

|   | <b>FAST/AD<br/>(n=72), a</b> | <b>FAST/IN<br/>(n=24), b</b> | <b>SLOW<br/>(n=64), c</b> | <b>F(2,157)</b> | <b>P(FDR)</b> | <b>post-hoc</b> | <b><math>\eta^2</math></b> |
|---|------------------------------|------------------------------|---------------------------|-----------------|---------------|-----------------|----------------------------|
| Mean age, years                               | 59.88 (13.67)                | 66.96 (14.82)                | 69.28 (11.42)             | 9.294           | <0.001        | a<c             |                            |
| <b>Spatiotemporal parameters</b>              |                              |                              |                           |                 |               |                 |                            |
| Gait speed (cm/second)                        | 85.86 (16.78)                | 83.95 (10.47)                | 45.98 (14.18)             | 133.145         | <0.001        | a>c, b>c        | 0.629                      |
| Stride length, unaffected (cm)                | 98.90 (14.63)                | 93.56 (11.79)                | 66.51 (17.17)             | 79.786          | <0.001        | a<c, b<c        | 0.504                      |
| Stride length, affected (cm)                  | 99.03 (14.66)                | 93.82 (11.22)                | 66.35 (16.56)             | 84.81           | <0.001        | a<c, b<c        | 0.519                      |
| Step length, unaffected (cm)                  | 49.36 (7.97)                 | 43.97 (7.17)                 | 32.08 (12.00)             | 54.633          | <0.001        | a<c, b<c        | 0.41                       |
| Step length, affected (cm)                    | 49.23 (9.83)                 | 49.69 (9.50)                 | 34.51 (11.64)             | 37.963          | <0.001        | a<c, b<c        | 0.326                      |
| Cadence (steps/minute)                        | 103.79 (10.16)               | 107.57 (9.56)                | 83.40 (15.36)             | 57.262          | <0.001        | a>c, b>c        | 0.422                      |
| Initial double support, unaffected (seconds)  | 0.20 (0.08)                  | 0.24 (0.11)                  | 0.43 (0.28)               | 25.52           | <0.001        | a>c, b>c        | 0.245                      |
| Initial double support, affected (seconds)    | 0.18 (0.05)                  | 0.19 (0.05)                  | 0.36 (0.16)               | 47.254          | <0.001        | a>c, b>c        | 0.376                      |
| Single support, unaffected (seconds)          | 0.46 (0.13)                  | 0.68 (0.12)                  | 0.69 (0.28)               | 24.327          | <0.001        | a<b, a<c        | 0.237                      |
| Single support, affected (seconds)            | 0.42 (0.07)                  | 0.48 (0.09)                  | 0.54 (0.14)               | 23.028          | <0.001        | a<b, a<c, b<c   | 0.227                      |
| Terminal double support, unaffected (seconds) | 0.19 (0.07)                  | 0.23 (0.06)                  | 0.38 (0.20)               | 32.429          | <0.001        | a<c, b<c        | 0.292                      |
| Terminal double support, affected (seconds)   | 0.19 (0.07)                  | 0.20 (0.07)                  | 0.35 (0.19)               | 29.403          | <0.001        | a<c, b<c        | 0.272                      |
| <b>Kinematic parameters (degrees)</b>         |                              |                              |                           |                 |               |                 |                            |
| Stance phase                                  |                              |                              |                           |                 |               |                 |                            |
| Hip extension, unaffected                     | -10.26 (8.10)                | 9.94 (12.68)                 | 5.27 (14.82)              | 40.904          | <0.001        | a<b, a<c        | 0.343                      |
| Hip extension, affected                       | -10.83 (9.12)                | 11.61 (15.42)                | 6.59 (16.62)              | 39.321          | <0.001        | a<b, a<c        | 0.334                      |
| Knee flexion, unaffected                      | 15.82 (9.26)                 | 28.52 (5.99)                 | 22.67 (15.02)             | 12.717          | <0.001        | a<b, a<c        | 0.139                      |
| Knee flexion, affected                        | 15.63 (9.09)                 | 27.91 (10.35)                | 22.29 (12.31)             | 14.086          | <0.001        | a<b, a<c        | 0.152                      |
| Ankle dorsiflexion, unaffected                | 18.08 (9.76)                 | 13.95 (3.85)                 | 18.14 (6.65)              | 2.806           | 0.1699        |                 | 0.035                      |
| Ankle dorsiflexion, affected                  | 15.90 (6.19)                 | 14.08 (3.51)                 | 19.18 (6.28)              | 8.511           | 0.0732        | a<c, b<c        | 0.098                      |
| Swing phase                                   |                              |                              |                           |                 |               |                 |                            |
| Hip flexion, unaffected                       | 30.73 (18.05)                | 43.41 (9.80)                 | 34.29 (12.57)             | 6.451           | <0.001        | a<c, b>c        | 0.076                      |
| Hip flexion, affected                         | 28.76 (11.60)                | 43.62 (11.73)                | 33.16 (14.36)             | 12.192          | 0.0025        | a<c, b>c        | 0.134                      |
| Knee flexion, unaffected                      | 53.64 (12.34)                | 66.40 (4.74)                 | 49.66 (17.98)             | 12.15           | <0.001        | a<b, b>c        | 0.134                      |
| Knee flexion, affected                        | 51.86 (13.48)                | 65.89 (6.13)                 | 49.57 (17.21)             | 11.702          | <0.001        | a<b, b>c        | 0.13                       |
| Ankle dorsiflexion, unaffected                | 6.09 (10.31)                 | 11.12 (6.78)                 | 11.63 (8.89)              | 6.69            | 0.015         | a<c             | 0.079                      |
| Ankle dorsiflexion, affected                  | 6.50 (18.95)                 | 8.73 (7.35)                  | 11.26 (8.68)              | 1.913           | 0.0025        |                 | 0.024                      |
| <b>Kinetic parameters</b>                     |                              |                              |                           |                 |               |                 |                            |
| Moment (Nm/kg)                                |                              |                              |                           |                 |               |                 |                            |
| Hip extension, unaffected                     | 0.87 (0.84)                  | 0.82 (0.46)                  | 0.92 (1.24)               | 0.106           | <0.001        |                 | 0.001                      |
| Hip extension, affected                       | 0.96 (0.74)                  | 0.73 (0.45)                  | 0.46 (0.65)               | 9.733           | 0.899         | a>c             | 0.11                       |
| Knee extension, unaffected                    | 0.39 (0.41)                  | 1.20 (0.61)                  | 0.77 (0.67)               | 20.99           | <0.001        | a<b, a<c, b>c   | 0.211                      |
| Knee extension, affected                      | 0.42 (0.46)                  | 0.98 (0.39)                  | 0.86 (0.71)               | 14.193          | <0.001        | a<b, a<c        | 0.153                      |
| Ankle extension, unaffected                   | 1.27 (0.78)                  | 1.13 (0.38)                  | 1.27 (1.22)               | 0.219           | <0.001        |                 | 0.003                      |
| Ankle extension, affected                     | 1.25 (0.57)                  | 1.18 (0.35)                  | 0.70 (0.48)               | 21.357          | 0.8513        | a>c, b>c        | 0.214                      |
| Power generation (Watt/kg)                    |                              |                              |                           |                 |               |                 |                            |
| Hip, unaffected                               | 1.43 (1.18)                  | 0.84 (0.54)                  | 0.85 (0.79)               | 7.258           | 0.0312        | a>b, a>c        | 0.085                      |
| Hip, affected                                 | 1.62 (1.54)                  | 0.71 (0.51)                  | 0.66 (1.12)               | 10.872          | 0.0013        | a>b, a>c        | 0.122                      |
| Knee, unaffected                              | 1.03 (1.32)                  | 1.16 (0.62)                  | 0.99 (1.54)               | 0.131           | <0.001        |                 | 0.002                      |
| Knee, affected                                | 0.90 (1.03)                  | 0.94 (0.86)                  | 0.53 (0.64)               | 3.737           | 0.899         | a>c             | 0.045                      |
| Ankle, unaffected                             | 2.05 (2.22)                  | 1.66 (0.91)                  | 1.65 (2.02)               | 0.766           | <0.001        |                 | 0.01                       |
| Ankle, affected                               | 1.82 (1.20)                  | 1.70 (1.20)                  | 0.78 (0.63)               | 19.396          | 0.5095        | a>c, b>c        | 0.198                      |

Data are mean (SD).

**Supplementary Table 4. Quantitative gait analysis data in subgroups within the musculoskeletal pain group**