Supplemental information

mRNA-based COVID-19 vaccine

boosters induce neutralizing immunity

against SARS-CoV-2 Omicron variant

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Table S1

Vaccinee cohort	recent vaccination (<3 months)	distant vaccination (6-12 months)	distant vaccination + infection	booster vaccination (<3 months)
Total (*n*)	**65**	**62**	**41**	**71**
Demographics				
Age (y) (median, range)	39 (24 – 72)	41 (18 – 71)	46 (22 – 78)	34 (22 – 76)
Sex (% female)	43/65 (66%)	40/62 (65%)	26/41 (63%)	41/71 (58%)
Community cohort (%)	20/65 (31%)	40/62 (65%)	33/41 (80%)	11/71 (15%)
Healthcare worker cohort (%)	45/65 (69%)	22/62 (35%)	8/41 (20%)	60/71 (85%)
Days since last dose (median, range)	17 (7 – 82)	244 (181 – 321)	229 (130 – 302)	31 (7 – 118)
mRNA-1273 (Moderna)				
Total (*n*)	**24**	**23**	**8**	**33**
Age (y) (median, range)	54 (24 – 72)	39 (23 – 65)	36 (22 – 56)	35 (23 – 74)
Sex (female, %)	17/24 (71%)	16/23 (70%)	3/8 (38%)	17/33 (52%)
Community cohort (%)	0/24 (0%)	9/23 (39%)	4/8 (50%)	3/33 (9%)
Healthcare worker cohort (%)	24/24 (100%)	14/23 (61%)	4/8 (50%)	30/33 (91%)
Days since last dose (median, range)	18 (7 – 60)	291 (181 – 315)	243 (130 – 302)	21 (7 – 82)
Cross-over vaccination regimen (%)	n.a.	n.a.	n.a.	1/33 (3%)
BNT162b2 (Pfizer)				
Total (*n*)	**21**	**33**	**27**	**30**
Age (y) (median, range)	32 (25 – 65)	43 (18 – 71)	47 (22 – 78)	33 (22 – 76)
Sex (female, %)	13/21 (62%)	22/33 (67%)	18/27 (67%)	19/30 (63%)
Community cohort (%)	0/21 (0%)	25/33 (76%)	24/27 (89%)	4/30 (13%)
Healthcare worker cohort (%)	21/21 (100%)	8/33 (24%)	3/27 (11%)	26/30 (87%)
Days since last dose (median, range)	13 (7 – 32)	224 (186 – 321)	217 (180 – 300)	49 (10 – 84)
Cross-over vaccination regimen (%)	n.a.	n.a.	n.a.	6/30 (20%)
Ad26.COV2.S (Janssen)				
Total (*n*)	**20**	**6**	**6**	**8**
Age (y) (median, range)	46 (24 – 67)	52 (34 – 71)	44 (35 – 68)	32 (23 – 37)
Sex (female, %)	13/20 (65%)	2/6 (33%)	5/6 (83%)	5/8 (63%)
Community cohort (%)	20/20 (100%)	6/6 (100%)	5/6 (83%)	4/8 (50%)
Healthcare worker cohort (%)	0/20 (0%)	0/6 (100%)	1/6 (17%)	4/8 (50%)
Days since last dose (median, range)	50 (11 – 82)	249 (184 – 269)	247 (233 – 266)	39 (20 – 118)
Cross-over vaccination regimen (%)	n.a.	n.a.	n.a.	7/8 (88%)

Table S1. Clinical data from vaccinee cohorts, related to Figure 2. Clinical data is shown for each pre-defined cohort.