Madrid, and Barcelona, and assessed between November 2011 and June 2012. Some of the participants and data from Spain were part of previous publications [159, 160, 161, 169, 71, 51], however there is no overlapping analysis.

The data from the United States of America (USA) were collected in Rochester, MN, as part of a cross-sectional study aiming to characterize the relationship between the 4 meter gait speed (4MGS) test and various psycho-physiologic measures in a cohort of patients with chronic lung disease. The study was approved by the the Institutional Review Board of the Mayo Clinic College of Medicine (IRB# 11-008157). Participants were recruited between July 2012 and July 2013 at Mayo Clinic. Some of the participants and data from the USA were part of previous publications [47, 170, 171], however there is no overlapping analysis.

The data from Brazil were collected in Londrina, Paraná, as part of an ongoing prospective randomized trial aiming to compare the long term effects of two exercise/training regimens on physical activity in daily life and other relevant outcome measures in patients with COPD. The study was approved by the ethics committee of the State University of Londrina (UEL), Londrina, Brazil. Participants were recruited during the baseline assessment for the outpatient pulmonary rehabilitation program which takes place at the University Hospital of Londrina. Some of the participants and data from Brazil were part of a previous report [172], however there is no overlapping analysis.

The data from Australia were collected in two cities, Perth and Sydney. In both cities the data were collected as part of an ongoing randomized controlled trial evaluating a walking training program versus usual care on quality of life and exercise capacity in patients with COPD (ACTRN12609000472279). Ethical approval was granted by the ethics committees of Sydney South West Area Health Service (lead Human Research Ethics Committee), The University of Sydney, Curtin University, Sir Charles Gairdner Hospital and Bentley Hospital, Australia. Participants were recruited from referrals to hospital outpatient pulmonary rehabilitation programs. Some of the participants and data from Australia were part of a previous report [173], however there is no overlapping analysis.

Features used for cluster analysis

Table XVI Features used for cluster analysis.

Number	Feature	Number	Feature
1	Daily time in moderate-to-vigorous intensity before midday (min·day^{-1})	91	Daily average duration of 2-min bouts of light intensity before midday (min·bout^{-1})
2	Daily time in moderate-to-vigorous intensity after midday (min·day^{-1})	92	Daily average duration of 2-min bouts of light intensity after midday (min·bout^{-1})
3	Daily time in moderate-to-vigorous intensity (min·day^{-1})	93	Daily average duration of 2-min bouts of light intensity (min·bout^{-1})
4	Daily time in moderate-to-vigorous intensity	94	Daily time in 10-min bouts of light intensity