

Protein supplement and exercise training for the treatment of sarcopenia risk in older adults who receive supportive home care: POWER Study

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The aim of the POWER Study is to investigate the effectiveness of a 12-week novel protein-based oral nutritional supplement (ONS) combined with an online resistance training programme for community-dwelling adults aged ≥ 70 who require home care and are at risk of sarcopenia.

Forty older adults will be recruited to participate and will be randomised into either (i) Resistance Training + ONS or (ii) Resistance Training only. The primary outcomes are functional status measured using the Timed Up and Go test and nutritional status measured using the Mini-Nutritional Assessment-Full Form. Secondary outcomes include feasibility of implementation (recruitment, retention, adherence and acceptability), muscle strength and mass, depression risk and quality of life. Functional status will also be measured using Katz index of ADLs and 4 m gait speed test. All outcomes will be measured at baseline (T1), end of intervention (T2) and 12-weeks post-intervention (T3). Descriptive statistics will be used to measure the effectiveness of the intervention and feasibility of the intervention.

Results:

Summary of Intervention progress: participants (Figure 1)

Baseline assessment completed (T1): n=27

(Intervention No 1: n=3; Intervention No 2: n=6; Intervention No 3: n=8; Intervention No 4: n= 10).

Post 12-week intervention assessment completed (T2): n=14

(Intervention No 1: 2; Intervention No 2: n=5; Intervention No 3: n=7; Intervention No 4: n= 0)

24-week assessment (12-weeks after intervention finish) completed (T3): n=7

(Intervention No 1: 7; Intervention No 2: n=0; Intervention No 3: n=0; Intervention No 4: n= 0)

Dropouts: n=3

(Intervention No 1: n=1; Intervention No 2: n=1; Intervention No 3: n=1)

Reasons for dropout:

Following baseline assessment but before starting the intervention n=2

Injury unrelated to the study: n= 1

Six participants have been recruited and eight more participants need to be recruited to meet the target 40.

The POWER Study has had a lot of positive feedback as captured from our surveys. Participants with all abilities have responded well to the exercise classes. They have enjoyed the personalised aspect, where exercises are modified to meet their needs and the positive feedback they receive throughout the classes.

Upon completion of the study, we hope to analyse all outcomes and report the results both through publication and through social media.

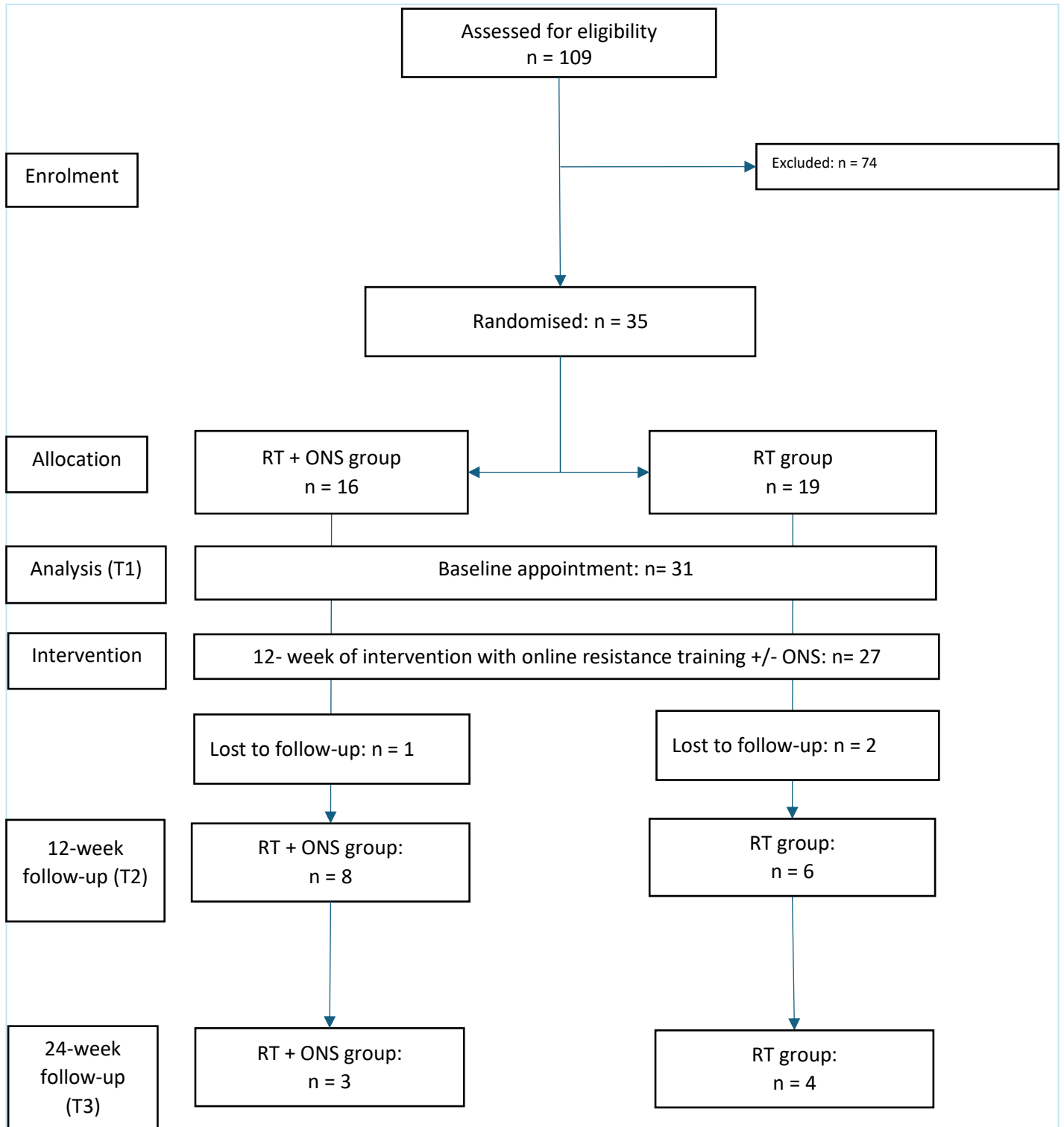


Figure 1 CONSORT diagram of participant progress to date (July 17, 2024)