1 Additional File 2: Site Specific Additional Measures

2 Brief behavioral counselling by allied health professionals to promote physical activity in

3 people with peripheral arterial disease (BIPP)

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5 At the Sydney site, the following additional assessments will be carried out at each

6 assessment time point:

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8 • Maximal exercise treadmill stress test with indirect calorimetry (Medgraphics PFX

9 Ultima) will be used to assess peak aerobic capacity (VO_2peak). Participants will be

10 monitored with a 12-lead electrocardiogram (ECG) (Quinton Q-Stress, USA) by a

11 physician for safety. The treadmill (TM55, Quinton, USA) will be set to the

12 participants habitual gait speed, with incline increasing by 2% every minute, up until

13 a maximum of 24% grade, with the speed increasing by 0.5km/hr thereafter.

14 Participants will be asked to walk until volitional fatigue, or until limited by

15 symptoms, or if the supervising physician decides to terminate the test.

16 • Maximal strength and endurance muscle measurements will be obtained using the

17 digital K400 Keiser pneumatic resistance machines (Keiser Sports health Equipment,

18 Inc. Fresno, CA). Exercises performed include the seated leg press, bilateral knee

19 extension, bilateral knee flexion, standing hip extension, calf raise, chest press, and

20 seated row.

21 • Dual-energy X-ray Absorptiometry (DXA; Lunar Prodigy DXA Scanner and the

22 enCORE software. GE Medical Systems Lunar, Madison, Wisconsin) will be

23 obtained in a fasting condition to determine whole body and regional muscle, fat and

24 bone mass. Regional scans of the lumbar spine as well as each hip will also be

25 performed to determine bone mineral density at each site.

26 - Pulse Wave Velocity (PWV) Pulse Wave Analysis (PWA) Heart Rate Variability

27   (HRV) will be determined using the SphygmoCor Unit and SphygmoCor software.

28 - 24-hour ambulatory blood pressure (TM-2430, A&D Co., LTD, Abingdon, Oxon,

29   U.K.) will be assessed during waking hours (05:00 A.M to 10:00 P.M) and during

30   sleeping hours (10:00 P.M to 05:00 A.M).

31 - Orthostatic hypotension (OH) will be determined with supine blood pressure and

32   heart rate taken after the participant has been supine for at least 20 minutes, in a fasted

33   state. Participants will then be asked to stand, with blood pressure and heart rate

34   measurements taken 1- and 3minutes after standing. Blood pressure will be measured

35   at the brachial level, with heart rate measured at the radial pulse for 15 seconds.

36 - Core self will be evaluated using the 12-item Core Self Evaluation Scale.[1]

37   Responses are recorded on a 5-point Likert-type scale ranging from 1 (disagree

38   strongly) to 5 (agree strongly). The scale measures a single factor that is the

39   intersection of self-esteem, locus of control, generalized self-efficacy, and emotional

40   stability.

41 - Stair climb power will be assessed. Participants will be asked to climb stairs as rapidly

42   as possible to enable the calculation of Power (Watts). Power is calculated from the

43   formula: $P \text{ (watts)} = (M \times D) \times 9.8/t$ Where: M = Body mass (kg), D = Vertical

44   distance (m), t = Time (s) and, D = vertical height of the staircase = height of 1 step in

45   meters $\times$ number of steps (if they are all the same height).

46 - Depression will be assessed using the Geriatric Depression Scale (GDS), which is a

47   30-item self-report assessment designed specifically to identify depression in the

48   elderly. It has been validated against therapist ratings of depressive symptoms.[2]

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50　At the Townsville site the following additional assessments will be conducted at each

51　assessment time point:

- 52　Pulse Wave Velocity (PWV) Pulse Wave Analysis (PWA) Heart Rate Variability
  53　(HRV) will be determined using the SphygmoCor Unit and SphygmoCor software.
- 54　Skin autofluoresence will be measured using a non-invasive technique at the lower
  55　arm and the lower leg (AGE reader).
- 56　Endothelial function will be measured at the finger using a non-invasive technique
  57　(EndoPAT).
- 58　A dietary assessment will be administered as a structured interview and will consist of
  59　asking the patient to recall what food and drink has been consumed in the previous 24
  60　hours. The information is then analysed using FoodWorks to find out the nutritional
  61　composition of the patient's diet.

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64　1.　Judge T, Erez A, Bono J, Thoresen C. The Core Self-Evaluations Scale: development of a
65　measure. Personnel Psychology. 2003;56(2):303–31.

66　2.　Brink T, Yesavage J, Lum O, Heersema P, Adey M, Rose T. Screening tests for geriatric
67　depression. Clin Gerontol. 2008;1(1):37–43.

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