

## Supplementary

**Table S1** Multivariate odds ratios (ORs) from logistic regression with severe dyspnea (mMRC  $\geq 2$ )

CPET parameters	Adjusted OR (95% CI)	P value
VO <sub>2</sub> max, L/min	0.426 (0.003–60.408)	0.736
WR max, W	0.991 (0.961–1.023)	0.591
HRR, beats/min	1.027 (0.989–1.067)	0.168
O <sub>2</sub> pulse max, mL/beat	1.018 (0.872–1.189)	0.821
V <sub>E</sub> max, L/min	0.970 (0.872–1.079)	0.573
MVV, L/min	0.930 (0.890–0.973)	0.002
Peak P <sub>ETCO<sub>2</sub></sub> , mmHg	0.827 (0.684–1.000)	0.05
V <sub>D</sub> /V <sub>T</sub> peak	0.000 (0.000–0.818)	<0.001

CPET, cardiopulmonary exercise testing; mMRC, modified Medical Research Council; VO<sub>2</sub> max, maximal oxygen uptake; WR, work rate; HRR, heart rate reserve; VE, minute ventilation; MVV, maximal voluntary ventilation; P<sub>ETCO<sub>2</sub></sub>, end-tidal PCO<sub>2</sub>; V<sub>D</sub>, dead space volume; V<sub>T</sub>, tidal volume.

**Table S2** Multivariate odds ratios (ORs) from logistic regression with poor quality of life (CAT  $\geq 10$ )

CPET parameters	Adjusted OR (95% CI)	P value
VO <sub>2</sub> max, L/min	0.232 (0.016–3.470)	0.290
WR max, W	0.986 (0.968–1.005)	0.151
HRR, beats/min	1.010 (0.990–1.030)	0.320
V <sub>E</sub> max, L/min	1.029 (0.971–1.090)	0.336
MVV, L/min	0.982 (0.963–1.002)	0.071
Peak P <sub>ETCO<sub>2</sub></sub> , mmHg	1.019 (0.920–1.128)	0.719
V <sub>D</sub> /V <sub>T</sub> rest	114.720 (0.226–58,235.092)	0.136
V <sub>D</sub> /V <sub>T</sub> peak	0.012 (0.000–753.646)	0.433

CPET, cardiopulmonary exercise testing; CAT, COPD Assessment Test; VO<sub>2</sub> max, maximal oxygen uptake; WR, work rate; HRR, heart rate reserve; V<sub>E</sub>, minute ventilation; MVV, maximal voluntary ventilation; P<sub>ETCO<sub>2</sub></sub>, end-tidal P<sub>CO<sub>2</sub></sub>; V<sub>D</sub>, dead space volume; V<sub>T</sub>, tidal volume.