Appendix 1. Diagnostic Codes Used to Identify Outcomes, Whether Medical Record Review Was Performed, Exclusions Applied to Outcomes, and Diagnostic Codes Used to Adjust Onset Date of Outcome

Outcome	ICD-10 code(s)	Medical Record Review	Exclusions	Additional codes to adjust onset date
Anaphylaxis	**T78.2*, T88.6*, T80.52***	**Y**	**n/a**	**n/a**
Skin and soft tissue or allergic reactions	**T78.3*, T78.40*, T80.62*, L50.0, L50.1, L50.8, L50.9, B09, B08.8, L51.0, .8, .9, L53.9, R21, T78.41*, L03.113, .114, L03.119**	**N**	**n/a**	**n/a**
Fever	**R50.83, R50.9**	**N**	**n/a**	**n/a**
Fatigue/Malaise	**R53.1, R53.81, R53.83, O26.811,**	**N**	**n/a**	**n/a**

DeSilva M, Haapala J, Vazquez-Benitez G, Boyce TG, Fuller CC, Daley MF, et al. Medically attended acute adverse events in pregnant persons after coronavirus disease 2019 (COVID-19) booster vaccination. Obstet Gynecol 2023;142.
The authors provided this information as a supplement to their article.

	O26.812, O26.813, O26.819, T88.1*			
Acute disseminated encephalomyelitis (ADEM)	**G04.00, G04.02**	**Y**	**n/a**	**n/a**
Acute myocardial infarction	**I21.***	**N**	**Trauma in prior 7 days (V00-Y99); I22.*, I23.*, I25.1, I25.2 ever prior**	**n/a**
Appendicitis	**K35*, K36, K37**	**N**	**n/a**	**n/a**
Bell's Palsy	**G51.0**	**N**	**A69.2*, A92.5, B00.*, B02.* in last 14 days; D86.* ever**	**n/a**
Convulsions/ seizure	**R56.9**	**N**	**If occurs EVER prior to case: F44.5, G40, I69.*, Z86.73; If in last 3 days prior to case:I60.*, I61.*, I62.*, I63.*; If in last 7 days prior to case: A17.0, A17.82, A27.81, A32.1*, A39.0, A39.81, A41.9, A69.21, A85.*, A86, A87.* A88.0, A88.8, A89, A92.31, A92.5, B00.*,**	**n/a**

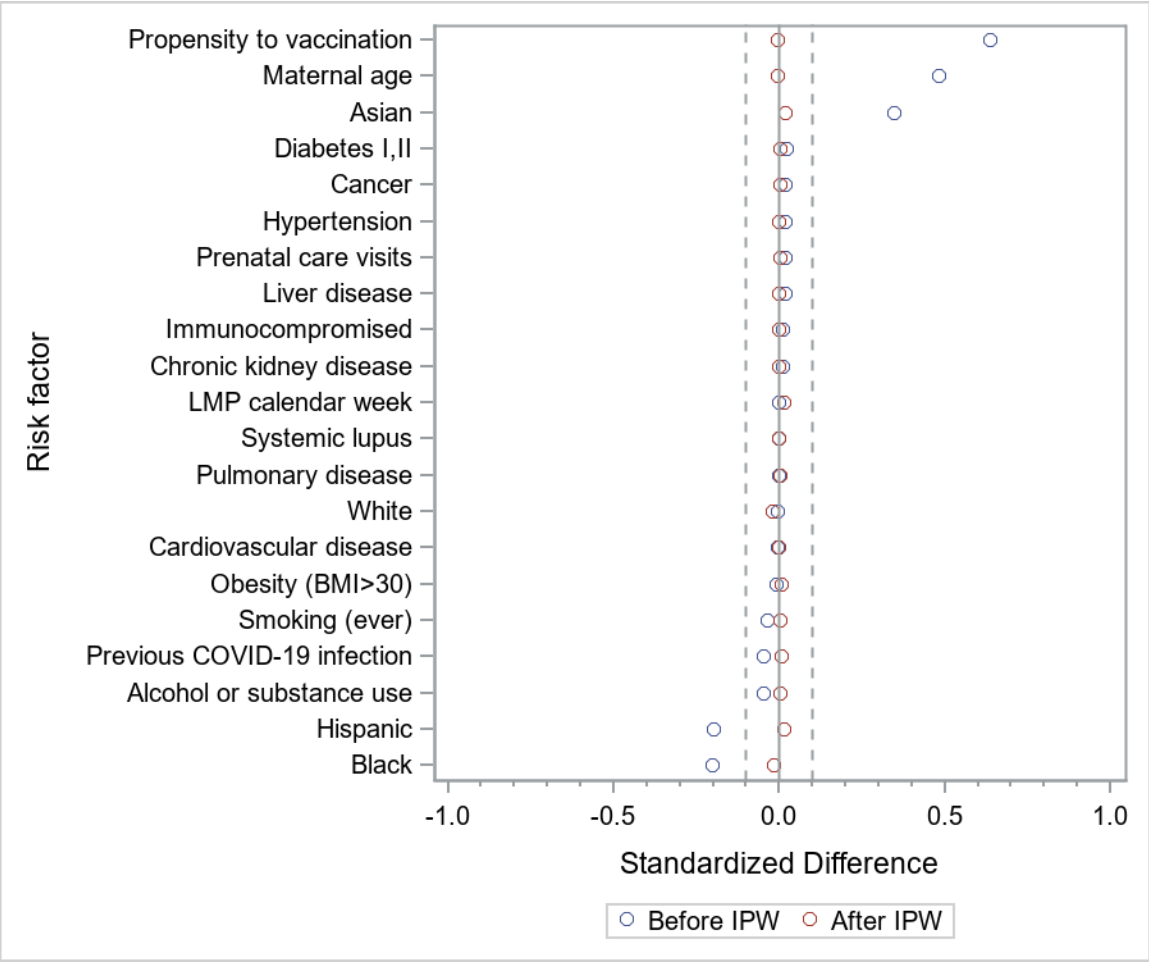
			B01.0, B01.11, B02.*, B05.*, B06.*, B10.81, B26.*, B45.1, B58.2, B96.0, G00.*, G01, G02, G03.0, G03.8, G04.3*, G04.81, G04.90, G05.3, G92, G93.41, G95.1*, G95.89, J09.*, J10.*, J11.*, R65.20, R65.21; If in past year prior to case:G03.1, Z86.61, S06.3*, S06.9*; If same day as case:, S06.0X9A	
Disseminated intravascular coagulation (DIC)	**D65**	**N**	**If in last 14 days prior to case: Physical trauma code C92.4*, K85.*, S06.*, T30-T32**	**n/a**
Encephalitis / myelitis	**G37.4, G04.30, G04.32, G04.39, G04.8*, G04.9*, G05.***	**N**	**If occurs EVER prior to case: G03.1, Z86.61; If in last 7 days prior to case: A17.0, A17.82, A32.1*, A39.0, A39.81, A41.9, A69.21, A85.*, A86, A87.*, A88.0, A88.8, A89, A92.31, A92.5, B00.*, B01.0, B01.1*, B02.*, B05.*, B06.*, B10.81, B26.*, B45.1, B58.2, B96.0, G00.*, G01, G02, G03.0, G03.8, G04.31, G95.1*, G95.89, J09.*, J10.*, J11.*, R65.20, R65.21**	**n/a**
Guillain-Barré syndrome (GBS)	**G61.0**	**Y**	**If occurs EVER prior to case: G65.0**	**n/a**
Trigeminal neuralgia and related disorders	**G50.0, G50.1, G50.8**	**N**	**If occurs EVER prior to case: D86.*; If in last 14 days: A69.2*, A92.5, B00.*, B02.***	**n/a**

Pulmoary Embolism (PE)	**I26.*, O88.2***	**Y**	**If occurs EVER prior to case: I27.82, Z86.71*; If in last 14 days prior to case: Physical trauma code (V00-Y99), T79.1***	**n/a**
Venous thromboembolism (VTE)	**I82.210, I82.220, I82.290, I82.3, I82.4*, I82.60, I82.62, I82.A1*, I82.B1*, I82.C1*, O88.2*, I82.890, I82.90, I26.*, O22.3*, O22.8*, O22.9***	**Y**	**If occurs EVER prior to case: I27.82, I82.211, I82.221, I82.291, I82.5*, I82.7*, I82.A2, I82.B2*, I82.C2*, I82.891, I82.91, Z86.71*; Physical trauma code in the past 60 days: (V00-Y99, M67.9*, M80.*, M84.3*, M99.*, Z08, Z51.89, C, S, T Z30.011, Z79.890; If in last 14 days prior to case: Pneumonia code (A22.1, B25.0, A37.01, A37.11, A37.81, A37.91, A48.1, B44.0, B77.81, J12.*, J13, J14, J15.*, J16.*, J17, J18.*), I50.*, T79.1***	**If in 14 days prior to case: M79.65*, M79.66*, M79.604, M79.605, M79.606, and R22.4***
Thrombotic thrombocytopenic purpura (TTP)	**M31.1**	**Y**	**If in the previous year: B20, C00-C96, Z51.11, Z94.81, Z94.84; If platelet <100k in prior year**	**n/a**
Immune thrombocytopenic purpura (ITP)	**D69.3, O99.11***	**N**	**1st ever: Known illnesses causing thrombocytopenia: B20, C00 – C96, D18.0*, D80 – D89, D59.0 – D59.2, D59.3, D61.*, D65, K70 – K77, D69.0, M32.*, Z51.11**	**If in 1 year prior to case: low platelet count**
Myocarditis / pericarditis	**B33.22, B33.23, I30.*, 131.9, I40.*, 151.4**	**Y**	**n/a**	**n/a**

Lymphadenopathy /Lymphadenitis	**R22.30, R22.31, R22.32, R59.*, M79.62*, L04.2, L04.9**	**N**	**n/a**	**n/a**
Skin and soft tissue or allergic reactions	**L51.1, L51.2, L51.3**	**N**	**n/a**	**n/a**
Stroke, ischemic	**G45.8, G45.9, I63.***	**N**	**If occurs EVER prior to case: I69.*, Z86.73; If in last 1 day prior to case: S15.*, I74.*; If in last 28 days prior to case: I21.*; If EVER prior to case: I48.*, D57.*, D68.5*; If same day as case: S15.*, I74.*, Physical trauma code (V00-Y99)**	**If in 1 day prior to case: G81.9*, H53.13*, H53.9, R29.810, R40.4, R41.82, R42.*, R47.*, R51.*, R53.1, Z92.8**
Stroke, hemorrhagic	**I60.*, I61.*, I62.***	**N**	**If occurs EVER prior to case: I69.*, Z86.73; If in last 1 day prior to case: S06; If occurs same day as case: Physical trauma codes (V00-Y99)**	**If in 1 day prior to case: G81.9*, H53.13*, H53.9, R29.810, R40.4, R41.82, R42.*, R47.*, R51.*, R53.1**
Transverse myelitis	**G37.3**	**Y**	**n/a**	**n/a**
		Y	**n/a**	**n/a**

Thrombosis with Thrombocytopenia Syndrome (TTS), includes the listed diagnostic codes along with platelets <150,000	**I67.6, G08, I63.6, O22.5*, O87.3, I81, K55.0*, I82.0, I82.890, N28.0 , I74.0*, I74.1*, I74.3, I74.5, I74.8, I74.9**			
Cerebral venous sinus thrombosis (CVST)	**I67.6, G08, I63.6 , O22.5*, O87.3**	**Y**	**If on the same day: S02*, S06.*, S09*, S15*, and Physical trauma codes (V00-Y99)**	**R51, R531, R42, R4182, R410, H539, H532, G932, H4710, I82C1, I609, I619, I629, I639, or G43909 as onset if seen within 7 days before case**

Appendix 2. Standardized differences for selected baseline characteristics before and after applying inverse probability weighting (IPW) among matched cohort of mRNA monovalent coronavirus disease 2019 (COVID-19) booster vaccinated pregnant people and pregnant people not vaccinated with a COVID-19 vaccine during pregnancy. We calculated propensity to receive a COVID-19 vaccine immediately preceding or during pregnancy using a generalized additive model with binomial distribution and logit link with spline functions for age at pregnancy start date, calendar week at pregnancy start, number of prenatal care encounters before vaccination or index date, race/ethnicity, VSD site, prior SARS-CoV-2 infection, and comorbidities. We generated stabilized IPWs by using the inverse of the propensity to be vaccinated or unvaccinated multiplied by the overall proportion with the same vaccination status.



DeSilva M, Haapala J, Vazquez-Benitez G, Boyce TG, Fuller CC, Daley MF, et al. Medically attended acute adverse events in pregnant persons after coronavirus disease 2019 (COVID-19) booster vaccination. Obstet Gynecol 2023;142.
The authors provided this information as a supplement to their article.

Appendix 3. Number of Events, Incident Rates Per 10,000 Vaccines Administered, and Adjusted Rate Ratios (aRR) With 95% Confidence Intervals (CI) for Acute Adverse Events After Coronavirus Disease 2019 (COVID-19) Vaccination Booster* in Pregnant Persons at Eight Vaccine Safety Link Sites, September 23, 2021–June 30, 2022

	COVID-19 mRNA Booster during pregnancy		No COVID-19 vaccine during pregnancy		
Maternal acute events after Covid-19 vaccine	**Events, n**	**Events per 10,000 (95% CI)**	**Events, n**	**Events per 10,000 (95% CI)**	**aRR (95% CI)**
1–7 day risk interval					
Malaise / fatigue	108	26.9 (22.0-32.4)	33	8.2 (5.7-11.5)	3.64 (2.42–5.48)
Skin and soft tissue or local allergic reactions	35	8.7 (6.1-12.1)	33	8.2 (5.7-11.5)	1.23 (0.73–2.07)
Fever	15	3.7 (2.1-6.2)	21	5.2 (3.2-8.0)	0.96 (0.46–2.00)
1–21 day risk interval					
Lymphadenopathy / lymphadenitis	38	9.5 (6.7-13.0)	12	3.0 (1.5-5.2)	3.25 (1.67–6.30)
Seizure	2	0.5 (0.1-1.8)	1	0.2 (0.0-1.4)	3.84 (0.32–45.63)
Venous thromboembolism (VTE)	2	0.5 (0.1-1.8)	1	0.2 (0.0-1.4)	3.40 (0.31–37.46)
Immune thrombocytopenic purpura (ITP)	39	9.7 (6.9-13.3)	34	8.5 (5.9-11.8)	1.13 (0.70–1.82)
Myocarditis / pericarditis	0	0.0 (0.0-0.9)	1	0.2 (0.0-1.4)	0.99 (0.00–18.85)
Pulmonary embolism (PE)	1	0.2 (0.0-1.4)	0	0.0 (0.0-0.9)	0.99 (0.05–Inf)
Trigeminal neuralgia and related disorders	0	0.0 (0.0-0.9)	1	0.2 (0.0-1.4)	0.99 (0.00–18.85)
Disseminated Intravascular Coagulation (DIC)	1	0.2 (0.0-1.4)	2	0.5 (0.1-1.8)	0.47 (0.04–5.19)
Appendicitis	2	0.5 (0.1-1.8)	4	1.0 (0.3-2.5)	0.46 (0.08–2.56)
Bell's Palsy	0	0.0 (0.0-0.9)	6	1.5 (0.5-3.2)	0.12 (0.00–0.64)
1–42 day risk interval					
Lymphadenopathy / lymphadenitis	57	14.2 (10.7-18.4)	24	6.0 (3.8-8.9)	2.18 (1.33–3.58)
Seizure	4	1.0 (0.3-2.5)	2	0.5 (0.1-1.8)	3.45 (0.59–20.29)
Venous thromboembolism (VTE)	3	0.7 (0.2-2.2)	3	0.7 (0.2-2.2)	1.29 (0.25–6.72)
Immune thrombocytopenic purpura (ITP)	66	16.4 (12.7-20.9)	64	15.9 (12.3-20.3)	1.14 (0.79–1.65)
Myocarditis / pericarditis	1	0.2 (0.0-1.4)	1	0.2 (0.0-1.4)	0.99 (0.06–15.79)
Stroke, hemorrhagic	0	0.0 (0.0-0.9)	1	0.2 (0.0-1.4)	0.98 (0.00–18.64)

DeSilva M, Haapala J, Vazquez-Benitez G, Boyce TG, Fuller CC, Daley MF, et al. Medically attended acute adverse events in pregnant persons after coronavirus disease 2019 (COVID-19) booster vaccination. Obstet Gynecol 2023;142.
The authors provided this information as a supplement to their article.

Trigeminal neuralgia and related disorders	0	0.0 (0.0-0.9)	1	0.2 (0.0-1.4)	0.98 (0.00–18.64)
Disseminated Intravascular Coagulation (DIC)	3	0.7 (0.2-2.2)	3	0.7 (0.2-2.2)	0.82 (0.16–4.10)
Pulmonary embolism (PE)	2	0.5 (0.1-1.8)	3	0.7 (0.2-2.2)	0.65 (0.10–4.11)
Bell's Palsy	3	0.7 (0.2-2.2)	7	1.7 (0.7-3.6)	0.60 (0.14–2.59)
Stroke, ischemic	0	0.0 (0.0-0.9)	2	0.5 (0.1-1.8)	0.41 (0.00–3.41)
Appendicitis	3	0.7 (0.2-2.2)	8	2.0 (0.9-3.9)	0.39 (0.10–1.47)

Note: Poisson regression was used to estimate aRRs and 95% CI after applying stabilized inverse probability of vaccination weights to quantify the association between each outcome and receipt of COVID-19 booster vaccine. Robust standard errors were used to account for correlation between vaccine doses for the same person and for unvaccinated persons if the same unvaccinated person was matched to multiple vaccine doses. We used an offset to account for follow-up time censoring at 7 days after pregnancy end or the day after second mRNA vaccine. For acute medically attended events only observed in one group, we used exact Poisson regression to estimate a median unbiased rate ratio estimate and one-tailed 95% CI. The exact confidence intervals do not account for within-person correlation and stabilized inverse probability of vaccination weighting was not incorporated. Confidence interval widths have not been adjusted for multiplicity and may not be used in place of hypothesis testing.

**Booster* was defined as an mRNA monovalent COVID-19 vaccine received ≥2 months after completion of the 2-dose mRNA primary series.

DeSilva M, Haapala J, Vazquez-Benitez G, Boyce TG, Fuller CC, Daley MF, et al. Medically attended acute adverse events in pregnant persons after coronavirus disease 2019 (COVID-19) booster vaccination. Obstet Gynecol 2023;142.
The authors provided this information as a supplement to their article.