

Web Material

Title: A prospective cohort study of COVID-19 vaccination, SARS-CoV-2 infection, and fertility

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Web Table 1. Distribution of baseline characteristics by brand of COVID-19 vaccine, Pregnancy Study Online, December 2020-November 2021.

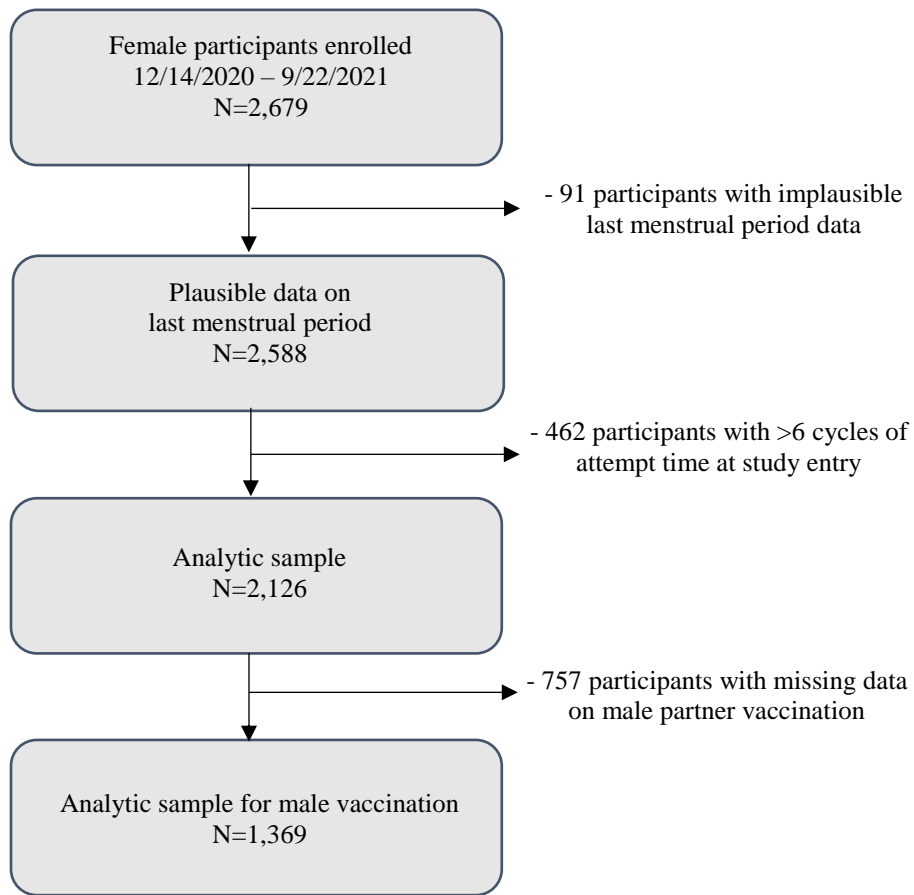
Characteristic	Vaccine Brand ^{a,b}			
	Unvaccinated (n=897)	Moderna® (n=446)	Pfizer- BioNTech® (n=713)	Johnson & Johnson® (n=67)
Age (years), mean	30.2	31.1	31.3	31.0
Attempt time at study entry (cycles), mean	2.2	1.8	1.9	1.2
Educational attainment (years), %				
≤12	5.6	1.9	0.1	0.0
13-15	20.1	9.1	7.9	13.2
16	33.2	31.3	32.1	29.0
≥17	41.2	57.7	59.0	57.8
Household income (USD/year), %				
<\$50,000	17.0	9.0	8.4	18.4
\$50,000-\$99,999	35.4	27.6	28.5	23.7
\$100,000-\$149,999	26.9	32.3	29.7	26.4
≥\$150,000	20.7	31.1	33.3	31.6
Race/ethnicity, %				
Hispanic	7.4	5.7	7.3	9.0
Non-Hispanic white	83.5	86.0	85.3	85.2
Non-Hispanic Black	4.0	2.0	1.8	1.3
Non-Hispanic Asian	2.8	2.9	3.1	2.9
Non-Hispanic other race	2.3	3.3	2.6	1.7
Geographic region of residence, %				
Northeastern U.S.	14.5	20.3	16.5	25.1
Southern U.S.	25.2	22.7	22.3	33.3
Midwestern U.S.	19.6	24.6	20.1	16.2
Western U.S.	15.4	23.9	19.7	25.4
Canada	25.3	8.4	21.5	0.0
Current smoker, %	5.3	2.3	3.4	5.0
Ever tested positive for SARS-CoV-2, %	7.7	8.7	7.2	7.1
Partner received ≥1 dose of COVID-19 vaccine, %	8.7	77.0	76.8	90.8
Partner ever tested positive for SARS-CoV-2, %	8.2	11.3	6.7	14.9
Private health insurance, %	81.1	92.9	87.7	94.9
Work duration (hours/week), mean	31.5	36.2	36.2	34.2
Rotating shift work, %	11.0	11.6	14.6	12.3
Night shift work, %	10.2	9.7	13.4	5.0
Occupation in healthcare industry, ^c %	16.8	28.1	33.6	11.6
Body mass index, %				
<25	43.8	46.9	50.2	40.8
25-29	24.6	22.4	23.8	29.8
≥30	31.6	30.8	26.0	29.4
Intercourse <1 time/week, %	24.1	26.8	28.4	30.2
Intercourse ≥4 times/week, %	14.7	9.4	7.7	11.5
Doing something to improve chances of conception, %	86.4	84.4	80.1	84.2
Sleep duration <6 hours/night, %	4.5	4.7	4.0	0.0
Perceived Stress Scale score, mean	17.4	16.2	16.0	17.4
Major Depression Inventory score, mean	12.7	11.3	10.8	11.9
Pap smear in past three years, %	89.7	92.8	91.2	94.3
History of infertility, %	11.4	6.9	5.9	8.7
Parous, %	40.9	37.4	30.8	35.2
Irregular menstrual cycles, %	16.3	13.0	11.9	15.6
Typical menstrual cycle length (days), mean	30.3	29.7	30.0	29.8
Hormonal last method of contraception, %	29.2	28.5	30.4	27.5

^a Three participants received the AstraZeneca vaccine and is excluded from this table.

^b Vaccination status defined by at least one dose of vaccine by the LMP date of the final observed cycle.

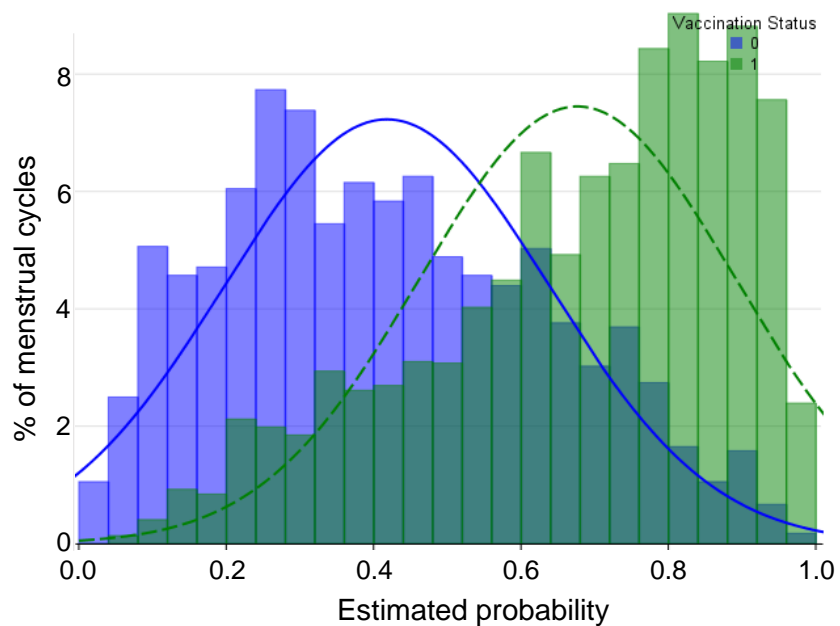
^c Occupation in healthcare industry defined based on United States Census Industry codes 8190 (Hospitals), 8180 (Other health care services), 8170 (Home health care services), 8080 (Offices of other health practitioners), 8070 (Offices of optometrists), 8090 (Outpatient care centers), 8270 (Nursing care facilities), 8290 (Residential care facilities, without nurses), 7970 (Offices of physicians) and 7980 (Offices of dentists).

Web Figure 1. Flow chart defining analytic sample.

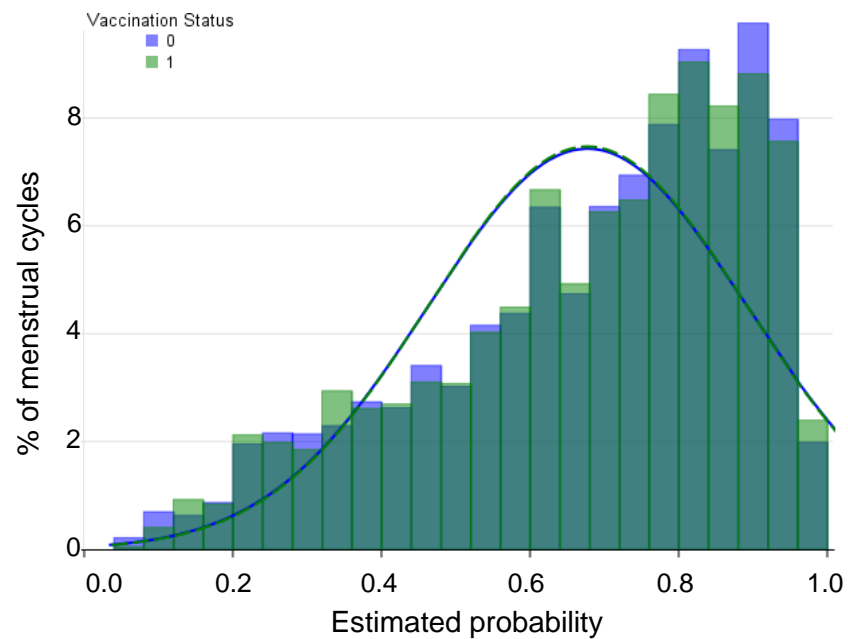


Web Figure 2. Distribution of propensity scores by female COVID-19 vaccination status at first day of menses, before (left panel) and after (right panel) propensity score weighting and trimming. We trimmed 57 (0.9%) menstrual cycles with non-overlapping propensity scores.

a) Unweighted propensity score distribution



b) Weighted propensity score distribution



Web Figure 3. Plot showing covariate balance across strata of female COVID-19 vaccination status at first day of menses before and after propensity score weighting. Black circles represent the standardized difference in the covariate between vaccinated and unvaccinated individuals before weighting and trimming; blue circles represent the standardized difference after propensity score weighting and trimming.



