

**Supplementary Table S1: STARD checklist**

Section & Topic	No	Item	Reported on page #
<b>TITLE OR ABSTRACT</b>			
	<b>1</b>	Identification as a study of diagnostic accuracy using at least one measure of accuracy (such as sensitivity, specificity, predictive values, or AUC)	<b>2</b>
<b>ABSTRACT</b>			
	<b>2</b>	Structured summary of study design, methods, results, and conclusions (for specific guidance, see STARD for Abstracts)	<b>2</b>
<b>INTRODUCTION</b>			
	<b>3</b>	Scientific and clinical background, including the intended use and clinical role of the index test	<b>4</b>
	<b>4</b>	Study objectives and hypotheses	<b>5</b>
<b>METHODS</b>			
<i>Study design</i>	<b>5</b>	Whether data collection was planned before the index test and reference standard were performed (prospective study) or after (retrospective study)	<b>6</b>
<i>Participants</i>	<b>6</b>	Eligibility criteria	<b>6</b>
	<b>7</b>	On what basis potentially eligible participants were identified (such as symptoms, results from previous tests, inclusion in registry)	<b>6</b>
	<b>8</b>	Where and when potentially eligible participants were identified (setting, location and dates)	<b>6</b>
	<b>9</b>	Whether participants formed a consecutive, random or convenience series	<b>6</b>
<i>Test methods</i>	<b>10a</b>	Index test, in sufficient detail to allow replication	<b>6</b>
	<b>10b</b>	Reference standard, in sufficient detail to allow replication	<b>7</b>
	<b>11</b>	Rationale for choosing the reference standard (if alternatives exist)	<b>7</b>
	<b>12a</b>	Definition of and rationale for test positivity cut-offs or result categories of the index test, distinguishing pre-specified from exploratory	<b>7</b>
	<b>12b</b>	Definition of and rationale for test positivity cut-offs or result categories of the reference standard, distinguishing pre-specified from exploratory	<b>7</b>
	<b>13a</b>	Whether clinical information and reference standard results were available to the performers/readers of the index test	<b>7</b>
	<b>13b</b>	Whether clinical information and index test results were available to the assessors of the reference standard	<b>7</b>
<i>Analysis</i>	<b>14</b>	Methods for estimating or comparing measures of diagnostic accuracy	<b>8</b>
	<b>15</b>	How indeterminate index test or reference standard results were handled	<b>8</b>
	<b>16</b>	How missing data on the index test and reference standard were handled	<b>8</b>
	<b>17</b>	Any analyses of variability in diagnostic accuracy, distinguishing pre-specified from exploratory	<b>8</b>
	<b>18</b>	Intended sample size and how it was determined	<b>Not applicable</b>
<b>RESULTS</b>			
<i>Participants</i>	<b>19</b>	Flow of participants, using a diagram	<b>Not applicable</b>
	<b>20</b>	Baseline demographic and clinical characteristics of participants	<b>6</b>
	<b>21a</b>	Distribution of severity of disease in those with the target condition	<b>Not applicable</b>
	<b>21b</b>	Distribution of alternative diagnoses in those without the target condition	<b>Not applicable</b>
	<b>22</b>	Time interval and any clinical interventions between index test and reference standard	<b>Not applicable</b>
<i>Test results</i>	<b>23</b>	Cross tabulation of the index test results (or their distribution) by the results of the reference standard	<b>9</b>
	<b>24</b>	Estimates of diagnostic accuracy and their precision (such as 95% confidence intervals)	<b>Not applicable</b>

	25	Any adverse events from performing the index test or the reference standard	Not applicable
DISCUSSION			
	26	Study limitations, including sources of potential bias, statistical uncertainty, and generalisability	17
	27	Implications for practice, including the intended use and clinical role of the index test	16
OTHER INFORMATION			
	28	Registration number and name of registry	8
	29	Where the full study protocol can be accessed	Not applicable
	30	Sources of funding and other support; role of funders	Not applicable

**Supplementary Table S2:** IgM values at various time points after first and second vaccination.

Time point	n	Median (COI)	Range
Pre-vaccination	70	0.030000	0.01 – 0.77
10 days post-dose 1	71	0.36000	0.02 – 5.33
20-40 days post-dose 1	8	0.55857	0.11 – 7.55
20 days post-dose 2	67	2.26000	0.13 – 13.6
40 days post-dose 2	48	1.34996	0.09 – 15.8
60 days post-dose 2	49	0.86000	0.07 – 2.96
90 days post-dose 2	37	0.41000	0.07 – 1.99
120 days post-dose 2	8	0.10954	0.04 – 1.92
150 days post-dose 2	18	0.15969	0.02 – 1.05
180 days post-dose 2	8	0.13416	0.03 – 0.83

**Supplementary Table S3:** Antibody comparison of titres >90 days post-second vaccination between subjects <50 and ≥50 years old

	120 days	150 days	180 days	All
N <50/≥50	4/4	9/9	5/3	18/16
<b>T-Ab (BAU/mL)</b>				
<50 Median, Range	1999 (1587-2852)	1327 (415-2852)	664 (180-2936)	1415 (180-2936)
≥50 Median, Range	1129 (370-2125)	765 (357-1803)	1294 (344-1594)	814 (344-2125)
Median difference, p	1091, p = 0.20	463, p = 0.11	164, p = 0.79	414, p = 0.10
<b>IgG (BAU/mL)</b>				
<50 Median, Range	454 (440-669)	307 (75-445)	217 (88-2452)	355 (75-2452)
≥50 Median, Range	377 (105-733)	179 (75-450)	310 (80-314)	210 (75-733)
Median difference, p	177, p = 0.89	118, p = 0.14	115, p = 0.79	123, p = 0.09
<b>IgM (COI)</b>				
<50 Median, Range	0.83 (0.08-1.92)	0.28 (0.06-0.66)	0.18 (0.04-0.31)	0.22 (0.04-1.92)
≥50 Median, Range	0.11 (0.04-1.25)	0.12 (0.02-1.05)	0.10 (0.03-0.83)	0.12 (0.02-1.25)
Median difference, p	0.19, p = 0.25	0.06, p = 0.31	0.01, p = 1.00	0.05, p = 0.22
<b>N-Ab (ug/mL)</b>				
<50 Median, Range	2.53 (1.93-2.82)	1.70 (0.43-2.82)	1.13 (0.66-1.53)	1.67 (0.43-2.82)
≥50 Median, Range	0.61 (0.58-2.46)	1.06 (0.39-2.36)	1.73 (0.39-1.92)	1.06 (0.39-2.46)
Median difference, p	1.57, p = 0.23	0.64, p = 0.09	0.55, p = 0.57	0.47, p = 0.06

**Supplementary Table S4:** Comparison of all antibody titres >90 days post-second vaccination between male and female subjects

<b>N Male/Female</b>	9/25
<b>T-Ab (BAU/mL)</b>	
Male Median, Range	762, 344-2851
Female Median, Range	1269, 180-2936
Median difference, p	84, p = 0.80
<b>IgG (BAU/mL)</b>	
Male Median, Range	246, 80-445
Female Median, Range	307, 75-2452
Median difference, p	61, p = 0.49
<b>IgM (COI)</b>	
Male Median, Range	0.08, 0.02-1.25
Female Median, Range	0.17, 0.03-1.92
Median difference, p	0.03, p = 0.62
<b>N-Ab (ug/mL)</b>	
Male Median, Range	1.31, 0.39-2.82
Female Median, Range	1.51, 0.39-2.67
Median difference, p	0.06, p = 0.82