Supplementary Materials

Association between vaccination with the BNT162b2 mRNA COVID-19 vaccine and Bell's palsy: a population-based study

Table 1S: Standardized incidence ratio (SIR), attributable risk fraction (ARF), and attributable risk (AR) for the first vaccine dose, stratified by sex and age groups (2018 reference).

Sex and age group (years)	Vaccinated with the first dose [1] (n)	Observed cases [2] (n)	Risk per 100,000 vaccinees [3]	Expected cases (2018 reference) [4] (n)	SIR [5] (95% CI)	ARF [6]	AR per 100,000 vaccinees [7]
All [8]	2594990	132	5.09	86.04	**1.53 (1.29-1.81)**	0.35	1.76
Males *(n=1,256,958)*							
16-44	654040	22	3.36	18.76	1.17 (0.75-1.75)	0.15	0.49
45-64	339849	23	6.77	18.35	1.25 (0.81-1.85)	0.20	1.35
65+	263069	17	6.46	10.95	1.55 (0.93-2.45)	0.35	2.29
Females *(n=1,338,032)*							
16-44	659597	24	3.64	16.44	1.46 (0.96-2.14)	0.32	1.15
45-64	354617	22	6.20	10.41	**2.11 (1.36-3.15)**	0.53	3.26
65+	323818	24	7.41	11.13	**2.16 (1.41-3.16)**	0.54	3.98

1: Number of those who received the first vaccine dose between 20 December 2020 and 30 April 2021

2: Number of observed cases of Bell's palsy that occurred within 21 days after the receipt of the first dose

3: The risk of Bell's palsy within 21 days after the first vaccine dose, estimated by dividing the number of observed cases by the number of vaccinees and reported per 100,000 vaccinees

4. Expected number of cases of Bell's palsy as estimated based on the experience of CHS population between January-May 2018

5. Standardized incidence ratio (SIR), computed by dividing the observed cases by the expected cases of Bell's palsy.

6. Attributable risk fraction (ARF) among exposed (vaccinated), calculated as (SIR-1)/SIR

7. Attributable risk (AR) per 100,000 vaccinees, estimated by multiplying ARF by the risk of Bell's palsy among vaccinated.

8. Age and sex weighted

Table 2S: Standardized incidence ratio (SIR), attributable risk fraction (ARF), and attributable risk (AR) for the second vaccine dose, stratified by sex and age groups (2018 reference).

Sex and age group (years)	Vaccinated with the second dose [1] (n)	Observed cases [2] (n)	Risk per 100,000 vaccinees [3]	Expected cases (2018 reference) [4] (n)	SIR [5] (95% CI)	ARF [6]	AR per 100,000 vaccinees [7]
All [8]	2434674	152	6.24	115.71	**1.31 (1.12-1.53)**	0.24	1.48
Males *(n=1,178,077)*							
16-44	602455	36	5.98	24.69	**1.46 (1.04-2.00)**	0.32	1.88
45-64	321982	29	9.01	24.85	1.17 (0.80-1.65)	0.15	1.31
65+	253640	26	10.25	15.08	**1.72 (1.15-2.49)**	0.42	4.29
Females *(n=1,256,597)*							
16-44	609135	21	3.45	21.69	0.97 (0.61-1.45)	-0.03	-0.11
45-64	335129	22	6.56	14.05	1.57 (1.00-2.33)	0.36	2.38
65+	312333	18	5.76	15.34	1.17 (0.71-1.82)	0.15	0.84

1: Number of those who received the second vaccine dose between 10 January 2021 and 30 April 2021

2: Number of observed cases of Bell's palsy that occurred within 30 days after the receipt of the second dose

3: The risk of Bell's palsy within 30 days after the second vaccine dose, estimated by dividing the number of observed cases by the number of vaccinees and reported per 100,000 vaccinees

4. Expected number of cases of Bell's palsy as estimated based on the experience of CHS population between January-May 2018

5. Standardized incidence ratio (SIR), computed by dividing the observed cases by the expected cases of Bell's palsy.

6. Attributable risk fraction (ARF) among exposed (vaccinated), calculated as (SIR-1)/SIR

7. Attributable risk (AR) per 100,000 vaccinees, estimated by multiplying ARF by the risk of Bell's palsy among vaccinated.

8. Age and sex weighted

Table 3S: Age and sex weighted standardized incidence ratio (SIR), attributable risk fraction (ARF), and attributable risk (AR) for the first and second vaccine dose among subjects with a previous history of Bell's palsy (2018 reference).

	Number of vaccinated [1] *(n)*	Observed cases [2] *(n)*	Risk per 100,000 vaccinees [3]	Expected cases (2018 reference) [4] *(n)*	SIR [5] (95% CI)	ARF [6]	AR per 100,000 vaccinees [7]
First vaccine dose	7567	4	52.86	5.64	0.71 (0.22-1.71)	-0.37	-19.55
Second vaccine dose	7045	10	141.94	7.53	1.33 (0.67-3.37)	0.27	38.50

1: Number of those who received the first vaccine dose, between 20 December 2020 and 30 April 2021, and the second vaccine dose between 10 January 2021 and 30 April 2021, and had a previous history of Bell's palsy

2: Number of observed cases of Bell's palsy that occurred within 21 days and 30 days after the receipt of the first and second vaccine dose, respectively.

3: The risk of Bell's palsy within 21 days after the first vaccine dose and 30 days after the second vaccine dose, estimated by dividing the number of observed cases by the number of vaccinees and reported per 100,000 vaccinees

4. Expected number of cases of Bell's palsy as estimated based on the experience of CHS population between January-May 2018. For this purpose, we used as reference the 2018 population with a previous history of Bell's palsy

5. Standardized incidence ratio (SIR), computed by dividing the observed cases by the expected cases of Bell's palsy.

6. Attributable risk fraction (ARF) among exposed (vaccinated), calculated as (SIR-1)/SIR

7. Attributable risk (AR) per 100,000 vaccinees, estimated by multiplying ARF by the risk of Bell's palsy among vaccinated.