





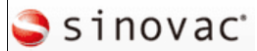











Company or name	Form of publication for phase 3 data	Reference
	Peer reviewed publication	Baden NEJM , Feb 4, 2021
	Peer reviewed publication	Polack NEJM , December 31, 2020
	Press release only	J&J press release January 29, 2021; FDA document Feb 24
	Two peer-reviewed publications but ongoing	Voysey Lancet December 8, 2020; Preprint Feb 1, 2021
	Press release and abstract only (phase 3 UK; phase 2b S. Africa)	Novavax press release 1/28 and NYAS abstract 2/2/21
	Peer-reviewed publication	Logunov Lancet , February 2, 2021
	Press release (scanter details)	Sinopharm , January 16, 2021
	Press release (scanter details)	Sinovac , February 5, 2021
	Press release (scanter details)	Bharat Covaxin , March 3, 2021

Nine vaccines with phase 3 clinical trial data to date: Some in press release form

Company	Platform	Doses	Non-clinical results	# who got vaccine	Protection from hospitalization from COVID-19	Protection from COVID severe dz (some at home)	Efficacy against milder COVID
	mRNA-1273 mRNA in lipid nanoparticle	2	Neutralizing Abs; Strong Th1 CD4+, CD8+; protection from challenge (macaques)	~15,000	97% (1 in vaccine arm after 2nd dose hospitalized)	97% (30 cases in placebo arm; 0 in vaccine reported but 1 severe per FDA)	94.1%
	BNT162b2 mRNA in lipid nanoparticle	2	Neutralizing Abs; Strong Th1 CD4+, CD8+; protection from challenge (macaques)	~18,600	100%	100% (9 cases in placebo arm; 0 in vaccine- 1 initially severe but not)	95%
	JNJ-78436725 Non-replicating human adenovirus/DNA	1	Neutralizing Abs; Strong Th1 CD4+ > Th2; CD8+; challenge protection (macaque)	~22,000 US, Latin America, S. Africa	100%	85.4% across 3 sites (7 deaths, 16 hospitalizations, all in placebo arm)	72% US; 61% Latin America; 64% S. Africa (96% B1.351)
	AZD 1222 Non-replicating Chimp Adenovirus-DNA	2	Neutralizing Abs; Strong Th1 CD4+ > Th2; CD8+; protection from challenge (macaques)	~8588	100%	100% (15 in placebo – all hospitalized; 0 in vaccine)	70% overall; 76% 1 dose; S. Africa trial halted for mild
	NVX-CoV2373 Spike protein/RBD + Matrix M adjuvant	2	Neutralizing Abs; Strong Th1 CD4 > Th2; challenge protection (macaques)	~8833 (Phase 3 UK; 2b SA)	100%	100% (10 severe in placebo in UK/SA; 0 in vaccine)	96.4% UK; 89% B117 UK; 55% SA (94% B1351)
	Ad26 and Ad5 adenovirus/DNA	2	NAbs; IFN- γ secretion PMBCs, cellular response	~14964	100%	100% (20 in placebo; 0 vaccine)	91.6%
	Inactivated virus	2	Antibodies (T cells next)	~12500	100%	83% (tx needed)	50.7% across