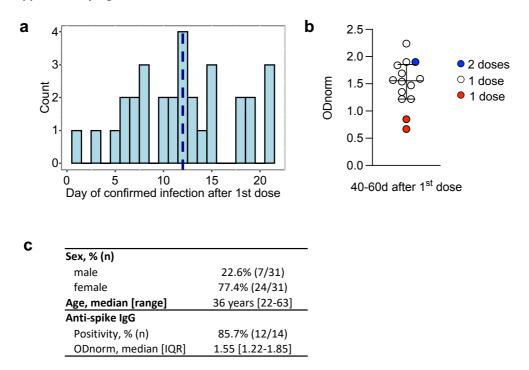


	t0	t1	t2
3 weeks (n=44)			
median [IQR]	0.21 [0.17-0.26]	0.46 [0.33-0.77]	1.97 [1.79-2.09]
Positivity; n (%; 95% CI)	0 (0.0; 0.0-0.1)	10 (22.7; 12.8-37.0)	42 (95.5; 84.9-98.7
5 weeks (n=74)			
median [IQR]	0.19 [0.16-0.27]	0.52 [0.37-1.18]	1.81 [1.65-1.86]
Positivity; n (%; 95% CI)	0 (0.0; 0.0-0.05)	20 (27.0; 18.2-38.1)	70 (94.6; 86.9-97.9

Supplementary Figure S1: Effect of delayed administration of 2nd vaccine dose in the NHR cohort.

The 2nd vaccine dose was administered 3 weeks (n=44 participants), or 5 weeks (n=74 participants) after the 1st dose. Shown are reanalysis of the data for anti- spike IgG (ELISA) presented in Fig.1C, now partitioned according to the time to the 2nd vaccine dose in weeks (wk). a) Seroconversion defined by frequency of samples testing positive (grey bars) at the indicated time point. Respective values are indicated inside each bar. b) Semi-quantitative measurements. Data points represent individual participants, boxes denote interquartile range, horizontal line represent the median, and whiskers denote the minimum and maximum values below or above the median at 1.5 times the interquartile range. Wilcoxon rank sum test, two-sided, revealed a significant difference between groups at t2 p=2.7927x10⁻⁰⁵, but not at t1 p=0.32340e. c) Table displaying anti-spike IgG ODnorm (Median and IQR]) and positivity, and measured at t0, t1 and t2. Source data are provided as a Source Data file.

Supplementary Figure S2.



Supplementary Figure S2. Infections after the 1st dose. 31 participants were diagnosed COVID-19 after the 1st vaccination, 14/31 contributed sera post-infection. a) Histogram of participants (n=31) who got infected with SARS-CoV-2 after the 1st vaccine dose, as determined by a positive qPCR test between t0 and t1. Dashed line represents median day of infection after 1st dose (t0). 24/31 (77.4%) of the infected participants, were diagnosed in the first 15 days after the 1st dose. b) Anti-spike IgG ODnorm measured 40-60 days after the 1st vaccine dose in participants infected during the first 4 weeks after receiving the 1st dose (n=14). Data points represent individual participants, major horizontal line represent the median, and whiskers denote interquartile range. Highlighted are 2 non-responders (red circles), and 1 participant who received 2 vaccine doses (blue circle). c) Table indicating sex and age distribution (upper part), and anti-spike IgG positivity, as well as ODnorm median and [IQR], both measured 40-60 days after the 1st dose (lower part). Source data are provided as a Source Data file.