**Supplemental Digital Content 1**

**Methods**

*Intervention*

Each 60-minute training session consisted of moderate-to-high intensity interval training on a cycle ergometer (TechnoGym, Bike Med, Gambettola, Italy) to improve aerobic fitness (40 minutes), and resistance training to improve peripheral muscle strength (20 minutes). CPET results were used to personalize training. The interval training component included a 7-minute warm-up at 50% of the work rate achieved at the VAT at the baseline CPET, 30 minutes of interval training, and a 3-minute cool-down at 50% of the work rate achieved at the VAT. Interval training consisted of six 5-minute intervals in which moderate-to-high-intensity exercise at 120% of the work rate achieved at the VAT was alternated with active recovery at 50% of the work rate achieved at the VAT. In the first week, exercise lasted 120 seconds and recovery lasted 180 seconds, which progressed to 140 and 160 seconds, respectively, in the second week, and 160 and 140 seconds in the third week. The duration of exercise was increased according to the participant’s perceived exertion to maximize the training effect. Participants were asked to maintain a pedaling frequency throughout the interval training sessions of 60 to 80 revolutions/min.

 Peripheral resistance training of the large muscle groups of the lower and upper extremities consisted of squat exercises (primary muscle group, quadriceps femoris; secondary muscle groups, gluteal muscles, hamstring muscles, and gastrocnemius muscle), and exercises with a pulley to train pulling (primary muscle groups, latissimus dorsi muscle and rhomboid muscles; secondary muscle groups, biceps brachii muscle, rotator cuff, and trapezius muscle), pushing (primary muscle group, pectoral muscles; secondary muscle groups, shoulder muscles, triceps brachii muscle), and lifting (primary muscle groups, trunk muscles and shoulder muscles; secondary muscle groups, quadriceps femoris, gluteal muscles, and trapezius muscle). Participants performed three sets of eight repetitions for each muscle group, with rest intervals of 60 to 90 seconds, at a personalized intensity of 70%, 76%, and 82% of their baseline one-repetition maximum in the first, second, and third week, respectively. At baseline, each patient’s one-repetition maximum was estimated from the patient’s 10-repetition maximum using the Oddvar Holten diagram.1

Additionally, patients performed unsupervised exercises at home at a moderate exercise intensity (e.g., walking, cycling, sit-to-stand exercises, or stair climbing) twice a week for at least 30 minutes. This was monitored by means of a patient diary checked by the community physical therapist.

**Reference**

1.     Hertling D, Kessler RM. Management of common musculoskeletal disorders: physical therapy principles and methods. Philadelphia: Lippincott Williams & Wilkins, 2006.