**Supplementary Table 1.** Baseline demographic and clinical characteristics of the study population with the intervention group divided into low exercise and high exercise sub-groups.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Control | Low Exercise | High Exercise |
| n (%) | 93 (46.5%) | 41 (20.5%) | 66 (33.0%) |
| **Sociodemographics** |  |  |  |
| Gender, *n (%)* |  |  |  |
| Women | 36 (38.7) | 19 (46.3) | 51 (48.5) |
| Men | 57 (61.3) | 22 (53.7) | 56 (51.5) |
| Age (years), *mean (SD)* | 71.3 (7.3) | 69.4 (7.5) | 70.0 (7.5) |
| Caregiver living with patient, *n (%)* | 66 (71.0) | 30 (73.2) | 48 (72.7) |
| Physical Activity Scale for the Elderly\*, *mean* (SD) | 97.2 (49.0) | 126.6 (67.0) | 102.0 (40.8) |
| **Comorbidities** |  |  |  |
| Hypertension, *n (%)* | 35 (37.6) | 25 (61.0) | 23 (34.8)& |
| Diabetes, *n (%)* | 7 (7.5) | 5 (12.2) | 6 (9.1) |
| Hypercholesterolemia, *n (%)* | 34 (36.6) | 18 (43.9) | 22 (33.3) |
| Apoplexia, *n (%)* | 2 (2.2) | 0 (0.0) | 1 (1.5) |
| Acute myocardial infarction, *n (%)* | 1 (1.1) | 1 (2.4) | 1 (1.5) |
| **Medicine** |  |  |  |
| Antihypertensive treatment, *n (%)* | 39 (41.9) | 26 (63.0) | 22 (33.3)# |
| Antidepressants, *n (%)* | 28 (30.1) | 11 (26.8) | 18 (27.3) |
| Anti-Alzheimer’s treatment, *n (%)* | 88 (94.6) | 41 (100.0) | 64 (97.0) |
| Beta-blocker treatment ¤, *n (%)* | 9 (9.7) | 7 (17.1) | 0 (0.0)$ |
|  |  |  |  |
| Symbol Digit Modalities Test §, *mean* (SD) | 25.4 (14.3) | 24.7 (14.6) | 28.6 (14.4) |
| Mini Mental State Examination ¶, *mean* (SD) | 24.1 (3.8) | 23.3 (3.5) | 24.1 (3.2) |
| Hamilton Depression Rating Scale 17 items †, *mean* (SD) | 2.0 (2.5) | 1.3 (1.7) | 2.3 (3.0) |
| Neuropsychiatric Inventory ‡, *mean* (SD) | 9.4 (9.7) | 12.2 (12.1) | 8.6 (9.6) |

Fisher’s exact test was used for categorical variables and Wilcoxon signed-rank test was used for continuous variables; & p=0.009; # p=0.003; $ p=0.001

\* Physical activity was measured by means of the Physical Activity Scale for the Elderly [37] (derived by multiplying activity participation by established item weights). Higher scores indicate higher levels of habitual physical activity.

¤ Patients on beta-blocker treatment were not able to reach the desired heart rate level, and therefore none fulfilled the high exercise criteria

§ Scores on the Symbol Digit Modalities Test are the number of correct matches in 120 s, with a higher score indicating a higher level of mental speed and attention

¶ Scores on the Mini–Mental State Examination range from 0 (severe impairment) to 30 (no impairment)

† Scores for the 17-item Hamilton Depression Rating Scale range from 0 to 52, with higher scores indicating more severe depression

‡ Scores on the Neuropsychiatric Inventory range from 0 to 144, with higher scores indicating increased behavioral and psychological symptoms