**Table 2.** Mendelian randomization estimates for assessing the causal effects of birth weight on cancer risk.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Cancer type** | **Number of SNPs** | **MR method** | **OR (95%CI)** | **SE** | **p value** |
| Lung cancer | 42 | IVW | 1.32 (0.84-2.07) | 0.231 | 0.23 |
| MR egger | 0.52 (0.04-6.35) | 1.271 | 0.66 |
| Weighted median | 1.13 (0.65-1.95) | 0.278 | 0.65 |
| Weighted mode | 1.07 (0.56-2.06) | 0.332 | 0.84 |
| Lung adenocarcinoma | 42 | IVW | 1.04 (0.77-1.41) | 0.154 | 0.77 |
| MR egger | 0.48 (0.09-2.48) | 0.832 | 0.48 |
| Weighted median | 1.00 (0.71-1.43) | 0.180 | 0.98 |
| Weighted mode | 0.91 (0.58-1.39) | 0.219 | 0.68 |
| Squamous cell lung cancer | 42 | IVW | 1.00 (0.63-1.59) | 0.237 | 0.99 |
| MR egger | 0.51 (0.04-6.12) | 1.272 | 0.65 |
| Weighted median | 0.96 (0.56-1.64) | 0.273 | 0.89 |
| Weighted mode | 0.89 (0.46-1.73) | 0.339 | 0.75 |
| Ovarian cancer | 40 | IVW | 1.11 (0.90-1.35) | 0.103 | 0.33 |
| MR egger | 1.00 (0.71-1.91) | 0.307 | 0.98 |
| Weighted median | 1.07 (0.90-1.35) | 0.120 | 0.96 |
| Weighted mode | 1.20 (0.78-1.84) | 0.221 | 0.42 |
| Invasive mucinous ovarian cancer | 40 | IVW | **0.62 (0.39-0.97)** | **0.233** | **0.04** |
| MR egger | 1.11 (0.28-4.31) | 0.692 | 0.88 |
| Weighted median | 0.60 (0.31-1.16) | 0.336 | 0.13 |
| Weighted mode | 0.38 (0.11-1.36) | 0.648 | 0.15 |
| Endometrioid ovarian cancer | 40 | IVW | 0.97 (0.69-1.38) | 0.177 | 0.88 |
| MR egger | 1.44 (0.52-4.02) | 0.524 | 0.49 |
| Weighted median | 0.85 (0.52-1.39) | 0.252 | 0.50 |
| Weighted mode | 0.79 (0.27-2.27) | 0.538 | 0.67 |
| Breast cancer | 40 | IVW | 0.94 (0.80-1.11) | 0.084 | 0.47 |
| MR egger | 1.16 (0.71-1.91) | 0.253 | 0.55 |
| Weighted median | 1.00 (0.88-1.13) | 0.063 | 0.96 |
| Weighted mode | 1.03 (0.86-1.23) | 0.093 | 0.76 |
| ER-positive breast cancer | 40 | IVW | 0.95 (0.80-1.11) | 0.082 | 0.50 |
| MR egger | 1.14 (0.70-1.84) | 0.246 | 0.61 |
| Weighted median | 0.96 (0.83-1.11) | 0.075 | 0.57 |
| Weighted mode | 1.18 (0.66-1.70) | 0.119 | 0.99 |
| ER-negative breast cancer | 40 | IVW | 0.95 (0.76-1.17) | 0.111 | 0.63 |
| MR egger | 0.95 (0.49-1.84) | 0.339 | 0.87 |
| Weighted median | 1.00 (0.81-1.24) | 0.108 | 0.97 |
| Weighted mode | 1.10 (0.82-1.48) | 0.149 | 0.52 |
| Colorectal cancer | 41 | IVW | 1.00 (0.99-1.00) | 0.001 | 0.30 |
| MR egger | 0.99 (0.99-1.00) | 0.004 | 0.24 |
| Weighted median | 1.00 (0.99-1.00) | 0.002 | 0.23 |
| Weighted mode | 1.00 (0.99-1.00) | 0.003 | 0.34 |
| Malignant melanoma | 36 | IVW | 1.00 (1.00-1.00) | 0.001 | 0.43 |
| MR egger | 1.00 (1.00-1.00) | 0.003 | 0.01 |
| Weighted median | 1.00 (1.00-1.00) | 0.001 | 0.22 |
| Weighted mode | 1.00 (1.00-1.00) | 0.002 | 0.35 |
| Endometrial cancer | 19 | IVW | 0.99 (0.99-1.00) | 0.001 | 0.89 |
| MR egger | 0.99 (0.99-1.00) | 0.003 | 0.48 |
| Weighted median | 1.00 (0.99-1.00) | 0.001 | 0.84 |
| Weighted mode | 1.00 (0.99-1.00) | 0.001 | 0.73 |
| Prostate cancer | 36 | IVW | 0.99 (0.98-1.01) | 0.001 | 0.17 |
| MR egger | 1.00 (0.99-1.01) | 0.005 | 0.48 |
| Weighted median | 1.00 (0.99-1.00) | 0.002 | 0.91 |
| Weighted mode | 1.00 (0.99-1.00) | 0.003 | 0.76 |

SNP: Single-nucleotide polymorphism; MR: Mendelian randomization; OR: odds ratio; CI: confidence interval; SE: standard error; IVW：inverse-variance weighted.