

## Additional File 2: Supplementary Tables

**Table S1.** International Classification of Disease (ICD)-10 codes for maternal and child morbidity and the Anatomical Therapeutic Chemical (ATC) codes for maternal drug use

| Maternal diseases                      | ICD-10/ATC code                                                                                                                                                                                                                  | Data source                 |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|
| T1DM                                   | E10, O240                                                                                                                                                                                                                        | MBR + NPR                   |
| T2DM                                   | E11, O241                                                                                                                                                                                                                        | MBR + NPR                   |
| GDM                                    | O244                                                                                                                                                                                                                             | MBR + NPR                   |
| Preeclampsia                           | O14, O15                                                                                                                                                                                                                         | MBR                         |
| Chronic hypertension                   | I10-I15, O10 and O11                                                                                                                                                                                                             | MBR + checkbox <sup>#</sup> |
| Psychiatric disorders                  | F00-F99                                                                                                                                                                                                                          | NPR                         |
| Epilepsy                               | G40, G41                                                                                                                                                                                                                         | NPR                         |
| Alcohol use disorder in pregnancy      | F10, O993, O354, Q860                                                                                                                                                                                                            | NPR                         |
| <b>Maternal use of diabetes drugs*</b> |                                                                                                                                                                                                                                  |                             |
| Insulin                                | A10A, A10AB01, A10AB04, A10AB05, A10AB06, A10AC01, A10AD01, A10AD04, A10AD05, A10AE04, A10AE05, A10AE06, A10AE56, A10AF01                                                                                                        | PDR                         |
| Oral antidiabetics                     | A10BA02, A10BB01, A10BB07, A10BB12, A10BD03, A10BD05, A10BD07, A10BD20, A10BF01, A10BG02, A10BG03, A10BH01, A10BH02, A10BH03, A10BH05, A10BJ01, A10BJ02, A10BJ03, A10BJ05, A10BJ06, A10BK01, A10BK02, A10BK03, A10BX02, A10BX03. | PDR                         |
| <b>Child diseases</b>                  |                                                                                                                                                                                                                                  |                             |
| Epilepsy                               | G40, G41                                                                                                                                                                                                                         | NPR                         |
| Focal epilepsy                         | G400-G402                                                                                                                                                                                                                        | NPR                         |
| Generalized epilepsy                   | G403                                                                                                                                                                                                                             | NPR                         |
| Birth asphyxia                         |                                                                                                                                                                                                                                  |                             |
| Meconium aspiration                    | P24                                                                                                                                                                                                                              | MBR + NPR                   |
| Convulsion/seizure                     | P90                                                                                                                                                                                                                              | MBR + NPR                   |
| Hypoxic ischemic encephalopathy        | P913-P916                                                                                                                                                                                                                        | MBR + NPR                   |
| Major malformations                    | Q7550, Q175, Q180, Q181, Q249, Q250, Q270, Q289, Q314, Q315, Q320, Q381, Q523, Q53, Q65, Q665, Q666, Q667, Q668, Q669, Q690, Q699, Q703, Q760, Q799, Q825, Q829                                                                  | MBR + NPR                   |

Note: GDM, gestational diabetes mellitus; ICD, the International Classification of Disease; MBR, Medical Birth Register; NPR, National Patient Register; PDR, Prescription Drug Register; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

\*Information on diabetes drugs was derived for sensitivity analyses from the Prescription Drug Register available since July 2005, using the Anatomical Therapeutic Chemical (ATC) codes.

<sup>#</sup>Chronic hypertension is also recorded in a checkbox in the prenatal record at first prenatal visit

**Table S2.** Distribution of sample characteristics according to missing and complete data

| <b>Sample characteristics</b>         | <b>Total</b><br>(N=2,305,051) | <b>Missing data</b><br>(N=260,444) <sup>1</sup> | <b>Complete data</b><br>(N=2,044,607) <sup>2</sup> | <b>P-value<sup>3</sup></b> |
|---------------------------------------|-------------------------------|-------------------------------------------------|----------------------------------------------------|----------------------------|
| <b>Infant characteristics % (N)</b>   |                               |                                                 |                                                    |                            |
| Sex                                   |                               |                                                 |                                                    | 0.40                       |
| Male                                  | 51.1 (1,177,861)              | 51.2 (133,285)                                  | 51.1 (1,044,576)                                   |                            |
| Female                                | 48.9 (1,127,190)              | 48.8 (127,159)                                  | 48.9 (1,000,031)                                   |                            |
| Birth year                            |                               |                                                 |                                                    | <0.001                     |
| 1998-2002                             | 17.9 (412,722)                | 25.6 (66,596)                                   | 16.9 (346,126)                                     |                            |
| 2003-2007                             | 20.2 (464,794)                | 25.0 (65,021)                                   | 19.6 (399,773)                                     |                            |
| 2008-2012                             | 21.8 (503,103)                | 14.5 (37,713)                                   | 22.8 (465,390)                                     |                            |
| 2013-2017                             | 22.4 (516,445)                | 17.4 (45,336)                                   | 23.0 (471,109)                                     |                            |
| 2018-2021                             | 17.7 (407,987)                | 17.6 (45,778)                                   | 17.7 (362,209)                                     |                            |
| Preterm birth                         |                               |                                                 |                                                    | <0.001                     |
| No                                    | 95.6 (2,202,806)              | 94.2 (245,311)                                  | 95.7 (1,957,495)                                   |                            |
| Yes                                   | 4.4 (102,245)                 | 5.8 (15,133)                                    | 4.3 (87,112)                                       |                            |
| Birthweight for gestational age       |                               |                                                 |                                                    | <0.001                     |
| SGA                                   | 6.2 (142,200)                 | 6.8 (17,586)                                    | 6.1 (124,614)                                      |                            |
| AGA                                   | 81.7 (1,879,781)              | 81.1 (210,455)                                  | 81.8 (1,669,326)                                   |                            |
| LGA                                   | 12.1 (277,919)                | 12.1 (31,503)                                   | 12.1 (246,416)                                     |                            |
| Birth asphyxia                        |                               |                                                 |                                                    | <0.001                     |
| No                                    | 99.5 (2,293,517)              | 99.4 (258,856)                                  | 99.5 (2,034,661)                                   |                            |
| Yes                                   | 0.5 (11,534)                  | 0.6 (1,588)                                     | 0.5 (9,946)                                        |                            |
| <b>Maternal characteristics % (N)</b> |                               |                                                 |                                                    |                            |
| Age at childbirth (years)             |                               |                                                 |                                                    | <0.001                     |
| ≤19                                   | 1.3 (30,403)                  | 2.0 (5,164)                                     | 1.2 (25,239)                                       |                            |
| 20-24                                 | 12.1 (277,968)                | 12.7 (33,050)                                   | 12.0 (244,918)                                     |                            |
| 25-29                                 | 31.1 (716,257)                | 29.2 (76,076)                                   | 31.3 (640,181)                                     |                            |
| 30-34                                 | 35.0 (805,797)                | 34.5 (89,834)                                   | 35.0 (715,963)                                     |                            |
| ≥35                                   | 20.6 (474,626)                | 21.6 (56,320)                                   | 20.5 (418,306)                                     |                            |
| Parity                                |                               |                                                 |                                                    | <0.001                     |
| 1                                     | 43.4 (1,000,628)              | 43.7 (113,706)                                  | 43.4 (886,922)                                     |                            |
| 2                                     | 37.3 (860,726)                | 35.8 (93,206)                                   | 37.5 (767,520)                                     |                            |
| 3                                     | 13.5 (310,749)                | 13.5 (35,175)                                   | 13.5 (275,574)                                     |                            |
| ≥4                                    | 5.8 (132,948)                 | 7.0 (18,357)                                    | 5.6 (114,591)                                      |                            |
| Country of birth                      |                               |                                                 |                                                    | <0.001                     |
| Sweden                                | 76.8 (1,768,112)              | 69.7 (180,133)                                  | 77.7 (1,587,979)                                   |                            |
| Other Nordic country                  | 1.5 (35,348)                  | 2.4 (6,170)                                     | 1.4 (29,178)                                       |                            |
| Non-Nordic country                    | 21.7 (499,608)                | 27.9 (72,158)                                   | 20.9 (427,450)                                     |                            |
| Level of education (years)            |                               |                                                 |                                                    | <0.001                     |
| ≤9                                    | 8.4 (190,343)                 | 8.7 (19,698)                                    | 8.3 (170,645)                                      |                            |
| 10-11                                 | 11.2 (254,716)                | 12.7 (28,902)                                   | 11.0 (225,814)                                     |                            |
| 12                                    | 26.1 (594,172)                | 24.2 (55,063)                                   | 26.4 (539,109)                                     |                            |
| 13-14                                 | 14.7 (334,141)                | 15.0 (34,123)                                   | 14.7 (300,018)                                     |                            |
| ≥15                                   | 39.6 (898,838)                | 39.5 (89,817)                                   | 39.6 (809,021)                                     |                            |
| Cohabitation with partner             |                               |                                                 |                                                    | <0.001                     |
| No                                    | 5.2 (114,985)                 | 7.0 (10,413)                                    | 5.1 (104,572)                                      |                            |

|                                             |                  |                |                  |        |
|---------------------------------------------|------------------|----------------|------------------|--------|
| Yes                                         | 94.8 (2,078,116) | 93.0 (138,081) | 94.9 (1,940,035) |        |
| Smoking in early pregnancy                  |                  |                |                  | <0.001 |
| No                                          | 92.5 (2,053,286) | 91.4 (159,838) | 92.6 (1,893,448) |        |
| Yes                                         | 7.5 (166,289)    | 8.6 (15,130)   | 7.4 (151,159)    |        |
| BMI in early pregnancy (kg/m <sup>2</sup> ) |                  |                |                  | <0.001 |
| Underweight ( $\leq 18.4$ )                 | 2.4 (51,828)     | 3.2 (2,469)    | 2.4 (49,359)     |        |
| Normal weight (18.5-24.9)                   | 59.5 (1,261,814) | 56.0 (43,109)  | 59.6 (1,218,705) |        |
| Overweight (25-29.9)                        | 25.5 (541,482)   | 26.4 (20,347)  | 25.5 (521,135)   |        |
| Obese ( $\geq 30$ )                         | 12.6 (266,415)   | 14.3 (11,007)  | 12.5 (255,408)   |        |
| Alcohol use disorder in pregnancy           |                  |                |                  |        |
| No                                          | 98.6 (2,272,439) | 98.8 (257,313) | 98.6 (2,015,126) | <0.001 |
| Yes                                         | 1.4 (32,612)     | 1.2 (3,131)    | 1.4 (29,481)     |        |
| Epilepsy                                    |                  |                |                  | <0.001 |
| No                                          | 99.4 (2,291,840) | 99.5 (259,139) | 99.4 (2,032,701) |        |
| Yes                                         | 0.6 (13,211)     | 0.5 (1,305)    | 0.6 (11,906)     |        |
| Psychiatric disorders                       |                  |                |                  | <0.001 |
| No                                          | 90.9 (2,094,341) | 92.3 (240,306) | 90.7 (1,854,035) |        |
| Yes                                         | 9.1 (210,710)    | 7.7 (20,138)   | 9.3 (190,572)    |        |
| Pregestational hypertension                 |                  |                |                  | <0.001 |
| No                                          | 99.3 (2,289,156) | 99.4 (258,853) | 99.3 (2,030,303) |        |
| Yes                                         | 0.7 (15,895)     | 0.6 (1,591)    | 0.7 (14,304)     |        |
| Preeclampsia                                |                  |                |                  | 0.92   |
| No                                          | 97.3 (2,241,775) | 97.3 (253,302) | 97.3 (1,988,473) |        |
| Yes                                         | 2.7 (63,276)     | 2.7 (7,142)    | 2.7 (56,134)     |        |

Note: AGA, Appropriate for gestational age; BMI, body mass index; LGA, Large for gestational age; SGA, Small for gestational age.

<sup>1</sup>The sample with data missing on any of the study variables. <sup>2</sup>The sample with complete data on all study variables. <sup>3</sup>Chi-squared p-value testing for differences in the proportions of missing data across groups.

**Table S3.** Odds ratios for the associations between maternal diabetes and potential mediators

| Potential mediators | Model   | Maternal diabetes |                   |                   |
|---------------------|---------|-------------------|-------------------|-------------------|
|                     |         | T1DM              | T2DM              | GDM               |
|                     |         | OR (95% CI)       | OR (95% CI)       | OR (95% CI)       |
| Preeclampsia        | Model 1 | 5.73 (5.46, 6.02) | 2.82 (2.49, 3.19) | 2.01 (1.92, 2.11) |
|                     | Model 2 | 5.26 (4.98, 5.55) | 2.87 (2.51, 3.28) | 1.79 (1.70, 1.88) |
| Preterm birth       | Model 1 | 5.63 (5.40, 5.86) | 2.99 (2.71, 3.30) | 1.70 (1.64, 1.77) |
|                     | Model 2 | 5.25 (5.02, 5.49) | 2.58 (2.32, 2.88) | 1.67 (1.60, 1.75) |
| Birth-asphyxia*     | Model 1 | 2.97 (2.58, 3.41) | 2.85 (2.17, 3.73) | 1.34 (1.18, 1.53) |
|                     | Model 2 | 2.70 (2.33, 3.13) | 2.30 (1.71, 3.08) | 1.15 (1.00, 1.32) |
| SGA                 | Model 1 | 0.44 (0.40, 0.48) | 0.93 (0.81, 1.07) | 0.84 (0.80, 0.88) |
|                     | Model 2 | 0.39 (0.34, 0.43) | 0.80 (0.69, 0.93) | 0.77 (0.73, 0.81) |
| LGA                 | Model 1 | 8.51 (8.23, 8.80) | 3.45 (3.22, 3.70) | 2.52 (2.46, 2.58) |
|                     | Model 2 | 8.52 (8.21, 8.84) | 3.07 (2.85, 3.31) | 2.33 (2.27, 2.39) |

Note: CI, confidence interval; GDM, Gestational diabetes mellitus; LGA, Large for gestational age; OR, hazard ratio; SGA, Small for gestational age; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

\*Birth-asphyxia was defined as any of the following complications: low Apgar score, convulsions, meconium aspiration, and hypoxic ischemic encephalopathy.

**Model 1** shows the unadjusted ORs. **Model 2** was adjusted for infant sex and birth year; maternal age at childbirth, parity, country of birth, educational level, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, history of epilepsy, and psychiatric disorders; and paternal age at childbirth, T1DM and T2DM, history of epilepsy, and psychiatric disorders.

**Table S4.** Incidence rates and hazard ratios of epilepsy in children by potential mediating variables

| Potential mediators             | Outcome: Epilepsy in children |                    |                        |                        |
|---------------------------------|-------------------------------|--------------------|------------------------|------------------------|
|                                 | No. of events                 | Rates <sup>1</sup> | Model 1<br>HR (95% CI) | Model 2<br>HR (95% CI) |
| Maternal Preeclampsia           |                               |                    |                        |                        |
| No                              | 18,294                        | 63.1               | 1.00 (Ref.)            | 1.00 (Ref.)            |
| Yes                             | 674                           | 82.0               | 1.30 (1.21, 1.40)      | 1.23 (1.14, 1.33)      |
| Preterm birth                   |                               |                    |                        |                        |
| No                              | 17,587                        | 61.8               | 1.00 (Ref.)            | 1.00 (Ref.)            |
| Yes                             | 1381                          | 102.9              | 1.67 (1.58, 1.76)      | 1.58 (1.49, 1.67)      |
| Birth-asphyxia*                 |                               |                    |                        |                        |
| No                              | 18,052                        | 60.8               | 1.00 (Ref.)            | 1.00 (Ref.)            |
| Yes                             | 916                           | 719.7              | 11.85 (11.09, 12.66)   | 10.98 (10.26, 11.74)   |
| Birthweight for gestational age |                               |                    |                        |                        |
| SGA                             | 1,484                         | 82.4               | 1.35 (1.28, 1.42)      | 1.31 (1.24, 1.38)      |
| AGA                             | 14,795                        | 61.1               | 1.00 (Ref.)            | 1.00 (Ref.)            |
| LGA                             | 2,339                         | 63.3               | 1.03 (0.99, 1.08)      | 0.99 (0.95, 1.04)      |

Note: AGA, Appropriate for gestational age; CI, confidence interval; HR, hazard ratio; LGA, Large for gestational age; SGA, Small for gestational age; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

<sup>1</sup>Crude incidence rates per 100,000 child-years.

\*Birth-asphyxia was defined as any of the following complications: low Apgar score, convulsions, meconium aspiration, and hypoxic ischemic encephalopathy.

The HRs were pooled from 12 multiply imputed datasets. **Model 1** shows the unadjusted HRs. **Model 2** was adjusted for infant sex and birth year; maternal T1DM, T2DM, preeclampsia, age at childbirth, parity, country of birth, educational level, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, history of epilepsy, and psychiatric disorders; and paternal age at childbirth, T1DM and T2DM, history of epilepsy, and psychiatric disorders.

**Table S5.** Incidence rates and subdistribution hazard ratios of epilepsy in children by maternal and paternal diabetes status, estimated through competing risk analysis including both live births and stillbirths<sup>#</sup>

| Exposure                 | Outcome: Epilepsy in children |        |                        |                        |
|--------------------------|-------------------------------|--------|------------------------|------------------------|
|                          | No. of epilepsy               | Rates* | Model 1<br>HR (95% CI) | Model 2<br>HR (95% CI) |
| <b>Maternal diabetes</b> |                               |        |                        |                        |
| Unexposed                | 18,752                        | 61.7   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                     | 156                           | 86.6   | 1.39 (1.27, 1.68)      | 1.31 (1.10, 1.53)      |
| T2DM                     | 41                            | 106.7  | 1.47 (1.21, 2.14)      | 1.42 (1.02, 1.97)      |
| GDM                      | 260                           | 72.9   | 1.16 (1.04, 1.30)      | 1.11 (0.97, 1.26)      |
| <b>Paternal diabetes</b> |                               |        |                        |                        |
| Unexposed                | 19,071                        | 62.0   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                     | 100                           | 65.0   | 1.03 (0.84, 1.24)      | 1.00 (0.81, 1.23)      |
| T2DM                     | 38                            | 66.6   | 1.04 (0.76, 1.43)      | 0.92 (0.65, 1.30)      |

Note: CI, confidence interval; GDM, Gestational diabetes mellitus; HR, hazard ratio; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

<sup>#</sup>This analysis was based on both stillbirths and live-births, with follow up started from the 22nd week of gestation rather than from birth (N=2,338,627). Maternal-child data linkage was performed using pregnancy ID, instead of mother ID.

\*Crude incidence rates per 100,000 person-years.

The HRs were pooled from 12 multiply imputed datasets. **Model 1** shows the unadjusted HRs. **Model 2** was adjusted for infant sex and birth year; maternal age at childbirth, parity, country of birth, educational level, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, history of epilepsy, and psychiatric disorders; and paternal age at childbirth, history of epilepsy, and psychiatric disorders. Maternal and paternal diabetes were mutually adjusted for each other.

**Table S6.** E-values for the total, direct, and indirect effects of maternal T1DM and T2DM and for the mediator-outcome estimates

| Pathway                            | Association                                                                 | Estimate<br>(HR, 95% CI) | E-value |
|------------------------------------|-----------------------------------------------------------------------------|--------------------------|---------|
| T1DM: Exposure-<br>outcome pathway | Total Effect                                                                | 1.30 (1.09, 1.51)        | 1.92    |
|                                    | Direct Effect                                                               | 1.12 (0.95, 1.32)        | 1.49    |
|                                    | Indirect Effect (via<br>preeclampsia, preterm birth,<br>and birth asphyxia) | 1.17 (1.13, 1.20)        | 1.62    |
|                                    | Indirect Effect (via preterm<br>birth and birth asphyxia)                   | 1.14 (1.11, 1.17)        | 1.54    |
|                                    |                                                                             |                          |         |
| T2DM: Exposure-<br>outcome pathway | Total Effect                                                                | 1.40 (1.01, 1.96)        | 2.15    |
|                                    | Direct Effect                                                               | 1.21 (0.86, 1.68)        | 1.71    |
|                                    | Indirect Effect (via<br>preeclampsia, preterm birth,<br>and birth asphyxia) | 1.16 (1.09, 1.24)        | 1.59    |
|                                    | Indirect Effect (via preterm<br>birth and birth asphyxia)                   | 1.11 (1.04, 1.18)        | 1.46    |
|                                    |                                                                             |                          |         |
| Mediator-outcome<br>pathway        | Preeclampsia→Epilepsy                                                       | 1.23 (1.14, 1.33)        | 1.76    |
|                                    | Preterm birth →Epilepsy                                                     | 1.58 (1.49, 1.67)        | 2.54    |
|                                    | Birth asphyxia→Epilepsy                                                     | 10.98 (10.27, 11.74)     | 21.45   |
|                                    |                                                                             |                          |         |

Note: The E-values were calculated using the formula:  $HR + \text{square root } \{HR * (HR-1)\}$

**Table S7.** Sequential mediation of the associations of maternal T1DM and T2DM with child epilepsy via preeclampsia, gestational age, and birth asphyxia

| <b>(i) Mediation by preeclampsia</b>                                              |                             |                             |
|-----------------------------------------------------------------------------------|-----------------------------|-----------------------------|
| <b>Mediation parameters</b>                                                       | <b>T1DM<br/>HR (95% CI)</b> | <b>T2DM<br/>HR (95% CI)</b> |
| Total Effect                                                                      | 1.30 (1.10, 1.52)           | 1.40 (1.02, 1.97)           |
| Direct Effect                                                                     | 1.26 (1.07, 1.49)           | 1.33 (0.95, 1.86)           |
| Indirect Effect                                                                   | 1.03 (1.02, 1.04)           | 1.05 (1.04, 1.07)           |
| Proportion Mediated (%)                                                           | 10.6                        | 14.7                        |
| <b>(ii) Joint mediation by preeclampsia and gestational age</b>                   |                             |                             |
|                                                                                   | <b>T1DM<br/>HR (95% CI)</b> | <b>T2DM<br/>HR (95% CI)</b> |
| Total Effect                                                                      | 1.30 (1.10, 1.52)           | 1.40 (1.02, 1.97)           |
| Direct Effect                                                                     | 1.16 (0.99, 1.36)           | 1.26 (0.90, 1.76)           |
| Indirect Effect                                                                   | 1.12 (1.10, 1.14)           | 1.11 (1.09, 1.13)           |
| Proportion Mediated (%)                                                           | 44.1                        | 33.9                        |
| <b>(iii) Joint mediation by preeclampsia, gestational age, and birth asphyxia</b> |                             |                             |
|                                                                                   | <b>T1DM<br/>HR (95% CI)</b> | <b>T2DM<br/>HR (95% CI)</b> |
| Total Effect                                                                      | 1.30 (1.10, 1.52)           | 1.40 (1.01, 1.96)           |
| Direct Effect                                                                     | 1.09 (0.91, 1.27)           | 1.19 (0.85, 1.67)           |
| Indirect Effect                                                                   | 1.19 (1.15, 1.22)           | 1.18 (1.11, 1.25)           |
| Proportion Mediated (%)                                                           | 68.2                        | 48.6                        |
| <b>(iv) Mediation by gestational age alone</b>                                    |                             |                             |
|                                                                                   | <b>T1DM<br/>HR (95% CI)</b> | <b>T2DM<br/>HR (95% CI)</b> |
| Indirect Effect                                                                   | 1.09 (1.08, 1.10)           | 1.06 (1.04, 1.07)           |
| Proportion Mediated (%)                                                           | 33.5                        | 16.0                        |
| <b>(v) Joint mediation by gestational age and birth asphyxia</b>                  |                             |                             |
|                                                                                   | <b>T1DM<br/>HR (95% CI)</b> | <b>T2DM<br/>HR (95% CI)</b> |
| Indirect Effect                                                                   | 1.16 (1.12, 1.19)           | 1.12 (1.06, 1.18)           |
| Proportion Mediated (%)                                                           | 57.6                        | 33.9                        |
| <b>(vi) Mediation by birth asphyxia alone</b>                                     |                             |                             |
|                                                                                   | <b>T1DM<br/>HR (95% CI)</b> | <b>T2DM<br/>HR (95% CI)</b> |
| Indirect Effect                                                                   | 1.06 (1.04, 1.08)           | 1.06 (1.00, 1.12)           |
| Proportion Mediated (%)                                                           | 24.1                        | 17.9                        |

Note: CI, confidence interval; HR, hazard ratio; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

Restricted cubic splines (5 knots) were used for gestational age to account for nonlinearity.

The 95% CIs are percentile based, obtained by bootstrapping with 1000 replications.

The Proportion Mediated is a ratio of the Indirect and Total Effects (i.e., Indirect Effect/Total Effect), calculated on the log HR scale and expressed in percentage.

T1DM and T2DM were used as binary exposures (No/Yes).

The HRs were adjusted for infant sex and birth year; maternal age at childbirth, parity, country of birth, educational level, cohabitation status, smoking, body mass index, alcohol use disorder, chronic hypertension, history of epilepsy, and psychiatric disorders; and paternal age at childbirth, paternal T1DM or T2DM, history of epilepsy, and psychiatric disorders.

**Table S8.** Hazard ratios of epilepsy in children by maternal and paternal diabetes status, using the spline terms to fit continuous confounders

| Exposure                 | Outcome: Epilepsy in children |        |                        |                        |
|--------------------------|-------------------------------|--------|------------------------|------------------------|
|                          | No. of epilepsy               | Rates* | Model 1<br>HR (95% CI) | Model 2<br>HR (95% CI) |
| <b>Maternal diabetes</b> |                               |        |                        |                        |
| Unexposed                | 18,518                        | 63.3   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                     | 156                           | 89.8   | 1.41 (1.20, 1.64)      | 1.30 (1.10, 1.54)      |
| T2DM                     | 37                            | 102.9  | 1.56 (1.13, 2.15)      | 1.38 (0.99, 1.93)      |
| GDM                      | 257                           | 76.2   | 1.17 (1.04, 1.32)      | 1.09 (0.96, 1.25)      |
| <b>Paternal diabetes</b> |                               |        |                        |                        |
| Unexposed                | 18,830                        | 63.6   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                     | 100                           | 67.2   | 1.03 (0.85, 1.25)      | 0.98 (0.80, 1.21)      |
| T2DM                     | 38                            | 68.9   | 1.04 (0.76, 1.43)      | 0.93 (0.66, 1.30)      |

Note: CI, confidence interval; GDM, Gestational diabetes mellitus; HR, hazard ratio; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

\*Crude incidence rates per 100,000 person-years.

The HRs were pooled from 12 multiply imputed datasets. **Model 1** shows the unadjusted HRs. **Model 2** was adjusted for infant sex and birth year; maternal age at childbirth, parity, country of birth, years of education, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, history of epilepsy, and psychiatric disorders; and paternal age at childbirth, history of epilepsy, and psychiatric disorders. Maternal and paternal diabetes were mutually adjusted for each other. Restricted cubic splines were used for birth year, maternal age, parity, years of education and BMI to account for possible non-linearity.

**Table S9.** Sex-stratified incidence rates and hazard ratios of epilepsy in children by maternal and paternal diabetes status

| <b>Females (N=1,127,190)</b> |                                      |        |                        |                        |
|------------------------------|--------------------------------------|--------|------------------------|------------------------|
| <b>Exposure</b>              | <b>Outcome: Epilepsy in children</b> |        |                        |                        |
|                              | No. of epilepsy                      | Rates* | Model 1<br>HR (95% CI) | Model 2<br>HR (95% CI) |
| <b>Maternal diabetes</b>     |                                      |        |                        |                        |
| Unexposed                    | 8,649                                | 60.5   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                         | 71                                   | 83.5   | 1.37 (1.08, 1.73)      | 1.25 (0.99, 1.57)      |
| T2DM                         | 16                                   | 88.9   | 1.41 (0.87, 2.30)      | 1.23 (0.75, 2.00)      |
| GDM                          | 109                                  | 66.1   | 1.07 (0.88, 1.29)      | 1.00 (0.82, 1.20)      |
| <b>Paternal diabetes</b>     |                                      |        |                        |                        |
| Unexposed                    | 8,777                                | 60.7   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                         | 46                                   | 63.2   | 1.02 (0.76, 1.36)      | 0.98 (0.74, 1.31)      |
| T2DM                         | 22                                   | 81.1   | 1.29 (0.85, 1.96)      | 1.18 (0.78, 1.80)      |
| <b>Males (N=1,177,861)</b>   |                                      |        |                        |                        |
| <b>Maternal diabetes</b>     |                                      |        |                        |                        |
| Unexposed                    | 9,868                                | 66.0   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                         | 85                                   | 95.9   | 1.44 (1.16, 1.78)      | 1.33 (1.08, 1.65)      |
| T2DM                         | 21                                   | 116.9  | 1.69 (1.10, 2.60)      | 1.41 (0.91, 2.16)      |
| GDM                          | 148                                  | 85.8   | 1.26 (1.07, 1.48)      | 1.11 (0.95, 1.32)      |
| <b>Paternal diabetes</b>     |                                      |        |                        |                        |
| Unexposed                    | 10,052                               | 66.4   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                         | 54                                   | 70.9   | 1.04 (0.80, 1.36)      | 1.02 (0.78, 1.33)      |
| T2DM                         | 16                                   | 57.1   | 0.82 (0.50, 1.35)      | 0.71 (0.43, 1.15)      |

Note: CI, confidence interval; GDM, Gestational diabetes mellitus; HR, hazard ratio; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

\*Crude incidence rates per 100,000 person-years.

P-value for maternal T1DM\*infant sex: 0.698, P-value for maternal T2DM\*infant sex: 0.683, P-value for GDM\*infant sex: 0.222, P-value for overall maternal diabetes\*infant sex: 0.617

The HRs were pooled from 12 multiply imputed datasets. **Model 1** shows the unadjusted HRs.

**Model 2** was adjusted for birth year and maternal age at childbirth, parity, country of birth, educational level, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, history of epilepsy, and psychiatric disorders; and paternal age at childbirth, history of epilepsy, and psychiatric disorders. Maternal and paternal diabetes were mutually adjusted for each other.

**Table S10.** Incidence rates and hazard ratios of epilepsy in children by maternal and paternal diabetes status, after excluding children with diabetes or parental epilepsy

| Exposure                 | Outcome: Epilepsy in children |        |                        |                        |
|--------------------------|-------------------------------|--------|------------------------|------------------------|
|                          | No. of epilepsy               | Rates* | Model 1<br>HR (95% CI) | Model 2<br>HR (95% CI) |
| <b>Maternal diabetes</b> |                               |        |                        |                        |
| Unexposed                | 17,684                        | 61.5   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                     | 138                           | 84.6   | 1.36 (1.15, 1.61)      | 1.28 (1.08, 1.51)      |
| T2DM                     | 35                            | 100.8  | 1.62 (1.16, 2.26)      | 1.41 (1.01, 1.96)      |
| GDM                      | 242                           | 73.3   | 1.16 (1.02, 1.32)      | 1.07 (0.94, 1.21)      |
| <b>Paternal diabetes</b> |                               |        |                        |                        |
| Unexposed                | 17,974                        | 61.8   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                     | 90                            | 65.0   | 1.03 (0.83, 1.26)      | 1.01 (0.82, 1.25)      |
| T2DM                     | 35                            | 65.6   | 1.02 (0.73, 1.42)      | 0.93 (0.67, 1.29)      |

Note: CI, confidence interval; GDM, Gestational diabetes mellitus; HR, hazard ratio; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

\*Crude incidence rates per 100,000 person-years.

The HRs were pooled from 12 multiply imputed datasets. **Model 1** shows the unadjusted HRs. **Model 2** was adjusted for infant sex and birth year; maternal age at childbirth, parity, country of birth, educational level, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, and history of psychiatric disorders; and paternal age at childbirth and history psychiatric disorders. Maternal and paternal diabetes were mutually adjusted for each other.

**Table S11.** Incidence rates and hazard ratios of epilepsy in children by maternal diabetes status, reclassified based on insulin use

| Exposure                 | Outcome: Epilepsy in children |        |                        |                        |
|--------------------------|-------------------------------|--------|------------------------|------------------------|
|                          | No. of epilepsy               | Rates* | Model 1<br>HR (95% CI) | Model 2<br>HR (95% CI) |
| <b>Maternal diabetes</b> |                               |        |                        |                        |
| Unexposed                | 18,517                        | 63.3   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                     | 153                           | 90.3   | 1.42 (1.21, 1.66)      | 1.31 (1.11, 1.56)      |
| T2DM                     | 40                            | 99.3   | 1.50 (1.10, 2.05)      | 1.37 (0.99, 1.88)      |
| GDM                      | 257                           | 76.2   | 1.17 (1.03, 1.32)      | 1.10 (0.95, 1.25)      |

Note: CI, confidence interval; GDM, Gestational diabetes mellitus; HR, hazard ratio; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

\*Crude incidence rates per 100,000 person-years.

The HRs were pooled from 12 multiply imputed datasets. **Model 1** shows the unadjusted HRs. **Model 2** was adjusted for infant sex and birth year; maternal age at childbirth, parity, country of birth, educational level, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, history of epilepsy, and psychiatric disorders; and paternal age at childbirth, T1DM and T2DM, history of epilepsy, and psychiatric disorders.

**Table S12.** Incidence rates and hazard ratios of epilepsy in children by maternal diabetes status, after excluding overlapping diagnoses of maternal T1DM and T2DM

| Exposure                 | Outcome: Epilepsy in children |        |                        |                        |
|--------------------------|-------------------------------|--------|------------------------|------------------------|
|                          | No. of epilepsy               | Rates* | Model 1<br>HR (95% CI) | Model 2<br>HR (95% CI) |
| <b>Maternal diabetes</b> |                               |        |                        |                        |
| Unexposed                | 18,517                        | 63.3   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                     | 135                           | 95.3   | 1.50 (1.27, 1.78)      | 1.40 (1.18, 1.66)      |
| T2DM                     | 30                            | 116.0  | 1.75 (1.22, 2.50)      | 1.49 (1.04, 2.13)      |
| GDM                      | 257                           | 76.2   | 1.17 (1.03, 1.32)      | 1.08 (0.95, 1.22)      |

Note: CI, confidence interval; GDM, Gestational diabetes mellitus; HR, hazard ratio; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

\*Crude incidence rates per 100,000 person-years.

The HRs were pooled from 12 multiply imputed datasets. **Model 1** shows the unadjusted HRs. **Model 2** was adjusted for infant sex and birth year; maternal age at childbirth, parity, country of birth, educational level, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, history of epilepsy, and psychiatric disorders; and paternal age at childbirth, T1DM and T2DM, history of epilepsy, and psychiatric disorders.

**Table S13.** Incidence rates and hazard ratios of epilepsy in children by parental diabetes status, restricting maternal T1DM and T2DM diagnoses to the preconception period

| Exposure                 | Outcome: Epilepsy in children |        |                        |                        |
|--------------------------|-------------------------------|--------|------------------------|------------------------|
|                          | No. of epilepsy               | Rates* | Model 1<br>HR (95% CI) | Model 2<br>HR (95% CI) |
| <b>Maternal diabetes</b> |                               |        |                        |                        |
| Unexposed                | 18,541                        | 63.3   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                     | 138                           | 91.9   | 1.44 (1.22, 1.70)      | 1.32 (1.10, 1.59)      |
| T2DM                     | 31                            | 94.7   | 1.42 (1.01, 2.02)      | 1.29 (0.89, 1.85)      |
| GDM                      | 257                           | 76.2   | 1.17 (1.04, 1.32)      | 1.09 (0.96, 1.25)      |
| <b>Paternal diabetes</b> |                               |        |                        |                        |
| Unexposed                | 18,830                        | 63.6   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                     | 100                           | 67.2   | 1.03 (0.85, 1.25)      | 0.98 (0.80, 1.21)      |
| T2DM                     | 38                            | 68.9   | 1.04 (0.76, 1.43)      | 0.93 (0.66, 1.30)      |

Note: CI, confidence interval; GDM, Gestational diabetes mellitus; HR, hazard ratio; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

\*Crude incidence rates per 100,000 person-years.

The HRs were pooled from 12 multiply imputed datasets. **Model 1** shows the unadjusted HRs. **Model 2** was adjusted for infant sex and birth year; maternal age at childbirth, parity, country of birth, years of education, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, history of epilepsy, and psychiatric disorders; and paternal age at childbirth, history of epilepsy, and psychiatric disorders. Maternal and paternal diabetes were mutually adjusted for each other.

**Table S14.** Incidence rates and hazard ratios of epilepsy in children by maternal use of diabetes medications during pregnancy<sup>#</sup>

| Diabetes medications                | Outcome: Epilepsy in children |                    |                        |                        |
|-------------------------------------|-------------------------------|--------------------|------------------------|------------------------|
|                                     | No. of events                 | Rates <sup>*</sup> | Model 1<br>HR (95% CI) | Model 2<br>HR (95% CI) |
| Insulin use in pregnancy            |                               |                    |                        |                        |
| No                                  | 165                           | 78.2               | 1.00 (Ref.)            | 1.00 (Ref.)            |
| Yes                                 | 129                           | 87.8               | 1.12 (0.89, 1.42)      | 1.12 (0.83, 1.51)      |
| Oral antidiabetics use in pregnancy |                               |                    |                        |                        |
| No                                  | 265                           | 80.3               | 1.00 (Ref.)            | 1.00 (Ref.)            |
| Yes                                 | 29                            | 104.6              | 1.25 (0.85, 1.85)      | 1.13 (0.72, 1.75)      |

Note: CI, confidence interval; HR, hazard ratio.

<sup>#</sup>This analysis included only children born to mothers with diabetes from 2005 onward, corresponding to the period when prescription drug data became available in Sweden (N=45,565). The purpose of restricting the analysis to children of mothers with diabetes was to account for confounding by indication.

<sup>\*</sup>Crude incidence rates per 100,000 child-years.

**Model 1** shows the unadjusted HRs. **Model 2** was adjusted for infant sex and birth year; types of maternal diabetes, preeclampsia, age at childbirth, parity, country of birth, educational level, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, history of epilepsy, and psychiatric disorders; and paternal age at childbirth, T1DM and T2DM, history of epilepsy, and psychiatric disorders.

**Table S15.** Incidence rates and hazard ratios of epilepsy in children by duration of pre-gestational type 1 and type 2 diabetes

| Exposure                          | Outcome: Epilepsy in children |        |                        |                        |
|-----------------------------------|-------------------------------|--------|------------------------|------------------------|
|                                   | No. of events                 | Rates* | Model 1<br>HR (95% CI) | Model 2<br>HR (95% CI) |
| <b>Diagnosis of maternal T1DM</b> |                               |        |                        |                        |
| No T1DM                           | 18,809                        | 63.5   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM <5 years before childbirth   | 88                            | 83.5   | 1.34 (1.08, 1.65)      | 1.23 (1.00, 1.52)      |
| T1DM 5–10 years before childbirth | 37                            | 95.5   | 1.47 (1.06, 2.02)      | 1.35 (0.98, 1.87)      |
| T1DM >10 years before childbirth  | 34                            | 101.0  | 1.46 (1.04, 2.04)      | 1.31 (0.93, 1.83)      |
| <b>Diagnosis of maternal T2DM</b> |                               |        |                        |                        |
| No T2DM                           | 18,911                        | 63.6   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T2DM <5 years before childbirth   | 50                            | 95.5   | 1.45 (1.10, 1.92)      | 1.35 (1.01, 1.80)      |
| T2DM 5–10 years before childbirth | <10!                          | -      | -                      | -                      |
| T2DM >10 years before childbirth  | <10!                          | -      | -                      | -                      |

Note: CI, confidence interval; HR, hazard ratio; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

\*Crude incidence rates per 100,000 person-years.

! Exact count is suppressed for confidentiality reason. -Not estimated due to insufficient number of events.

The HRs were pooled from 12 multiply imputed datasets. **Model 1** shows the unadjusted HRs. **Model 2** was adjusted for infant sex and birth year; maternal age at childbirth, parity, country of birth, educational level, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, history of epilepsy, and psychiatric disorders; and paternal age at childbirth, T1DM and T2DM, history of epilepsy, and psychiatric disorders.

**Table S16.** Incidence rates and hazard ratios of epilepsy by maternal diabetes status among children of Swedish-born mothers

| Exposure                 | Outcome: Epilepsy in children |        |                        |                        |
|--------------------------|-------------------------------|--------|------------------------|------------------------|
|                          | No. of epilepsy               | Rates* | Model 1<br>HR (95% CI) | Model 2<br>HR (95% CI) |
| <b>Maternal diabetes</b> |                               |        |                        |                        |
| Unexposed                | 14,905                        | 63.6   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                     | 138                           | 92.8   | 1.44 (1.22, 1.71)      | 1.33 (1.13, 1.58)      |
| T2DM                     | 22                            | 103.7  | 1.72 (1.14, 2.62)      | 1.40 (0.92, 2.13)      |
| GDM                      | 141                           | 70.7   | 1.09 (0.92, 1.28)      | 0.97 (0.82, 1.15)      |

Note: CI, confidence interval; GDM, Gestational diabetes mellitus; HR, hazard ratio; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

\*Crude incidence rates per 100,000 person-years.

The HRs were pooled from 12 multiply imputed datasets. **Model 1** shows the unadjusted HRs.

**Model 2** was adjusted for infant sex and birth year; maternal age at childbirth, parity, educational level, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, history of epilepsy, and psychiatric disorders; and paternal at childbirth, T1DM and T2DM, history of epilepsy, and psychiatric disorders.

**Table S17.** Incidence rates and hazard ratios of epilepsy by maternal diabetes status before the revised GDM criteria in 2018

| Exposure                 | Outcome: Epilepsy in children |        |                        |                        |
|--------------------------|-------------------------------|--------|------------------------|------------------------|
|                          | No. of epilepsy               | Rates* | Model 1<br>HR (95% CI) | Model 2<br>HR (95% CI) |
| <b>Maternal diabetes</b> |                               |        |                        |                        |
| Unexposed                | 17,380                        | 62.6   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                     | 147                           | 90.4   | 1.43 (1.22, 1.69)      | 1.33 (1.13, 1.56)      |
| T2DM                     | 31                            | 98.9   | 1.53 (1.07, 2.17)      | 1.31 (0.92, 1.87)      |
| GDM                      | 204                           | 72.8   | 1.15 (1.00, 1.32)      | 1.07 (0.93, 1.22)      |

Note: CI, confidence interval; GDM, Gestational diabetes mellitus; HR, hazard ratio; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

\*Crude incidence rates per 100,000 person-years.

The HRs were pooled from 12 multiply imputed datasets. **Model 1** shows the unadjusted HRs. **Model 2** was adjusted for infant sex and birth year; mother's age at childbirth, parity, country of birth, educational level, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, history of epilepsy, and psychiatric disorders; and paternal age at childbirth, T1DM and T2DM, history of epilepsy, and psychiatric disorders.

**Table S18.** Incidence rates and hazard ratios of epilepsy by severity of maternal GDM<sup>#</sup>

| Exposure               | Outcome: Epilepsy in children |        |                        |                        |
|------------------------|-------------------------------|--------|------------------------|------------------------|
|                        | No. of epilepsy               | Rates* | Model 1<br>HR (95% CI) | Model 2<br>HR (95% CI) |
| <b>GDM severity</b>    |                               |        |                        |                        |
| No GDM                 | 11,238                        | 66.8   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| GDM without medication | 137                           | 79.2   | 1.16 (0.98, 1.37)      | 1.08 (0.90, 1.29)      |
| GDM with medication    | 46                            | 96.8   | 1.40 (1.04, 1.86)      | 1.11 (0.81, 1.54)      |

Note: CI, confidence interval; GDM, Gestational diabetes mellitus; HR, hazard ratio.

<sup>#</sup>This analysis was restricted to children born after 2004, coinciding with the availability of prescription drugs information in Sweden (N=1,710,867).

\*Crude incidence rates per 100,000 person-years.

The HRs were pooled from 12 multiply imputed datasets. **Model 1** shows the unadjusted HRs. **Model 2** was adjusted for infant sex and birth year; mother's age at childbirth, parity, country of birth, educational level, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, T1DM and T2DM, history of epilepsy, and psychiatric disorders; and paternal age at childbirth, T1DM and T2DM, history of epilepsy, and psychiatric disorders.

**Table S19.** Incidence rates and hazard ratios of epilepsy in children by maternal and paternal diabetes status, with major malformations included (N=2,403,421)

| Exposure                 | Outcome: Epilepsy in children |        |                        |                        |
|--------------------------|-------------------------------|--------|------------------------|------------------------|
|                          | No. of epilepsy               | Rates* | Model 1<br>HR (95% CI) | Model 2<br>HR (95% CI) |
| <b>Maternal diabetes</b> |                               |        |                        |                        |
| Unexposed                | 21,000                        | 69.3   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                     | 190                           | 102.3  | 1.46 (1.26, 1.68)      | 1.33 (1.15, 1.56)      |
| T2DM                     | 41                            | 106.4  | 1.45 (1.06, 1.96)      | 1.35 (1.01, 1.79)      |
| GDM                      | 300                           | 84.7   | 1.17 (1.04, 1.31)      | 1.09 (0.96, 1.23)      |
| <b>Paternal diabetes</b> |                               |        |                        |                        |
| Unexposed                | 21,366                        | 69.6   | 1.00 (Ref.)            | 1.00 (Ref.)            |
| T1DM                     | 122                           | 78.7   | 1.10 (0.92, 1.31)      | 1.06 (0.88, 1.28)      |
| T2DM                     | 43                            | 74.5   | 1.02 (0.76, 1.38)      | 0.90 (0.66, 1.24)      |

Note: CI, confidence interval; GDM, Gestational diabetes mellitus; HR, hazard ratio; T1DM, type 1 diabetes mellitus; T2DM, type 2 diabetes mellitus.

\*Crude incidence rates per 100,000 person-years.

The HRs were pooled from 12 multiply imputed datasets. **Model 1** shows the unadjusted HRs. **Model 2** was adjusted for infant sex and birth year; maternal age at childbirth, parity, country of birth, educational level, cohabitation status, smoking, body mass index, alcohol use disorders, chronic hypertension, history of epilepsy, and psychiatric disorders; and paternal age at childbirth, history of epilepsy, and psychiatric disorders. Maternal and paternal diabetes were mutually adjusted for each other.