

Authors	Year	Country	n (COPD/Controls)	% female	Mean age (SD) COPD/Controls	Adjustment for confounders made	Mean % predicted FEV ¹ (SD) COPD	Balance outcomes				
								TUG	SLS	BBS	Posturography	Other
Butcher, Meshke & Sheppard(33)	2004	Canada	30(15 with O ₂ , 15 without)/21	64.28%	72.1(2.203) No O ₂ , 69.0(2.20) O ₂ / 68.1(1.86)	Age	29.87(3.73) O ₂ Group 45.7(29.87) No O ₂ group	X	X		X	
Eisner et al(34)	2008	USA	1202/302	57.64%	58.2(6.2)/ 58.5(6.2)	age, sex, race, height, educational attainment, household income and smoking status	62(23)					Functional reach test
Smith et al(35)	2010	Australia	20/12	41.66%	64.6(7.2)/ 63.5(5.4)	None reported	33.1(12.7)				X	
Roig et al(36)	2010	Canada	21/21	not reported	71.2(8.1)/ 67.4(8.6)	Age and weight	47.2(12.9)	X				
Rocco et al(37)	2011	Brazil	22/16	26.32%	70(6.66)/ 68(6.56)	None reported	39.88(8.69)				X	Tinetti

Roig et al(38)	2011	Canada	20/20	not reported	72.3(7.6)/ 68.2(8.1)	Sex, age and BMI matched controls	46.7(13)				X	
Ozalevli et al(16)	2011	Turkey	36/20	32.14%	70.3(3.01)/ 68.5(7.3)	None reported	43.5(6.07)			X		
Beauchamp et al(11)	2012	Canada	37/20	44.85%	71(7)/ 67(90)	Age, knee flexor muscle strength and self-reported physical activity	39.4(16.3)				X	BESTest
Janssens et al(8)	2013	Belgium	20/20	Not stated	64(7)/ 64(6)	None reported	50(18)				X	
Janssens et al(13)	2014	Belgium	18/18	not stated	65(7)/ 64(7)	None reported	51(19)				X	

Mkacher et al(39)	2014	Tunisia	16/18	0%	56.22(4.12)/ 58.06(2.91)	None reported	49.75(2.56)	X	X	X		Tinetti
Pedrozo & Silveira(40)	2015	Brazil	29/24	45.79%	64.72(7.67)/ 63.58(8.17)	None reported	49.15(10.90)				X	
Yumrutepe et al(14)	2015	Turkey	90/57	6.80%	60.2(7.8)/ 58.9(6.4)	None reported	62.5(20.6)	X				Functional reach test
Crisan et al(41)	2015	Romania	29 COPD, 17 AECOPD/17	gender not reported	62.2(5.0) COPD, 63.1(4.6) AECOPD/ 64.4(4.0)	None reported	29(7)COPD group 28(7) AECOPD	X	X	X		
Oliveira et al(42)	2015	Australia	40/25	52%	71(8)/ 69(8)	None reported	41.5(16.2)			X**		
Tudorache et al(12)	2015	Romania	41 (21 Stable, 19 AECOPD)/20	not reported	63(5) COPD, 63(3) AECOPD/ 63(4)*	None reported	27.5(7) COPD 20(10) AECOPD*	X	X	X		
Smith, Chang and Hodges(17)	2016	Australia	15/15	40%	66(8)/ 65(6)	None reported	35.1(12.5)				X	

Voica et al(43)	2016	Romania	27 (13 Emphysematous and 14 Bronchitic)/17	not reported	64.1(2.6) Emphysematous, 63.9(1.9) Bronchitic/ 61.3(4.0)*	None reported	31(2) Emphysematous 30(4) Bronchitic*	X	X	X		
Iwakura et al(9)	2016	Japan	22/13	0%	71.6(6.9)/ 71.5(5.6)	Age, pulmonary function, nutritional status, dyspnoea, quadriceps muscle strength, functional exercise capacity, and health-related quality of life	52.8(20.6)		X			Standing balance test
de Castro et al(44)	2016	Brazil	47/25	41.66%	65(5)/ 66(8)	None reported	45(15)	X	X		X	
Porto et al(45)	2017	Brazil	93/39	45.07%	67.3(10.8)/ 65.1(9.7)	None reported	50.4(19)			X	X	
Oliveira et al(15)	2017	Australia	26/25	50.64%	70(9) COPD, 72(7) AECOPD/ 70(8)	Quadriceps strength adjusted for age, sex, and BMI	44(18) COPD 48(11) AECOPD			X	X	
Morlino et al(46)	2017	Italy	40/28	35.35%	70.7(7.1)/ 69.5(6.7)	None reported	50.2(21.1)	X			X	Mini BESTest

Participant characteristics for all participants in the review; mean age was 65.9 years, 38% of participants were female; COPD groups mean FEV¹ was 42.4%, age was 66.5, 35.2% were female; control groups mean FEV¹ was 101.3%, age was 65.2, 38.4% were female.

Study sample sizes range: n=30-1504. Total sample size in review: n=2751 patients with COPD.

*median (IQR), **confirmed with authors, some participants data used in both papers for this outcome

TUG = timed up and go, SLS = single leg stance, BBS = berg balance scale