

Vaccine and vaccine type	Recommended dose and administration	Study ref.	Study type	Study date and location(s)	N	Vaccine effectiveness % (95% confidence interval) *				
						Vaccine efficacy against:	One dose	Two doses		
Pfizer/BioNTech (BNT162b2) – mRNA.	Two doses (30µg, 0.3ml each) intramuscularly (deltoid) with a recommended interval of 21-28 days between doses.	(156)	Randomised controlled trial	27/7/2020 to 14/11/2020 US, Argentina, Brazil, South Africa, Germany, and Turkey.	37,706	Symptomatic infection		95% (90.3–97.6%)		
		(241)	Observational	20/12/2020 to 1/2/2021 Israel.	1,193,236	Documented infection	46% (40-51%)	92% (88-95%)		
						Symptomatic infection	57% (50-63%)	94% (87-98%)		
						Hospitalisation	74% (56-86%)	87% (55-100%)		
						Severe disease	62% (39-80%)	92% (75-100%)		
		(242)	Test-negative case-control	26/10/2020 to 16/5/2021 UK.	19,109	Infection with Alpha	47.5% (41.6–52.8%)	93.7% (91.6–95.3%)		
						Infection with Delta	35.6% (22.7–46.4%)	88.0% (85.3–90.1%)		
		(243)	Test-negative case-control	1/2/2021 to 31/3/2021 Qatar.	213,758	Infection with Beta		75.0% (70.5-78.9%)		
						Infection with Alpha or Beta		97.4% (92.2-99.5%)		
		(244)	Test-negative case-control	14/12/2020 to 19/4/2021 Canada.	324,033	Symptomatic infection	14-20 days: 48% (41-54%)	≥7 days: 91% (89-93%)		
							≥14 days: 60% (57-64%)			
							35-41 days: 71% (63-78%)			
						Hospital admission or death	14-20 days: 62% (44-75%)	≥7 days: 98% (88-100%)		
							≥14 days: 70% (60-77%)			
							≥35 days: 91% (73-97%)			
		[NOTE: Participants in this study received an mRNA vaccine (either BNT162b2 or mRNA-1273)]								
		(245)	Test-negative case-control	14/12/2020 to 3/8/2021 Canada.	682,071	Symptomatic infection - Alpha	≥14 days: 66% (95% CI: 64-68%)	≥7 days: 89% (86–91%)		
Symptomatic infection - Beta or Gamma variants	≥14 days: 60% (52-67%)					≥7 days: 84% (69–92%)				
Symptomatic infection - Delta	≥14 days: 56% (45-64%)					≥7 days: 87% (64–95%)				
Against hospitalisation or death - Alpha	≥14 days: 80% (78-82%)					≥7 days: 95% (92-97%)				
Against hospitalisation or death - Beta or Gamma	≥14 days: 77% (69-83%)					≥7 days: 95% (81-99%)				
(246)	Retrospective case-control	January to July 2021 US.	119,463	Infection		≥14 days: 86% (81-90.6%)				
				Hospitalisation		≥14 days: 85% (73-93%)				
				Admission to an ICU		≥14 days: 87% (46-98.6%)				
(133)	Test-negative observational	1/4/2021 to 6/6/2021 Scotland.	400,827	Infection - Alpha		92% (90–93%)				
				Infection - Delta		79% (75-82%)				
(247)	Test-negative	12/4/2021 to	14,019	Hospitalisation - Alpha	83% (62-93%)	95% (78-99%)				

			case-control	4/6/2021 England.		Hospitalisation - Delta	94% (46-99%)	96% (86-99%)
	(248)	Test-negative case-control	8/12/2020 to 19/2/2021. England.	156,930		Infection		10-13 days: 70% (59-78%)
								≥14 days: 89% (85-93%)
								28-34 days: 61% (51-69%)
	(249)	Test-negative case-control	4/4/2021 to 1/5/2021 Canada.	16,993		Infection	0-13 days: 14% (0-26%)	
							14-20 days: 43% (30-53%)	
							35-41 days: 75% (63-83%)	
						Infection		≥21 days: 65% (58-71%)
						Infection - non-VOC		72% (58-81%)
						Infection - Alpha		67% (57-75%)
						Infection - Gamma		61% (45-72%)
	(250)	Test-negative case-control	17/1/2021 to 5/6/2021 Canada.	5,8476		Infection	≥14 days: 70.3% (68.1-72.4%)	≥7 days: 85.5% (80.4-89.3%)
	(251)	Case-control	14/2/2021 to 3/5/2021 France.	67,760		Infection		≥7 days: 88% (81-92%)
						Infection - Alpha		≥7 days: 86% (81-90%)
						Infection - Beta/Gamma		≥7 days: 77% (63-86%)
	(252)	Test-negative case-control	23/3/2021 to 7/9/2021 Qatar.	1 dose: 906,078 2 doses: 877,354		Infection – Delta	65.5% (40.9-79.9%)	≥14 days: 59.6% (50.7-66.9%)
						Severe disease or death - Delta		97.3% (84.4-99.5%)
	(192)	Test-negative case-control	1/1/2021 to 5/9/2021 Qatar.	1 dose: 947,035 2 doses: 907,763		Symptomatic infection	0-13 days: -5.5% (-12.9-1.4%)	
							≥14 days: 47.9% (43.6-51.9%)	
							1 month: 81.5% (79.9-83.0%)	
							2 months: 72.5% (69.6-75.1%)	
							3 months: 70.6% (66.4-74.3%)	
							4 months: 57.0% (48.6-64.0%)	
							5 months: 12.0% (-6.1-27.1%)	
							6 months: 12.8% (-9.1-30.3%)	
							≥7 months: 27.8% (-1.4-48.7%)	
						Hospitalisation and death	0-13 days: 7.5% (-11.9-23.6%)	
							≥14 days: 65.0% (55.0-72.8%)	
							1 month: 95.9% (93.6-97.3%)	
							2 months: 96.3% (92.9-98.0%)	
							3 months: 93.4% (87.5-96.5%)	
							4 months: 80.8% (56.9-91.4%)	
							6 months: 81.8% (18.5-95.9%)	
							≥7 months: 44.1% (-86.5-83.3%)	
	(253)	Prospective cohort	7/12/2020 to 5/2/2021 UK.	23,324		Infection	≥21 days: 70% (55-85%)	≥7 days: 85% (74-96%)

		(254)	Observational	24/1/2021 to 3/4/2021 Israel.	186,109	Infection	≥7 days: 95.3% (94.9-95.7%)
						Asymptomatic infection	≥7 days: 91.5% (90.7-92.2%)
						Symptomatic infection	≥7 days: 97.0% (96.7-97.2%)
						Hospitalisation	≥7 days: 97.2% (96.8-97.5%)
						Severe or critical infection	≥7 days: 97.5% (97.1-97.8%)
						Death	≥7 days: 96.7% (96.0-97.3%)
		(255)	Observational	1/3/2021 to 1/8/2021 US.	10,428, 783	Infection – Pre-Delta period	≥14 days: 74.2% (68.9-78.7%)
						Infection – Intermediate period	≥14 days: 66.5% (58.3-73.1%)
						Infection – Delta	≥14 days: 52.4% (48.0-56.4%)
		(256)	Observational	14/12/2020 to 14/8/2021 US.	Delta: 2,840 Pre-Delta: 7,012	Infection – Delta	14–119 days: 85% (68-93%)
							120–149 days: 81% (34-95%)
							≥150 days: 73% (49-86%)
						Infection – Pre-Delta	91% (81-96%)
		[NOTE only 65% of participants in this study received BNT162b2 (33% received mRNA-1273, and 2% received Ad26.COV2.S)]					
		(257)	Observational	15/1/2021 to 16/4/2021 France.	378	Infection – Beta	≥7 days: 49% (14-69%)
						Severe disease	≥7 days: 86% (67-94%)
		(258)	Observational	1/12/2020 to 1/8/2021 UK.	384,543	Infection – Alpha	≥21 days: 59% (52-65%)
						Infection – Delta	≥21 days: 57% (50-63%)
						Infection – Alpha	0-13 days: 77% (66-84%)
							≥14 days: 78% (68-84%)
						Infection – Delta	0-13 days: 82% (75-87%)
≥14 days: 80% (77-83%)							
(259)	Observational	April to May 2021. Canada	224	Infection	66.2% (2.3-88.3%)		
				Symptomatic infection	25.6% (-157.8-78.5%)		
(260)	Retrospective cohort	27/12/2020 to 24/3/2021 Italy.	6,423	Infection	0-14 days: 47.3% (24.7-63.1%)		
					14-21 days: 84.1% (39.7-95.8%)		
					≥21 days: 85.4% (-35.3-98.4%)		
				Symptomatic infection	0-14 days: 39.9% (9.1-60.3%)		
					14-21 days: 83.3% (14.8-96.7%)		
					≥21 days: 65.9% (-171-95.7%)		
(261)	Randomised controlled trial	27/7/2020 to 29/10/2020 US, Argentina, Brazil, South Africa, Germany, Turkey	44,165	Infection (without evidence of prior infection)	≥7 days: 91.3% (89-93.2%)		
				Infection (with evidence of previous infection)	≥7 days: 91.1% (88.8-93.0%)		
				Infection	<11 days: 18.2% (-26.1-47.3%)		
					≥11 days to second dose: 91.7% (79.6-97.4%)		
					≥7 days to <2 months: 96.2% (93.3-98.1%)		
				≥2 months to <4 months: 90.1%			

							(86.6-92.9%)
							≥4 months: 83.7% (74.7-89.9%)
(262)	Retrospective cohort	20/12/2020 to 25/2/2021 Israel.	6,710	Symptomatic Infection	7-21 days: 89% (83-94%)	≥7 days: 97% (94-99%)	
							≥21 days: 98% (94-100%)
				Asymptomatic Infection	7-21 days: 36% (-51-69%)	≥7 days: 86% (69-93%)	
							≥21 days: 94% (78-98%)
(263)	Cohort	27/12/2020 to 28/2/2021 Sweden.	805,741	Infection	≥14 days: 42% (14-63%)	<7 days: 60% (27-81%)	
							≥7 days: 86% (72-94%)
(264)	Prospective cohort	27/12/2020 to 26/5/2021 Spain.	28,594	Infection – Nursing home residents	12 days: 20% (19.76-20.3%)	90.89% (90.84-90.95%)	
					40.28% (40.17-40.39)		
			26,238	Infection – Nursing home staff	12 days: 20.27% (19.8-20.73%)	85.02% (84.86-85.17%)	
					26.49% (26.25-26.74%)		
			61,951	Infection – Healthcare workers	12 days: 15.44% (15.19-15.68%)	94% (93.92-94.1%)	
					33.8% (33.66-33.92%)		
			28,594	Hospital admission - Nursing home residents	12 days: 67.59% (65.29-69.75%)	95.06% (94.73-95.38%)	
					46.24% (45.62-46.86%)		
Death - Nursing home residents	12 days: 43.95% (37.87-49.44%)						
				51.71% (51.17-52.23%)	96.73% (96.43-96.99)		
(265)	Cohort	27/12/2020 to 11/4/2021 Denmark.	864,096	Infection - Prioritised risk groups	0-14 days: -72% (-80- -64%)	0-7 days: 42% (33-50%)	
					>14 days to second dose: 7% (-1-15%)		> 7 days: 82% (79-84%)
				COVID-19-related hospitalisation - Prioritised risk groups	0-14 days: 54% (44-62%)	0-7 days: 90% (80-95%)	
					>14 days to second dose: 35% (18-49%)		>7 days: 93% (89-96%)
				COVID-19-related death - Prioritised risk groups	0-14 days: 76% (68-82%)	>7 days: 94% (90-96%)	
					>14 to second dose days: 7% (-15-25%)		
(266)	Case-control	27.1.2021 to 7/2/2021 Spain.	268	Infection	52.6% (95%CI: 1.1-77.3)		
(267)	Observational	15/12/2020 to 3/2/2021 England.	170,226	Infection	21-27 days: 55.2% (40.8-66.8%)		
				Emergency hospital attendance	21-27 days: 57.8% (30.8-74.5%)		
				Hospitalisation	21-27 days: 50.1% (19.9-69.5%)		
(268)	Cohort	27/12/2020 to 10/3/2021 Spain.	299,209	Infection (without evidence of prior infection)	0-14 days: 28.9% (26.9-31%)		
					15-21 days: 51.9% (50.7-53.1%)		
					22-28 days: 62.9% (61.9-64%)		
					≥29 days: 81.8% (81.0-82.7%)		
				Infection (with evidence of prior infection)	0-14 days: 9.6% (-6.9-26.8%)		
					15-21 days: 25.5% (15.1-36.6%)		
					22-28 days: 34.6% (25.7-44.1%)		
					≥29 days: 56.8% (47.1-67.7%)		

		(269)	Observational	1/12/2020 to 8/5/2021 UK.	383,812	Infection	8-20 days after either dose: 56% (51-61%)			
							≥21 days: 64% (59-68%)	≥21 days: 80% (74-84%)		
		[NOTE: Both BNT162b2 and AZD1222 vaccines were included in this study]								
		(270)	Cohort	19/12/2020 to 14/3/2021 Israel.	9,347	Infection	4-10 days: 28% (-18-57%)		≥11 days: 65% (45-79%)	
							≥11 days after first, ≤10 days after second: 55% (32-70%)			
							Symptomatic infection	4-10 days: 21% (-32-41%)		≥11 days: 90% (84-94%)
		≥11 days after first, ≤10 days after second: 80% (69-87%)								
		(271)	Prospective cohort	8/12/2020 to 15/3/2021 England.	10,412	Infection	0-6 days: 36% (-6-62%)			
							7-13 days: 17% (-28-46%)			
							14-20 days: 4% (-60-43%)			
							21-27 days: 8% (-59-47%)			
							28-34 days: 56% (19-76%)			
							35-48 days: 62% (23-81%)			
							≥49 days: 51% (-17-80%)			
		[NOTE: Both BNT162b2 and AZD1222 vaccines were included in this study]								
		(272)	Retrospective cohort	1/1/2021 to 31/3/2021 US.	44,498	Infection	>14 days after first, ≤14 days after second: 78.1% (71.1-82%)			
									>14 days: 96.8% (95.3-97.8%)	
		(273)	Prospective cohort	14/12/2020 to 10/4/2021 US.	3,975	Infection	≥14 days after first, <14 days after second: 80% (60-90%)			
									≥14 days: 93% (78-98%)	
		(274)	Randomised controlled trial	15/10/2020 to 12/1/2021 US.	2,260	Infection - Adolescents (12-15 years of age) - (without evidence of prior infection)	≥7 days: 100% (75.3-100%)			
Infection - Adolescents (12-15 years of age) - (with or without evidence of prior infection)	≥7 days: 100% (78.1-100%)									
(275)	Retrospective cohort	19/7/2021 to 13/11/2021 South Korea.	444,313	Infection – Adolescents (16-18 years of age)	≥14 days: 91.1% (89.6-92.5%)		≥14 days: 99.1% (98.5-99.5%)			
(276)	Prospective cohort	25/7/2021 to 4/12/2021 US.	243	Infection - Adolescents (12-17 years of age)	≥14 days: 92% (79-97%)					
(277)	Retrospective longitudinal cohort	21/12/2020 to 6/2/2021 Israel.	5,439,734 first dose, 5,112,516 second dose	Infection	14-20 days: 54.3% (50.6-57.8%)		8-14 days: 89.9% (88.6-91.1%)			
				Symptomatic infection	14-20 days: 58.3% (54.7-61.6%)		8-14 days: 93.6% (92.7-94.3%)			
				Hospitalisation	14-20 days: 74.5% (69.1-79%)		8-14 days: 93.8% (91.9-95.2%)			
				Severe/Critical disease	14-20 days: 77.3% (71.2-82.1%)		8-14 days: 94.4% (92.6-95.8%)			
				Death	14-20 days: 71.7% (64.1-77.7%)		8-14 days: 91.3% (87.4-94.0%)			
				Infection					15-21 days: 96.8% (96.1-97.4%)	
				Symptomatic infection					15-21 days: 98.1% (97.7-98.5%)	
				Hospitalisation					15-21 days: 98% (97.1-98.6%)	
Severe/Critical disease					15-21 days: 98.6% (97.8-99.1%)					

					Death	15-21 days: 97.7% (95.9-98.7%)
					Infection	22-28 days: 97.3% (96.7-97.8%)
					Symptomatic infection	22-28 days: 97.9% (97.4-98.3%)
					Hospitalisation	22-28 days: 99% (98.4-99.3%)
					Severe/Critical disease	22-28 days: 99.2% (98.6-99.5%)
					Death	22-28 days: 98.6% (97-99.3%)
(278)	Test-negative case-control	January to March 2021 US.	1,843	Infection	≥14 days: 81.7% (74.3-86.9%)	≤2 days: 81.7% (74.3-86.9%)
						3-6 days: 81.7% (74.3-86.9%)
						≥7 days: 93.5% (86.5-96.9%)
				[NOTE: 76% of case-patients and 78% of controls received BNT162b2, remainder received mRNA-1273]		
(279)	Prospective cohort	January to April 2021 Spain.	20,961	Infection	21% (3-36%)	65% (56-73%)
				Symptomatic infection	30% (10-45%)	82% (73-88%)
				Symptomatic infection – 18-59 years old	50% (12-72%)	85% (74-91%)
				Symptomatic infection - ≥60 years old	20% (-7-40%)	76% (55-87%)
				Hospitalisation	65% (25-83%)	94% (60-99%)
(280)	Prospective cohort	8/10/2020 to 22/2/2021 Scotland.	409,588	Hospitalisation	0-6 days: 86% (81-90%)	
					7-13 days: 53% (45-59%)	
					14-20 days: 69% (62-75%)	
					21-27 days: 78% (71-83%)	
					28-34 days: 91% (85-94%)	
					35-41 days: 78% (69-85%)	
					≥42 days: 77% (68-83%)	
(281)	Test-negative case-control	27/12/2020 to 30/6/2021 Belgium, Croatia, Czechia, France, Greece, Ireland, Luxembourg, Malta, Portugal, Spain.	1,893	Infection	≥14 days: 76% (61-86%)	≥14 days: 94% (88-97%)
(282)	Prospective cohort	1/5/2021 to 3/9/2021 US.	8,690,825	Infection - 18-49 years old		≥14 days: 93.3% (92.2-94.4%)
				Infection - 50-64 years old		≥14 days: 95.0% (94.0-96.0%)
				Infection - ≤65 years old		≥14 days: 91.4% (90.0-92.8%)
				Hospitalisation - 18-49 years old		≥14 days: 96.1% (94.1-97.6%)
				Hospitalisation - 50-64 years old		≥14 days: 95.6% (94.2-96.7%)
				Hospitalisation - ≤65 years old		≥14 days: 94.8% (94.0-95.5%)
(283)	Test-negative case-control	1/7/2021 to 25/10/2021 US.	1,222	Hospitalisation 12-18 years old	97% (86-100%)	≥14 days: 94% (90-96%)
				ICU admission – 12-18 years old		≥14 days: 98% (93-99%)
				Life support – 12-18 years old		≥14 days: 98% (92-100%)
(284)	Test-negative	1/7/2021 to	283	COVID-19 multisystem inflammatory		≥14 days: 92% (77-97%)

			case-control	9/12/2021 US.		syndrome – 12-18 years old		
<b>Oxford University/ AstraZeneca (AZD1222) - Non-replicating adenovirus viral vector (ChAdOx1).</b>	Two doses (0.5ml each) intramuscularly (deltoid) with a recommended interval window of 8 to 12 weeks.	(242)	Test-negative case-control	26/10/2020 to 16/5/2021 UK.	19,109	Infection - Alpha	48.7% (45.2–51.9%)	74.5% (68.4–79.4%)
						Infection - Delta	30.0% (24.3–35.3%)	67.0% (61.3–71.8%)
		(245)	Test-negative case-control	14/12/2020 to 3/8/2021 Canada.	682,071	Symptomatic infection - Alpha	64% (60-68%)	
						Symptomatic infection – Beta or Gamma	48% (28-63%)	
						Symptomatic infection - Delta	67% (44-80%)	
						Hospitalisation or death - Alpha	85% (81-88%)	
						Hospitalisation or death – Bet or Gamma	83% (66-92%)	
						Hospitalisation or death - Delta	88% (60-96%)	
		(133)	Test-negative observational	1/4/2021 to 6/6/2021 Scotland.	462,755	Infection with Alpha variant		73% (66-78%)
						Infection with Delta variant		60% (53-66%)
		(285)	Randomised controlled trial	1/10/2020 to 14/1/2021 UK.	8,534	Symptomatic infection – Alpha		70.4% (43.6-84%)
						Symptomatic infection – non-Alpha		81.5% (67.9-89.4%)
		(286)	Randomised controlled trial	28/8/2020 to 5/3/2021 US.	32,449	Symptomatic infection		79%
						Severe disease or hospitalisation		100%
		(247)	Test-negative case-control	12/4/2021 to 4/6/2021 England.	14,019	Hospitalisation – Alpha	76% (61-85%)	86% (53-96%)
						Hospitalisation – Delta	71% (51-83%)	92% (75-97%)
		(287)	Randomised controlled trial	23/4/2020 to 4/11/2020 UK, Brazil.	11,636	Infection		62.1% (41.0-75.7%)
		(288)	Randomised controlled trial	24/6/2020 to 9/11/2020 South Africa.	2,026	Symptomatic infection		21.9% (-49.9-59.8%)
						Symptomatic infection - Beta		10.4% (-76.8-54.8%)
		(248)	Test-negative case-control	8/12/2020 to 19/2/2021. England.	156,930	Symptomatic infection		28-34 days: 60% (41-73%)
						≥35 days: 73% (27-90%)		
(258)	Observational	1/12/2020 to 1/8/2021 UK.	384,543	Infection - Alpha	≥21 days: 63% (55–69%)	0-13 days: 72% (50-84%)		
						≥14 days: 79% (56–90%)		
				Infection Delta	≥21 days: 46% (35–55%)	0-13 days: 71% (64–77%)		
						≥14 days: 67% (62–71%)		
(289)	Test-negative case-control	1/3/2021 to 31/5/2021 India	720	Infection	49% (17-68%)	54% (27-71%)		
				Symptomatic infection	58% (28-75%)	64% (38-78%)		
				Moderately severe disease	Any dosage >3 weeks ago: 95% (44-100%)			
(269)	Observational	1/12/2020 to 8/5/2021 UK.	383,812	Infection	8-20 days after either dose: 56% (51-61%)			
					≥21 days: 64% (59-68%)	≥21 days: 80% (74-84%)		
				[NOTE: Both BNT162b2 and AZD1222 vaccines were included in this study]				
(290)	Randomised	28/8/2020 to	32,451	Symptomatic infection		≥15 days: 74.0% (65.3-80.5%)		

			controlled trial	15/1/2021 US, Chile, Peru.		Severe or critical infection		≥15 days: 100.0% (71.6-NE%)
						Emergency department visit		≥15 days: 94.8% (59.0-99.3%)
						Hospitalisation		≥15 days: 94.2% (53.3-99.3%)
						ICU admission		≥15 days: 100.0 (-1781.6-NE%)
	(291)	Clinical trial		23/6/2020 to 1/12/2020 Brazil.	9433	Infection – B.1.1.33		88.2 (5.4, 98.5)
						Infection – B.1.1.28		72.6% (46.4-86.0%)
						Infection – Zeta		68.7% (54.9-78.3%)
						Infection – Gamma		63.6% (-2.1-87.0%)
						Infection – Undetermined variant		56.6% (28.2-73.8%)
						Hospitalisation – Any variant		95% (61-99%)
	(292)	Meta-analysis		23/4/2020 to 6/12/2020 UK, Brazil, South Africa.	17,178	Asymptomatic infection		≥14 days: 22.2% (-9-45%)
						Symptomatic infection		≥14 days: 66.7% (57.4-74%)
						Asymptomatic infection - <6 weeks prime-boost interval (standard doses)		≥14 days: -11.8% (-189.5- 56.8%)
						Asymptomatic infection - 6-8 weeks prime-boost interval (standard doses)		≥14 days: -74.2% (-330.3- 29.5%)
						Asymptomatic infection – 9-11 weeks prime-boost interval (standard doses)		≥14 days: 39.9% (-62.3-77.8%)
						Asymptomatic infection - ≥12 weeks prime-boost interval (standard doses)		≥14 days: 22.8% (-63.3-63.5%)
						Symptomatic infection - <6 weeks prime- boost interval (standard doses)		≥14 days: 55.1% (33-69.9%)
						Symptomatic infection - 6-8 weeks prime-boost interval (standard doses)		≥14 days: 59.9% (32-76.4%)
						Symptomatic infection – 9-11 weeks prime-boost interval (standard doses)		≥14 days: 63.7% (28-81.7%)
						Symptomatic infection - ≥12 weeks prime-boost interval (standard doses)		≥14 days: 81.3% (60.3-91.2%)
	(293)	Cross-sectional observational		1/5/2021 to 31/5/2021 India.	583	Infection	<14 days: 15% (-68-57%) ≥14 days: 44% (7-66%)	<14 days: 66% (34-81%) ≥14 days: 83% (73-89%)
						Hospitalisation	<14 days: 43% (-68-81%) ≥14 days: 76% (21-92%)	<14 days: 83% (17-96%) ≥14 days: 88% (55-97%)
						ICU admission or death	<14 days: 62% (-27-89%) ≥14 days: 53% 9-29-83%)	<14 days: 93% (35-99%) ≥14 days: 93% (64-99%)
						[NOTE: Participants either received Covaxin or Covishield (AZD1222)]		
	(279)	Prospective cohort		January to April 2021 Spain.	20,961	Infection	44% (31-54%)	
						Symptomatic infection	50% (37-61%)	
						Symptomatic infection – 18-59 years old	50% (34-62%)	
						Symptomatic infection - ≥60 years old	53% (19-72%)	
						Hospitalisation	92% (46-99%)	
	(294)	Retrospective cohort		1/6/2020 to 31/5/2021	11,405	Infection (with evidence of prior infection)		≥14 days: 91.1% (84.1-94.9%)

				India.		Infection (without evidence of prior infection)		≥14 days: 31.8% (23.5-39.1%)
						[NOTE: 5.77% of participants received Covaxin, 94.23% received Covishield (AZD1222)]		
		(280)	Prospective cohort	8/10/2020 to 22/2/2021 Scotland	409,588	Hospitalisation	0-6 days: 72% (66-77%)	
							7-13 days: 68% (61-73%)	
							14-20 days: 73% (66-79%)	
							21-27 days: 81% (72-87%)	
							28-34 days: 88% (75-94%)	
							35-41 days: 97% (63-100%)	
							≥42 days: 59% (-296-96%)	
		(295)	Cohort	17/1/2021 to 11/5/2021 Brazil.	313,328	Death	≥21 days: 94.4% (93.9-94.8%)	≥21 days: 99.8 (99.6-99.9%)
						Death – 75-79 years old	≥21 days: 88% (85.8-90%)	
						Death – 80-89 years old	≥21 days: 96.8% (96.5-97.2%)	
						Death - ≥90 years old	≥21 days: 99.2% (99.1-99.4%)	
		(296)	Retrospective cohort	18/1/2021 to 30/6/2021 Brazil.	60,577, 870	Infection	≥14 days: 34% (33.2-34.7%)	0-13 days: 56.9% (55.3-58.5%)
								≥14 days: 70% (68.6-71.3%)
						Hospitalisation	≥14 days: 52.2% (50.9-53.4%)	0-13 days: 69.6% (67.2-71.8%)
								≥14 days: 86.8% (85.2-88.2%)
						ICU admission	≥14 days: 54% (51.8-56%)	0-13 days: 69.2% (65-72.8%)
								≥14 days: 88.1% (85.4-90.3%)
						Death	≥14 days: 49.3% (47-51.5%)	0-13 days: 72.1% (69.1-74.9%)
								≥14 days: 90.2% (88.3-91.8%)
<b>Johnson &amp; Johnson (Ad26.COV2.S)</b> - Recombinant, replication-incompetent adenovirus serotype 26 (Ad26) vector.	One dose (0.5ml) intramuscularly (deltoid).	(172)	Randomised controlled trial	21/9/2020 to 22/1/2021 Argentina, Brazil, Chile, Colombia, Mexico, Peru, South Africa, US.	39,321	Moderate to severe-critical infection	≥14 days: 66.9% (59.0-73.4%)	
							≥28 days: 66.1% (55.0-74.8%)	
						Severe-critical infection	≥14 days: 76.7% (54.6-89.1%)	
							≥28 days: 85.4% (54.2-96.9%)	
		(297)	Test-negative case-control	25/6/2021 to 30/9/2021 Brazil.	11,817	Symptomatic infection	14-27 days: 27.4% (8.7-42.7%)	
							≥28 days: 50.9% (35.5-63.0%)	
						Hospitalisation	14-27 days: 33.5% (-29.1-69.8%)	
							≥28 days: 72.9% (35.1-91.1%)	
						Admission to an ICU	14-27 days: 56.0% (-52.8-93.1%)	
							≥28 days: 92.5% (54.9-99.6%)	
Mechanical ventilation	14-27 days: 65.2% (-74.7-98.1%)							
	≥28 days: 88.7% (17.9-99.5%)							
Death	14-27 days: 48.9% (-92.3-92.5%)							
	≥28 days: 90.5% (31.5-99.6%)							

		(298)	Retrospective case-control	27/2/2021 to 14/4/2021 US.	126,572	Symptomatic infection	≥1 day: 50.6% (14.0-74.0%)		
							≥8 days: 65.5% (23.3-87.5%)		
							≥15 days: 76.7% (30.3-95.3%)		
		(299)	Test-negative case-control	1/7/2021 to 31/7/2021 US.	1,000	Symptomatic infection	51% (95% CI: -2-76%)		
		(256)	Observational	14/12/2020 to 14/8/2021 US.	Delta: 2,840 Pre-Delta: 7,012	Infection – Delta	14–119 days: 85% (68-93%)		
							120–149 days: 81% (34-95%)		
							≥150 days: 73% (49-86%)		
						Infection – Pre-Delta	91% (81-96%)		
						[NOTE: 2% of study participants received Ad26.COV2.S (65% received BNT162b2, and 33% received mRNA-1273)]			
		(300)	Cohort	March to July 2021 US.	1,914,670	Infection	79% (77-80%)		
				Hospitalisation	81% (79-84%)				
(301)	Retrospective cohort	27/2/2021 to 22/7/2021 US.	97,787	Infection	≥1 day: 73.6% (65.9-79.9%)				
					≥8 days: 72.9% (64.2-79.9%)				
					≥15 days: 74.2% (64.9-81.6%)				
(282)	Prospective cohort	1/5/2021 to 3/9/2021 US.	8,690,825	Infection - 18-49 years old		≥14 days: 89% (86.5-91.5%)			
				Infection - 50-64 years old		≥14 days: 86.1% (82.5-89.6%)			
				Infection - ≤65 years old		≥14 days: 80.8% (75.2-86.5%)			
				Hospitalisation - 18-49 years old		≥14 days: 95.7% (91.1-98.3%)			
				Hospitalisation - 50-64 years old		≥14 days: 87.5% (82.4-91.4%)			
				Hospitalisation - ≤65 years old		≥14 days: 85.2% (81.1-88.6%)			
<b>Moderna (mRNA-1273) - mRNA</b>	Two doses (100µg, 0.5ml each) intramuscularly (deltoid) with a recommended interval of 28 days between doses.	(245)	Test-negative case-control	14/12/2020 to 3/8/2021 Canada.	682,071	Symptomatic infection – Alpha	≥14 days: 83% (80-86%)	≥7 days: 92% (86-96%)	
						Symptomatic infection – Beta or Gamma	≥14 days: 77% (63-86%)		
						Symptomatic infection – Delta	≥14 days: 72% (57-82%)		
						Hospitalisation - Alpha	≥14 days: 79% (74-83%)	≥7 days: 94% (89-97%)	
						Hospitalisation – Beta or Gamma	≥14 days: 89% (73-95%)		
						Hospitalisation - Delta	≥14 days: 96% (72-99%)		
		(246)	Retrospective case-control	January to July 2021 US.	60,083	Infection		≥14 days: 86% (81-90.6%)	
						Hospitalisation		≥14 days: 91.6% (81-97%)	
						Admission to an ICU		≥14 days: 93.3% (57-99.8%)	
		(250)	Test-negative case-control	17/1/2021 to 5/6/2021 Canada.	5,8476	Infection	≥14 days: 68.7% (59.5-75.9%)	≥7 days: 84.1% (34.9-96.1%)	
(252)	Test-negative case-control	23/3/2021 to 7/9/2021 Qatar.	1 dose: 490,828 2 doses: 409,041	Infection - Delta	≥14 days: 79.7% (60.8-89.5%)	≥14 days: 86.1% (78.0-91.3%)			
(255)	Observational	1/3/2021 to 1/8/2021	10,428,783	Infection – Pre-Delta period		≥14 days: 74.7% (66.2-81.1%)			
				Infection – Intermediate period		≥14 days: 70.4% (60.1-78.0%)			

		(256)	Observational	US. 14/12/2020 to 14/8/2021 US.	Delta: 2,840 Pre-Delta: 7,012	Infection – Delta	≥14 days: 50.6% (45.0-55.7%)		
						Infection – Delta	14–119 days: 85% (68-93%)		
							120–149 days: 81% (34-95%)		
							≥150 days: 73% (49-86%)		
						Infection – Pre-Delta	91% (81-96%)		
		[NOTE: 33% of study participants received mRNA-1273 (2% received Ad26.COVID.S, and 65% received BNT162b2)]							
		(258)	Observational	1/12/2020 to 1/8/2021 UK.	384,543	Infection - Delta	75% (64-83%)		
		(259)	Observational	April to May 2021. Canada	124	Infection	52.5% (26.9-69.1%)		
						Symptomatic infection	65.6% (33.8-82.1%)		
						Severe infection	78.6% (47.9-91.2%)		
		(272)	Retrospective cohort	1/1/2021 to 31/3/2021 US.	4,722	Infection	>14 days after first, ≤14 days after second: 91.2% (80.6-96.1%)		
							>14 days: 98.6% (90.1-99.8%)		
		(273)	Prospective cohort	14/12/2020 to 10/4/2021 US.	3,975	Infection	≥14 days after first, <14 days after second: 83% (40-95%)		
							≥14 days: 82% (20-96%)		
		(177)	Randomised controlled trial	27/7/2020 to 23/10/2020 US.	30,420	Infection	≥14 days: 94.1% (89.3-96.8%)		
						Infection - ≥18 to <65 years of age	≥14 days: 95.6% (90.6-97.9%)		
						Infection - ≥65 years of age	≥14 days: 86.4% (61.4-95.2%)		
		(302)	Retrospective cohort	16/7/2021 to 15/8/2021 US.	827	Infection	≥14 days: 56.6% (42.0-67.5%)		
						Symptomatic infection	≥14 days: 84.2% (56.4-94.3%)		
		(303)	Retrospective cohort	22/12/2020 to 2/2/2021 US.	4,028	Infection	8-42 days: 77.5% (61.2-87%)		
							15-42 days: 95% (86-98.2%)		
		(304)	Test negative case-control	28/10/2020 to 10/5/2021 Qatar.	256,037	Infection – Alpha	0-6 days: 2.4% (0-21.7%)	0-6 days: 98.0% (94.7-99.5%)	
							7-13 days: 0.0% (0.0-11.9%)	7-13 days: 99.2% (95.3-100.0%)	
							14-20 days: 81.6% (73.1-87.8%)		
							21-27 days: 94.4% (89.1-97.5%)		
Infection - Beta	0-6 days: 4.2% (0-15.1%)					0-6 days: 94.2% (92.1-95.9%)			
	7-13 days: 0.0% (0.0-0.0%)					7-13 days: 96.4% (94.3-97.9%)			
	14-20 days: 47.9% (39.5-55.2%)								
	21-27 days: 73.7% (67.6-78.8%)								
Any severe, critical, or fatal infection	0-6 days: 18.7% (0-44.7%)					0-6 days: 100.0% (93.9-100.0%)			
	7-13 days: 0.0% (0.0-10.1%)					7-13 days: 100.0% (86.9-100.0%)			
	14-20 days: 70.3% (48.9-83.5%)								
	21-27 days: 92.1% (78.4-97.9%)								
(305)	Retrospective cohort	27/4/2021 to 6/6/2021	1,945	Symptomatic infection - Mesa County, US	(36% fully vaccinated) Crude vaccine effectiveness 78% (71-84%)				

				US.		Symptomatic infection - Other Colorado counties, US	(44% fully vaccinated) Crude vaccine effectiveness 89% (88-91%)		
		(306)	Prospective cohort	18/12/2020 to 31/03/2021 US.	705,756	Infection		87.4% (85.6-89.1%)	
						Hospitalisation		95.8% (92.5-97.6%)	
						Hospital death		97.9% (84.5-99.7%)	
		(307)	Test-negative case control	1/3/2021 to 27/7/2021 US.	8153 cases and matched controls	Infection - Alpha	≥14 days: 90.1 (82.9 to 94.2)	≥14 days: 98.4 (96.9 to 99.1)	
						Infection - Delta	≥14 days: 77.0% (60.7-86.5%)	≥14 days: 86.7% (84.3-88.7%)	
						Infection - Epsilon	≥14 days: 76.3% (48.1-89.1%)	≥14 days: 97.6% (90.2-99.4%)	
						Infection - Gamma	≥14 days: 74.2% (43.8-88.1%)	≥14 days: 95.5% (90.9-97.8%)	
						Infection - Iota	≥14 days: 88.8% (0.7-98.7%)	≥14 days: 95.7% (81.7-99.0%)	
						Infection - Mu	≥14 days: 45.8% (0.0-88.9%)	≥14 days: 90.4% (73.9-96.5%)	
						Infection - Other	≥14 days: 84.3% (65.9-92.7%)	≥14 days: 96.4% (91.2-98.5%)	
						Infection - Unidentified	≥14 days: 67.6% (57.1-75.6%)	≥14 days: 79.9% (76.9-82.5%)	
		(278)	Test-negative case-control	January to March 2021 US.	1,843	Infection	≥14 days: 81.7% (74.3-86.9%)	≤2 days: 81.7% (74.3-86.9%)	
								3-6 days: 81.7% (74.3-86.9%)	
								≥7 days: 93.5% (86.5-96.9%)	
						[NOTE: 24% of case-patients and 22% of controls received mRNA-1273, remainder received BNT162b2]			
		(282)	Prospective cohort	1/5/2021 to 3/9/2021 US.	8,690,825	Infection - 18-49 years old		≥14 days: 96.3% (95.4-97.2%)	
						Infection - 50-64 years old		≥14 days: 97.3% (96.4-98.1%)	
						Infection - ≤65 years old		≥14 days: 96.0% (95.1-96.9%)	
						Hospitalisation - 18-49 years old		≥14 days: 96.6% (94.3-98.1%)	
						Hospitalisation - 50-64 years old		≥14 days: 97.3% (95.9-98.2%)	
						Hospitalisation - ≤65 years old		≥14 days: 97.1% (96.5-97.6%)	
		(308)	Randomised controlled trial	27/7/2020 to 23/10/2020 US.	30,415	Asymptomatic infection		63.0% (56.6-68.5%)	
						Symptomatic infection		93.2% (91.0-94.8%)	
						Severe infection		98.2% (92.8-99.6%)	
						Death		100.0% (NE-100.0%)	
<b>Sinopharm BBIBP-CorV</b> - Aluminium-hydroxide-adjuvanted, inactivated whole virus vaccine	Two doses (0.5ml) intramuscularly (deltoid) with a recommended interval of 3 weeks between doses.	(309)	Test-negative case-control	18/5/2021 to 20/6/2021 China.	366	Infection	13.8% (-60.2-54.8%)	59.0% (16.0-81.6%)	
							Moderately severe infection		70.2% (29.6-89.3%)
							[NOTE: 27.5% of study participants were vaccinated with Sinopharm BIBP (61.3% received CoronaVac)]		
		(310)	Retrospective cohort	May to June 2021 China.	10,813	Infection with Pneumonia - Delta	8.4% (-47.6-64.4%)	69.5% (42.8-96.3%)	
							Severe/critical disease -Delta	100% (NA)	100% (NA)
		(311)	Retrospective cohort	9/2/2021 to 30/6/2021 Peru.	606,772	Infection	≥14 days: 15.3 (12.7 to 17.8)	≥14 days: 49.2 (47.9 to 50.4)	
							COVID-19 mortality	≥14 days: 45.2% (28.8-57.8%)	≥14 days: 93.9% (90.9-95.9%)
							Infection - ≥60 years old	≥14 days: 14.1% (5.2-22.2%)	≥14 days: 54.7% (50.7-58.3%)
						COVID-19 mortality - ≥60 years old	≥14 days: 25.5% (-10.2-49.7%)	≥14 days: 90.6% (83.8-94.5%)	
		(312)	Randomised controlled	16/7/2020 to 20/12/2020	40,382	Infection		≥14 days: 73.5% (60.6-82.2%)	
						Symptomatic infection		≥14 days: 78.1% (64.8-86.3%)	

			trial	UAE, Bahrain.		Severe infection		≥14 days: 100% (NA)	
		(313)	Retrospective cohort	1/9/2020 to 1/5/2021 UAE.	176,640	Hospitalisation	-20% (-28.6-11.8%)	79.8% (78-81.4%)	
						Critical care admission	3.7% (-12.8-18.1%)	92.2% (89.7-94.1%)	
						Death	27.9% (-61-72.6%)	97.1% (83-99.9%)	
		(314)	Observational	9/12/2020 to 17/7/2021 Bahrain.	569,054	Symptomatic infection		45.5%	
						Hospitalisation		44.5%	
						Hospitalisation - >50 years old		72%	
						Death		63%	
<b>Sinovac-CoronaVac</b> - Aluminium-hydroxide-adjuvanted, inactivated whole virus vaccine	Two doses (0.5ml) intramuscularly (deltoid) with a recommended interval window of 2 to 4 weeks.	(309)	Test-negative case-control	18/5/2021 to 20/6/2021 China.	366	Infection	13.8% (-60.2-54.8%)	59.0% (16.0-81.6%)	
						Moderately severe infection		70.2% (29.6-89.3%)	
						[NOTE: 61.3% of study participants were vaccinated with CoronaVac (27.5% recieved Sinopharm BIBP)]			
		(315)	Observational	2/2/2021 to 1/5/2021 Chile.	10,187, 720	Infection	17.2% (15.8-18.6%)	63.7% (62.8-64.6%)	
						Hospitalisation	40.3% (37.6-42.8%)	86.5% (85.6-87.4%)	
						Admission to an ICU	45.3% (41.2-49.2%)	90.2% (88.9-91.4%)	
						Death	46.0% (40.7-50.8%)	86.7% (84.9-88.3%)	
		(316)	Test-negative case-control	17/1/2021 to 29/4/2021 Brazil.	43,774	Symptomatic infection - Gamma	0-13 days: -0.8% (-9.4 to 7.2%)	0-13 days: 24.7% (14.7 to 33.4%)	
							≥14 days: 12.5% (3.7 to 20.6%)	≥14 days: 46.8% (38.7 to 53.8%)	
						Hospitalisation - Gamma	0-13 days: 6.6% (-4.3 to 16.3%)	0-13 days: 39.1% (28.0 to 48.5%)	
							≥14 days: 16.9% (5.7 to 26.8%)	≥14 days: 55.5% (46.5 to 62.9%)	
						Death - Gamma	0-13 days: 13.1% (-1.5 to 25.6%)	0-13 days: 48.9% (34.4 to 60.1%)	
							≥14 days: 31.2% (17.6 to 42.5%)	≥14 days: 61.2% (48.9 to 70.5%)	
		(317)	Test-negative case-control	19/1/2021 to 13/4/2021 Brazil.	53,153	Infection – Gamma	≥14 days: 49.4% 13.2-71.9%	≥14 days: 37.1% (-53.3-74.2%)	
						Infection	≥14 days: 35.1% (-6.6-60.5%)	37.9% (-46.4-73.6%)	
		(115)	Prospective cohort	February to March 2021 Brazil.	20,187	Infection		≥14 days: 50.7% (33.3-62.5%)	
								≥21 days: 51.8% (30-66.0%)	
						≥28 days: 68.4% (51-80.8%)			
						≥35 days: 73.8% (57-84.8%)			
(318)	Test-negative case-control	15/3/2021 to 3/10/2021 Brazil.	19,838	Symptomatic infection – Pregnant women	≥14 days: 5.02% (-18.22-23.69%)	≥14 days: 40.97% (27.07-52.22%)			
				Severe infection – Pregnant women	≥14 days: 67.74% (20-87%)	≥14 days: 85.39% (59.44-94.80%)			
(319)	Test-negative case-control	19/1/2021 to 25/3/2021 Brazil.	2,656	Symptomatic infection – Gamma	≥14 days: 49.6% (11.3-71.4%)				
				Symptomatic infection	≥14 days: 35.1% (-6.6-60.5%)				
(320)	Randomised controlled trial	14/9/2020 to 5/1/2021 Turkey.	10,029	Symptomatic infection	14-27 days: 46.4% (0.4-71.2%)	≥14 days: 83.5% (65.4-92.1%)			
				Hospitalisation		≥14 days: 100% (20.4-100%)			

		(321)	Randomised controlled trial	21/7/2020 to 16/12/2020 Brazil.	9,823	Infection	≤14 days: -3.3% (-4.8- -1.9%)	≥14 days: 50.7% (35.9-62%)
							14-28 days: 94.0% (55.1-99.2%)	
							≤28 days: 42.5% (32.9-50.7%)	
							≤42 days: 56.5% (49.6-62.5%)	
							≤56 days: 60.4% (56.5-63.9%)	
							≤70 days: 54.7% (53.2-56.1%)	
							≤84 days: 53.7% (52.7-54.7%)	
							≤98 days: 52.5% (51.9-53.1%)	
		Infection requiring medical assistance (hospitalisation)	≥14 days: 83.7% (58.0-93.7%)					
		Moderate infection	≥14 days: 100% (56.4-100%)					
		Severe infection or death	≥14 days: 100% (16.9-100%)					
		Infection - <21 days between 2 doses	≥14 days: 49.1% (33-61.4%)					
		Infection - ≥21 days between 2 doses	≥14 days: 62.3% (13.9-83.5%)					
		(295)	Cohort	17/1/2021 to 11/5/2021 Brazil.	313,328	Death	≥21 days: 95.1% (94.7-95.5%)	≥21 days: 99.1% (98.9-99.3%)
Death – 75-79 years old	≥21 days: 86.3% (84.7-87.7%)							
Death – 80-89 years old	≥21 days: 97.6% (97.2-97.9%)							
Death - ≥90 years old	≥21 days: 99.3% (99.1-99.5%)							
(296)	Retrospective cohort	18/1/2021 to 30/6/2021 Brazil	60,577, 870	Infection	≥14 days: 16.4% (15.2-17.5%)	0-13 days: 40.3% (39.4-41.2%)		
					≥14 days: 54.2% (53.4-55.0%)			
				Hospitalisation	≥14 days: 26.6% (24.6-28.4%)	0-13 days: 57.3% (56.0-58.6%)		
					≥14 days: 72.6% (71.6-73.6%)			
				ICU admission	≥14 days: 28.1% (24.9-31.1%)	0-13 days: 58.1% (55.9-60.1%)		
					≥14 days: 74.2% (72.6-75.7%)			
				Death	≥14 days: 29.4% (26.7-32.0%)	0-13 days: 58.7% (56.9-60.4%)		
					≥14 days: 74% (72.6-75.3%)			
Bharat Biotech – Covaxin – whole virion inactivated virus vaccine	Two doses (0.5ml) intramuscularly (deltoid) with a recommended interval window of 28 days.	(322)	Randomised controlled trial	16/11/2020 to 7/1/2021 India.	25 798	Symptomatic infection	≥14 days: 77.8% (65.2-86.4%)	
						Severe disease	≥14 days: 93.4% (57.1-99.8%)	
						Symptomatic infection – 18-59 years old	≥14 days: 79.4% (66.0-88.2%)	
						Symptomatic infection - ≥60 years old	≥14 days: 67.8% (8.0-90.0%)	
						Symptomatic infection – participants with pre-existing chronic medical condition	≥14 days: 66.2% (33.8-84.0%)	
						Asymptomatic infection	≥14 days: 63.6% (29.0-82.4%)	
		(323)	Test-negative case-control	15/4/2021 to 15/5/2021 India.	3,732	Symptomatic infection	<7 days: 40% (-21-71%)	<14 days: 27% (-35-61%)
							≥7 days: 1% (-30-25%)	≥14 days: 50% (33-62%)
							≥21 days: -1% (-51-33%)	≥28 days: 46% (22-62%)
		(293)	Cross-	1/5/2021 to	583	Infection		≥42 days: 57% (21-76%)
							<14 days: 15% (-68-57%)	<14 days: 66% (34-81%)

			sectional observational	31/5/2021 India.			≥14 days: 44% (7-66%)	≥14 days: 83% (73-89%)			
						Hospitalisation	<14 days: 43% (-68-81%)	<14 days: 83% (17-96%)			
							≥14 days: 76% (21-92%)	≥14 days: 88% (55-97%)			
						ICU admission or death	<14 days: 62% (-27-89%)	<14 days: 93% (35-99%)			
			≥14 days: 53% (9-29-83%)	≥14 days: 93% (64-99%)							
			[NOTE: Participants either received Covaxin or Covishield (AZD1222)]								
			(294)	Retrospective cohort	1/6/2020 to 31/5/2021 India.	11,405	Infection (with evidence of prior infection)		≥14 days: 91.1% (84.1-94.9%)		
							Infection (without evidence of prior infection)		≥14 days: 31.8% (23.5-39.1%)		
			[NOTE: 5.77% of participants received Covaxin, 94.23% received Covishield (AZD1222)]								
			(324)	Retrospective cohort	3/3/2020 to 18/6/2021 India.	15,244	Reinfection		86% (77-92%)		
Symptomatic reinfection		87% (76-93%)									
Asymptomatic reinfection		84% (47-95%)									
<b>Novavax – NVX-CoV2373 (Nuvaxovid) or Serum Institute of India – COVOVAX (Novavax formulation - recombinant SARS-CoV-2 S protein nanoparticle as a coformulation with the adjuvant Matrix-M</b>	Two doses (0.5 ml) intramuscularly (deltoid) with a recommended interval of 3-4 weeks.	(325)	Randomised controlled trial	28/9/2020 to 28/10/2020 UK.	14,039	Infection		89.7% (80.2-94.6%)			
						Infection – 18 to 64 years old		89.8% (79.7-95.5%)			
						Infection – 65 to 84 years old		88.9% (20.2-99.7%)			
						Infection – Alpha		86.3% (71.3-93.5%)			
						Infection – Non-Alpha		96.4% (73.8-99.5%)			
		(326)	Randomised controlled trial	27/12.2020 to 18/2/2021 US, Mexico.	29,949	Infection		≥7 days: 89.3% (81.6-93.8%)			
						Infection – COVID-19 high risk group		≥7 days: 91.0% (83.6-95.0%)			
		(327)	Randomised controlled trial	28/9/2020 to 28/10/2020 UK.	15,139	Infection		89.8% (79.7-95.5%)			
						Infection – 18-64 years old		87.5% (-0.2-98.4%)			
		(328)	Randomised controlled trial	17/7/2020 to 25/11/2020 South Africa.	2,684	Symptomatic infection		≥7 days: 49.4% (6.1-72.8%)			
Symptomatic infection – Beta						≥7 days: 51.0% (-0.6-76.2%)					