

**Supplementary Table 4.** Regression coefficients of multiple linear regression models with gait parameter as a dependent variable

| Dependent variable               | Independent variable |                   |                   |                  |
|----------------------------------|----------------------|-------------------|-------------------|------------------|
|                                  | Age                  | Height            | Leg length        | MMSE             |
| <b>Spatiotemporal parameters</b> |                      |                   |                   |                  |
| Velocity (cm/sec)                | -0.8489 (<0.0001)*   | 0.6794 (0.0054)*  | -0.9209 (0.0401)* | 1.1196 (0.0878)  |
| Cadence (steps/min)              | -0.1533 (0.1128)     | 0.0780 (0.5790)   | -0.9846 (0.0002)* | 0.3106 (0.4142)  |
| <b>Spatial parameters</b>        |                      |                   |                   |                  |
| Step length (cm)                 | -0.4099 (<0.0001)*   | 0.3571 (0.0015)*  | -0.0967 (0.6360)  | 0.5360 (0.0745)  |
| Stride length (cm)               | -0.8170 (<0.0001)*   | 0.7191 (0.0014)*  | -0.2051 (0.6170)  | 1.0786 (0.0738)  |
| Base width (cm)                  | 0.0558 (0.0567)      | 0.1653 (0.0001)*  | -0.1384 (0.0790)  | 0.1151 (0.3175)  |
| <b>Temporal parameters</b>       |                      |                   |                   |                  |
| Step time (sec)                  | 0.0009 (0.1216)      | -0.0003 (0.6951)  | 0.0057 (0.0005)*  | -0.0027 (0.2480) |
| Swing time (sec)                 | 0.0000 (0.9239)      | 0.0003 (0.5477)   | 0.0022 (0.0183)*  | -0.0002 (0.8999) |
| Stance time (sec)                | 0.0019 (0.0582)      | -0.0011 (0.4659)  | 0.0090 (0.0008)*  | -0.0053 (0.1729) |
| Single support time (sec)        | 0.0000 (0.9239)      | 0.0003 (0.5477)   | 0.0022 (0.0183)*  | -0.0002 (0.8999) |
| Double support time (sec)        | 0.0020 (0.0228)*     | -0.0014 (0.2687)  | 0.0066 (0.0064)*  | -0.0057 (0.1072) |
| <b>Gait phase parameters</b>     |                      |                   |                   |                  |
| Swing time (%)                   | -0.0528 (0.0315)*    | 0.0534 (0.1345)   | -0.1354 (0.0405)* | 0.1069 (0.2671)  |
| Stance time (%)                  | 0.0530 (0.0305)*     | -0.0533 (0.1346)  | 0.1354 (0.0401)*  | -0.1077 (0.2629) |
| Single support time (%)          | -0.0522 (0.0330)*    | 0.0532 (0.1354)   | -0.1352 (0.0404)* | 0.1081 (0.2611)  |
| Double support time (%)          | 0.1238 (0.0139)*     | -0.1137 (0.1198)  | 0.2519 (0.0622)   | -0.2629 (0.1830) |
| <b>Variability</b>               |                      |                   |                   |                  |
| CV step length (%)               | 0.1498 (<0.0001)*    | -0.0638 (0.1931)  | 0.1001 (0.2687)   | -0.0907 (0.4931) |
| CV stride length (%)             | 0.0851 (<0.0001)*    | -0.0572 (0.0235)* | 0.1168 (0.0125)*  | -0.1019 (0.1344) |
| CV base width (%)                | -0.0326 (0.7830)     | -0.4411 (0.0112)* | 0.6151 (0.0544)   | -0.6998 (0.1344) |
| CV swing time (%)                | 0.1093 (<0.0001)*    | -0.0312 (0.3964)  | 0.1146 (0.0927)   | -0.1830 (0.0670) |
| CV stance time (%)               | 0.0427 (0.0482)*     | -0.0162 (0.6052)  | 0.0727 (0.2096)   | -0.0606 (0.4748) |
| CV double support time (%)       | 0.0737 (0.0046)*     | -0.0274 (0.4652)  | 0.0967 (0.1633)   | -0.1121 (0.2696) |

Each value represents an unstandardized regression coefficient, with the value in parentheses indicating the corresponding two-sided  $p$  value. Statistically significant coefficients ( $p < 0.005$ ) are highlighted in bold.

\*significant regression coefficients.

MMSE, Mini-Mental State Examination; CV, coefficient of variance.