

Supplementary File 2

Statistical Analysis Plan – AWARD trial

Continuous outcome variables will be assessed for normal distributions with transformations applied as appropriate. Baseline characteristics will be compared between groups with independent-samples t-tests and chi-square tests used to confirm successful randomization; if differences are noted, adjustment will be made when comparing outcomes between groups. All comparisons of primary and secondary outcomes will be performed in accordance with intention-to-treat principles.

The effect of aerobic exercise on change in V02peak and physical performance, will be quantified using mixed linear models, with 6- and 12-month outcome measures as dependent variables, individual participant as random effect, and treatment group, baseline measures, time since randomization, and treatment-by-time interaction as fixed effects. This approach accounts for the correlation between individuals' baseline and subsequent performance when comparing outcomes between treatment groups.