|  |
| --- |
| Supplemental Table1. Participant characterstics among those included in or excluded from the analysis, and according to blood sampling period of OCPs |
| **Characteristics** | All participants (n = 514) | 　 | Analysis in this study | 　 | 　 | Blood sampling periodof OCPs |
| 　 | Included(n=333) | 　 | Excluded(n=181) | p-value | 　 | During pregnancy(n=217) | 　 | After delivery(n=116) | p-value |
| **n** |  | **Mean±SDNo.(%)** |  | **n** | **Mean±SDNo.(%)** |  | **n** | **Mean±SDNo.(%)** |  | **n** | **Mean±SDNo.(%)** |  | **n** | **Mean±SDNo.(%)** |
| ***Maternal charasteristics*** |  | 　 | 　 | 　 | 　 |  | 　 | 　 | 　 |  | 　 | 　 | 　 | 　 |  | 　 | 　 | 　 |  | 　 | 　 | 　 |
| Age at delivery (years) | 497 | 　 | 30.7  | ±4.9 | 　 | 333 | 31.3  | ±4.7 | 　 | 164 | 29.6  | ±5.1 | **<0.01** | 　 | 217 | 30.9  | ±4.6 | 　 | 116 | 32.1  | ±4.8 | **0.03**  |
| BMI before pregnancy | 　 | 　 | 21.2  | ±3.2 | 　 | 　 | 21.1  | ±3.1 | 　 | 　 | 21.3  | ±3.4 | 0.54  | 　 | 　 | 21.4  | ±3.4 | 　 | 　 | 20.7  | ±2.6 | 0.06  |
| Parity | 　 |  1 | 238 | (46.3) | 　 | 　 | 156 | (46.8) | 　 | 　 | 82 | (45.3) | 1.00  | 　 | 　 | 111 | (51.2) | 　 | 　 | 45 | (38.8) | **0.04**  |
| 　 | 　 | >1 | 269 | (52.3) | 　 | 　 | 177 | (53.2) | 　 | 　 | 92 | (50.8) | 　 | 　 | 　 | 106 | (48.8) | 　 | 　 | 71 | (61.2) | 　 |
| Educational attainment (years) | 　 | <13 | 225 | (43.8) | 　 | 　 | 139 | (41.7) | 　 | 　 | 86 | (47.5) | 0.13  | 　 | 　 | 93 | (42.9) | 　 | 　 | 46 | (39.7) | 0.64  |
| 　 | 　 | ≥13 | 283 | (55.1) | 　 | 　 | 194 | (58.3) | 　 | 　 | 89 | (49.2) | 　 | 　 | 　 | 124 | (57.1) | 　 | 　 | 70 | (60.3) | 　 |
| Annual household income (yen) | 　 | <300 | 95 | (18.5) | 　 | 　 | 56 | (16.8) | 　 | 　 | 39 | (21.5) | 0.15  | 　 | 　 | 40 | (18.4) | 　 | 　 | 16 | (13.8) | 0.36  |
| 　 | 　 | ≥300 | 410 | (79.8) | 　 | 　 | 276 | (82.9) | 　 | 　 | 134 | (74.0) | 　 | 　 | 　 | 177 | (81.6) | 　 | 　 | 99 | (85.3) | 　 |
| Smoking during pregnancy | 　 | No | 421 | (81.9) | 　 | 　 | 286 | (85.9) | 　 | 　 | 135 | (74.6) | **0.02**  | 　 | 　 | 181 | (83.4) | 　 | 　 | 105 | (90.5) | 0.10  |
| 　 | 　 | Yes | 87 | (16.9) | 　 | 　 | 47 | (14.1) | 　 | 　 | 40 | (22.1) | 　 | 　 | 　 | 36 | (16.6) | 　 | 　 | 11 | (9.5) | 　 |
| Alcohol intake during pregnancy | 　 | No | 357 | (69.5) | 　 | 　 | 231 | (69.4) | 　 | 　 | 126 | (69.6) | 1.00  | 　 | 　 | 145 | (66.8) | 　 | 　 | 86 | (74.1) | 0.17  |
| 　 | 　 | Yes | 157 | (30.5) | 　 | 　 | 102 | (30.6) | 　 | 　 | 55 | (30.4) | 　 | 　 | 　 | 72 | (33.2) | 　 | 　 | 30 | (25.9) | 　 |
| Povidone iodine gargling(week) | 　 | No | 471 | (91.6) | 　 | 　 | 309 | (92.8) | 　 | 　 | 162 | (89.5) | 1.00  | 　 | 　 | 198 | (91.2) | 　 | 　 | 111 | (95.7) | 0.47  |
| 　 | 　 | Yes | 28 | (5.4) | 　 | 　 | 19 | (5.7) | 　 | 　 | 9 | (5.0) | 　 | 　 | 　 | 14 | (6.5) | 　 | 　 | 5 | (4.3) | 　 |
| Seaweed (week) | 　 | No | 138 | (26.8) | 　 | 　 | 96 | (28.8) | 　 | 　 | 42 | (23.2) | 1.00  | 　 | 　 | 67 | (30.9) | 　 | 　 | 29 | (25.0) | 0.09  |
| 　 | 　 | Yes | 255 | (49.6) | 　 | 　 | 178 | (53.5) | 　 | 　 | 77 | (42.5) | 　 | 　 | 　 | 105 | (48.4) | 　 | 　 | 73 | (62.9) | 　 |
| Iodine intake per month | 　 | No | 324 | (63.0) | 　 | 　 | 230 | (69.1) | 　 | 　 | 94 | (51.9) | 0.25  | 　 | 　 | 140 | (64.5) | 　 | 　 | 90 | (77.6) | 0.17  |
| 　 | 　 | Yes | 69 | (13.4) | 　 | 　 | 44 | (13.2) | 　 | 　 | 25 | (13.8) | 　 | 　 | 　 | 32 | (14.7) | 　 | 　 | 12 | (10.3) | 　 |
| AMC and/or ATG positive | 　 | No | 421 | (81.9) | 　 | 　 | 301 | (90.4) | 　 | 　 | 120 | (66.3) | 0.50  | 　 | 　 | 198 | (91.2) | 　 | 　 | 103 | (88.8) | 0.56  |
| 　 | 　 | Yes | 48 | (9.3) | 　 | 　 | 32 | (9.6) | 　 | 　 | 16 | (8.8) | 　 | 　 | 　 | 19 | (8.8) | 　 | 　 | 13 | (11.2) | 　 |
| Toxemia of pregnancy | 　 | No | 442 | (90.9) | 　 | 　 | 299 | (91.4) | 　 | 　 | 143 | (89.9) | 0.62  | 　 | 　 | 192 | (91.0) | 　 | 　 | 107 | (92.2) | 0.84  |
| 　 | 　 | Yes | 44 | (9.1) | 　 | 　 | 28 | (8.6) | 　 | 　 | 16 | (10.1) | 　 | 　 | 　 | 19 | (9.0) | 　 | 　 | 9 | (7.8) | 　 |
| Gestationall deabetes | 　 | No | 489 | (99.8) | 　 | 　 | 328 | (99.7) | 　 | 　 | 161 | (100.0) | 1.00  | 　 | 　 | 212 | (99.5) | 　 | 　 | 116 | (100.0) | 1.00  |
| 　 | 　 | Yes | 1 | (0.2) | 　 | 　 | 1 | (0.3) | 　 | 　 | 0 | (0.0) | 　 | 　 | 　 | 1 | (0.5) | 　 | 　 | 0 | (0.0) | 　 |
| Blood sampling period for POPs | 　 | During pregnancy | 246 | (47.9) | 　 | 　 | 217 | (65.2) | 　 | 　 | 29 | (16.0) | 0.87  | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| 　 | 　 | After birth | 133 | (25.9) | 　 | 　 | 116 | (34.8) | 　 | 　 | 17 | (9.4) | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| Blood sampling period for TH | 470 | 　 | 80.7  | ±17.4 | 　 | 333 | 80.0  | ±15.3 | 　 | 137 | 82.5  | ±21.5 | 0.22  | 　 | 217 | 79.3  | ±13.6 | 　 | 116 | 81.2  | ±18.2 | 0.33  |
| 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| ***Infant characteristics*** | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| Gender | 　 | Male | 234 | (45.5) | 　 | 　 | 153 | (45.9) | 　 | 　 | 81 | (44.8) | 0.39  | 　 | 　 | 104 | (47.9) | 　 | 　 | 49 | (42.2) | 0.42  |
| 　 | 　 | Female | 253 | (49.2) | 　 | 　 | 175 | (52.6) | 　 | 　 | 78 | (43.1) | 　 | 　 | 　 | 111 | (51.2) | 　 | 　 | 64 | (55.2) | 　 |
| Gestational days | 497 | 　 | 275.2  | ±10.0 | 　 | 333 | 275.5  | ±9.8 | 　 | 164 | 274.7  | ±10.4 | 0.40  | 　 | 217 | 277.2  | ±9.1 | 　 | 116 | 272.4  | ±10.4 | **0.00**  |
| Birth weight (g) | 487 | 　 | 3049  | ±395 | 　 | 328 | 3073  | ±385 | 　 | 159 | 2999  | ±411 | 0.06  | 　 | 215 | 3084  | ±382 | 　 | 113 | 3051  | ±393 | 0.47  |
| Blood sampling (day after birth) of THs | 507 | 　 | 4.3  | ±1.2 | 　 | 333 | 4.4  | ±0.9 | 　 | 174 | 4.1  | ±1.6 | **0.03**  | 　 | 217 | 4.4  | ±0.9 | 　 | 116 | 4.5  | ±0.9 | 0.34  |
| Total dioxin TEQ | 426 | 　 | 14.9  | ±6.6 | 　 | 333 | 14.5  | ±6.4 | 　 | 93 | 16.2  | ±7.2 | **0.02**  | 　 | 217 | 14.6  | ±6.3 | 　 | 116 | 14.3  | ±6.5 | 0.57  |
| SD: standard deviation; CI: confidence interval; BMI: body mass index; AMC: antimicrosomal antibody; ATG: antithyroglobulin antibody; OCP: organochlorine pesticide; TH: thyroid hormone; TEQ: toxic equivalency; TSH: thyroid stimulating hormone, FT4: free thyroxine |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Supplemental Table 2. Differences in thyroid hormone concentrations among participants included in and excluded from the study, and between blood sampling groups. | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| 　 | ALL | 　 | Analysis in this study | 　 | Blood sampling period of OCPs | 　 |
| 　 | 　 | Included | 　 | Exclude | p-value | 　 | Before | 　 | After | p-value | 　 |
| 　 | n | Median | Range | 　 | n | Median | Range | 　 | n | Median | Range | 　 | n | Median | Range | 　 | n | Median | Range | 　 |
| *Mother* |  | 　 | 　 | 　 |  | 　 | 　 | 　 |  | 　 | 　 | 　 | 　 |  | 　 | 　 | 　 |  | 　 | 　 | 　 | 　 |
| TSH | 468 | 1.00  | (0 7) | 　 | 333 | 1.00  | (0 7) | 　 | 135 | 0.90  | (0 5) | 0.56  | 　 | 217 | 1.00  | (0 7) | 　 | 116 | 1.00  | (0 5) | 0.54  | 　 |
| FT4 | 467 | 0.99  | (0.5 3.3) | 　 | 333 | 0.98  | (0.5 3.3) | 　 | 134 | 1.00  | (0.5 2.4) | 0.69  | 　 | 217 | 1.00  | (0.5 2.6) | 　 | 116 | 0.96  | (0.5 3.3) | 0.84  | 　 |
| TSH×FT4 | 467 | 0.92  | (0.2 6.1) | 　 | 333 | 0.93  | (0.2 6.1) | 　 | 134 | 0.86  | (0.2 4.6) | 0.56  | 　 | 217 | 0.97  | (0.2 6.1) | 　 | 116 | 0.88  | (0.2 4.4) | 0.45  | 　 |
| 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| *Children* |  | 　 | 　 | 　 |  | 　 | 　 | 　 |  | 　 | 　 | 　 | 　 |  | 　 | 　 | 　 |  | 　 | 　 | 　 | 　 |
| TSH | 507 | 2.10  | (0 25) | 　 | 333 | 2.20  | (0 25) | 　 | 174 | 2.10  | (0 10) | 0.86  | 　 | 217 | 2.20  | (0 25) | 　 | 116 | 1.90  | (0 10) | 0.06  | 　 |
| FT4 | 507 | 2.02  | (0 3.3) | 　 | 333 | 2.01  | (0.9 3.3) | 　 | 174 | 2.04  | (0 3.1) | 0.44  | 　 | 217 | 2.02  | (1.1 3.3) | 　 | 116 | 1.97  | (0.9 3.1) | 0.46  | 　 |
| TSH×FT4 | 507 | 4.24  | (0 58.0) | 　 | 333 | 4.20  | (0.21 58.0) | 　 | 174 | 4.42  | (0 24.1) | 0.73  | 　 | 217 | 4.37  | (0.3 58.0) | 　 | 116 | 3.78  | (0.2 20.9) | 0.05  | 　 |
| TH: thyroid hormone; TSH: thyroid stimulating hormone, FT4: free thyroxine |

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Supplemental Table3. Correlation between OCPs, Total dioxin TEQ (n=333) | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| 　 | Loxychlordane |  Lcis-Nonachlor |  Ltrans-Nonachlor |  Lp,p'-DDD |  Lo,p'-DDE |  Lp,p'-DDE |  Lo,p'-DDT |  Lp,p'-DDT |  LDieldrin |  Lcis-Heptachlorepoxide |  LHCB |  Lβ-HCH | LMirex | LParlar-26 | LParlar-50 | Total Dioxin-TEQ |
|  oxychlordane | 1 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
|  cis-Nonachlor | .857\*\* | 1 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
|  trans-Nonachlor | .933\*\* | .914\*\* | 1 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
|  p,p'-DDD | .292\*\* | .334\*\* | .335\*\* | 1 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
|  o,p'-DDE | .390\*\* | .528\*\* | .432\*\* | .337\*\* | 1 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
|  p,p'-DDE | .589\*\* | .581\*\* | .587\*\* | .449\*\* | .586\*\* | 1 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
|  o,p'-DDT | .322\*\* | .468\*\* | .368\*\* | .409\*\* | .713\*\* | .693\*\* | 1 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
|  p,p'-DDT | .541\*\* | .677\*\* | .569\*\* | .528\*\* | .690\*\* | .709\*\* | .724\*\* | 1 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
|  Dieldrin | .448\*\* | .635\*\* | .498\*\* | .233\*\* | .451\*\* | .430\*\* | .456\*\* | .596\*\* | 1 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
|  cis-HCE | .565\*\* | .619\*\* | .547\*\* | .239\*\* | .358\*\* | .464\*\* | .389\*\* | .550\*\* | .756\*\* | 1 | 　 | 　 | 　 | 　 | 　 | 　 |
|  HCB | .804\*\* | .816\*\* | .752\*\* | .315\*\* | .494\*\* | .640\*\* | .442\*\* | .677\*\* | .595\*\* | .640\*\* | 1 | 　 | 　 | 　 | 　 | 　 |
|  β-HCH | .727\*\* | .652\*\* | .664\*\* | .288\*\* | .381\*\* | .720\*\* | .367\*\* | .569\*\* | .477\*\* | .570\*\* | .791\*\* | 1 | 　 | 　 | 　 | 　 |
| Mirex | .702\*\* | .747\*\* | .696\*\* | .314\*\* | .415\*\* | .528\*\* | .357\*\* | .536\*\* | .360\*\* | .408\*\* | .626\*\* | .534\*\* | 1 | 　 | 　 | 　 |
| Parlar-26 | .562\*\* | .775\*\* | .600\*\* | .344\*\* | .561\*\* | .480\*\* | .539\*\* | .646\*\* | .653\*\* | .572\*\* | .682\*\* | .509\*\* | .556\*\* | 1 | 　 | 　 |
| Parlar-50 | .588\*\* | .812\*\* | .617\*\* | .289\*\* | .587\*\* | .496\*\* | .538\*\* | .678\*\* | .668\*\* | .587\*\* | .718\*\* | .512\*\* | .592\*\* | .932\*\* | 1 | 　 |
| Total dioxin | .643\*\* | .673\*\* | .625\*\* | .185\*\* | .423\*\* | .517\*\* | .367\*\* | .534\*\* | .399\*\* | .430\*\* | .688\*\* | .621\*\* | .547\*\* | .514\*\* | .547\*\* | 1 |
| The 15 compounds detected among > 80% of the participants as well as total dioxin were reported. |
|
| OCP: organochlorine pesticide; DDD: dichlorodiphenyldichloroethane; DDE: dichlorodiphenyldichloroethylene; DDT: dichlorodiphenyldichloroethylene; HCB: hexachlorobenzene; HCH: hexachlorocyclohexane |

|  |  |
| --- | --- |
| Supplemental table 4. Difference of OCP concentlation included and excluded group in this study, and between blood sampling group. | 　 |
| 　 | ALL(n=379) | 　 | Analysis in this study | 　 | Blood sampling period of OCPs | 　 |
| 　 | 　 | Included(n=333) | Exclude(n=46) | p-value | 　 | During pregnancy(n=217) | 　 | After delivery(n=116) | p-value | 　 |
| 　 | Median | (Range) | 　 | Median | (Range) | Median | (Range) | 　 | Median | (Range) | 　 | Median | (Range) | 　 |
| oxychlordane | 39.67  | (7.9 250.9) | 　 | 39.17  | (7.9 250.9) | 45.17  | (18 107.8) | 0.12  | 　 | 38.16  | (7.9 199.7) | 　 | 40.21  | (9.2 250.9) | 0.63  | 　 |
| cisNonachlor | 9.97  | (1.6 38.1) | 　 | 9.70  | (1.6 38.1) | 12.51  | (3.5 27.5) | **0.01**  | 　 | 9.46  | (1.6 37.6) | 　 | 10.07  | (1.7 38.1) | 0.59  | 　 |
| transNonachlor | 71.52  | (13.1 513.5) | 　 | 69.73  | (13.1 513.5) | 95.35  | (32.1 286.8) | **0.03**  | 　 | 68.26  | (13.4 513.5) | 　 | 79.22  | (13.1 487.9) | 0.24  | 　 |
|  p,p'-DDD | 1.48  | (0.2 9) | 　 | 1.48  | (0.2 9) | 1.55  | (0.2 7.2) | 0.81  | 　 | 1.32  | (0.2 6.3) | 　 | 1.75  | (0.2 9) | 0.14  | 　 |
|  o,p'-DDE | 1.27  | (0.2 6.2) | 　 | 1.28  | (0.2 6.2) | 1.12  | (0.2 3.4) | 0.69  | 　 | 1.31  | (0.2 5.7) | 　 | 1.27  | (0.2 6.2) | 0.43  | 　 |
|  p,p'-DDE | 650.99  | (99.5 4575.7) | 　 | 634.02  | (99.5 4575.7) | 724.64  | (217.9 3345.9) | 0.33  | 　 | 637.22  | (103.3 4575.7) | 　 | 624.27  | (99.5 3682.2) | 0.64  | 　 |
|  o,p'-DDT | 3.48  | (0.3 17.1) | 　 | 3.54  | (0.3 17.1) | 3.19  | (0.3 11) | 0.81  | 　 | 3.66  | (0.3 17.1) | 　 | 3.28  | (0.3 13.2) | 0.10  | 　 |
|  p,p'-DDT | 23.16  | (2.4 121.5) | 　 | 22.49  | (2.4 121.5) | 26.59  | (9.2 107.4) | 0.06  | 　 | 22.05  | (5.6 121.5) | 　 | 23.90  | (2.4 76.4) | 0.80  | 　 |
| Dieldrin | 16.42  | (4.1 71.5) | 　 | 16.28  | (4.1 71.5) | 18.95  | (7.2 63.6) | **0.04**  | 　 | 16.54  | (5.8 53.5) | 　 | 15.66  | (4.1 71.5) | 0.97  | 　 |
| cisHeptachlorepoxide | 26.44  | (6.2 200.5) | 　 | 25.81  | (6.2 200.5) | 30.19  | (12.6 91) | 0.05  | 　 | 25.57  | (6.5 200.5) | 　 | 26.07  | (6.2 149.1) | 0.80  | 　 |
| HCB | 101.65  | (34.9 245.5) | 　 | 101.06  | (34.9 239.8) | 110.02  | (65.6 245.5) | **0.02**  | 　 | 101.64  | (34.9 238.2) | 　 | 99.71  | (39.4 239.8) | 0.64  | 　 |
| βHCH | 154.45  | (19.9 1667.1) | 　 | 153.35  | (19.9 1667.1) | 185.45  | (37 719.7) | 0.11  | 　 | 151.91  | (19.9 772.6) | 　 | 156.39  | (23.7 1667.1) | 0.70  | 　 |
| Mirex | 5.95  | (0.9 35) | 　 | 5.87  | (0.9 35) | 6.09  | (2.2 18.4) | 0.75  | 　 | 5.82  | (1.1 31.2) | 　 | 6.02  | (0.9 35) | 0.10  | 　 |
| Parlar26 | 4.39  | (0.5 20.8) | 　 | 4.30  | (0.5 20.8) | 5.51  | (1.4 17.6) | **0.02**  | 　 | 4.30  | (0.5 20.8) | 　 | 4.30  | (0.5 16.9) | 0.63  | 　 |
| Parlar50 | 6.52  | (1 29.3) | 　 | 6.40  | (1 29.3) | 7.24  | (1 23.8) | 0.07  | 　 | 6.56  | (1 29.3) | 　 | 6.15  | (1 23.3) | 0.63  | 　 |
| The 15 compounds detected among > 80% of the participants as well as total dioxin were reported. |
| OCP: organochlorine pesticide; DDD: dichlorodiphenyldichloroethane; DDE: dichlorodiphenyldichloroethylene; DDT: dichlorodiphenyldichloroethylene; HCB: hexachlorobenzene; HCH: hexachlorocyclohexane |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Supplemental table 5. Associations between prenatal exposure to OCPs and maternal TH (n = 188) | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
|  | **TSH** | 　 | **FT4** |  | **TSH×FT4** |
| **Crude** |  | **Model** | 　 | **Crude** |  | **Model** |  | **Crude** |  | **Model** |
| β | 95%CI | *p* | 　 | β | 95%CI | *p* | 　 | β | 95%CI | *p* | 　 | β | 95%CI | *p* | 　 | β | 95%CI | *p* | 　 | β | 95%CI | *p* |
| oxychlordane | 0.07  | -0.14  | 0.28  | 0.53  | 　 | 0.07  | -0.23  | 0.36  | 0.64  | 　 | -0.01  | -0.08  | 0.06  | 0.82  | 　 | 0.01  | -0.09  | 0.10  | 0.90  | # | 0.06  | -0.13  | 0.25  | 0.54  | 　 | 0.08  | -0.19  | 0.34  | 0.57  |
| cis-Nonachlor | 0.07  | -0.13  | 0.27  | 0.49  | 　 | 0.01  | -0.27  | 0.30  | 0.93  | 　 | -0.05  | -0.12  | 0.02  | 0.14  |  | -0.06  | -0.15  | 0.03  | 0.22  | **#** | 0.02  | -0.16  | 0.20  | 0.83  | 　 | -0.04  | -0.30  | 0.21  | 0.74  |
| trans-Nonachlor | 0.11  | -0.09  | 0.30  | 0.28  | 　 | 0.11  | -0.15  | 0.37  | 0.41  | 　 | -0.03  | -0.10  | 0.04  | 0.37  | 　 | -0.02  | -0.10  | 0.06  | 0.66  | # | 0.08  | -0.09  | 0.25  | 0.37  | 　 | 0.09  | -0.14  | 0.32  | 0.45  |
|  p,p'-DDD | 0.04  | -0.09  | 0.17  | 0.56  | 　 | 0.01  | -0.12  | 0.14  | 0.87  | 　 | -0.01  | -0.05  | 0.04  | 0.81  |  | 0.01  | -0.04  | 0.05  | 0.77  | # | 0.03  | -0.08  | 0.15  | 0.57  | 　 | 0.02  | -0.10  | 0.13  | 0.78  |
|  o,p'-DDE | 0.12  | -0.01  | 0.25  | 0.07  | 　 | 0.12  | -0.03  | 0.26  | 0.11  | 　 | **-0.05**  | **-0.09**  | **-0.01**  | **0.02**  |  | **-0.05**  | **-0.10**  | **-0.01**  | **0.02**  | # | 0.07  | -0.05  | 0.18  | 0.24  | 　 | 0.06  | -0.07  | 0.20  | 0.34  |
|  p,p'-DDE | 0.11  | -0.07  | 0.28  | 0.24  | 　 | 0.07  | -0.15  | 0.28  | 0.55  | 　 | **-0.07**  | **-0.13**  | **-0.01**  | **0.03**  |  | -0.06  | -0.13  | 0.00  | 0.07  | **#** | 0.04  | -0.12  | 0.20  | 0.62  | 　 | 0.001  | -0.19  | 0.20  | 0.99  |
|  o,p'-DDT | 0.14  | -0.02  | 0.31  | 0.08  | 　 | 0.16  | -0.03  | 0.34  | 0.10  | 　 | **-0.09**  | **-0.14**  | **-0.04**  | **0.001**  |  | **-0.10**  | **-0.16**  | **-0.04**  | **0.001**  | # | 0.05  | -0.09  | 0.20  | 0.47  | 　 | 0.05  | -0.12  | 0.22  | 0.53  |
|  p,p'-DDT | 0.10  | -0.10  | 0.30  | 0.33  | 　 | 0.10  | -0.16  | 0.36  | 0.45  | 　 | -0.07  | -0.13  | 0.003  | 0.06  |  | **-0.09**  | **-0.17**  | **-0.01**  | **0.03**  | **#** | 0.04  | -0.15  | 0.22  | 0.70  | 　 | 0.01  | -0.22  | 0.24  | 0.93  |
| Dieldrin | 0.16  | -0.10  | 0.41  | 0.23  | 　 | 0.14  | -0.15  | 0.44  | 0.34  | 　 | **-0.13**  | **-0.21**  | **-0.04**  | **0.003**  |  | **-0.16**  | **-0.25**  | **-0.07**  | **0.001**  | # | 0.03  | -0.20  | 0.26  | 0.81  | 　 | -0.02  | -0.28  | 0.25  | 0.90  |
| cis-HCE | 0.01  | -0.20  | 0.23  | 0.91  | 　 | -0.09  | -0.34  | 0.16  | 0.48  | 　 | -0.07  | -0.14  | -0.001  | 0.05  | 　 | -0.05  | -0.13  | 0.03  | 0.19  | # | -0.06  | -0.25  | 0.13  | 0.54  | 　 | -0.14  | -0.37  | 0.08  | 0.21  |
| HCB | -0.04  | -0.35  | 0.27  | 0.79  | 　 | -0.26  | -0.72  | 0.21  | 0.28  | 　 | -0.04  | -0.14  | 0.07  | 0.47  | 　 | -0.05  | -0.20  | 0.10  | 0.55  | # | -0.08  | -0.36  | 0.19  | 0.56  | 　 | -0.30  | -0.72  | 0.12  | 0.16  |
| βHCH | 0.07  | -0.10  | 0.23  | 0.42  | 　 | -0.04  | -0.30  | 0.21  | 0.74  | 　 | -0.04  | -0.09  | 0.02  | 0.17  |  | -0.04  | -0.12  | 0.04  | 0.35  | **#** | 0.03  | -0.12  | 0.17  | 0.69  | 　 | -0.08  | -0.31  | 0.15  | 0.48  |
| Mirex | 0.07  | -0.13  | 0.27  | 0.49  | 　 | 0.02  | -0.27  | 0.31  | 0.87  | 　 | -0.03  | -0.10  | 0.03  | 0.34  |  | 0.00  | -0.10  | 0.09  | 0.92  | **#** | 0.04  | -0.14  | 0.21  | 0.68  | 　 | 0.02  | -0.24  | 0.28  | 0.88  |
| Parlar26 | 0.10  | -0.07  | 0.27  | 0.24  | 　 | 0.04  | -0.16  | 0.24  | 0.70  | 　 | -0.05  | -0.11  | 0.005  | 0.07  | 　 | -0.04  | -0.10  | 0.03  | 0.23  | # | 0.049  | -0.10  | 0.20  | 0.52  | 　 | 0.000  | -0.18  | 0.18  | 1.00  |
| Parlar50 | 0.03  | -0.14  | 0.20  | 0.70  | 　 | -0.06  | -0.28  | 0.15  | 0.56  | 　 | -0.06  | -0.12  | -0.004  | 0.04  | 　 | -0.05  | -0.12  | 0.01  | 0.11  | # | -0.03  | -0.18  | 0.12  | 0.72  | 　 | -0.12  | -0.31  | 0.07  | 0.23  |
| 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| Models were adjusted for maternal age, maternal BMI, smoking during pregnancy, maternal education, blood sampling period of TH and OCP, Total dioxin, OH-PCB.The values of OCP, TH, Total dioxin, and OH-PCB were log10 transformed. |
| OCPs: organochlorine pesticides; TH: thyroid hormone; CI: confidence interval; DDD: dichlorodiphenyldichloroethane; DDE: dichlorodiphenyldichloroethylene; DDT: dichlorodiphenyldichloroethylene; HCE: Heptachlorepoxide; HCB: hexachlorobenzene; HCH: hexachlorocyclohexane |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Supplemental table6 Association between prenatal exposure to OCPs and infant TH (n = 188) | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
|  | **TSH** | 　 | **FT4** |  | **TSH×FT4** |
| **Crude** |  | **Model** | 　 | **Crude** |  | **Model** |  | **Crude** |  | **Model** |
| β | 95%CI | *p* | 　 | β | 95%CI | *p* | 　 | β | 95%CI | *p* | 　 | β | 95%CI | *p* | 　 | β | 95%CI | *p* | 　 | β | 95%CI | *p* |
| oxychlordane | 0.01  | -0.21  | 0.22  | 0.96  | 　 | 0.07  | -0.23  | 0.37  | 0.63  | 　 | 0.05  | -0.01  | 0.10  | 0.08  | 　 | 0.06  | -0.01  | 0.14  | 0.10  | # | 0.05  | -0.17  | 0.28  | 0.65  | 　 | 0.14  | -0.19  | 0.46  | 0.41  |
| cis-Nonachlor | 0.06  | -0.14  | 0.27  | 0.53  | 　 | 0.07  | -0.21  | 0.36  | 0.61  | 　 | 0.05  | 0.0002  | 0.10  | 0.05  | 　 | **0.09**  | **0.02**  | **0.16**  | **0.01**  | # | 0.11  | -0.10  | 0.33  | 0.29  | 　 | 0.17  | -0.14  | 0.47  | 0.28  |
| trans-Nonachlor | 0.04  | -0.16  | 0.23  | 0.70  | 　 | 0.09  | -0.18  | 0.35  | 0.52  | 　 | **0.05**  | **0.004**  | **0.10**  | **0.03**  | 　 | **0.08**  | **0.01**  | **0.14**  | **0.02**  | # | 0.09  | -0.12  | 0.30  | 0.39  | 　 | 0.16  | -0.12  | 0.44  | 0.25  |
|  p,p'-DDD | 0.02  | -0.11  | 0.15  | 0.80  | 　 | 0.02  | -0.12  | 0.15  | 0.82  | 　 | 0.02  | -0.01  | 0.05  | 0.27  | 　 | 0.02  | -0.01  | 0.06  | 0.18  | # | 0.03  | -0.10  | 0.17  | 0.62  | 　 | 0.04  | -0.10  | 0.18  | 0.60  |
|  o,p'-DDE | 0.02  | -0.11  | 0.15  | 0.76  | 　 | 0.01  | -0.14  | 0.16  | 0.92  | 　 | **0.04**  | **0.01**  | **0.07**  | **0.01**  |  | **0.05**  | **0.02**  | **0.09**  | **0.01**  | # | 0.06  | -0.08  | 0.20  | 0.38  | 　 | 0.06  | -0.10  | 0.22  | 0.46  |
|  p,p'-DDE | -0.05  | -0.23  | 0.13  | 0.57  | 　 | -0.08  | -0.30  | 0.14  | 0.46  | 　 | 0.01  | -0.04  | 0.05  | 0.72  | 　 | 0.001  | -0.05  | 0.06  | 0.96  | # | -0.04  | -0.24  | 0.15  | 0.65  | 　 | -0.08  | -0.31  | 0.15  | 0.50  |
|  o,p'-DDT | 0.08  | -0.08  | 0.25  | 0.34  | 　 | 0.05  | -0.14  | 0.24  | 0.60  | 　 | 0.01  | -0.04  | 0.05  | 0.76  | 　 | 0.00  | -0.04  | 0.05  | 0.84  | # | 0.09  | -0.09  | 0.26  | 0.33  | 　 | 0.06  | -0.15  | 0.26  | 0.59  |
|  p,p'-DDT | 0.02  | -0.19  | 0.22  | 0.86  | 　 | -0.02  | -0.28  | 0.24  | 0.88  | 　 | 0.04  | -0.01  | 0.09  | 0.09  | 　 | 0.07  | 0.0010  | 0.13  | 0.05  | # | 0.06  | -0.16  | 0.28  | 0.57  | 　 | 0.04  | -0.24  | 0.33  | 0.75  |
| Dieldrin | 0.07  | -0.19  | 0.33  | 0.58  | 　 | 0.06  | -0.25  | 0.36  | 0.72  | 　 | 0.03  | -0.03  | 0.10  | 0.35  | 　 | 0.05  | -0.03  | 0.12  | 0.21  | # | 0.10  | -0.17  | 0.38  | 0.46  | 　 | 0.10  | -0.22  | 0.43  | 0.53  |
| cis-HCE | -0.13  | -0.34  | 0.09  | 0.25  | 　 | -0.17  | -0.42  | 0.08  | 0.19  | 　 | -0.02  | -0.07  | 0.04  | 0.51  | 　 | -0.02  | -0.09  | 0.04  | 0.44  | # | -0.15  | -0.38  | 0.08  | 0.21  | 　 | -0.19  | -0.46  | 0.08  | 0.16  |
| HCB | -0.07  | -0.39  | 0.24  | 0.65  | 　 | -0.08  | -0.55  | 0.40  | 0.74  | 　 | 0.05  | -0.02  | 0.13  | 0.17  | 　 | 0.06  | -0.06  | 0.18  | 0.31  | # | -0.02  | -0.35  | 0.32  | 0.92  | 　 | -0.02  | -0.53  | 0.49  | 0.94  |
| βHCH | -0.06  | -0.22  | 0.11  | 0.51  | 　 | -0.04  | -0.31  | 0.23  | 0.76  | 　 | -0.002  | -0.04  | 0.04  | 0.93  | 　 | -0.02  | -0.08  | 0.05  | 0.62  | # | -0.06  | -0.23  | 0.12  | 0.52  | 　 | -0.06  | -0.35  | 0.23  | 0.68  |
| Mirex | 0.13  | -0.07  | 0.33  | 0.20  | 　 | 0.18  | -0.11  | 0.48  | 0.22  | 　 | 0.04  | -0.01  | 0.09  | 0.15  | 　 | **0.09**  | **0.02**  | **0.16**  | **0.02**  | # | 0.17  | -0.04  | 0.38  | 0.12  | 　 | 0.27  | -0.04  | 0.58  | 0.09  |
| Parlar26 | 0.06  | -0.11  | 0.22  | 0.52  | 　 | 0.02  | -0.18  | 0.23  | 0.82  | 　 | 0.02  | -0.02  | 0.06  | 0.39  | 　 | 0.04  | -0.01  | 0.09  | 0.11  | # | 0.07  | -0.10  | 0.25  | 0.41  | 　 | 0.06  | -0.15  | 0.28  | 0.56  |
| Parlar50 | 0.03  | -0.14  | 0.21  | 0.69  | 　 | -0.01  | -0.22  | 0.21  | 0.93  | 　 | 0.03  | -0.02  | 0.07  | 0.23  | 　 | 0.04  | -0.01  | 0.10  | 0.12  | # | 0.06  | -0.12  | 0.24  | 0.51  | 　 | 0.03  | -0.20  | 0.26  | 0.78  |
| 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 | 　 |
| Models were adjusted for maternal age, maternal BMI, smoking during pregnancy, maternal education, blood sampling period of TH and OCP, Total dioxin, OH-PCB.The values of OCP, TH, Total dioxin, and OH-PCB were log10 transformed. |
| OCPs: organochlorine pesticides; TH: thyroid hormone; CI: confidence interval; DDD: dichlorodiphenyldichloroethane; DDE: dichlorodiphenyldichloroethylene; DDT: dichlorodiphenyldichloroethylene; HCE: Heptachlorepoxide; HCB: hexachlorobenzene; HCH: hexachlorocyclohexane |



