

Supplemental Online Content

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

eTable 1: Sensitivity analysis excluding infants born to women with a positive SARS-CoV-2 PCR-test up to 14 days prior to giving birth. Number of infants included: 20,244. Time was included as an interaction term for the two time periods in the unadjusted and adjusted analyses.

	Before January 1, 2022						After January 1, 2022					
	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^a (95% CI)	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^a (95% CI)
Unvaccinated	9177	456298	144 (1.6)	3.2	Reference	Reference	5850	271506	314 (5.4)	11.6	Reference	Reference
Vaccinated	4669	206199	25 (0.5)	1.2	0.27 (0.18 to 0.41)	0.28 (0.18 to 0.43)	9253	526832	380 (4.1)	7.2	0.61 (0.52 to 0.71)	0.64 (0.54 to 0.76)

^a Adjusted for maternal age, maternal parity, maternal country of birth, maternal educational attainment as of 2019, and county of residence.

eTable 2: Sensitivity analysis of term births only, excluding infants born before 37 gestational weeks. Number of infants included: 20,423. Time was included as an interaction term for the two time periods in the unadjusted and adjusted analyses.

	Before January 1, 2022						After January 1, 2022					
	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^a (95% CI)	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^a (95% CI)
Unvaccinated	9261	461794	139 (1.5)	3.0	Reference	Reference	6370	302516	338 (5.3)	11.2	Reference	Reference
Vaccinated	4414	194576	24 (0.5)	1.2	0.29 (0.19 to 0.45)	0.30 (0.19 to 0.47)	9026	514639	364 (4.0)	7.1	0.62 (0.53 to 0.72)	0.67 (0.56 to 0.79)

^a Adjusted for maternal age, maternal parity, maternal country of birth, maternal educational attainment as of 2019, and county of residence.

eTable 3: Sensitivity analysis of infants conceived at least 42 weeks prior to end of inclusion to avoid oversampling of short pregnancies. Number of infants included: 19,495. Time was included as an interaction term for the two time periods in the unadjusted and adjusted analyses.

	Before January 1, 2022						After January 1, 2022					
	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^a (95% CI)	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^a (95% CI)
Unvaccinated	9743	485567	146 (1.5)	3.0	Reference	Reference	6178	296278	332 (5.4)	11.2	Reference	Reference
Vaccinated	4690	206715	25 (0.5)	1.2	0.29 (0.19 to 0.44)	0.30 (0.19 to 0.46)	8024	476946	360 (4.5)	7.5	0.65 (0.56 to 0.76)	0.70 (0.59 to 0.84)

^a Adjusted for maternal age, maternal parity, maternal country of birth, maternal educational attainment as of 2019, and county of residence.

eTable 4: Sensitivity analysis of infants born to a Scandinavian-born woman. Number of infants included: 15,701. Time was included as an interaction term for the two time periods in the unadjusted and adjusted analyses.

	Before January 1, 2022						After January 1, 2022					
	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^a (95% CI)	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^a (95% CI)
Unvaccinated	6231	293624	56 (0.9)	1.9	Reference	Reference	3236	141039	163 (5.0)	11.6	Reference	Reference
Vaccinated	4066	180914	20 (0.5)	1.1	0.40 (0.24 to 0.67)	0.40 (0.24 to 0.68)	8333	473508	348 (4.2)	7.3	0.60 (0.50 to 0.73)	0.64 (0.52 to 0.78)

^a Adjusted for maternal age, maternal parity, maternal country of birth, maternal educational attainment as of 2019, and county of residence.

eTable 5: Sensitivity analysis of infants born to a primiparous woman. Number of infants included: 9349. Time was included as an interaction term for the two time periods in the unadjusted and adjusted analyses.

	Before January 1, 2022						After January 1, 2022					
	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^a (95% CI)	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^a (95% CI)
Unvaccinated	4103	198332	37 (0.9)	1.9	Reference	Reference	2642	124631	111 (4.2)	8.9	Reference	Reference
Vaccinated	2177	93689	5 (0.2)	0.5	0.19 (0.08 to 0.49)	0.21 (0.08 to 0.55)	4387	248967	110 (2.5)	4.4	0.47 (0.36 to 0.62)	0.54 (0.40 to 0.73)

^a Adjusted for maternal age, maternal parity, maternal country of birth, maternal educational attainment as of 2019, and county of residence.

eTable 6: Sensitivity analysis excluding infants born to vaccinated women who received the Oxford-AstraZeneca vaccine (ChAdOx1 nCoV-19) as their first vaccine dose.^a Number of infants included: 21,083. Time was included as an interaction term for the two time periods in the unadjusted and adjusted analyses.

	Before January 1, 2022						After January 1, 2022					
	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^b (95% CI)	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^b (95% CI)
Unvaccinated	9759	485967	146 (1.5)	3.0	Reference	Reference	6728	320292	350 (5.2)	10.9	Reference	Reference
Vaccinated	4477	200158	24 (0.5)	1.2	0.28 (0.18 to 0.44)	0.29 (0.19 to 0.46)	9074	517800	372 (4.1)	7.2	0.64 (0.56 to 0.75)	0.68 (0.58 to 0.81)

^a Exclusion of 380 infants whose mother's first vaccine dose was Oxford-AstraZeneca vaccine (ChAdOx1-S), but the second was an mRNA vaccine.

^b Adjusted for maternal age, maternal parity, maternal country of birth, maternal educational attainment as of 2019, and county of residence.

eTable 7: Sensitivity analysis restricting follow-up time to start on January 15, 2022. Number of infants included: 15,230.

	After January 1, 2022					
	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^a (95% CI)
Unvaccinated	5808	253616	299 (5.1)	11.8	Reference	Reference
Vaccinated	9422	470863	354 (3.8)	7.5	0.65 (0.55 to 0.75)	0.59 (0.49 to 0.71)

^a Adjusted for maternal age, maternal parity, maternal country of birth, maternal educational attainment as of 2019, and county of residence.

eTable 8: Sensitivity analysis using age of the infant as time axis. Number of infants included: 21,643. Time was included as an interaction term for the two time periods in the unadjusted and adjusted analyses.

	Before January 1, 2022						After January 1, 2022					
	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI) ^a	Adjusted hazard ratio ^b (95% CI)	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI) ^a	Adjusted hazard ratio ^b (95% CI)
Unvaccinated	9759	485967	146 (1.5)	3.0	Reference	Reference	6728	320292	350 (5.2)	10.9	Reference	Reference
Vaccinated	4696	206857	25 (0.5)	1.2	0.36 (0.24 to 0.56)	0.38 (0.24 to 0.58)	9616	546790	385 (4.0)	7.0	0.68 (0.59 to 0.79)	0.73 (0.62 to 0.87)

^a Adjusted for week of birth.

^b Adjusted for week of birth, maternal age, maternal parity, maternal country of birth, maternal educational attainment as of 2019, and county of residence.

eTable 9: Sensitivity analysis including infants born to vaccinated women who received only one mRNA vaccine dose during the second or third trimester of pregnancy. Number of infants included: 14,743. Time was included as an interaction term for the two time periods in the unadjusted and adjusted analyses.

	Before January 1, 2022						After January 1, 2022					
	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^a (95% CI)	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^a (95% CI)
Unvaccinated	9759	485967	146 (1.5)	3.0	Reference	Reference	6728	320292	350 (5.2)	10.9	Reference	Reference
Vaccinated	2215	80546	<5 (0.1)	0.2	0.10 (0.02 to 0.41)	0.11 (0.03 to 0.43)	1048	44919	34 (3.2)	7.6	0.68 (0.48 to 0.97)	0.72 (0.50 to 1.03)

^a Adjusted for maternal age, maternal parity, maternal country of birth, maternal educational attainment as of 2019, and county of residence.

eTable 10: Sensitivity analysis stratifying by whether the mother received dose number 2 (n=8915) or 3 in pregnancy (n=824)^a. Time was included as an interaction term for the two time periods in the unadjusted and adjusted analyses.

	Before January 1, 2022						After January 1, 2022					
	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^b (95% CI)	Live-born infants, No.	Follow-up time, days	Covid-19 positive test, No. (%)	Incidence rate, cases/10,000 days of follow-up	Unadjusted hazard ratio (95% CI)	Adjusted hazard ratio ^b (95% CI)
Unvaccinated	9759	485967	146 (1.5)	3.0	Reference	Reference	6728	320292	350 (5.2)	10.9	Reference	Reference
Vaccinated with dose 2	4666	206389	25 (0.5)	1.2	0.29 (0.19 to 0.44)	0.29 (0.19 to 0.45)	8792	501255	375 (4.3)	7.5	0.67 (0.57 to 0.77)	0.70 (0.59 to 0.83)
Vaccinated with dose 3^a	30	468	0 (0)	0	N/A	N/A	824	45535	10 (1.2)	2.2	0.22 (0.11 to 0.41)	0.22 (0.12 to 0.43)

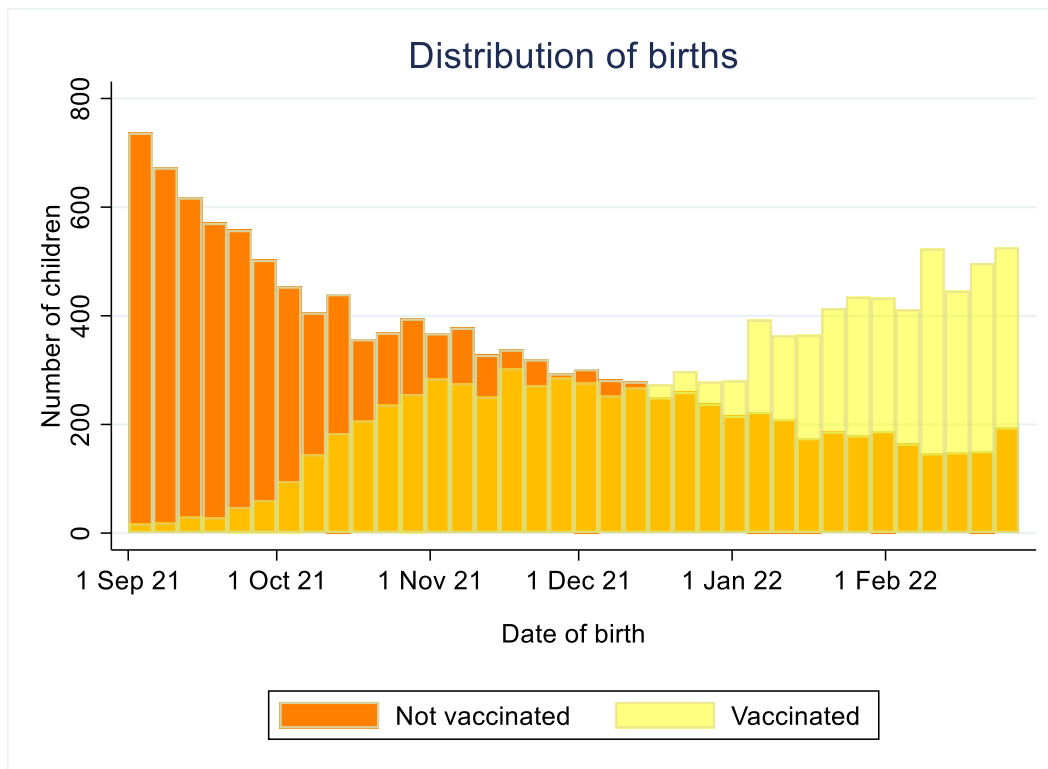
^a Less than 5 women received the fourth dose in pregnancy and their infants are included in the 3-dose stratification.

^b Adjusted for maternal age, maternal parity, maternal country of birth, maternal educational attainment as of 2019, and county of residence.

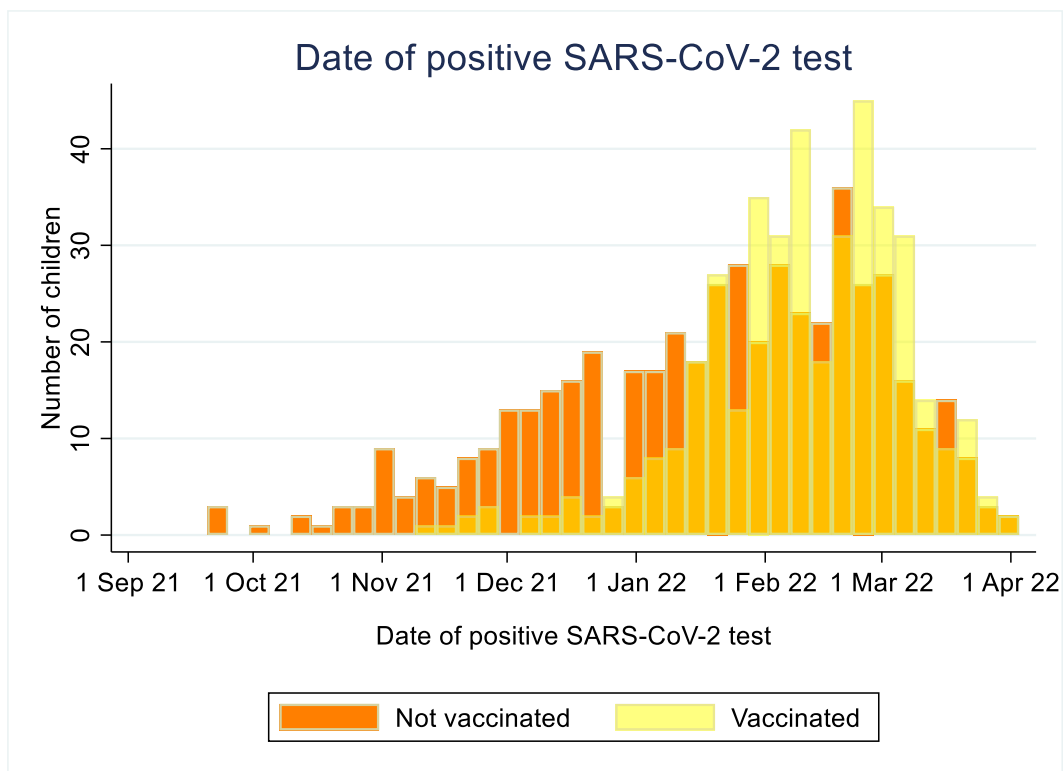
eFigure 1: Distributions according to maternal vaccination status (second/third dose during pregnancy versus none) during the whole time period.

A) Date of births, B) Date of positive SARS-CoV-2 PCR-test by 4 months of age, C) Age of child in days at the time of first positive SARS-CoV-2 test, D) Date of SARS-CoV-2 PCR-test, regardless of the result of that test.

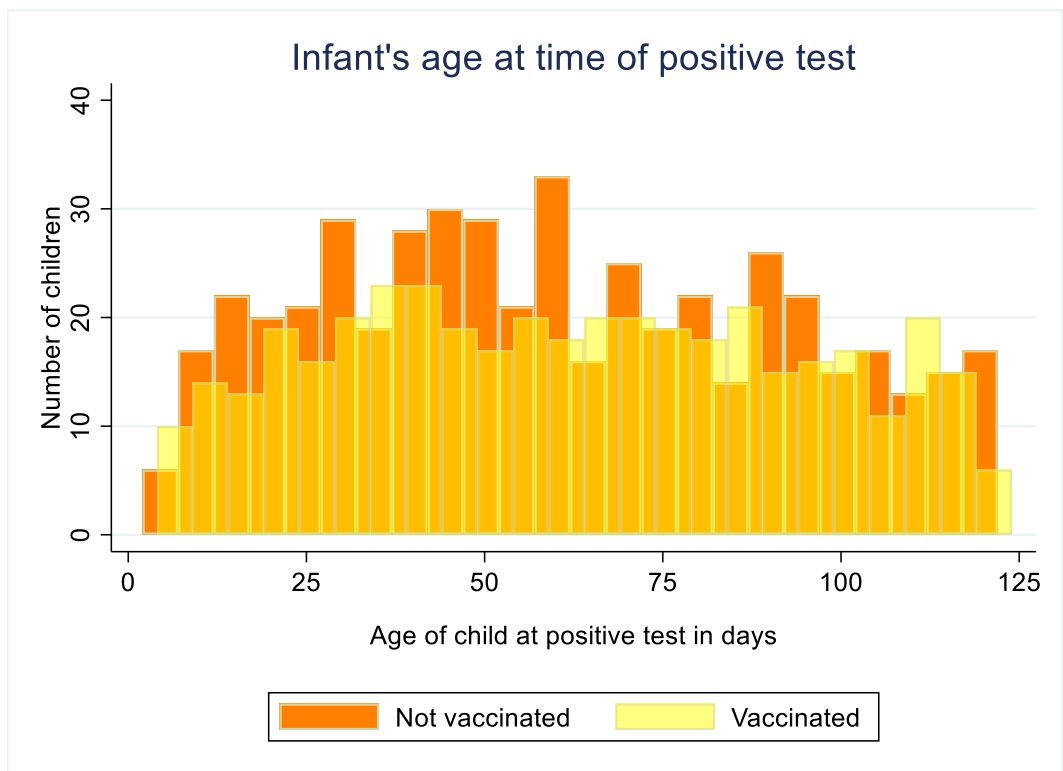
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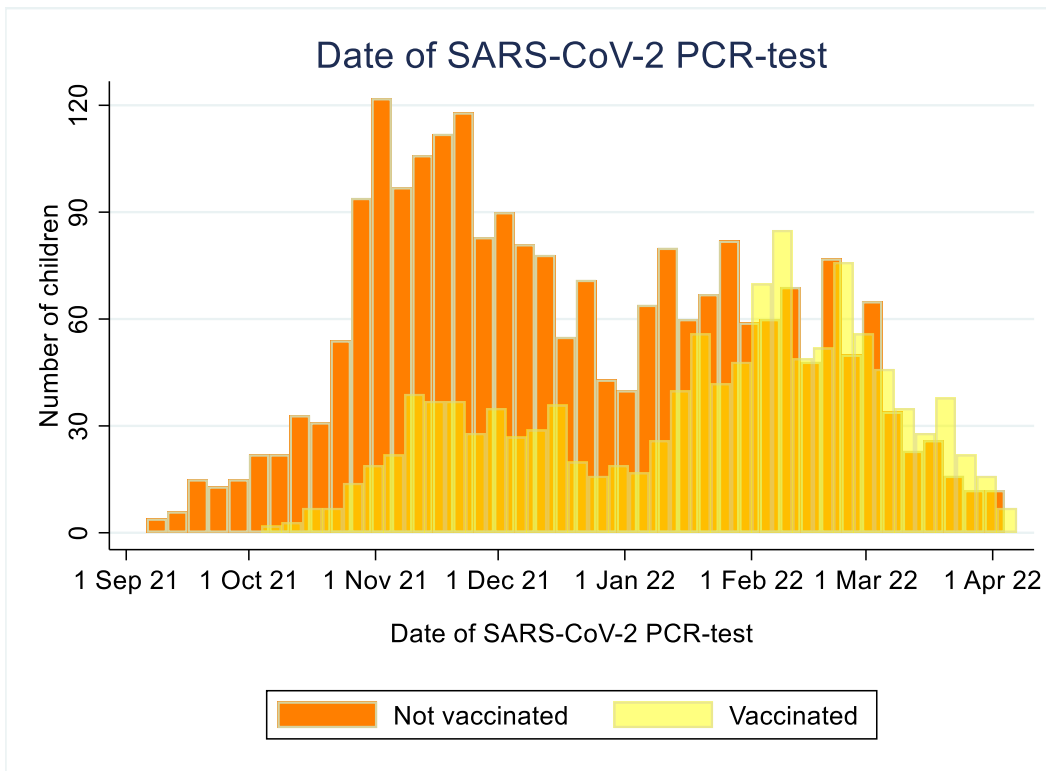
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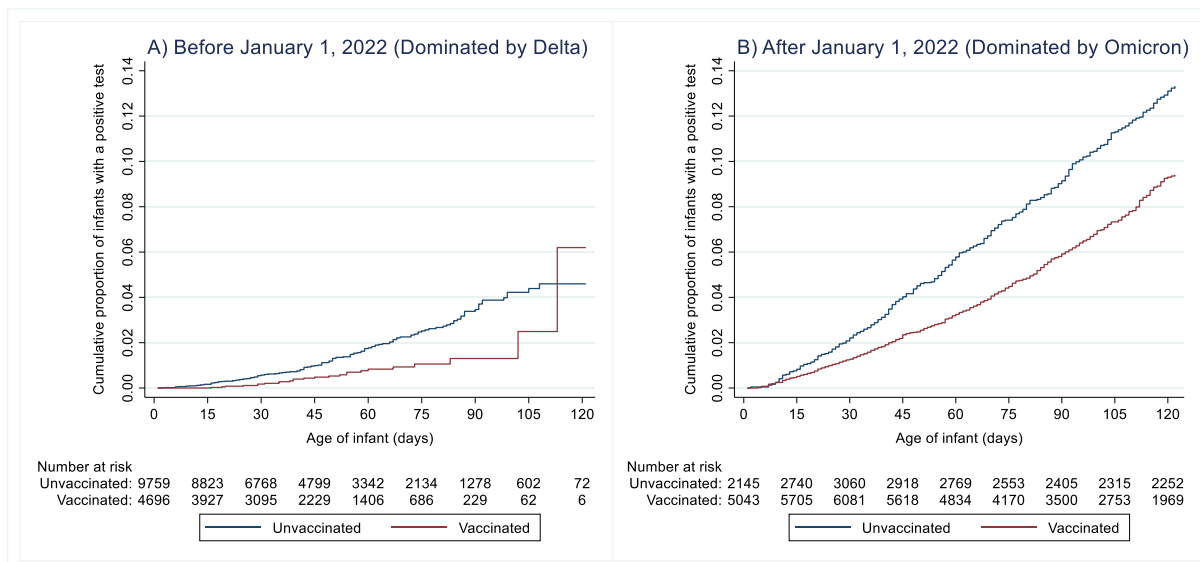


D)



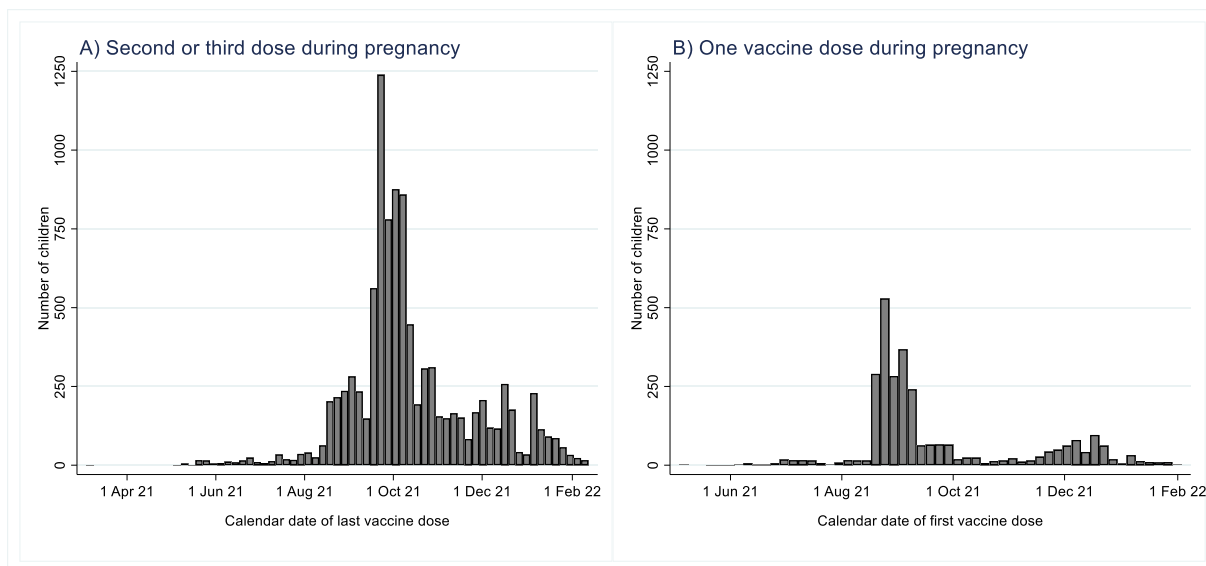
eFigure 2: Cumulative proportion of infants with a positive SARS-CoV-2 PCR-test by maternal vaccination status, using infant age as time axis

(A) Delta-dominated period: September 1 to December 31, 2021, and (B) Omicron-dominated period: January 1, to April 4, 2022.



eFigure 3: Distribution of calendar time for date of last vaccine dose in pregnancy according to maternal vaccination status

A) Second or third dose in pregnancy, B) One vaccine dose during pregnancy



eFigure 4: Distribution of time between birth and last vaccine dose in pregnancy according to maternal vaccination status

A) Second or third dose in pregnancy, B) One vaccine dose during pregnancy

