**Table 4–Source Data 1. Association between quartile methylation level of identified CpGs and systolic blood pressure (mmHg).**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Quartile 2 | Quartile 3 | Quartile 4 | P for trend (adjusted for batch) | P for trend (adjusted for SVs) |  | Mediation effect |
| CpGs | Effect size (se) | P | Effect size | P | Effect size | P |  | Proportion mediated, % | P |
| cg23398826 | -1.825 (2.079) | 0.380  | -3.918 (2.096) | 0.062  | -6.410 (2.118) | 0.003  | <0.001  | 0.009  |  | 7.65 | 0.003 |
| cg13311494 | -0.831 (2.087) | 0.691  | -1.981 (2.072) | 0.339  | -6.580 (2.122) | 0.002  | 0.020  | 0.013  |  | 15.61 | 0.031 |
| cg08106661 | 0.219 (2.140) | 0.918  | -1.100 (2.266) | 0.628  | -3.349 (2.404) | 0.164  | 0.151  | 0.634  |  | - | - |
| cg19583211 | 2.305 (2.107) | 0.274  | 4.571 (2.122) | 0.031  | 3.003 (2.125) | 0.158  | 0.176  | 0.275  |  | - | - |
| cg16639138 | 3.847 (2.073) | 0.064  | 3.811 (2.084) | 0.068  | 3.739 (2.092) | 0.074  | 0.130  | 0.034  |  | - | - |
| cg15833447 | 2.427 (2.096) | 0.247  | 1.993 (2.136) | 0.351  | 0.340 (2.165) | 0.875  | 0.336  | 0.388  |  | - | - |
| cg26334131 | 2.102 (2.118) | 0.321  | 2.932 (2.117) | 0.166  | 1.172 (2.144) | 0.585  | 0.361  | 0.617  |  | - | - |
| cg08484100 | 2.230 (2.086) | 0.285  | 1.163 (2.124) | 0.584  | 2.924 (2.145) | 0.173  | 0.687  | 0.993  |  | - | - |
| cg10643850 | -0.989 (2.116) | 0.640  | -3.207 (2.119) | 0.130  | -0.076 (2.156) | 0.972  | 0.336  | 0.346  |  | - | - |
| cg02386575 | -0.383 (2.080) | 0.854  | 2.455 (2.085) | 0.239  | 0.603 (2.106) | 0.775  | 0.564  | 0.479  |  | - | - |
| cg22794712 | -1.039 (2.110) | 0.623  | -0.306 (2.156) | 0.887  | -2.997 (2.200) | 0.173  | 0.342  | 0.857  |  | - | - |
| cg06358566 | 0.231 (2.088) | 0.912  | 0.912 (2.111) | 0.666  | -1.183 (2.136) | 0.580  | 0.538  | 0.772  |  | - | - |
| cg21210537 | 2.537 (2.133) | 0.235  | 2.328 (2.203) | 0.291  | 1.803 (2.280) | 0.429  | 0.578  | 0.042  |  | - | - |
| cg05681643 | 0.109 (2.082) | 0.958  | 1.617 (2.102) | 0.442  | 1.124 (2.182) | 0.607  | 0.571  | 0.558  |  | - | - |
| cg24792179 | -0.323 (2.109) | 0.878  | 1.585 (2.131) | 0.457  | 3.024 (2.183) | 0.166  | 0.453  | 0.638  |  | - | - |
| cg01545454 | -0.976 (2.094) | 0.641  | 0.159 (2.124) | 0.940  | -0.189 (2.124) | 0.929  | 0.596  | 0.244  |  | - | - |
| cg07560408 | -0.666 (2.121) | 0.753  | 0.483 (2.113) | 0.819  | 0.188 (2.150) | 0.930  | 0.481  | 0.984  |  | - | - |
| cg20302171 | -1.829 (2.095) | 0.383  | -0.342 (2.096) | 0.870  | -0.659 (2.146) | 0.759  | 0.905  | 0.654  |  | - | - |
| cg11754670 | 1.706 (2.117) | 0.421  | 2.328 (2.148) | 0.279  | 0.362 (2.168) | 0.868  | 0.949  | 0.182  |  | - | - |
| cg07219103 | 1.293 (2.107) | 0.540  | -0.044 (2.151) | 0.984  | 1.815 (2.234) | 0.417  | 0.603  | 0.248  |  | - | - |
| cg02591826 | -2.627 (2.081) | 0.207  | 0.069 (2.104) | 0.974  | -2.415 (2.148) | 0.261  | 0.673  | 0.571  |  | - | - |
| cg05740632 | -2.065 (2.099) | 0.326  | 1.208 (2.126) | 0.570  | -1.129 (2.142) | 0.598  | 0.744  | 0.312  |  | - | - |
| cg10400937 | 0.564 (2.078) | 0.786  | -0.390 (2.111) | 0.853  | 1.950 (2.129) | 0.360  | 0.607  | 0.881  |  | - | - |
| cg11630610 | 2.511 (2.123) | 0.237  | 0.576 (2.099) | 0.784  | 0.729 (2.122) | 0.731  | 0.648  | 0.889  |  | - | - |
| cg20562821 | -2.440 (2.123) | 0.251  | 2.679 (2.179) | 0.219  | -1.509 (2.203) | 0.494  | 0.950  | 0.566  |  | - | - |

CpG = cytosine-phosphoguanine site; SE = standard error; SV = surrogate variable.

Effect size is for the comparison with quartile 1. Systolic blood pressure added 15 mmHg if participants reported usage of blood pressure lowering medications. Multivariable model was adjusted for: age, sex, education level, marital status, smoking, drinking, physical activity, diet score, body mass index, fasting time, study area, and batch or SVs. Mediation analysis was performed for significant CpGs (P for trend < 0.05) only.