**eTable 1. Distribution of characteristics based on the dataset which exclude women with any missing data (complete data; n=41,285) and the dataset which impute all variables (fully imputed; n=55,303)**

| Age at first pregnancy | Complete data<sup>a</sup> | Fully imputed<sup>b</sup> | Complete data<sup>a</sup> | Fully imputed<sup>b</sup> | Complete data<sup>a</sup> | Fully imputed<sup>b</sup> | Complete data<sup>a</sup> | Fully imputed<sup>b</sup> | Complete data<sup>a</sup> | Fully imputed<sup>b</sup> |
|------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| **<1,500 g**           |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |
| 15–24                  | 121 (40.2) 213 (45.0)     | 1,763 2,878 (43.7)        | 9,206 (39.8) 13,388 (42.5) | 4,314 (32.8) 5,781 (35.4) | 76 (27.0) 103 (29.2)      |
| 25–29                  | 138 (45.8) 212 (44.8)     | 2,051 2,927 (44.4)        | 10,909 14,418 (45.7)      | 6,309 (47.9) 7,647 (46.8) | 127 (45.0) 160 (45.1)     |
| 30–34                  | 32 (10.6) 37 (7.9)        | 466 (10.5) 604 (9.2)      | 2,321 (10.0) 2,887 (9.2)  | 1,857 (14.1) 2,147 (13.1) | 57 (20.2) 67 (18.9)       |
| >34                    | 10 (3.3) 11 (2.3)         | 138 (3.1) 181 (2.7)       | 677 (2.9) 840 (2.7)       | 691 (5.2) 777 (4.8)       | 22 (7.8) 24 (6.8)         |
| **BMI at 20 years**    |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |
| <18.5                  | 58 (19.3) 75 (15.8)       | 747 (16.9) 1,011 (15.3)   | 2,965 (12.8) 3,827 (12.1) | 1,623 (12.3) 1,902 (11.6) | 32 (11.3) 37 (10.5)       |
| 18.5–24.9              | 224 (74.4) 360 (76.0)     | 3,422 5,156 (78.2)        | 18,992 25,874 (82.1)      | 10,764 13,389 (81.9)      | 231 (81.9) 289 (81.7)     |
| ≥25.0                  | 19 (6.3) 39 (8.2)         | 249 (5.6) 423 (6.4)       | 1156 (5.0) 1,831 (5.8)    | 784 (6.0) 1,062 (6.5)     | 19 (6.7) 28 (7.8)         |
| **Current height**     |                           |                           |                           |                           |                           |                           |                           |                           |                           |                           |
| < 151                  | 123 (40.9) 228 (48.1)     | 1,610 2,762 (41.9)        | 5,821 (25.2) 9,053 (28.7) | 1,416 (10.8) 2,114 (12.9) | 14 (5.0) 26 (7.2)         |
| 151–155                | 103 (34.2) 147 (31.1)     | 1,398 2,028 (30.8)        | 7,566 (32.7) 10,326 (32.7) | 3,325 (25.2) 4,284 (26.2) | 42 (14.9) 55 (15.6)       |
| 156–159                | 47 (15.6) 62 (13.2)       | 856 (19.4) 1,125 (17.1)   | 5,604 (24.2) 7,153 (22.7) | 3,773 (28.6) 4,575 (28.0) | 84 (29.8) 101 (28.7)      |
| ≥160                   | 28 (9.3) 36 (7.6)         | 554 (12.5) 675 (10.2)     | 4,122 (17.8) 5,000 (15.9) | 4,657 (35.4) 5,380 (32.9) | 142 (50.4) 171 (48.4)     |
| **passive smoking at 10 years** |                 |                           |                           |                           |                           |                           |                           |                           |                           |                           |
| Almost none            | 150 (49.8) 248 (52.5)     | 2,230 3,479 (52.8)        | 11,929 16,696 (52.9)      | 6,265 (47.6) 7,964 (48.7) | 126 (44.7) 161 (45.5)     |
| 1–3 times a month      | 8 (2.7) 13 (2.7)          | 186 (4.2) 249 (3.8)       | 997 (4.3) 1,268 (4.0)     | 607 (4.6) 709 (4.3)       | 19 (6.7) 21 (5.8)         |
| 1–4 times a week       | 27 (9.0) 37 (7.7)         | 325 (7.4) 452 (6.9)       | 2,014 (8.7) 2,558 (8.1)   | 1,215 (9.2) 1,430 (8.7)   | 24 (8.5) 29 (8.2)         |
| Almost every day       | 116 (38.5) 175 (37.1)     | 1,677 2,409 (36.6)        | 8,173 (35.4) 11,011 (34.9) | 5,084 (38.6) 6,250 (38.2) | 113 (40.1) 143 (40.5)     |

<sup>a</sup> Includes data on 41,285 women.

<sup>b</sup> Includes data on 55,303 women.

<sup>c</sup> Smoking status at first pregnancy: 0-4 days a week, 4 times a week, 5-6 days a week, almost none, almost every day.
| Yes                  | 43 (14.3) | 49 (10.4) | 563 (12.7) | 688 (10.4) | 2,680 (11.6) | 3,269 (10.4) | 2,296 (17.4) | 2,629 (16.1) | 57 (20.2) | 71 (20.1) |
|---------------------|-----------|-----------|------------|------------|--------------|--------------|--------------|--------------|-----------|-----------|
| Educational attainment<sup>d</sup> |            |           |            |            |              |              |              |              |           |           |
| Junior high school  | 87 (28.9) | 182 (38.5)| 866 (19.6) | 1,911 (29.0)| 3,864 (16.7) | 7,182 (22.8) | 962 (7.3)   | 1,858 (11.4) | 21 (7.4)  | 36 (10.3) |
|                     | 145 (48.2)| 211 (44.5)| 2,340 (49.2)| 3,241 (49.2)| 12,493 (51.8)| 16,343 (51.8)| 6,846 (52.0)| 8,443 (51.6)| 127 (45.0)| 164 (46.2)|
| High school         |           |           |            |            |              |              |              |              |           |           |
| Other               | 56 (18.6) | 67 (14.2) | 1,026 (18.7)| 1,235 (18.7)| 5,638 (24.4)| 6,768 (21.5)| 4,291 (32.6)| 4,905 (30.0)| 103 (36.5)| 121 (34.3)|
| University or more  | 13 (4.3)  | 13 (2.8)  | 186 (4.2)  | 204 (3.1)  | 1,118 (4.8)  | 1,240 (3.9)  | 1,072 (8.1) | 1,147 (7.0) | 31 (11.0) | 33 (9.2)  |

<sup>a</sup> “Fully imputed”: based on the dataset of all women who gave birth with all missing variables imputed;
<sup>b</sup> “Partially imputed”: based on the dataset of all women who gave birth and had self-reported birthweight, and with all missing variables except for birthweight imputed;
<sup>c</sup> Smoking status at first pregnancy, “No” combines “Never smoke or starting after the 1st pregnancy”;
<sup>d</sup> Educational attainment, “Other” means “Junior college / specialty / 4 year system dropout”
Table 2. Odds ratio for each outcome based on complete cases dataset (N=41,285)

| Birth weight | <1,500 g (n=301) | 1,500–2,499 g (n=4,418) | 2,500–2,999 g (n=23,113) | 3,000–3,999 g (n=13,171) | >4,000 g (n=282) |
|--------------|------------------|------------------------|------------------------|------------------------|------------------|
| *Pregnancy induced hypertension* |                  |                        |                        |                        |                  |
| n(%)         | 42 (14.0)        | 411 (9.3)              | 2,025 (8.8)            | 1,018 (7.7)            | 27 (9.6)         |
| Odds ratio [95% confidence interval]a |                  |                        |                        |                        |                  |
| Model 1      | 1.82 [1.30;2.54] | 1.16 [1.03;1.31]       | 1.10 [1.02;1.20]       | reference              | 1.32 [0.88;1.97] |
| Model 2      | 1.81 [1.30;2.54] | 1.14 [1.01;1.29]       | 1.09 [1.01;1.19]       | reference              | 1.34 [0.89;2.01] |
| Model 3a     | 1.79 [1.28;2.51] | 1.14 [1.00;1.29]       | 1.09 [1.01;1.19]       | reference              | 1.34 [0.90;2.01] |
| Model 3b     | 1.85 [1.32;2.59] | 1.17 [1.03;1.32]       | 1.11 [1.03;1.21]       | reference              | 1.33 [0.88;1.99] |
| *Gestational diabetes mellitus*    |                  |                        |                        |                        |                  |
| n(%)         | 8 (2.7)          | 189 (4.3)              | 830 (3.6)              | 617 (4.7)              | 19 (6.7)         |
| Odds ratio [95% confidence interval]a |                  |                        |                        |                        |                  |
| Model 1      | 0.75 [0.37;1.52] | 1.20 [1.01;1.42]       | 0.98 [0.88;1.10]       | reference              | 1.22 [0.75;1.96] |
| Model 2      | 0.75 [0.37;1.52] | 1.20 [1.01;1.43]       | 1.00 [0.89;1.12]       | reference              | 1.16 [0.72;1.87] |
| Model 3a     | 0.73 [0.36;1.49] | 1.20 [1.01;1.43]       | 1.01 [0.90;1.13]       | reference              | 1.15 [0.71;1.85] |
| Model 3b     | 0.75 [0.37;1.53] | 1.22 [1.03;1.46]       | 1.03 [0.92;1.15]       | reference              | 1.14 [0.70;1.84] |

a Multilevel logistic regression model with place of residence as random effect
Model 1: birth year
Model 2: + (education) + (family history) + (passive smoking at 10 years old) + (height) + (older sibling)
Model 3a: + (age at first pregnancy) + (age at first pregnancy) x (birth year) + (smoking status)
Model 3b: + (BMI at 20 years old)
Table 3. Odds ratio for each outcome based on the dataset which impute all variables (N=55,303)

| Birth weight                  | <1,500g (n=491) | 1,500–2,499 g (n=6,613) | 2,500–2,999 g (n=31,462) | 3,000–3,999 g (n=16,389) | >4,000 g (n=348) |
|------------------------------|-----------------|--------------------------|---------------------------|--------------------------|-----------------|
| Pregnancy induced hypertension|                 |                          |                           |                          |                 |
| n (%                        | 58 (11.9)       | 627 (9.5)                | 2841 (9.0)                | 1305 (8.0)               | 36 (10.2)       |
| Odds ratio [95% confidence interval]a |
| Model 1                     | 1.45 [1.07;1.98] | 1.15 [1.03;1.29]         | 1.11 [1.02;1.20]          | reference                | 1.36 [0.95;1.94] |
| Model 2                     | 1.45 [1.06;1.97] | 1.14 [1.01;1.27]         | 1.09 [1.01;1.19]          | reference                | 1.36 [0.95;1.96] |
| Model 3a                    | 1.44 [1.05;1.97] | 1.13 [1.01;1.27]         | 1.10 [1.01;1.19]          | reference                | 1.37 [0.96;1.96] |
| Model 3b                    | 1.56 [1.14;2.14] | 1.16 [1.03;1.30]         | 1.12 [1.03;1.22]          | reference                | 1.37 [0.94;1.99] |
| Gestational diabetes mellitus|                 |                          |                           |                          |                 |
| n (%            | 13 (2.8)        | 246 (3.7)                | 1068 (3.4)                | 723 (4.4)                | 24 (6.8)        |
| Odds ratio [95% confidence interval]a |
| Model 1                     | 0.84 [0.46;1.57] | 1.15 [0.98;1.36]         | 1.00 [0.90;1.11]          | reference                | 1.34 [0.87;2.05] |
| Model 2                     | 0.85 [0.46;1.59] | 1.15 [0.97;1.37]         | 1.01 [0.91;1.13]          | reference                | 1.29 [0.84;1.98] |
| Model 3a                    | 0.85 [0.46;1.58] | 1.15 [0.98;1.36]         | 1.03 [0.92;1.14]          | reference                | 1.27 [0.82;1.96] |
| Model 3b                    | 0.87 [0.47;1.61] | 1.19 [1.01;1.41]         | 1.04 [0.93;1.16]          | reference                | 1.22 [0.78;1.93] |

*a Multilevel logistic regression model with place of residence as random effect
Model 1: birth year
Model 2: + (education) + (family history) + (passive smoking at 10 years old) + (height) + (older sibling)
Model 3a: + (age at first pregnancy) + (age at first pregnancy) x (birth year) + (smoking status)
Model 3b: + (BMI at 20 years old)