

## **SUPPLEMENTARY MATERIALS**

**Table S1.** Distribution of workplaces in healthcare workers.

<b>HEALTH CARE WORKER DISTRIBUTION</b>	<b>N</b>	<b>%</b>
<b>Nursing staff</b>	293	43.2
<b>Physicians</b>	102	15.0
<b>Laboratory staff</b>	88	13.0
<b>Administration or maintenance workers</b>	185	27.3
<b>Allied health professionals</b>	10	1.5
<b>TOTAL</b>	<b>678</b>	<b>100</b>

**Table S2.** Results of humoral response according to the initial vaccine schedule before booster with mRNA-1273 (n= 603).

	<b>mRNA-1273/ mRNA-1273</b>	<b>BNT162b2/ BNT162b2</b>	<b>ChAdOx1/ ChAdOx1</b>	<b>ChAdOx1/ BNT162b2</b>	<b>ChAdOx1 single dose</b>
<b>N</b>	256	125	141	58	23
<b>Anti-S-RBD U/mL median (IQR) SARS-CoV-2 infected individuals</b>					
<b>Previous to Booster</b>	1,962 (1,045-11,491)	2,108 (1,394-4,405)	657 (197-11,817)	-	1,153 (473-2,171)
<b>Booster 1-month follow-up</b>	32,517 (17,172-51,347)	24,727 (16,504-49,385)	34,902 (22,506-55,952)	48,537 (34,282-61,356)	23,011 (17,634-43,130)
<b>Booster 6-months follow-up</b>	19,616 (13,372-33,476)	17,710 (9,054-36,679)	15,142 (8,865-23,553)	22,474 (15,733-35,647)	10,519 (5,196-16,123)
<b>Anti-S-RBD U/mL median (IQR) SARS-CoV-2 non-infected individuals</b>					
<b>Previous to Booster</b>	686 (450-1,113)	512 (267-733)	429 (273-736)	1,419 (877-2,201)	-
<b>Booster 1-month follow-up</b>	21,903 (14,448-40,227)	23,951 (15,055-37,437)	19,540 (13,489-30,810)	17,071 (11,207-30,199)	-
<b>Booster 6-months follow-up</b>	8,295 (4,834-14,736)	8,590 (4,874-13,402)	3,975 (2,632-5,758)	4,679 (1,702-6,768)	-

**Table S3.** Anti-S-RBD levels among non-infected and infected individuals at different timepoints and SARS-CoV-2 variants (only those participants who received mRNA-1273 Booster dose were analyzed).

	<b>Primoinfection before Dec 2021</b>	<b>Primoinfection Jan 2022</b>	<b>Reinfection Jan 2022</b>	<b>Primoinfection Jan-Jun 2022</b>	<b>Reinfection Jan-Jun 2022</b>	<b>Non Infected</b>	<b>TOTAL</b>
<b>Infecting Variant</b>	Wild-type, Alpha, Delta[6,7]	Omicron (BA.1)[6,7]	Omicron (BA.1)[6,7]	Omicron (BA.1, BA.2)[6,7]	Omicron (BA.1, BA.2)[6,7]	-	
<b>N (%)</b>	58	134	23	183	38	167	603
<b>SARS-CoV-2 Anti-S-RBD U/mL median (IQR)</b>							
<b>Previous to Booster</b>	2,261 (1,433-9,999)	620 (340-1,089)	1,484 (669-4,227)	60 (344-1,011)	1,798 (948-5,752)	665 (375- 1,131)	732 (401- 1,466)
<b>Booster 1-month follow- up</b>	24,088 (16,198-42,523)	39,413 (28,536-62,594)	16,693 (12,358- 30,120)	18,316 (11,664-30,018)	17,523 (10,490- 35,564)	22,336 (13,756- 39,686)	23,467 (14,774- 41,185)
<b>Booster 6- months follow- up</b>	9,111 (4,881-16,714)	17,823 (12,029-28,496)	9,184 (6,558-16,013)	22,545 (15,266-39,222)	9,460 (5,837- 16,520)	5,900 (3,778- 10,369)	14,147 (7,070- 23,882)
<b>SARS-CoV-2 Anti-N Index median (IQR)</b>							
<b>Previous to Booster</b>	17.1 (4.51-54.08)	0.089 (0.085-0.094)	3.71 (0.794-10.56)	0.089 (0.084-0.095)	18.1 (2.21-42.0)	0.09 (0.084- 0.095)	0.092 (0.086- 0.106)
<b>Booster 1-month follow- up</b>	14.47 (3.31-39.54)	7.29 (2.21-15.58)	145.1 (111.7-190.2)	0.056 (0.051-0.088)	10.9 (1.76-26.2)	0.057 (0.051- 0.087)	0.094 (0.055- 7.75)
<b>Booster 6- months follow- up</b>	13.36 (2.58-28.58)	14.29 (5.47- 29.54)	91.39 (51.9-174.6)	15.6 (5.65-35.09)	106 (67.6-170.5)	0.087 (0.084- 0.091)	10.2 (0.22- 38.4)