**Additional file 4 –** Median values of fitness tests at each point time and change to intervention start (D1, D2).

| | | | T0 | T1 | T2 | D1 (T1–baseline) | D2 (T2–baseline) |
|---|---|---|---|---|---|---|---|
| **Side jumps (n/30 sec)** | PM | median (range) | 71.5 (51 to 84) | 81.5 (63 to 99) | 84.0 (64 to 101) | 12.0** (2 to 27) | 14.0* (2 to 24) |
| | CON | median (range) | 69.0 (62 to 82) | 80.0 (67 to 103) | 79.0 (70 to 114) | 9.0* (4 to 23) | 11.0* (3 to 32) |
| | | p-value[a] (group differences) | 0.79 | 0.58 | 0.61 | 0.4 | 0.41 |
| **Tap Test (sec/25 cycles)** | PM | median (range) | 12.4 (10 to 21) | 10.6 (8 to 17) | 10.9 (7 to 16) | -1.6** (-3 to 1) | -2.7* (-5 to -0) |
| | CON | median (range) | 11.7 (10 to 16) | 11.3 (9 to 14) | 10.8 (8 to 15) | -1.4* (-3 to 1) | -1.3* (-2 to 0) |
| | | p-value[a] (group differences) | 0.49 | 0.88 | 0.93 | 0.24 | 0.055 |
| **6-minute-run (km)** | PM | median (range) | 0.75 (0.5 to 1.0) | 0.79 (0.6 to 0.9) | 0.81 (0.6 to 0.9) | 0.03 (-0.1 to 0.2) | 0.05 (-0.1 to 0.2) |
| | CON | median (range) | 0.79 (0.7 to 0.9) | 0.83 (0.7 to 1.1) | 0.83 (0.7 to 1.1) | 0.05* (-0.0 to 0.3) | 0.12 (-0.1 to 0.2) |
| | | p-value[a] (group differences) | 0.2 | 0.14 | 0.21 | 0.4 | 0.28 |
| **Balance (failures per min)** | PM | median (range) | 2.0 (0 to 10) | 0.0 (0 to 10) | 0.0 (0 to 7) | 0.0 (-4 to 7) | 0.0 (-4 to 2) |
| | CON | median (range) | 0.0 (0 to 3) | 0.0 (0 to 2) | 0.0 (0 to 1) | 0.0 (-3 to 2) | 0.0 (0 to 0) |
| | | p-value[a] (group differences) | 0.13 | 0.15 | 0.89 | 0.98 | 0.19 |

| | | | T0 | T1 | T2 | T1-T0 | T2-T0 |
|---|---|---|---|---|---|---|---|
| **Jump distance (cm)** | PM | median (range) | 121.0 (100 to 171) | 131.0 (97 to 189) | 137.0 (103 to 182) | 7.5* (-20 to 25) | 11.0 (-21 to 29) |
| | CON | median (range) | 127.0 (106 to 172) | 142.0 (108 to 177) | 145.0 (100 to 196) | 10.5* (-19 to 35) | 18.0 (-27 to 56) |
| | | p-value[a] (group differences) | 0.35 | 0.24 | 0.11 | 0.67 | 0.12 |
| **Sit-ups (n/40 s)** | PM | median (range) | 18.0 (2 to 26) | 20.5 (3 to 28) | 20.0 (12 to 30) | 1.0* (-7 to 8) | 4.5* (-1 to 11) |
| | CON | median (range) | 19.0 (5 to 27) | 23.5 (16 to 28) | 23.0 (18 to 28) | 2.5* (-1 to 11) | 3.0* (-2 to 13) |
| | | p-value[a] (group differences) | 0.6 | 0.33 | 0.3 | 0.37 | 1 |
| **Push-ups (n/ 40 s)** | PM | median (range) | 8.5 (0 to 13) | 9.5 (0 to 18) | 10.5 (0 to 18) | 1.5* (0 to 9) | 3.0* (0 to 10) |
| | CON | median (range) | 8.0 (4 to 17) | 11.5 (6 to 18) | 13.0 (10 to 19) | 3.0* (0 to 6) | 4.0* (1 to 7) |
| | | p-value[a] (group differences) | 0.42 | 0.35 | 0.2 | 0.8 | 0.57 |
| **Sit and reach – Flexibility (cm)** | PM | median (range) | -3.5 (-16 to 9) | 0.5 (-14 to 13) | -2.0 (-18 to 15) | 4.0** (-1 to 12) | 2.5 (-4 to 11) |
| | CON | median (range) | 1.0 (-15 to 14) | 0.0 (-16 to 13) | -3.0 (-16 to 13) | 2.5 (-3 to 4) | 0.0 (-3 to 7) |
| | | p-value[a] (group differences) | 0.42 | 0.9 | 1 | 0.035 | 0.51 |
| Number of patients (all tests) | PM | n | 18 | 18 | 14 | 18 | 14 |
| | CON | n | 13 | 12 | 9 | 12 | 9 |

* p-values ≤0.05, ** p-values <0.001
[a] p-values testing the significance of group differences at each time point, and of group differences in change. Null hypothesis: medians of both groups are equal.
PM: PathMate group, CON: Control group, T0: intervention start, T1 and T2: 5.5 and 12 months after intervention start, respectively