

Supplementary Online Content

Corchado-Garcia J, Zemmour D, Hughes T, et al. Analysis of the effectiveness of the Ad26.COV2.S adenoviral vector vaccine for preventing COVID-19. *JAMA Netw Open*. 2021;4(11):e2132540. doi:10.1001/jamanetworkopen.2021.32540

eFigure 1. Evolution of the Number of SARS-CoV-2–Positive Cases

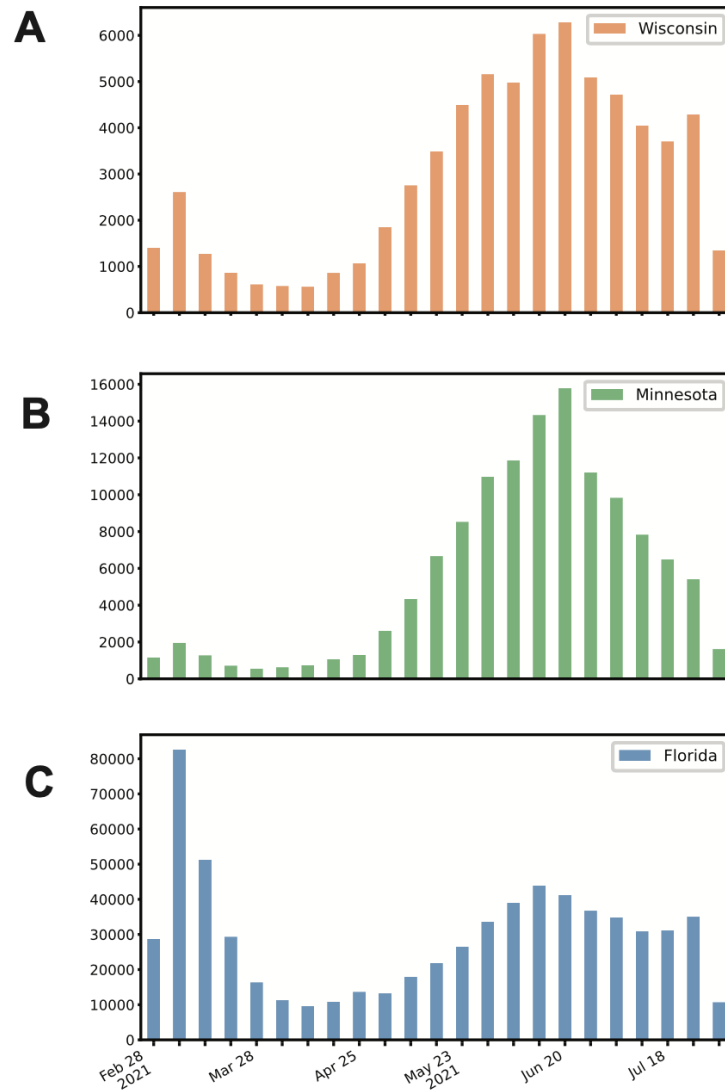
eFigure 2. Evolution of the Prevalence of SARS-CoV-2 Variants of Interest and Concern

eTable 1. Rates of Hospitalization, ICU Admission, and Mortality in Vaccinated vs 1:10 Propensity-Matched Unvaccinated COVID-19 Patients

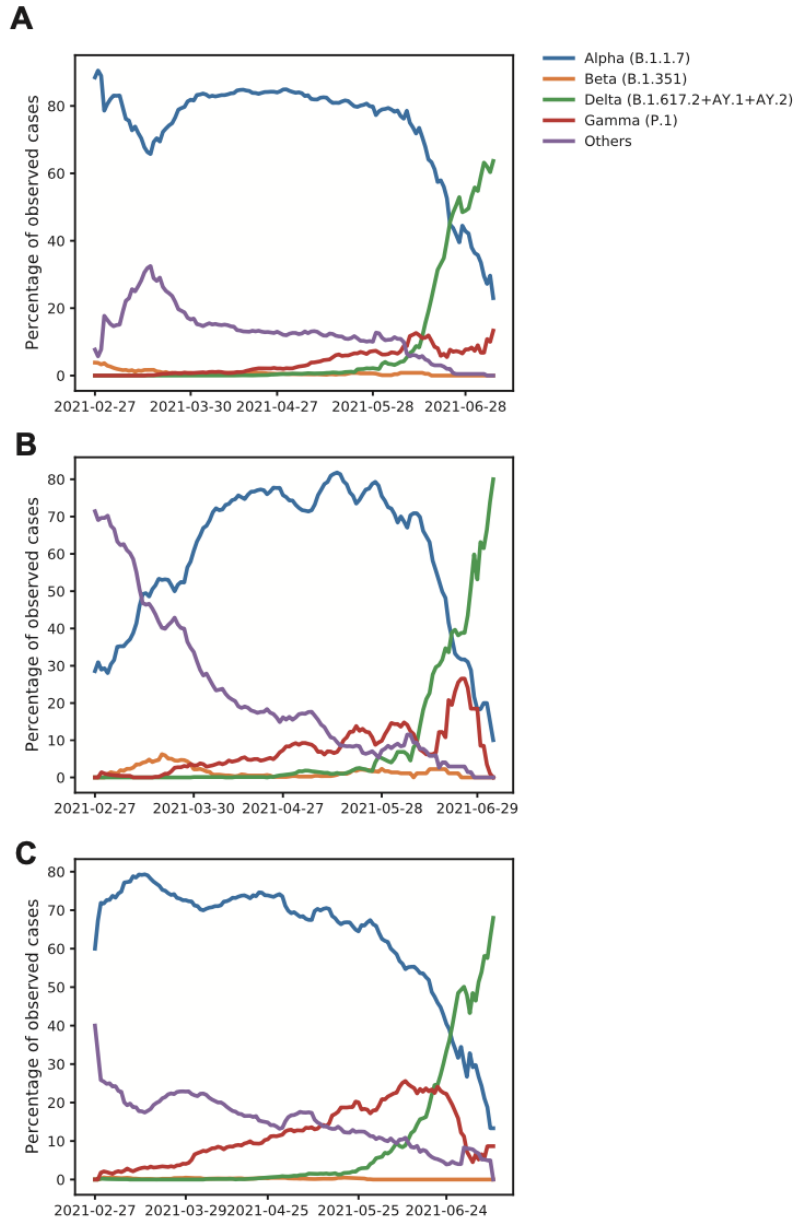
eTable 2. Clinical Characteristics of SARS-CoV-2–Positive Cases in the Vaccinated and 1:10 Propensity-Matched- by-Comorbidities Unvaccinated Cohorts

eTable 3. 14-Day Rates of Hospitalization, ICU Admission, and Mortality for Vaccinated vs 1:10 Propensity-Matched-by-Comorbidities Unvaccinated COVID-19 Patients

This supplementary material has been provided by the authors to give readers additional information about their work.



eFigure 1. Evolution of the Number of SARS-CoV-2–Positive Cases. Weekly number of SARS-CoV-2 positive cases reported to the CDC (blue histograms) in (A) Wisconsin, (B) Minnesota and (C) Florida between February 27, 2021 and July 22, 2021 (<https://covid.cdc.gov/covid-data-tracker/>).



eFigure 2. Evolution of the Prevalence of SARS-CoV-2 Variants of Interest and Concern. Percentage of daily observations of SARS-CoV-2 variants in the states of (A) Minnesota, (B) Wisconsin and (C) Florida between February 27, 2021 and July 11, 2021.

eTable 1. Rates of Hospitalization, ICU Admission, and Mortality in Vaccinated vs 1:10 Propensity-Matched Unvaccinated COVID-19 Patients. For the composite and each outcome, the odds ratio (with 95% confidence interval) and Fisher exact test p-value are used to compare the odds between vaccinated and unvaccinated patients.

	Vaccinated	Unvaccinated	Odds Ratio (95% CI)	p-value
Hospitalization or ICU admission or mortality	9/8880 (0.10%)	271/88627 (0.31%)	0.33 [0.19,0.65]	0.00016
Hospitalization Rate	8/8881 (0.09%)	248/88650 (0.28%)	0.32 [0.18,0.66]	2.833 x 10 ⁻⁴
ICU Admission Rate	0/8889 (0.00%)	54/88844 (0.06%)	0.00 [0.00,1.43]	0.014
Mortality Rate	1/8888 (0.01%)	12/88886 (0.01%)	0.83 [0.26,5.20]	1.00

eTable 2. Clinical Characteristics of SARS-CoV-2–Positive Cases in the Vaccinated and 1:10 Propensity-Matched- by-Comorbidities Unvaccinated Cohorts. Highly balanced covariates with Standardized Mean Difference (SMD) < 0.1 are indicated with ***.

Clinical covariate		SARS-CoV-2 positive vaccinated cohort (n=60)	1:10 Propensity-matched SARS-CoV-2 positive unvaccinated cohort (n = 600)	Standardized Mean Difference (SMD)
Age (Overall)		49.81 (17.23)	49.23 (16.72)	0.03***
	18-44	21 (35.0%)	241 (40.2%)	0.11*
	45-64	27 (45.0%)	250 (41.7%)	0.07***
	65+	12 (20.0%)	109 (18.2%)	0.05***
Comorbidities				
	Asthma	12.0 (20.0%)	141.0 (23.5%)	0.08***
	Cancer	18.0 (30.0%)	183.0 (30.5%)	0.01***
	Cardiomyopathy	1.0 (1.7%)	10.0 (1.7%)	0.00***
	Chronic kidney disease	5.0 (8.3%)	49.0 (8.2%)	0.01***
	Chronic obstructive pulmonary disease	2.0 (3.3%)	22.0 (3.7%)	0.02***
	Coronary Artery Disease	5.0 (8.3%)	53.0 (8.8%)	0.02***
	Heart failure	4.0 (6.7%)	59.0 (9.8%)	0.11*
	Hypertension	26.0 (43.3%)	259.0 (43.2%)	0.00***
	Obesity	21.0 (35.0%)	234.0 (39.0%)	0.08***
Ethnicity				
	Hispanic or Latino	4 (6.7%)	55 (9.2%)	0.09***
	Not Hispanic or Latino	49 (81.7%)	493 (82.2%)	0.01***
	Unknown	7 (11.7%)	52 (8.7%)	0.11*
Sex				
	Female	27 (45.0%)	266 (44.3%)	0.01***
	Male	33 (55.0%)	334 (55.7%)	0.01***
Race				
	Asian	0 (0.0%)	1 (0.2%)	0.04***
	Black / African American	3 (5.0%)	34 (5.7%)	0.03***
	Other	2 (3.3%)	26 (4.3%)	0.05***
	Unknown	4 (6.7%)	21 (3.5%)	0.17*
	White / Caucasian	51 (85.0%)	518 (86.3%)	0.04***
Follow-up days				
Mean		35	45	
Median		27	28	

Q1		12	12	
Q4		49	79	
Standard deviation		30	38	

eTable 3. 14-Day Rates of Hospitalization, ICU Admission, and Mortality for Vaccinated vs 1:10 Propensity-Matched-by-Comorbidities Unvaccinated COVID-19 Patients. Patients were considered eligible for analysis if they had at least 14 days of follow-up after COVID-19 diagnosis as defined by a positive SARS-CoV-2 PCR test. For each outcome, the relative risk (and its 95% confidence interval) and Fisher exact test p value are used to compare the rates between vaccinated and unvaccinated patients. .

Outcome	J&J 1 dose, COVID positive (60 patients)	Matched unvaccinated, COVID positive (600 patients)	Relative Risk (95% CI)	Fisher Exact test p-value
Number of patients with at least 14 days of follow-up	41	534		
14-Day Hospital admission rate	5/44 (11%)	77/534 (14%)	0.79 (0.38, 1.9)	0.82
14-Day ICU admission rate	0/44 (0%)	21/534 (3.9%)	0 (0, 4.5)	0.39
14-Day Mortality rate	0/44 (0%)	0/534 (0%)	-	1