

**Evidence Analysis Library: Chronic Obstructive Pulmonary Disease (COPD)
Body Weight and Body Composition**

What effect does body weight or body composition have on mortality and lung function outcomes in adults with COPD?

List of Excluded Articles (N=568)

Abbreviations: BC=body composition; **BODE Index**=body mass index, lung obstruction, dyspnea, and exercise capacity; **BW**=body weight; **OAD**=obstructive airway disease

Article	Reason for Exclusion ¹
Abbatecola, AM, Fumagalli A, et al. Body composition markers in older persons with COPD. <i>Age Ageing</i> . 2014; 43(4):548-553. PMID: 24366838	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Ade-Oshifogun, JB. Model of functional performance in obese elderly people with chronic obstructive pulmonary disease. <i>J Nurs Scholarshp</i> . 2012; 44(3):232-241. PMID: 22882559	Mortality or lung function were not primary outcomes of the study.
Affara N, Shaarawy H, Elgawish, M. Quadriceps bulk and strength and effect of its training in patients with moderate to severe chronic obstructive pulmonary disease. <i>Egypt J Chest Dis Tuberc</i> . 2013; 62(1):79-83.	No BW/BC data in relation to outcomes of interest.
Agarwal R, Zaheer MS, Ahmad Z, Akhtar J. The relationship between C-reactive protein and prognostic factors in chronic obstructive pulmonary disease. <i>Multidiscip Respir Med</i> . 2013; 8(1):63. Published 2013 Sep 28.	No BW/BC data in relation to outcomes of interest.
Agusti, A, Morla M. et al. NF-kappaB activation and iNOS upregulation in skeletal muscle of patients with COPD and low body weight. <i>Thorax</i> . 2004 June; 59(6):483-487. PMID: 15170030	Less than 10 subjects per study group; published prior to 2005.
Agusti, AG, Sauleda J, et al. Skeletal muscle apoptosis and weight loss in chronic obstructive pulmonary disease. <i>Am J Respir Crit Care Med</i> . 2002; 166(4):485-489. PMID: 12186825	Less than 10 subjects per study group; published prior to 2005.
Ahmadi A, Haghghat N, et al. Nutritional evaluation in chronic obstructive pulmonary disease patients. <i>Pak J Biol Sci</i> . 2012;15(10):501-505. PMID: 24187906	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Ahmadi F, Babaie SMHJ, et al. Evaluating the effect of Exercise Test on Pulmonary Artery Systolic Pressure in COPD Patients and its Comparison with Normal Subjects in Ahvaz Imam and Golestan Hospitals. <i>Int J Pharm Res Allied Sci</i> 2016, 5(3):237-246.	No BW/BC data in relation to outcomes of interest.
Ahmed MS, Neyaz A, Aslami AN. Health-related quality of life of chronic obstructive pulmonary disease patients: Results from a community based cross-sectional study in Aligarh, Uttar Pradesh, India. <i>Lung India</i> 2016 Mar-Apr; 33(2): 148-53. PMID: 27051101	No BW/BC data in relation to outcomes of interest.
Ahnfeldt-Mollerup P, Hey H, Johansen C, et al. The effect of protein supplementation on quality of life, physical function, and muscle strength in patients with chronic obstructive pulmonary disease. <i>Eur J Phys Rehabil Med</i> . 2015 Aug; 51(4):447-56. Epub 2014 Nov 26. PMID: 25426541	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Aida Y, Shibata Y, et al. The relationship between serum uric acid and spirometric values in participants in a health check: the Takahata study. <i>Int J Med Sci</i> 2011; 8(6):470-478. PMID: 21850198	Not all COPD population; General population study.
Aiello M, Teopompi E, Tzani, P, et al. Maximal exercise in obese patients with COPD: the role of fat free mass. <i>BMC Pulm Med</i> . 2014; 14(0)96-2466-14-96. PMID: 24885001	No outcomes of interest (mortality or lung function) were reported.
Alavi SA, Soati F, et al. HsCRP in Patients with Acute Exacerbation of Chronic Obstructive Pulmonary Disease. <i>Iran Red Crescent Med J</i> . 2011 Oct; 13(10):713-8. Epub 2011 Oct 1. PubMed PMID: 22737409; PubMed Central PMCID: PMC3371875.	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.

Article	Reason for Exclusion ¹
Alexopoulos EC, Malli F, et al. Frequency and risk factors of COPD exacerbations and hospitalizations: a nationwide study in Greece (Greek Obstructive Lung Disease Epidemiology and health ecoNomics: GOLDEN study). <i>Int J Chron Obstruct Pulmon Dis</i> . 2015 Dec 11;10: 2665-74. eCollection 2015. PMID: 26715845	No outcomes of interest (mortality or lung function) were reported.
Almagro P, Salvado M, et al. Recent improvement in long-term survival after a COPD hospitalisation. <i>Thorax</i> , 2010; 65(4):298-302. PMID: 20388752	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Al-shair K, Kolsum U, et al. Biomarkers of systemic inflammation and depression and fatigue in moderate clinically stable COPD. <i>Respir Res</i> 2011; 12(0):3-9921-12-3. PMID: 21208443	BW/BC outcome is not the primary independent variable (not the primary predictor); No outcomes of interest.
Al-shair K, Dockry R, et al. Depression and its relationship with poor exercise capacity, BODE index and muscle wasting in COPD. <i>Respir Med</i> 2009;103(10): 1572-1579. PMID: 19560330	BMI was not separated from BODE index and reported separately; No outcomes of interest.
Andersson M, Slinde F, et al. Physical activity level and its clinical correlates in chronic obstructive pulmonary disease: a cross-sectional study. <i>Respir Res</i> 2013; 14(0):128-9921-14-128. PMID: 24237876	No outcomes of interest (mortality or lung function) were reported.
Andrianopoulos V, Wagers SS, et al. Characteristics and determinants of endurance cycle ergometry and six-minute walk distance in patients with COPD. <i>BMC Pulm Med</i> 2014;14(0)97-2466-14-97 PMID: 24885117	No outcomes of interest (mortality or lung function) were reported.
Ansari K, Keaney N, et al. Muscle weakness, health status and frequency of exacerbations in chronic obstructive pulmonary disease. <i>Postgrad Med J</i> 2012; 88(1041): 372-376. PMID: 22388793	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Ansari K, Shamssain M, et al. Predictors of Quality of Life in COPD Patients with Different Frequency of Exacerbations. <i>Pak J Med Sci</i> 2007 23(4):490-496.	No BW/BC data in relation to outcomes of interest.
Ansari K, Keaney N, et al. Precision in Diagnosing and Classifying COPD: Comparison of Historical Height with Current Height and Arm Span to Predict FEV(1). <i>Open Respir Med J</i> 2012; 6:54-8. Epub 2012 Jul 24. PubMed PMID: 22896775	Evaluated height vs. arm span and lung function; not a measure of body composition.
Araujo ZT, Holanda G. Does the BODE index correlate with quality of life in patients with COPD? <i>J Bras Pneumol</i> 2010; 36(4):447-452. PMID: 20835591	BMI was not separated from BODE index and reported separately.
Ba A, Brégeon F, et al. Cardiopulmonary response to exercise in COPD and overweight patients: relationship between unloaded cycling and maximal oxygen uptake profiles. <i>Biomed Res Int</i> . 2015; 2015: 378469. Epub 2015 Mar 19. PMID: 25866778	No assessment of BW/BC in COPD subgroup in relation to outcomes.
Bai B, Sun Y, et al. Disturbance of the OPG/RANK/RANKL pathway and systemic inflammation in COPD patients with emphysema and osteoporosis. <i>Respir Res</i> 2011 12(0):157-9921-12-157. PMID: 22176920	Bone mineral density, not BW/BC.
Balcells E, Anto J M et al. and Study Group, PAC-COPD. Characteristics of patients admitted for the first time for COPD exacerbation. <i>Respir Med</i> 2009; 103(9):1293-1302. PMID: 19427776	No outcomes of interest (mortality or lung function) were reported.
Baldi S, Aquilani R, et al. Fat-free mass change after nutritional rehabilitation in weight losing COPD: role of insulin, C-reactive protein and tissue hypoxia. <i>Int J Chron Obstruct Pulmon Dis</i> . 2010;5: 29-39. PMID: 20368909.	No outcomes of interest (mortality or lung function) were reported.
Baldi S, Pinna G, et al. Nutritional status and airflow obstruction: two independent contributors to CO diffusing capacity impairment in COPD <i>Monaldi Arch Chest Dis</i> 2005; 63(1):13-16. PMID: 16035559	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Barbarito N, De Mattia E. Grading the severity of obstruction in patients with chronic obstructive pulmonary disease and morbid obesity. <i>Monaldi Arch Chest Dis</i> 2013; 7 9(3):121-127. PMID: 24761530	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.

Article	Reason for Exclusion ¹
Barker BL, McKenna S, et al. Systemic and pulmonary inflammation is independent of skeletal muscle changes in patients with chronic obstructive pulmonary disease. <i>Int J Chron Obstruct Pulmon Dis</i> 2014; 9(0):975-981. PMID: 25246784	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Barriga S, Rodrigues F, Barbara C. Factors that influence physical activity in the daily life of male patients with chronic obstructive pulmonary disease. <i>Rev Port Pneumol</i> 2014; 20(3):131-137 PMID: 24418722	No BW/BC data in relation to outcomes of interest.
Battaglia S, Spatafora M, et al. Ageing and COPD affect different domains of nutritional status: the ECCE study. <i>Eur Respir J</i> 2011; 37(6):1340-1345. PMID: 21071469	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Benedik B, Farkas J, et al. (2011) Mini nutritional assessment, body composition, and hospitalisations in patients with chronic obstructive pulmonary disease. <i>Respir Med</i> 2011; 105(0): S38-43. PMID: 22015084	No outcomes of interest (mortality or lung function) were reported.
Benton MJ, Wagner CL, Alexander JL. Relationship between body mass index, nutrition, strength, and function in elderly individuals with chronic obstructive pulmonary disease. <i>J Cardiopulm Rehabil Prev.</i> 2010; 30(4):260-3. PMID: 20410829	No outcomes of interest (mortality or lung function) were reported.
Berton DC, Silveira L, et al. Effectiveness of pulmonary rehabilitation in exercise capacity and quality of life in chronic obstructive pulmonary disease patients with and without global fat-free mass depletion. <i>Arch Phys Med Rehabil</i> 2013; 94(8):1607-1614. PMID: 23416765	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Bhavani S, Tsai CL, et al. Clinical and Immunological Factors in Emphysema Progression. Five-Year Prospective Longitudinal Exacerbation Study of Chronic Obstructive Pulmonary Disease (LES-COPD). <i>Am J Respir Crit Care Med.</i> 2015 Nov 15; 192(10):1171-8. PMID: 26241705	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Bian P, Li X, Ying Q, et al. Factors associated with low femoral neck bone mineral density in very elderly Chinese males. <i>Arch Gerontol Geriatr.</i> 2015 Nov-Dec; 61(3): 84-8. Epub 2015 Aug 10. PMID: 26279395	Data for COPD population were not separated from elderly population.
Blum A, Simsolo C, et al. "Obesity paradox" in chronic obstructive pulmonary disease. <i>Isr Med Assoc J</i> 2011; 13(11):672-675. PMID: 22279700	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Blumenthal JA, Smith PJ, et al. Biobehavioral Prognostic Factors in Chronic Obstructive Pulmonary Disease: Results From the INSPIRE-II Trial. <i>Psychosomatic Med</i> 2016; 78(2):153-162. PMID: 26780299	No BW/BC data in relation to outcomes of interest.
Boiselle PM, Litmanovich DE, et al. Dynamic expiratory tracheal collapse in morbidly obese COPD patients. <i>COPD</i> 2013;10(5):604-610. PMID: 23837455	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Bolton C E, Broekhuizen R, et al. Cellular protein breakdown and systemic inflammation are unaffected by pulmonary rehabilitation in COPD. <i>Thorax</i> 2007; 62(2):109-114. PMID: 16928709	No outcomes of interest (mortality or lung function) were reported.
Bolton C E, Evans M, et al. Insulin resistance and inflammation - A further systemic complication of COPD. <i>COPD</i> 2007; 4(2) 121-126. PMID: 17530505	No BW/BC data in relation to outcomes of interest.
Bolton CE, Ionescu AA, et al. Associated loss of fat-free mass and bone mineral density in chronic obstructive pulmonary disease. <i>Am J Respir Crit Care Med</i> 2004; 170(12):1286-1293. PMID: 15374843	No outcomes of interest (mortality or lung function) were reported; published prior to 2005.
Bonarius HP, Brandsma CA, et al. Antinuclear autoantibodies are more prevalent in COPD in association with low body mass index but not with smoking history. <i>Thorax</i> 2011;66(2): 101-107. PMID: 21047865	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.

Article	Reason for Exclusion ¹
Bonsaksen T, Fagermoen MS, Lerdal A. Factors associated with self-esteem in persons with morbid obesity and in persons with chronic obstructive pulmonary disease: a cross-sectional study. <i>Psychol Health Med</i> . 2015; 20(4):431-42. PMID: 25220791	Mortality or lung function were not primary outcomes of the study.
Bonsaksen T, Lerdal A, Fagermoen MS. Trajectories of illness perceptions in persons with chronic illness: An explorative longitudinal study. <i>J Health Psychol</i> . 2015 Jul; 20(7):942-53. PMID: 24140616	Mortality or lung function were not primary outcomes of the study.
Bowen JB, Votto JJ, et al. Functional status and survival following pulmonary rehabilitation. <i>Chest</i> 2000; 118(3):697-703. PMID: 10988191	Not all COPD patients; data were not reported separately for COPD patients; published prior to 2005.
Breyer M K, Spruit M A, et al. Highly elevated C-reactive protein levels in obese patients with COPD: a fat chance? <i>Clin Nutr</i> 2009; 28(6):642-647. PMID: 19540024	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Breyer M K, Rutten E P et al. Gender differences in the adipose secretome system in chronic obstructive pulmonary disease (COPD): a pivotal role of leptin. <i>Respir Med</i> 2011; 105(7):1046-1053. PMID: 21367591	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Bridevaux PO, Gerbase MW, et al. Sex-specific effect of body weight gain on systemic inflammation in subjects with COPD: results from the SAPALDIA cohort study 2. <i>Eur Respir J</i> 2009; 34(2):332-339. PMID: 19251780	No BW/BC data in relation to outcomes of interest.
Broderick J, Mc Grath C, et al. Effects of pulmonary rehabilitation on exercise capacity and disease impact in patients with chronic obstructive pulmonary disease and obesity. <i>Physiotherapy</i> 2018 Jun; 104(2):248-250. Epub 2017 Aug 10. PMID: 28967440	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Broekhuizen R, Grimble RF, et al. (2005) Pulmonary cachexia, systemic inflammatory profile, and the interleukin 1beta -511 single nucleotide polymorphism. <i>Am J Clin Nutr</i> 2005; 82(5):1059-1064. PMID: 16280439	Mortality or lung function were not primary outcomes of the study.
Broekhuizen R, Wouters E F, et al. Raised CRP levels mark metabolic and functional impairment in advanced COPD. <i>Thorax</i> 2006; 61(1):17-22. PMID: 16055618	No BW/BC data in relation to outcomes of interest.
Broekhuizen R, Creutzberg EC, et al. Optimizing oral nutritional drink supplementation in patients with chronic obstructive pulmonary disease. <i>Br J Nutr</i> . 2005; 93(6):965-71. PMID: 16022768.	BW/BC was not evaluated in relation to outcomes.
Bruno AM, Alessi S, et al. Increased leptin/leptin receptor pathway affects systemic and airway inflammation in COPD former smokers. <i>J Inflamm Res</i> . 2011:451-59	No BW/BC data in relation to outcomes of interest.
Brusik M, Ukropec J, et al. Circulatory and adipose tissue leptin and adiponectin in relationship to resting energy expenditure in patients with chronic obstructive pulmonary disease. <i>Physiol Res</i> 2012; 61(5):469-480. PMID: 22881231	Less than 10 subjects per study group.
Brusse-Keizer M, Zuur-Telgen M, et al. Adrenomedullin optimises mortality prediction in COPD patients. <i>Respir Med</i> . 2015 Jun; 109(6):734-42. PMID: 25937049	BMI was not analyzed separately from other risk score components.
Bu X N, Yang T, et al. Changes in the BODE index, exacerbation duration and hospitalisation in a cohort of COPD patients. <i>Singapore Med J</i> 2011; 52(12):894-900. PMID: 22159933	BMI was not separated from BODE index and reported separately.
Budweiser S, Heinemann F, et al. Weight gain in cachectic COPD patients receiving noninvasive positive-pressure ventilation. <i>Respir Care</i> 2006 Feb; 51(2): 126-32. PMID: 16441956	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Burgel PR, Nesme-Meyer P, et al. Cough and sputum production are associated with frequent exacerbations and hospitalizations in COPD subjects. <i>Chest</i> 2009; 135(4): 975-982. PMID: 19017866	No BW/BC data in relation to outcomes of interest.
Budweiser S, Meyer K, et al. Nutritional depletion and its relationship to respiratory impairment in patients with chronic respiratory failure due to COPD or restrictive	Secondary exclusion: Cross-sectional study design.

Article	Reason for Exclusion ¹
thoracic diseases. <i>Eur J Clin Nutr</i> 2008 Mar; 62(3):436-43. Epub 2007 Mar 7. PMID: 17342162	
Burgel PR, Escamilla R, et al. (2013) Impact of comorbidities on COPD-specific health-related quality of life. <i>Respir Med</i> 2013; 107(2): 233-241. PMID: 23098687	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Byun MK, Cho EN, et al. Sarcopenia correlates with systemic inflammation in COPD. <i>Int J Chron Obstruct Pulmon Dis</i> 2017 Feb 20; 12 669-675. eCollection 2017. PMID: 28255238	Secondary exclusion: Cross-sectional study design.
Camargo LACDR, Castellano MVO, et al. Hospitalization due to exacerbation of COPD: "Real-life" outcomes. <i>Rev Assoc Med Bras</i> 1992; 2017 Jun; 63(6):543-549. PMID: 28876432	No outcomes of interest (mortality or lung function) were reported.
Camelier A, Rosa FW, et al. Brazilian version of airways questionnaire 20: a reproducibility study and correlations in patients with COPD. <i>Respir Med</i> 2005; 99(5):602-608. PMID: 15823458	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Camillo CA, Pitta F, et al. Heart rate variability and disease characteristics in patients with COPD. <i>Lung</i> 2008; 186(6): 393-401. PMID: 18815834	No BW/BC data in relation to outcomes of interest.
Cano NJ, Roth H, et al. Nutritional depletion in patients on long-term oxygen therapy and/or home mechanical ventilation. <i>Eur Respir J</i> . 2002 Jul; 20(1):30-7. PMID: 12166577	Not all COPD population; data were not reported separately for COPD population. Published prior to 2005.
Cano NJ, Pichard C, et al. Survival of patients with chronic respiratory failure on long-term oxygen therapy and or non-invasive ventilation at home. <i>Clin Nutr</i> . 2015 Aug; 34(4):739-44. PMID: 25240804	Not all COPD population; data were not reported separately for COPD population.
Cano NJ, Pichard C, Roth H, et al. C-reactive protein and body mass index predict outcome in end-stage respiratory failure. <i>Chest</i> . 2004; 126(2):540-6. PMID: 15302742 DOI: 10.1378/chest.126.2.540.	While data were reported separately for COPD patients, mortality or lung function were not primary outcomes of the study; published prior to 2005.
Carrasco Garrido P, de Miguel Diez J, et al. Negative impact of chronic obstructive pulmonary disease on the health-related quality of life of patients. Results of the EPIDEPOC study <i>Health Qual Life Outcomes</i> . 2006; 4(0): 31. PMID: 16719899	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Carter R, Holiday D B, et al. 6-minute walk work for assessment of functional capacity in patients with COPD. <i>Chest</i> . 2003;123(5):1408-1415. PMID: 12740255	No BW/BC data in relation to outcomes of interest; published prior to 2005.
Casanova C, de Torres JP, et al. The progression of chronic obstructive pulmonary disease is heterogeneous: the experience of the BODE cohort. <i>Am J Respir Crit Care Med</i> 2011 184(9):1015-1021. PMID: 21836135	BMI was not separated from BODE index and reported separately.
Catalfo G, Crea L, et al. (2016) Depression, body mass index, and chronic obstructive pulmonary disease - a holistic approach. <i>Intl J Chron Obstruct Pulmon Dis</i> 2016;11(0):239-249. PMID: 26929612	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Cecere LM, Littman AJ, et al. Obesity and COPD: associated symptoms, health-related quality of life, and medication use. <i>COPD</i> 2011; 8(4):275-284. PMID: 21809909	Mortality or lung function were not primary outcomes of the study.
Cedano S, Belasco AG, et al. (2012) Influence that sociodemographic variables, clinical characteristics, and level of dependence have on quality of life in COPD patients on long-term home oxygen therapy. <i>J Bras Pneumol</i> 2012; 38(3):331-338. PMID: 22782603	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Celli BR, Calverley PM, et al. A. Proposal for a multidimensional staging system for chronic obstructive pulmonary disease. <i>Respir Med</i> 2005; 99(12):1546-1554. PMID:16291077	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.

Article	Reason for Exclusion ¹
Celli BR, Cote CG, et al. The body-mass index, airflow obstruction, dyspnea, and exercise capacity index in chronic obstructive pulmonary disease. <i>NEJM</i> 2004; 350(10): 1005-1012. PMID:14999112	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes. Published prior to 2005.
Celli BR, Thomas NE, et al. Effect of pharmacotherapy on rate of decline of lung function in chronic obstructive pulmonary disease: results from the TORCH study. <i>Am J Respir Crit Care Med</i> 2008; 178(4):332-338. PMID: 18511702	No BW/BC data in relation to outcomes of interest.
Cerdá B, Soto C, Albaladejo MD, et al. Pomegranate juice supplementation in chronic obstructive pulmonary disease: a 5-week randomized, double-blind, placebo-controlled trial. <i>EJCN</i> 2006; 60(2): 245-253. PMID: 16278692	No BW/BC data in relation to outcomes of interest.
Cesari M, Pedone C, et al. Physical performance, sarcopenia and respiratory function in older patients with chronic obstructive pulmonary disease. <i>Age Ageing</i> . 2012; 41(2): 237-241. PMID: 22156558	Mortality or lung function were not primary outcomes of the study.
Chailleux E, Laaban JP, Veale D. Prognostic value of nutritional depletion in patients with COPD treated by long-term oxygen therapy: data from the ANTADIR observatory. <i>Chest</i> . 2003 May; 123(5):1460-6. PMID: 12740261	Secondary exclusion: Cross-sectional study design; published prior to 2005.
Chan KH, Yeung SC, et al. (2010) Elevated plasma adiponectin levels in patients with chronic obstructive pulmonary disease. <i>Int J Tuberc Lung Dis</i> 2010; 14(9):1193-1200. PMID: 20819268	Mortality or lung function were not primary outcomes of the study.
Chavannes NH, Huibers MJ, et al. Associations of depressive symptoms with gender, body mass index and dyspnea in primary care COPD patients. <i>Family Pract</i> 2005; 22(6):604-607. PMID: 16024555	Mortality or lung function were not primary outcomes of the study.
Chen LF, Wang CH, Chou PC, et al. Association Between Emphysema Score, Six-Minute Walk and Cardiopulmonary Exercise Tests in COPD. <i>Open Respir Med J</i> . 2012; 6:104–110. PMID: 23115601	BMI was not separated from BODE index and reported separately.
Chen YC, Liu SF, et al. Association of tumor necrosis factor-alpha-863C/A gene polymorphism with chronic obstructive pulmonary disease. <i>Lung</i> 2010; 188(4):339-347. PMID: 20352242	No BW/BC data in relation to outcomes of interest.
Chen CZ, Ou CY, et al. Comparison of global initiative for chronic obstructive pulmonary disease 2013 classification and body mass index, airflow obstruction, dyspnea, and exacerbations index in predicting mortality and exacerbations in elderly adults with chronic obstructive pulmonary disease. <i>J Am Geriatr Soc</i> . 2015 Feb; 63(2):244-50. Epub 2015 Feb 2. PMID: 25641518	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Chen Y, Breithaupt K, Muhajarine, N. Occurrence of chronic obstructive pulmonary disease among Canadians and sex-related risk factors <i>J Clin Epid</i> . 2000; 53(7):755-761. PMID: 10941954	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes; published prior to 2005.
Chuang ML, Lin, IF, et al. Kinetics of changes in oxyhemoglobin saturation during walking and cycling tests in COPD. <i>Respir Care</i> , 2014; 59(3):353-362. PMID: 23942752	No BW/BC data in relation to outcomes of interest.
Chung JH, Hwang HJ, et al. Association between sarcopenia and metabolic syndrome in chronic obstructive pulmonary disease: the Korea National Health and Nutrition Examination Survey (KNHANES) from 2008 to 2011 <i>COPD</i> 2015; 12(1):82-89. PMID: 24914701	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Cochrane WJ, Afolabi OA. Investigation into the nutritional status, dietary intake and smoking habits of patients with chronic obstructive pulmonary disease. <i>J Hum Nutr Diet</i> . 2004; 17(1): 3-11; quiz 13-5. PMID: 14718026.	No outcomes of interest (mortality or lung function) were reported; published prior to 2005.
Coin A, Sergi G, et al. Predictors of low bone mineral density in elderly males with chronic obstructive pulmonary disease: the role of body mass index. <i>Aging Male</i> 2010; 13(2):142-147. PMID: 20429721	No outcomes of interest (mortality or lung function) were reported.
Çolak Y, Marott JL, Vestbo J, Lange P. Overweight and obesity may lead to under-diagnosis of airflow limitation: findings from the Copenhagen City Heart Study. <i>COPD</i> . 2015 Feb; 12(1): 5-13. Epub 2014 Oct 7. PMID: 25290888	Not all COPD population; general population.

Article	Reason for Exclusion ¹
Collins BF, Ramenofsky D, et al. The association of weight with the detection of airflow obstruction and inhaled treatment among patients with a clinical diagnosis of COPD. <i>Chest</i> . 2014; 146(6):1513-1520. PMID: 24763942	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Comeche Casanova L, Echave-Sustaeta JM, et al. Prevalence of anaemia associated with chronic obstructive pulmonary disease. Study of associated variables. <i>Archivos de Bronconeumologia</i> . 2013; 49(9):383-387. PMID: 23791383	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Costa TM, Costa FM, et al. Sarcopenia in COPD: relationship with COPD severity and prognosis. <i>J Bras Pneumol</i> . 2015 Sep-Oct; 41(5): 415-21. PMID: 26578132	Secondary exclusion: Cross-sectional study design.
Coxson HO, Dirksen A, et al. The presence and progression of emphysema in COPD as determined by CT scanning and biomarker expression: a prospective analysis from the ECLIPSE study. <i>Lancet Respir Med</i> . 2013 Apr; 1(2): 129-36. Epub 2013 Feb 1. PMID: 24429093	BW/BC was not evaluated in relation to outcomes.
Creutzberg EC, Wouters EF, et al. Efficacy of nutritional supplementation therapy in depleted patients with chronic obstructive pulmonary disease. <i>Nutrition</i> . 2003; 19(2): 120-7. PMID: 12591542.	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes. Published prior to 2005.
Creutzberg EC, Wouters EF, et al. A role for anabolic steroids in the rehabilitation of patients with COPD? A double-blind, placebo-controlled, randomized trial <i>Chest</i> . 2003. 124(5):1733-1742. PMID: 14605042	No BW/BC data in relation to outcomes of interest.
Creutzberg EC, Schols AM, et al. Characterization of nonresponse to high caloric oral nutritional therapy in depleted patients with chronic obstructive pulmonary disease <i>Am J Respir Crit Care Med</i> 2000; 161(3):745-752. PMID: 10712317	Less than 10 subjects per study group; published prior to 2005.
Crim C, Calverley PM, et al. Pneumonia risk in COPD patients receiving inhaled corticosteroids alone or in combination: TORCH study results. <i>Eur Respir J</i> 2009; 34(3) 641-647. PMID: 19443528	No outcomes of interest (mortality or lung function) were reported.
Crockett AJ, Cranston JM, et al. (2002) The impact of anxiety, depression and living alone in chronic obstructive pulmonary disease. <i>Qual Life Res</i> 2002; 11(4): 309-316. PMID: 12086116	No BW/BC data in relation to outcomes of interest; published prior to 2005.
da Silva SM, Paschoal IA, et al. COPD phenotypes on computed tomography and its correlation with selected lung function variables in severe patients. <i>Int J Chron Obstruct Pulmon Dis</i> 2016 11(0):503-513. PMID: 27042039	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Dale C, Nüesch E, et al. Why do thin people have elevated all-cause mortality? Evidence on confounding and reverse causality in the association of adiposity and COPD from the British Women's Heart and Health Study. <i>PLoS One</i> 2015 Apr 17; 10(4): e0115446. eCollection 2015. PMID: 25884834	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Dal Negro RW, Aquilani R, et al. Comprehensive effects of supplemented essential amino acids in patients with severe COPD and sarcopenia. <i>Monaldi Arch Chest Dis</i> 2010; 73(1): 25-33. PMID: 20499791	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Dal Negro RW, Tognella S, et al. Changes in blood hemoglobin and blood gases PaO ₂ and PaCO ₂ in severe COPD over a three-year telemonitored program of long-term oxygen treatment. <i>Multidiscip Respir Med</i> 2012, 7:15.	No outcomes of interest (mortality or lung function) were reported.
Dal Negro RW, Testa A, et al. Essential amino acid supplementation in patients with severe COPD: a step towards home rehabilitation. <i>Monaldi Arch Chest Dis</i> 2012; 77(2):67-75. PMID: 23193843	BW/BC was not evaluated in relation to outcomes.
Dal Negro RW, Celli BR. The BODECOST Index (BCI): a composite index for assessing the impact of COPD in real life. <i>Multidiscip Respir Med</i> . 2016 Mar 3; 11:10. doi: 10.1186/s40248-016-0045-4. eCollection 2016. PMID: 26941954	Used regression analysis to determine mortality/burden of care predicted using BODE index; BMI was not separated from BODE index and reported separately.

Article	Reason for Exclusion ¹
Date H, Aoe M, Nagahiro I, et al. Living-donor lobar lung transplantation for various lung diseases. <i>J Thor Cardio Surg</i> . 2003; 126(2):476-481.	Not all COPD population; Data for COPD subjects were not reported separately. Published prior to 2005.
De Angelis G, Sposato B, et al. Predictive indexes of nocturnal desaturation in COPD patients not treated with long term oxygen therapy. <i>Eur Rev Med Pharmacol Sci</i> 2001; 5(5): 173-179. PMID: 12201668	No BW/BC data in relation to outcomes of interest; published prior to 2005.
de Batlle J, Sauleda J, Balcells E, et al. Association between 3 and 6 fatty acid intakes and serum inflammatory markers in COPD. <i>J Nutri Biochem</i> . 2012; 23(7):817-821 5p. PMID: 21889886	No BW/BC data in relation to outcomes of interest.
De Benedetto F, Del Ponte A, et al. In COPD patients, body weight excess can mask lean tissue depletion: a simple method of estimation. <i>Monaldi Arch Chest Dis</i> . 2000; 55(4):273-278. PMID: 11057077	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes; published prior to 2005.
de Blasio F, Santaniello MG, et al. Raw BIA variables are predictors of muscle strength in patients with chronic obstructive pulmonary disease. <i>Eur J Clin Nutr</i> . 2017 Nov; 71(11): 1336-1340. Epub 2017 Sep 13. PMID: 28901331	Secondary exclusion: Cross-sectional study design.
Deacon SJ, Vincent EE, Greenhaff PL, et al. Randomized controlled trial of dietary creatine as an adjunct therapy to physical training in chronic obstructive pulmonary disease. <i>Amer J Respir Crit Care Med</i> . 2008; 178(3):233-239. PMID: 18420964	No BW/BC data in relation to outcomes of interest.
Decramer M, Molenberghs G, et al. (2011) Premature discontinuation during the UPLIFT study. <i>Respir Med</i> , 2011; 105(10): 1523-1530. PMID: 21530213	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Degache F, Costes, F, et al. Determination of isokinetic muscle strength in chronic heart failure patients and in patients with chronic obstructive pulmonary disease. <i>Isokinetics & Exer Sci</i> , 2003; 11(1), 31-35.	Less than 10 COPD subjects per study group; published prior to 2005.
Degen, H. Sanchez Horneros JM. Et al. Skeletal muscle contractility is preserved in COPD patients with normal fat-free mass. <i>Acta Physiologica Scandinavica</i> , 2005; 184(3):235-242. PMID: 15954991	Less than 10 COPD subjects per study group.
de Moraes MR, da Costa AC, et al. Interleukin-6 and interleukin-8 blood levels' poor association with the severity and clinical profile of ex-smokers with COPD. <i>Int J Chron Obstruct Pul Dis</i> 2014; 9(0): 735-743. PMID: 25114519	No BW/BC data in relation to outcomes of interest.
de Torres JP, Marin JM, et al. Lung cancer in patients with chronic obstructive pulmonary disease-- incidence and predicting factors. <i>Amer J Respir Crit Care Med</i> 2011; 184(8): 913-919. PMID: 21799072	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
de Torres JP, Casanova C, et al. Gender and respiratory factors associated with dyspnea in chronic obstructive pulmonary disease. <i>Respir Res</i> . 2007; 8(0): 18. PMID: 17341300	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
de Torres JP, Cordoba-Lanus E, et al. C-reactive protein levels and clinically important predictive outcomes in stable COPD patients. <i>Euro Respir J</i> 2006; 27(5): 902-907. PMID: 16455829	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
de Voogd JN, Wempe JB, et al. Depressive symptoms as predictors of mortality in patients with COPD. <i>Chest</i> . 2009 Mar; 135(3): 619-625. doi: 10.1378/chest.08-0078. Epub 2008 Nov 24. PMID: 19029432.	No BW/BC data in relation to outcomes of interest.
Dhakal N, Lamsal M, et al. Oxidative stress and nutritional status in chronic obstructive pulmonary disease. <i>J Clin Diagn Res</i> . 2015 Feb; 9(2): BC01-4. Epub 2015 Feb 1. PubMed PMID: 25859442.	No outcomes of interest (mortality or lung function) were reported.
Ding Y, Xu J, et al. The analyses of risk factors for COPD in the Li ethnic group in Hainan, People's Republic of China. <i>Int J Chron Obstruct Pulmon Dis</i> . 2015 Nov 30; 10: 2593-600. eCollection 2015. PMID: 26664107	Not all COPD population; risk for COPD examined.

Article	Reason for Exclusion ¹
Domagala-Kulawik J, Hoser G, et al. CD4+/CD25+ cells in systemic inflammation in COPD. <i>Scand J Immun</i> , 2011; 73(1): 59-65. PMID: 21129004	BMI and outcomes were not evaluated independently.
Domingo-Salvany A, Lamarca R, et al. Health-related quality of life and mortality in male patients with chronic obstructive pulmonary disease. <i>Am J Respir Crit Care Med</i> . 2002 Sep 1; 166(5): 680-5. PMID: 12204865	Secondary exclusion: Cross-sectional study design; published prior to 2005.
Dourado VZ, Antunes LC, et al. Relationship of upper-limb and thoracic muscle strength to 6-min walk distance in COPD patients. <i>Chest</i> . 129(3):551-557. PMID: 16537851	No BW/BC data in relation to outcomes of interest.
Dubey A, Kant S, et al. Leptin level correlates with obesity and health related quality of life in obstructive sleep apnea syndrome patients. <i>Indian J Tuberc</i> . 2015 Apr; 62(2): 105-9. Epub 2015 Jun 12. PMID: 26117480	Not a COPD population; COPD patients were excluded.
Eagan TM, Aukrust, P. et al. Body composition and plasma levels of inflammatory biomarkers in COPD. <i>Eur Respir J</i> 2010; 36(5): 1027-1033. PMID: 20413541	No outcomes of interest (mortality or lung function) were reported.
Eagan TM, Gabazza EC, et al. (2012) TNF-alpha is associated with loss of lean body mass only in already cachectic COPD patients. <i>Respir Res</i> , 2012; 13(0): 48-9921-13-48. PMID: 22708547	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Eaton T, Young P, et al. Does early pulmonary rehabilitation reduce acute health-care utilization in COPD patients admitted with an exacerbation? A randomized controlled study <i>Respirology</i> 2009; 14(2): 230-238. PMID: 19272084	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Ehrlich RI, White N, et al. Predictors of chronic bronchitis in South African adults. <i>Int J Tuberc Lung Dis</i> 2004; 8(3): 369-376. PMID: 15139477	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes. Published prior to 2005.
Eid AA, Ionescu AA, et al. Inflammatory response and body composition in chronic obstructive pulmonary disease. <i>Am J Respir Crit Care Med</i> 2001; 164(8): 1414-1418. PMID: 11704588	Mortality or lung function were not primary outcomes of the study; published prior to 2005.
Eisner MD, Blanc PD, et al. Body composition and functional limitation in COPD. <i>Respir Res</i> .2007; 8(0):7. PMID: 17261190	BW/BC outcome is not the primary independent variable (not the primary predictor).
Eisner MD, Iribarren C, et al. Development of disability in chronic obstructive pulmonary disease: beyond lung function. <i>Thorax</i> , 2011; 66(2): 108-114. PMID: 21047868	BW/BC outcome is not the primary independent variable (not the primary predictor).
Eker S, Ayaz L, et al. Leptin, visfatin, insulin resistance, and body composition change in chronic obstructive pulmonary disease. <i>Scand J Clin Lab Invest</i> , 2010; 70(1):40-44. PMID: 20021311	No outcomes of interest (mortality or lung function) were reported.
Ekici A, Bulcun E, et al. Factors Associated With Quality of Life in Subjects With Stable COPD. <i>Respir Care</i> . 2015 Nov; 60(11): 1585-91. Epub 2015 Jul 7. PMID: 26152471	No BW/BC data in relation to outcomes of interest.
Eliason G, Abdel-Halim S, et al. Physical performance and muscular characteristics in different stages of COPD. <i>Scand J Med Sci Sports</i> , 2009; 19(6): 865-870. PMID: 18980606	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Emtner M, Hallin R, Arnardottir RH, Janson C. Effect of physical training on fat-free mass in patients with chronic obstructive pulmonary disease (COPD). <i>Ups J Med Sci</i> . 2015 Mar; 120(1): 52-8. Epub 2014 Nov 28. PMID: 25430624	No outcomes of interest (mortality or lung function) were reported.
Engelen MP, De Castro CL, et al. Enhanced anabolic response to milk protein sip feeding in elderly subjects with COPD is associated with a reduced splanchnic extraction of multiple amino acids. <i>Clin Nutr</i> . 2012; 31(5): 616-624. PMID: 22682082	Less than 10 subjects per study group.
Engelen MPK, Deutz NEP, et al. Response of whole-body protein and urea turnover to exercise differs between patients with chronic obstructive pulmonary disease with	Less than 10 subjects per study group; published prior to 2005.

Article	Reason for Exclusion ¹
and without emphysema. <i>Amer J Clin Nutr.</i> 2003; 77(4): 868-874 7p. PMID: 12663285	
Engelen MPK, Rutten EPA, et al. Supplementation of soy protein with branched-chain amino acids alters protein metabolism in healthy elderly and even more in patients with chronic obstructive pulmonary disease. <i>Amer J Clin Nutr.</i> 2007; 85(2): 431-439 9p. PMID: 7284740.	Less than 10 subjects per study group.
Engelen MPK, Wouters EFM, et al. Factors contributing to alterations in skeletal muscle and plasma amino acid profiles in patients with chronic obstructive pulmonary disease. <i>Amer J Clin Nutr.</i> 2000; 72(6): 1480-1487 8p. PMID: 11101475	Mortality or lung function were not primary outcomes of the study; published prior to 2005.
Engelen MP, Deutz NE, et al. Enhanced levels of whole-body protein turnover in patients with chronic obstructive pulmonary disease. <i>Amer J Respir Crit Care Med</i> 2000; 162(4): 1488-1492. PMID: 11029366	Less than 10 subjects per study group; published prior to 2005.
Ergün P, Kaymaz D, et al. Comprehensive out-patient pulmonary rehabilitation: Treatment outcomes in early and late stages of chronic obstructive pulmonary disease. <i>Ann Thorac Med.</i> 2011 Apr; 6(2):70-6. PMID: 21572695	BW/BC outcome is not the primary independent variable (not the primary predictor).
Ergun, P. Turay, UY, et al. Nutritional status of COPD patients with acute exacerbation <i>Tuberkuloz ve toraks.</i> 2003; 51(3):239-243. PMID: 15143400	Mortality or lung function were not primary outcomes of the study; published prior to 2005.
Esteban C, Quintana JM, et al. Predictors of mortality in patients with stable COPD. <i>J Gen Int Med</i> 2008; 23(11): 1829-1834. PMID: 18795373	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Faager G, Söderlund K, et al. Creatine supplementation and physical training in patients with COPD: a double blind, placebo-controlled study. <i>Inter J Chron Obstruc Pulmon Dis.</i> 2006; 1(4): 445-453. PMID: 18044100	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Faganello MM, Tanni SE, et al. BODE index and GOLD staging as predictors of 1-year exacerbation risk in chronic obstructive pulmonary disease. <i>Amer J Med Sci,</i> 2010; 339(1): 43022. PMID: 19926966	BMI was not separated from BODE index and reported separately.
Fan VS, Ramsey SD, et al. Physiologic variables and functional status independently predict COPD hospitalizations and emergency department visits in patients with severe COPD. <i>COPD.</i> 2007; 4(1): 29-39. PMID: 17364675	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Farooqi N, Slinde F, et al. Assessment of energy intake in women with chronic obstructive pulmonary disease: a doubly labeled water method study. <i>J Nutr Health Aging.</i> 2015 May; 19(5): 518-24. PMID: 25923480	BW/BC was not evaluated in relation to outcomes.
Fayngersh V, Drakopanagiotakis F, et al. Pulmonary hypertension in a stable community-based COPD population. <i>Lung,</i> 2011; 189(5): 377-382. PMID: 21814783	BW/BC was not evaluated in relation to outcomes.
Feghali-Bostwick CA, Gadgil AS, et al. Autoantibodies in patients with chronic obstructive pulmonary disease. <i>Amer J Respir Crit Care Med</i> 2008; 177(2):156-163. PMID: 17975205	Less than 10 subjects per study group.
Feliz-Rodriguez D, Zudaire S, et al. (2013) Evolution of the COPD Assessment Test score during chronic obstructive pulmonary disease exacerbations: determinants and prognostic value. <i>Can Respir J</i> 2013; 20(5): e92-7.	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Fermoselle C, Rabinovich R, et al. (2012) Does oxidative stress modulate limb muscle atrophy in severe COPD patients? <i>Euro Respir J</i> 2012; 40(4): 851-862. PMID: 22408199	No BW/BC data in relation to outcomes of interest.
Fernández-Villar A, López-Campos JL, et al. Factors associated with inadequate diagnosis of COPD: On-Sint cohort analysis. <i>Int J Chron Obstruct Pulmon Dis.</i> 2015 May 18; 10:961-7. eCollection 2015. PMID: 26028969	BW/BC outcomes were not reported.
Ferrari R, Tanni SE, et al. Three-year follow-up study of respiratory and systemic manifestations of chronic obstructive pulmonary disease. <i>Braz J Med Biol Res</i> 2011; 44(1): 46-52. PMID: 21180880	BW/BC outcome is not a primary independent variable (not the primary predictor).

Article	Reason for Exclusion ¹
Ferreira IM, Brooks D, et al. Nutritional support for individuals with COPD: a meta-analysis. <i>Chest</i> . 2000; 117(3): 672-678. PMID: 10712990	Meta-analysis; not primary research; published prior to 2005.
Figueira Gonçalves JM, Pérez Méndez LI, et al. Impact of body mass index on the predictive capacity of the COPD-6 device in the detection of airflow obstruction. <i>Med Clin</i> 2017 Dec 7; 149(11): 483-487. Epub 2017 Jun 29. PMID: 28669515	Mortality or lung function were not primary outcomes of the study.
Fischer MJ, Scharloo M, Abbink JJ, et al. Drop-out and attendance in pulmonary rehabilitation: the role of clinical and psychosocial variables. <i>Respir Med</i> . 2009; 103(10): 1564-71. PMID: 19481919.	No BW/BC data in relation to outcomes of interest.
Forli L, Halse J, et al. Vitamin D deficiency, bone mineral density and weight in patients with advanced pulmonary disease. <i>J Int Med</i> . 256(1): 56-62. PMID: 15189366	Not all COPD population; results for COPD patients were not reported separately.
Forli L, Mellbye OJ, et al. Cytokines, bone turnover markers and weight change in candidates for lung transplantation. <i>Pulm Pharmacol Ther</i> 2008; 21(1): 188-195. PMID: 17419084	Mortality or lung function were not primary outcomes of the study.
Foschino Barbaro MP, Carpagnano GE, et al. Inflammation, oxidative stress and systemic effects in mild chronic obstructive pulmonary disease. <i>Int J Immunopathol Pharmacol</i> 2007; 20(4): 753-763. PMID: 18179748	No BW/BC data in relation to outcomes of interest.
Fountoulis GA, Minas M, et al. Association of bone mineral density, parameters of bone turnover, and body composition in patients with chronic obstructive pulmonary disease. <i>J Clin Densitom</i> 2012; 15(2): 217-223. PMID: 22154434	BW/BC outcome is not the primary independent variable (not the primary predictor); bone mineral density, not BW/BC.
Franssen FM, Sauerwein HP, et al. Increased postabsorptive and exercise-induced whole-body glucose production in patients with chronic obstructive pulmonary disease. <i>Metabolism</i> 2011; 60(7):957-964. PMID: 21056887	Less than 10 subjects per study group.
Franssen FM, Sauerwein HP, et al. Whole-body resting and exercise-induced lipolysis in sarcopenic [corrected] patients with COPD. <i>Eur Respir J</i> 2008; 32(6): 1466-1471. PMID: 18579550	Less than 10 subjects per study group.
Franssen FM, Broekhuizen R, et al. Effects of whole-body exercise training on body composition and functional capacity in normal-weight patients with COPD <i>Chest</i> . 2004; 125(6): 2021-2028. PMID: 15189917	Mortality or lung function were not primary outcomes of the study; published prior to 2005.
Franssen FM, Broekhuizen R, et al. Limb muscle dysfunction in COPD: effects of muscle wasting and exercise training. <i>Med Sci Sports Exerc</i> 2005; 37(1): 42775. PMID: 15632660	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Frisk B, Espehaug B, et al. Physical activity and longitudinal change in 6-min walk distance in COPD patients. <i>Respir Med</i> , 2014; 108(1): 86-94. PMID: 24075305	No outcomes of interest (mortality or lung function) were reported.
Fujimoto H, Asai K, et al. Association of six-minute walk distance (6MWD) with resting pulmonary function in patients with chronic obstructive pulmonary disease (COPD). <i>Osaka City Med J</i> 2011; 57(1):21-29. PMID: 22106764	No BW/BC data in relation to outcomes of interest.
Fukutani N, Yamada M, Nishiguchi S, et al. The physiological characteristics of community-dwelling elderly Japanese with airflow limitation: a cross-sectional study. <i>Aging Clin Exp Res</i> . 2015 Feb; 27(1):69-74. Epub 2014 Jun 1. PMID: 24880698	Secondary exclusion: Cross-sectional study design.
Fumagalli G, Fabiani F, et al. INDACO project: a pilot study on incidence of comorbidities in COPD patients referred to pneumology units. <i>Multidiscip Respir Med</i> 2013, 8(1):28. PMID: 23551874	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Fung A, Chan LLC, So CT, et al. Reliability and validity of the self-administered Chinese version of the shortness of breath questionnaire (C-SOBQ) in patients with chronic obstructive pulmonary disease. <i>Hong Kong J Occup Th</i> . 2012; 22(2);75-83	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Furlanetto KC, Pinto IFS, et al. Profile of patients with chronic obstructive pulmonary disease classified as physically active and inactive according to different thresholds of physical activity in daily life. <i>Brazilian J Phys Ther</i> 2016; 20(6):517-524.	BW/BC outcome is not the primary independent variable (not the primary predictor); evaluated physical activity and lung function.

Article	Reason for Exclusion ¹
Furutate R, Ishii T, et al. Excessive visceral fat accumulation in advanced chronic obstructive pulmonary disease. <i>Int J Chron Obs Pulmon Dis</i> 2011; 6(0):423-430. PMID: 21857782	Mortality or lung function were not primary outcomes of the study.
Gaki E, Papatheodorou G, et al. Correlation between frequency of hospitalization of patients with severe copd and severity indices. <i>Pneumon</i> , 2011; 24(2):157-171	No BW/BC data in relation to outcomes of interest.
Gaki E, Kontogianni K, et al. Associations between BODE index and systemic inflammatory biomarkers in COPD. <i>COPD</i> 2011; 8(6):408-413. PMID: 22149400	BMI was not separated from BODE index and reported separately.
Garcia-Aymerich J, Felez MA, et al. Physical activity and its determinants in severe chronic obstructive pulmonary disease. <i>Med Sci Sports Exerc</i> 2004; 36(10):1667-1673. PMID: 15595285	No BW/BC data in relation to outcomes of interest; published prior to 2005.
Garcia-Rio F, Soriano JB, et al. Impact of obesity on the clinical profile of a population-based sample with chronic obstructive pulmonary disease. <i>PLoS One</i> 2014; 9(8): e105220. PMID: 25153331	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Garcia-Rio F, Miravittles M, et al. Systemic inflammation in chronic obstructive pulmonary disease: a population-based study. <i>Respir Res</i> 2010; 11(0):63-9921-11-63. PMID: 20500811	No BW/BC data in relation to outcomes of interest.
Garcia-Rio F, Romero D, et al. Dynamic hyperinflation, arterial blood oxygen, and airway oxidative stress in stable patients with COPD. <i>Chest</i> 2011; 140(4):961-969. PMID: 21436248	No BW/BC data in relation to outcomes of interest.
Galal W, van Gestel Y R, et al. The obesity paradox in patients with peripheral arterial disease. <i>Chest</i> 2008; 134(5):925-930. PMID: 18641109	Not all COPD population; Peripheral arterial disease.
Gariballa S, Forster S. Associations between underlying disease and nutritional status following acute illness in older people. <i>Clin Nutr</i> 2007; 26(4):466-73. PMID: 17383777	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Genç A, Üçok K, Şener Ü, et al. Association analyses of oxidative stress, aerobic capacity, daily physical activity, and body composition parameters in patients with mild to moderate COPD. <i>Turk J Med Sci</i> 2014 44(6): 972-9. PMID: 25552149	Secondary exclusion: Cross-sectional study design.
Genç A, Uçok K, et al. Effects of long-acting beta-2 agonist treatment on daily energy balance and body composition in patients with chronic obstructive pulmonary disease. <i>Turk J Med Sci</i> 2012; 42 (Sup.2):1414-1422.	BW/BC outcome is not the primary independent variable (not the primary predictor).
Ghanei M, Aslani J, et al. Logistic regression model to predict chronic obstructive pulmonary disease exacerbation. <i>Arch Med Sci</i> 2007; 3, 4:360-366.	No BW/BC data in relation to outcomes of interest.
Ghoddusi K, Aslani J, et al. Association of depression with body mass index in patients with chronic obstructive pulmonary disease. <i>Tanaffos</i> 2007; 6(3):47-53.	No outcomes of interest (mortality or lung function) were reported.
Girón R, Matesanz C, et al. Nutritional state during COPD exacerbation: clinical and prognostic implications. <i>Ann Nutr Metab</i> 2009; 54(1):52-8. Epub 2009 Mar 2. PMID: 19252400	Secondary exclusion: Cross-sectional study design.
Godoy I, Castro E Silva, MH, et al. Is chronic hypoxemia in patients with chronic obstructive pulmonary disease associated with more marked nutritional deficiency? A study of the fat-free mass evaluated by anthropometry and bioelectrical impedance methods. <i>J Nutr Health Aging</i> 2002; 4(2):102-8. PMID: 10842422	No outcomes of interest (mortality or lung function) were reported; published prior to 2005.
Godoy I, Campana AO, et al. Cytokines and dietary energy restriction in stable chronic obstructive pulmonary disease patients. <i>Eur Respir J</i> . 2003; 22(6):920-5. PMID: 14680079.	No outcomes of interest (mortality or lung function) were reported; published prior to 2005.
Golpe R, Mengual-Macennle N, et al. Prognostic Indices and Mortality Prediction in COPD Caused by Biomass Smoke Exposure. <i>Lung</i> 2015 Aug; 193(4):497-503. Epub 2015 Apr 30. PMID: 25926292	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Gonlugur U, E Gonlugur T. A Retrospective Analysis of Nutritional Parameters in Chronic Obstructive Pulmonary Disease between Sexes. <i>J Clin Biochem Nutr</i> . 2007 Nov; 41(3):175-8. PMID: 18299712	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.

Article	Reason for Exclusion ¹
Goossens LM, Baker CL, et al. Adjusting for COPD severity in database research: developing and validating an algorithm. <i>Intl J Chron Obstruc Pulmon Dis.</i> 2011; 6(0):669-78. PMID: 22259243	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Görek Dilektaşlı A, Ulubay G, et al. The effects of cachexia and related components on pulmonary functions in patients with COPD. <i>Tuberk Toraks.</i> 2009; 57(3):298-305. PMID: 19787469	Secondary exclusion: Cross-sectional study design.
Goris,AH, Vermeeren MA, et al. Energy balance in depleted ambulatory patients with chronic obstructive pulmonary disease: the effect of physical activity and oral nutritional supplementation. <i>Brit J Nutr.</i> 2003; 89(5):725-31. PMID: 12720592	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes. Published prior to 2005.
Gosker HR, Engelen MPK, van Mameren H, et al. Muscle fiber type IIX atrophy is involved in the loss of fat-free mass in chronic obstructive pulmonary disease. <i>Amer J Clin Nutr.</i> 2002;76(1):113-119 7p. PMID: 1208182	Evaluated muscle fiber area and mortality; not a measure of body composition. Published prior to 2005.
Graat-Verboom L, Wouters EF, et al. Current status of research on osteoporosis in COPD: a systematic review. <i>Euro Respir J.</i> 2009; 34(1):209-218. PMID: 19567604	Review article; Not primary research.
Graat-Verboom L, Smeenk FW, et al. Risk factors for osteoporosis in Caucasian patients with moderate chronic obstructive pulmonary disease: a case control study. <i>Bone.</i> 2012; 50(6):1234-39. PMID: 22426499	No outcomes of interest (mortality or lung function) were reported.
Graat-Verboom L, Spruit MA, et al. Correlates of osteoporosis in chronic obstructive pulmonary disease: An underestimated systemic component. <i>Respir Med.</i> 2009; 103(8):1143-51. PMID: 19304474	No outcomes of interest (mortality or lung function) were reported.
Graat-Verboom L, van den Borne BE, et al. Osteoporosis in COPD outpatients based on bone mineral density and vertebral fractures. <i>J Bone Miner Res</i> 2011; 26(3):561-8. PMID: 20878771	No BW/BC data in relation to outcomes of interest.
Grace J, Leader JK, et al. Mediastinal and Subcutaneous Chest Fat Are Differentially Associated with Emphysema Progression and Clinical Outcomes in Smokers. <i>Respir.</i> 2017; 94(6):501-9. Epub 2017 Sep 15. PMID: 28910816	Not all COPD subjects.
Greening NJ, Evans RA, et al. Does body mass index influence the outcomes of a Waking-based pulmonary rehabilitation programme in COPD?. <i>Chronic Respir Dis.</i> 2012; 9(2): 99-106. PMID: 22414784	No outcomes of interest (mortality or lung function) were reported.
Groenewegen KH, Schols AM, Wouters EF. Mortality and mortality-related factors after hospitalization for acute exacerbation of COPD. <i>Chest.</i> 2003; 124(2): 459-467. PMID: 12907529	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes. Published prior to 2005.
Grolimund E, Kutz A, et al. Long-term Prognosis in COPD Exacerbation: Role of Biomarkers, Clinical Variables and Exacerbation Type. <i>COPD.</i> 2015 Jun;12(3):295-305. Epub 2014 Sep 17. PMID: 25230352	No BW/BC data in relation to outcomes of interest.
Gronberg AM, Slinde F, et al. Dietary problems in patients with severe chronic obstructive pulmonary disease. <i>J Hum Nutr Diet</i> 2005;18(6):445-452. PMID: 16351703	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Gu S, Li R, et al. Obesity and extent of emphysema depicted at CT. <i>Clin Radiol.</i> 2015 May; 70(5):e14-9. Epub 2015 Feb 19. PMID: 25703460	Mortality or lung function were not primary outcomes of the study.
Gudmundsson G, Ulrik CS, et al. Long-term survival in patients hospitalized for chronic obstructive pulmonary disease: a prospective observational study in the Nordic countries. <i>Intl J Chron Obstruct Pulmon Dis.</i> 2012; 7(0). 571-576. PMID: 23055707	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Guenegou A, Boczkowski J, et al. Interaction between a heme oxygenase-1 gene promoter polymorphism and serum beta-carotene levels on 8-year lung function decline in a general population: the European Community Respiratory Health Survey (France). <i>Amer J Epid.</i> 2008; 167(2): 139-144. PMID: 17971338	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.

Article	Reason for Exclusion ¹
Guerri R, Gayete A, et al. Mass of intercostal muscles associates with risk of multiple exacerbations in COPD. <i>Respir Med</i> , 2010; 104(3):378-388. PMID: 19932014	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Gunay E, Kaymaz D, et al. Effect of nutritional status in individuals with chronic obstructive pulmonary disease undergoing pulmonary rehabilitation. <i>Respirology</i> 2013; 18(8):1217-22. PMID: 23714353	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Gunen H, Hacievliyagil SS, et al. Factors affecting survival of hospitalised patients with COPD. <i>Euro Respir J</i> . 2005; 26(2):234-241. PMID: 16055870	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Gupta SS, Gothi D, Narula G, Sircar J. Correlation of BMI and oxygen saturation in stable COPD in Northern India. <i>Lung India</i> . 2014 Jan-Mar;31(1):29-34. PubMed PMID: 24669078.	Mortality or lung function were not primary outcomes of the study.
Gurgu, A, Karadağ V, et al. (2015). Evaluation of Exercise Capacity, Quality of Life, and Body Composition in Patients With COPD According to the New GOLD Classification. <i>Chest</i> , 2015; 148(4 Supp);710A.	Not a research study; Meeting abstract.
HajGhanbari B, Garland SJ, et al. Pain and physical performance in people with COPD. <i>Respir Med</i> . 2013; v107(11):1692-99. PMID: 23845881	No outcomes of interest (mortality or lung function) were reported.
Halldin CN, Doney BC, Hnizdo E. Changes in prevalence of chronic obstructive pulmonary disease and asthma in the US population and associated risk factors. <i>Chron Respir Dis</i> . 2015 Feb; 12(1):47-60. Epub 2014 Dec 24. PMID: 25540134	Mortality or lung function were not primary outcomes of the study.
Hallin R, Koivisto-Hursti UK, et al. Nutritional status, dietary energy intake and the risk of exacerbations in patients with chronic obstructive pulmonary disease (COPD). <i>Respir Med</i> . 2006; 100(3):561-7. PMID: 16019198.	No outcomes of interest (mortality or lung function) were reported.
Hallin R, Janson C, et al. Relation between physical capacity, nutritional status and systemic inflammation in COPD. <i>Clin Respir J</i> 2011; 5(3):136-42. PMID: 21679348	No outcomes of interest (mortality or lung function) were reported.
Hamnegard CH, Bake B, et al. Does undernutrition contribute to diaphragm weakness in patients with severe COPD? <i>Clin Nutr</i> . 2002; 21(3):239-43. PMID: 12127933	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes; published prior to 2005.
Hansen H, Johnsen NF, Molsted S. Time trends in leisure time physical activity, smoking, alcohol consumption and body mass index in Danish adults with and without COPD. <i>BMC Pulmon Med</i> . 2016. 16(1): 110-016-0265-6. PMID: 27473716	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Hany Assal H., Kamal E. Body mass index and its relation to GOLD stage in chronic obstructive pulmonary disease patients. <i>Egypt J Chest Dis Tuberc</i> 2016; 65, 411-4.	Secondary exclusion: Cross-sectional study design.
Harik-Khan RI, Fleg JL, Wise RA. Body mass index and the risk of COPD. <i>Chest</i> . 121(2):370-6. PMID: 11834645	Not a COPD population; examined risk of developing COPD.
Hartman JE, Prinzen J, et al. Frequent sputum production is associated with disturbed night's rest and impaired sleep quality in patients with COPD. <i>Sleep Breath</i> . 2015 Dec; 19(4): 1125-33. Epub 2015 Mar 4. PMID: 25737300	No BW/BC data in relation to outcomes of interest.
Haruna A, Muro S, et al. (2010) CT scan findings of emphysema predict mortality in COPD. <i>Chest</i> , 138(3):635-40. PMID: 20382712	No BW/BC data in relation to outcomes of interest.
Hattiholi J, Gaude GS. Prevalence and correlates of osteoporosis in chronic obstructive pulmonary disease patients in India. <i>Lung India</i> . 2014 Jul; 31(3):221-7. PMID: 25125807	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Hattiholi J, Gaude GS. Bone mineral density among elderly patients with chronic obstructive pulmonary disease patients in India. <i>Niger Med J</i> . 2013 Sep-Oct; 54(5): 295-301. PMID: 24403704	No BW/BC data in relation to outcomes of interest.

Article	Reason for Exclusion ¹
Hayashi Y, Senjyu H, et al. Prevalence of depressive symptoms in Japanese male patients with chronic obstructive pulmonary disease. <i>Psychiatry Clin Neurosci</i> 2011; 65(1):82-88. PMID: 21265940	No BW/BC data in relation to outcomes of interest.
Heijdra YF, Pinto-Plata V, et al. Muscle strength and exercise kinetics in COPD patients with a normal fat-free mass index are comparable to control subjects. <i>Chest</i> . 2003; 124(1):75-82. PMID: 12853505	BW/BC outcome is not the primary independent variable (not the primary predictor); published prior to 2005.
Helala L, Wagih K, et al. Study the relation between body mass index, waist circumference and spirometry in COPD patients. <i>Egypt J Chest Dis Tubers</i> , 2014; 63(2):321-7.	Secondary exclusion: Cross-sectional study design.
Hernandes NA, Wouters EF, et al. Reproducibility of 6-minute walking test in patients with COPD. <i>Euro Respir J</i> . 2011. 38(2): 261-267. PMID: 21177838	No BW/BC data in relation to outcomes of interest.
Higami Y, Ogawa E, et al. Increased Epicardial Adipose Tissue Is Associated with the Airway Dominant Phenotype of Chronic Obstructive Pulmonary Disease. <i>PloS One</i> . 2016; 11(2): e0148794. PMID: 26866482	No BW/BC data in relation to outcomes of interest.
Higashimoto Y, Yamagata T, et al. Clinical and inflammatory factors associated with body mass index in elderly patients with chronic obstructive pulmonary disease. <i>Geriatr Gerontol Int</i> . 2011 Jan; 11(1): 32-8. PMID: 20609004	Secondary exclusion: Cross-sectional study design.
Higashimoto Y, Yamagata T, et al. Influence of comorbidities on the efficacy of pulmonary rehabilitation in patients with chronic obstructive pulmonary disease. <i>Geriatr Gerontol Int</i> . 2016 Aug; 16(8):934-41. Epub 2015 Aug 5. PMID: 26246006	No outcomes of interest (mortality or lung function) were reported.
Ho SC, Hsu MF, et al. The relationship between anthropometric indicators and walking distance in patients with chronic obstructive pulmonary disease. <i>Int J Chron Obstruct Pulmon Dis</i> . 2015 Sep 8; 10:1857-62. eCollection 2015. PMID: 26392760	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Hogan D, Lan LT, et al. Nutritional status of Vietnamese outpatients with chronic obstructive pulmonary disease. <i>J Hum Nutr Diet</i> . 2017 Feb; 30(1):83-9. Epub 2016 Jul 27. PMID: 27460166	No outcomes of interest (mortality or lung function) were reported.
Hooper R, Burney P, et al. Risk factors for COPD spirometrically defined from the lower limit of normal in the BOLD project. <i>Euro Respir J</i> . 2012. 39(6): 1343-1353. PMID: 22183479	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Hopkinson NS, Li KW, Kehoe A, et al. Vitamin D receptor genotypes influence quadriceps strength in chronic obstructive pulmonary disease. <i>Amer J Clin Nutr</i> . 2008; 87(2):385-90 6p. PMID: 18258629	Evaluated quadriceps muscle response; not a measure of body composition.
Hopkinson NS, Tennant RC, et al. A prospective study of decline in fat free mass and skeletal muscle strength in chronic obstructive pulmonary disease. <i>Respir Res</i> . 2007; 8(0):25. PMID: 17355636	No outcomes of interest (mortality or lung function) were reported.
Hsu MF, Ho SC, et al. Mini-nutritional assessment (MNA) is useful for assessing the nutritional status of patients with chronic obstructive pulmonary disease: a cross-sectional study. <i>COPD</i> . 2014; 11(3): 325-332. PMID: 24475999	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Huertas A, Testa U, et al. Bone marrow-derived progenitors are greatly reduced in patients with severe COPD and low-BMI. <i>Respir Physiol Neurobiol</i> . 2010 Jan 31; 170(1): 23-31. Epub 2009 Nov 4. PMID: 19895908	No outcomes of interest (mortality or lung function) were reported.
Huijsmans RJ, de Haan A, et al. The clinical utility of the GOLD classification of COPD disease severity in pulmonary rehabilitation. <i>Respir Med</i> . 2008; 102(1):162-71. PMID: 17881207	BMI was not separated from BODE index and reported separately.
Hunter LC, Lee RJ, et al. Patient characteristics associated with risk of first hospital admission and readmission for acute exacerbation of chronic obstructive pulmonary disease (COPD) following primary care COPD diagnosis: a cohort study using linked electronic patient records. <i>BMJ Open</i> 2016; 6: e009121.	No outcomes of interest (mortality or lung function) were reported.
Husebo GR, Bakke PS, et al. Predictors of exacerbations in chronic obstructive pulmonary disease--results from the Bergen COPD cohort study. <i>PloS one</i> . 2014; 9(10): e109721. PMID: 25279458	No BW/BC data in relation to outcomes of interest.

Article	Reason for Exclusion ¹
Incalzi RA, Caradonna P, et al. Correlates of osteoporosis in chronic obstructive pulmonary disease. <i>Respir Med</i> . 2000; 94(11): 1079-1084. PMID: 11127495	No outcomes of interest (mortality or lung function) were reported; published prior to 2005.
Ingadottir AR, Beck AM, et al. Two components of the new ESPEN diagnostic criteria for malnutrition are independent predictors of lung function in hospitalized patients with chronic obstructive pulmonary disease (COPD). <i>Clin Nutr</i> . 2018 Aug; 37(4):1323-31. Epub 2017 Jun 8. PMID: 28641831	Secondary exclusion: Cross-sectional study design.
Ischaki E, Papatheodorou G, et al. Body mass and fat-free mass indices in COPD: relation with variables expressing disease severity. <i>Chest</i> . 2007 Jul; 132(1):164-9. Epub 2007 May 15. PMID: 17505043	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Itoh T, Nagaya N, et al. Elevated plasma ghrelin level in underweight patients with chronic obstructive pulmonary disease. <i>Amer J Respir Crit Care Med</i> . 2004; 170(8): 879-882. PMID: 15271696	No outcomes of interest (mortality or lung function) were reported; published prior to 2005.
Izquierdo JL, Barcina C, et al. Study of the burden on patients with chronic obstructive pulmonary disease. <i>Inter J Clin Pract</i> . 2009; 63(1):87-97. PMID: 19125996	No outcomes of interest (mortality or lung function) were reported.
Jacob A, Laurin C, et al. The impact of body mass index on inpatient- versus outpatient-treated chronic obstructive pulmonary disease exacerbations. <i>Canad Respir J</i> . 2013; 20(4):237-42. PMID: 23717822	No outcomes of interest (mortality or lung function) were reported.
Jacome C, Cruz J, et al. Functional balance in older adults with chronic obstructive pulmonary disease. <i>J Aging Phys Act</i> . 2014; 22(3): 357-363. PMID: 23917153	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Jain NK, Thakkar MS, Jain N, Rohan KA, Sharma M. Chronic obstructive pulmonary disease: Does gender really matter? <i>Lung India</i> . 2011 Oct-Dec; 28(4): 258-62. PMID: 22084538.	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Jamaati HR, Malekmohammad M, et al. Relationship between the severity of airway obstruction and inspiratory muscles dysfunction in COPD patients. <i>Tanaffos</i> . 2009; 8(3),37-42.	No BW/BC data in relation to outcomes of interest.
Jamaati HR, Adimi P, et al. Respiratory Disturbance Index and Severity of Airway Obstruction in COPD Patients. <i>Tanaffos</i> 2008; 7(3):18-22.	Not all COPD population.
Jana PK, Mitra R, et al. A Study of Systemic Manifestations of Chronic Obstructive Pulmonary Disease in a Tertiary Care Hospital. <i>Inter Med J</i> . 2016; 23(1):39-42.	Secondary exclusion: Cross-sectional study design.
Jeon YK, Shin MJ, et al. Low pulmonary function is related with a high risk of sarcopenia in community-dwelling older adults: the Korea National Health and Nutrition Examination Survey (KNHANES) 2008-2011. <i>Osteoporos Int</i> . 2015 Oct; 26(10): 2423-9. PMID: 25956284	Not all COPD population; general community-living population.
Jeon YK, Shin MJ, et al. The relationship between pulmonary function and bone mineral density in healthy nonsmoking women: the Korean National Health and Nutrition Examination Survey (KNHANES) 2010. <i>Osteoporosis Intl</i> . 2014; 25(5): 1571-76. PMID: 24577346	Not all COPD population; general population.
Jiang R, Paik DC, et al. Cured meat consumption, lung function, and chronic obstructive pulmonary disease among United States adults. <i>Amer J Respir Crit Care Med</i> . 2007; 175(8):798-804 7p. PMID: 17255565	No BW/BC data in relation to outcomes of interest.
Jin J, Yu, W, et al. Factors associated with bronchiectasis in patients with moderate-severe chronic obstructive pulmonary disease. <i>Medicine</i> . 2016; 95(29): e4219. PMID: 27442646	No BW/BC data in relation to outcomes of interest.
Johannessen A, Omenaas ER, et al. Implications of reversibility testing on prevalence and risk factors for chronic obstructive pulmonary disease: a community study. <i>Thorax</i> . 2005; 60(10): 842-7. PMID: 16085729	Not all COPD population; evaluated BMI as a risk factor for COPD.
Jones SE, Maddocks M, et al. Sarcopenia in COPD: prevalence, clinical correlates and response to pulmonary rehabilitation. <i>Thorax</i> . 2015 Mar; 70(3):213-8. Epub 2015 Jan 5. PMID: 25561517	No BW/BC data in relation to outcomes of interest.

Article	Reason for Exclusion ¹
Joppa P, Tkacova R, et al. Sarcopenic Obesity, Functional Outcomes, and Systemic Inflammation in Patients With Chronic Obstructive Pulmonary Disease. <i>J Am Med Dir Assoc</i> . 2016 Aug 1; 17(8):712-8. Epub 2016 May 5. PMID: 27161848	Secondary exclusion: Cross-sectional study design.
Ju C, Chen R. Factors associated with impairment of quadriceps muscle function in Chinese patients with chronic obstructive pulmonary disease <i>PLoS One</i> . 2014; 9(2): e84167. PMID: 24558357	No BW/BC data in relation to outcomes of interest.
Kao CC, Hsu JW, et al. Resting energy expenditure and protein turnover are increased in patients with severe chronic obstructive pulmonary disease <i>Metabolism</i> . 2011; 60(10):1449-55. PMID: 21550084	Less than 10 subjects per study group.
Kapella MC, Larson JL, et al. Functional performance in chronic obstructive pulmonary disease declines with time. <i>Med Sci Sports Exerc</i> . 2011; 43(2):218-24. PMID: 20543752	No outcomes of interest (mortality or lung function) were reported.
Kaplan O, Kurtoglu E, et al. Epicardial adipose tissue thickness in patients with chronic obstructive pulmonary disease having right ventricular systolic dysfunction. <i>Eur Rev Med Pharmacol Sci</i> . 2015 Jul; 19(13):2461-7. PMID: 26214783	No BW/BC data in relation to outcomes of interest.
Karadag F, Kirdar S, et al. The value of C-reactive protein as a marker of systemic inflammation in stable chronic obstructive pulmonary disease. <i>Euro J Int Med</i> . 2008; 19(2):104-8. PMID: 18249305	No BW/BC data in relation to outcomes of interest.
Karadag F, Karul AB, et al. Determinants of BMI in patients with COPD <i>Respirology</i> . 2004; 9(1):70-5. PMID: 14982605	No BW/BC data in relation to outcomes of interest; published prior to 2005.
Karakas S, Karadag F, et al. Circulating leptin and body composition in chronic obstructive pulmonary disease. <i>Intl J Clin Prac</i> . 2005; 59(10): 1167-1170. PMID: 16178984	No BW/BC data in relation to outcomes of interest.
Katsura H, Yamada K, et al. Both generic and disease specific health-related quality of life are deteriorated in patients with underweight COPD. <i>Respir Med</i> . 2005; 99(5):624-30. PMID: 15823461	No outcomes of interest (mortality or lung function) were reported.
Katz P, Iribarren C, et al. Obesity and Functioning Among Individuals with Chronic Obstructive Pulmonary Disease (COPD). <i>COPD</i> . 2016 Jun; 13(3):352-9. Epub 2015 Dec 18. PMID: 26683222	No outcomes of interest (mortality or lung function) were reported.
Kavoura P, Kostikas K, et al. Changes in BODE Quartiles After Pulmonary Rehabilitation Do Not Predict 2-Year Survival in Patients With COPD. <i>J Cardiopulm Rehabil Prev</i> . 2016; 36(1):62-7. PMID: 26629865	BMI was not separated from BODE index and reported separately.
Kilduff LP, Fuld JP, et al. Clinical relevance of inter-method differences in fat-free mass estimation in chronic obstructive pulmonary disease. <i>Respir</i> . 2003; 70(6):585-93. PMID: 14732788	BW/BC outcome is not a primary independent variable (not the primary predictor); published prior to 2005.
Kim SW, Lee JM, et al. Association between vitamin D receptor polymorphisms and osteoporosis in patients with COPD. <i>Int J Chron Obstruct Pulmon Dis</i> . 2015 Sep 4; 10: 1809-17. doi: 10.2147/COPD.S91576. eCollection 2015. PMID: 26379431	BW/BC outcome is not a primary independent variable (not the primary predictor); Mortality or lung function were not primary outcomes of the study.
Kim MH, Lee K, et al. Risk Factors Associated with Frequent Hospital Readmissions for Exacerbation of COPD. <i>Tuberc Respir Dis</i> . 2010 Oct; 69(4):243-249.	No BW/BC data in relation to outcomes of interest.
Kim SB, Kang YA, et al. Body mass index and fat free mass index in obstructive lung disease in Korea. <i>Int J Tuberc Lung Dis</i> 2014; 18(1): 102-108. PMID: 24365561	Not all COPD population; general population-based study.
Kjensli A, Mowinckel P, et al. Low bone mineral density is related to severity of chronic obstructive pulmonary disease. <i>Bone</i> . 2007; 40(2):493-497. PMID: 17049326	No BW/BC data in relation to outcomes of interest.
Kitaguchi Y, Fujimoto K, et al. Characteristics of COPD phenotypes classified according to the findings of HRCT. <i>Respir Med</i> . 2006; 100(10):1742-52. PMID: 16549342	No BW/BC data in relation to outcomes of interest.
Kivimäki M, Shipley MJ, et al. Underweight as a risk factor for respiratory death in the Whitehall cohort study: exploring reverse causality using a 45-year follow-up. <i>Thorax</i> . 2016; 71(1):84-5. PMID: 26253581	Not all COPD subjects; COPD data were not reported separately in relation to mortality.
Ko FW, Tam W, et al. A longitudinal study of serial BODE indices in predicting mortality and readmissions for COPD. <i>Respir Med</i> . 2011; 105(2):266-273. PMID: 20655186	BMI was not separated from BODE index; BW/BC outcome is not the primary independent variable (not the primary predictor).
Kobayashi A, Yoneda, T, et al. The relation of fat-free mass to maximum exercise performance in patients with chronic obstructive pulmonary disease. <i>Lung</i> . 2000; 178(2):119-127. PMID: 10773137	Mortality or lung function were not primary outcomes of the study; published prior to 2005.

Article	Reason for Exclusion ¹
Koehler F, Doehner W, et al. (2007). Anorexia in chronic obstructive pulmonary disease--association to cachexia and hormonal derangement. <i>Int J Cardiol.</i> 2007; 119(1):83-9. PMID: 17064790	No outcomes of interest (mortality or lung function) were reported.
Koniski M, Salhi H, et al. Distribution of body mass index among subjects with COPD in the Middle East and North Africa region: data from the BREATHE study. <i>Int J Chron Obstruct Pulmon Dis.</i> 2015 Aug 26; 10: 1685-94. PMID: 26346564	Mortality or lung function were not primary outcomes of the study.
Koo HK, Park JH, et al. Conflicting role of sarcopenia and obesity in male patients with chronic obstructive pulmonary disease: Korean National Health and Nutrition Examination Survey. <i>PLoS One.</i> 2014 Oct 29; 9(10): e110448. eCollection 2014. PMID: 25353344	Secondary exclusion: Cross-sectional study design.
Korsic, M, Kusec, V. Serum leptin and skeletal differences between obese and non-obese patients with chronic obstructive pulmonary disease. <i>Obesity Facts</i> 2014; 7(6):399-407. PMID: 25428659	BW/BC outcome is not a primary independent variable (not the primary predictor); Mortality or lung function were not primary outcomes of the study.
Kurosaki H, Ishii T, et al. Extent of emphysema on HRCT affects loss of fat-free mass and fat mass in COPD. <i>Inter Med.</i> 2009; 48(1):41-8. PMID: 19122355	Mortality or lung function were not primary outcomes of the study.
Kostianev SS, Hodgev VA, Iluchev DH. Multidimensional system for assessment of COPD patients. Comparison with BODE index. <i>Folia Med.</i> 2008; 50(4):29-38. PMID: 19209528	BMI was not separated from BODE index and reported separately.
Ladeira I, Gomes T, et al. The overall impact of COPD (CAT) and BODE index on COPD male patients: correlation? <i>Rev Port Pneumol</i> 2006; 2015 Jan-Feb;21(1): 11-5. doi: 10.1016/j.rppnen.2014.02.004. Epub 2015 Jan 17. PMID: 25854130	BMI was not separated from BODE index.
Lan CC, Yang MC, et al. Pulmonary rehabilitation improves exercise capacity and quality of life in underweight patients with chronic obstructive pulmonary disease. <i>Respirology</i> 2011; 16(2):276-83. PMID: 21054672	BW/BC outcome is not a primary independent variable (not the primary predictor); Mortality or lung function were not primary outcomes of the study.
Laviolette L, Sava F, et al. Effect of obesity on constant workrate exercise in hyperinflated men with COPD. <i>BMC Pulm Med.</i> 2010; 10(0):33-2466-10-33. PMID: 20509967	No outcomes of interest (mortality or lung function) were reported.
Lee SJ, Lee SH, et al. Clinical Features according to the Frequency of Acute Exacerbation in COPD. <i>Tuberc Respir Dis</i> 2012; Apr; 72(4): 367-73. Epub 2012 Apr 30. PMID: 23227078.	No BW/BC data in relation to outcomes of interest.
Lee H, Kim S, et al. Nutritional status and disease severity in patients with chronic obstructive pulmonary disease (COPD). <i>Arch Geront Geri.</i> 2013; 56(3):518-23. PMID: 23352455	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Lee SH, Kim SJ, et al. Hand grip strength and chronic obstructive pulmonary disease in Korea: an analysis in KNHANES VI. <i>Int J Chron Obstruct Pulmon Dis.</i> 2017; Aug 4; 12: 2313-2321. eCollection 2017. PMID: 28831248	Mortality or lung function were not primary outcomes of the study.
Lee YK, Oh YM, et al. Quantitative assessment of emphysema, air trapping, and airway thickening on computed tomography. <i>Lung.</i> 2008; 186(3):157-65. PMID: 18351420.	Mortality or lung function were not primary outcomes of the study.
Lerario MC, Sachs A, et al. Body composition in patients with chronic obstructive pulmonary disease: which method to use in clinical practice? <i>Br J Nutr.</i> 2006; 96(1):86-92. PMID: 16869995.	Described COPD patients based on BC using DEXA scan, but did not relate BC to mortality or lung function outcomes.
Levinson B, Gertner J. Randomized study of the efficacy and safety of SUN11031 (synthetic human ghrelin) in cachexia associated with chronic obstructive pulmonary disease. <i>e-SPEN J.</i> 2012; 7(5): October 2012, Pages e171-e175	BW/BC outcome is not a primary independent variable (not the primary predictor).
Lewko A, Bidgood PL, et al. Evaluation of psychological and physiological predictors of fatigue in patients with COPD. <i>BMC Pulm Med.</i> 2009; 9(0):47-2466-9-47. PMID: 19845947	No BW/BC data in relation to outcomes of interest.
Li L, Brennan KJ. et al. African Americans and men with severe COPD have a high prevalence of osteoporosis. <i>COPD.</i> 2008; 5(5):291-7. PMID: 18972277	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.

Article	Reason for Exclusion ¹
Lima DF, Dela Coleta, K, et al. Potentially modifiable predictors of mortality in patients treated with long-term oxygen therapy. <i>Respir Med.</i> 2011; 105(3):470-6. PMID: 20846839	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Lin YC, Wu TC, et al. Comparison of plasma and intake levels of antioxidant nutrients in patients with chronic obstructive pulmonary disease and healthy people in Taiwan: a case-control study. <i>Asia Pac J Clin Nutr.</i> 2010; 19(3):393-401. PMID: 20805084	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Lin YX, Xu WN, et al. The cross-sectional and longitudinal association of the BODE index with quality of life in patients with chronic obstructive pulmonary disease. <i>Chinese Med J.</i> 2009; 122(24): 2939-2944. PMID: 20137478	BMI was not separated from BODE index and reported separately.
Liu S, Ren Y, et al. Prevalence and risk factors for COPD in greenhouse farmers: a large, cross-sectional survey of 5,880 farmers from northeast China. <i>Int J Chron Obstruct Pulmon Dis.</i> 2015 Oct 1; 10 2097-108. PMID: 26491280	Not all COPD population; general population of farmers and risk factors for COPD.
Liu D, Peng SH, et al. Prediction of short-term re-exacerbation in patients with acute exacerbation of chronic obstructive pulmonary disease. <i>Int J Chron Obstruct Pulmon Dis.</i> 2015 Jul 2; 10:1265-73. PMID: 26170655	BW/BC outcome is not a primary independent variable (not the primary predictor); Mortality or lung function were not primary outcomes of the study.
Liu SF, Chin CH, et al. Correlation between serum biomarkers and BODE index in patients with stable COPD. <i>Respir.</i> 2009; 14(7):999-1004. PMID: 19740260	BMI was not separated from BODE index and reported separately.
Liu SF, Wang CC, et al. High value of combined serum C-reactive protein and BODE score for mortality prediction in patients with stable COPD. <i>Arch Bronconeun.</i> 2011; 47(9): 427-432. PMID: 21821335	BMI was not separated from BODE index and reported separately.
Liu Y, Pleasants RA, et al. Body mass index, respiratory conditions, asthma, and chronic obstructive pulmonary disease. <i>Respir Med.</i> 2015 Jul; 109(7):851-9. Epub 2015 May 16. PMID: 26006753	BW/BC outcome is not a primary independent variable (not the primary predictor); Mortality or lung function were not primary outcomes of the study.
Luijckx HD, de Grauw WJ, et al. Exploring the impact of chronic obstructive pulmonary disease (COPD) on diabetes control in diabetes patients: a prospective observational study in general practice. <i>NPJ Prim Care Respir Med.</i> 2015 Apr 23; 25: 15032. PMID: 25906025	Data were separated for subjects with and without COPD; however, BW/BC outcome is not a primary independent variable (not the primary predictor).
Luo Y, Zhou L, et al. Fat-Free Mass Index for Evaluating the Nutritional Status and Disease Severity in COPD. <i>Respir Care.</i> 2016 May; 61(5): 680-8. Epub 2016 Jan 26. PMID: 26814217	Secondary exclusion: Cross-sectional study design.
Luo FM, Liu XJ, et al. Circulating ghrelin in patients with chronic obstructive pulmonary disease. <i>Nutri.</i> 2005; 21(7) 793-98. PMID: 15975486	No BW/BC data in relation to outcomes of interest.
Lutchmedial SM, Creed WG, et al. How Common Is Airflow Limitation in Patients With Emphysema on CT Scan of the Chest? <i>Chest.</i> 2015 Jul; 148(1):176-84. PMID: 25539080	No BW/BC data in relation to outcomes of interest.
Maddocks M, Kon SS, et al. Bioelectrical impedance phase angle relates to function, disease severity and prognosis in stable chronic obstructive pulmonary disease. <i>Clin Nutr.</i> 2015 Dec; 34(6):1245-50. Epub 2015 Jan 7. PMID: 25597016	BW/BC outcome is not a primary independent variable (not the primary predictor); Mortality or lung function were not primary outcomes of the study.
Maddocks M, Shrikrishna D, et al. Skeletal muscle adiposity is associated with physical activity, exercise capacity and fibre shift in COPD. <i>Euro Respir J.</i> 2014; 44(5):1188-98. PMID: 24993908	Mortality or lung function were not primary outcomes of the study.
Maggi S, Siviero P. et al. EOLO Osteoporosis risk in patients with chronic obstructive pulmonary disease: the EOLO stud. <i>J Clin Densitom.</i> 2009; 12(3):345-52. PMID: 19647671	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Mahmoud AE, Omar MM, et al. Leptin hormone in obese and non-obese stable and exacerbated cases of chronic obstructive pulmonary disease. <i>Egypt J Chest Dis Tubercul.</i> 2015; 64(3) 557-565.	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.

Article	Reason for Exclusion ¹
Mair G, Maclay J, et al. Airway dimensions in COPD: relationships with clinical variables. <i>Respir Med</i> . 2010; 104(11): 1683-1690. PMID: 20541384	No BW/BC data in relation to outcomes of interest.
Mair G, Miller JJ, et al. Computed tomographic emphysema distribution: relationship to clinical features in a cohort of smokers. <i>Euro Respir J</i> . 2009; 33(3): 536-42. PMID: 18829675	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Majumda, SR, Villa-Roel C, et al. Prevalence and predictors of vertebral fracture in patients with chronic obstructive pulmonary disease. <i>Respir Med</i> . 2010. 104(2):260-6. PMID: 19828305	No outcomes of interest (mortality or lung function) were reported.
Majumdar S, Sen S, Mandal SK. A hospital-based study on pulmonary function tests and exercise tolerance in patients of chronic obstructive pulmonary disease and other diseases. <i>J Indian Med Assoc</i> . 2007; 105(10): 565-6, 568, 570. PMID: 18383952	Not all COPD population; did not separate data for restrictive lung disease or other disease and COPD.
Makarevich AE, Lemiasheuskaya S. Dynamics of body composition in male patients during chronic obstructive pulmonary disease (COPD) development. <i>Pneumonol Alergol Pol</i> . 2015; 83(6):424-30. PMID: 26559794	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Malaguti C, Napolis LM, et al. Relationship between peripheral muscle structure and function in patients with chronic obstructive pulmonary disease with different nutritional status. <i>J Strength Cond Res</i> . 2011; 25(7):1795-803. PMID: 21490512.	No outcomes of interest (mortality or lung function) were reported.
Malaguti C, Nery LE, et al. Scaling skeletal muscle function to mass in patients with moderate-to-severe COPD. <i>Euro J Appl Phys</i> . 2006; 98(5):482-8. PMID: 17021786	No outcomes of interest (mortality or lung function) were reported.
Malik MN, Shafqat W, Sohail S, Imtiaz, S. Malnutrition assessment of chronic obstructive pulmonary disease patients. <i>Med Forum Monthly</i> . 2011; 22. 9-13.	No outcomes of interest (mortality or lung function) were reported.
Mamoto T, Fujiwara H, et al. Relationship between exercise performance and water distribution measured by new bioelectrical impedance analysis in patients with chronic obstructive pulmonary disease. <i>Clin Physiol Funct Imaging</i> . 2003; 23(4): 230-5. PMID: 12914563	BW/BC was not evaluated in relation to outcomes; published prior to 2005.
Mangueira NM, Viegas, IL, et al. Correlation between clinical parameters and health-related quality of life in women with COPD. <i>J Bras Pneumol</i> . 2009; 35(3): 248-55. PMID: 19390723	No outcomes of interest (mortality or lung function) were reported.
Manzar N, Haque AS, et al. The efficacy of spirometry as a screening tool in detection of air flow obstruction. <i>Open Respir Med J</i> . 2010 Sep 23; 4:71-5. PMID: 21253452.	BW/BC outcome is not a primary independent variable (not the primary predictor).
Marinari S, Manigrasso M, De Benedetto F., Effects of nutraceutical diet integration, with coenzyme Q10 (Q-Ter multicomposite) and creatine, on dyspnea, exercise tolerance, and quality of life in COPD patients with chronic respiratory failure. <i>Multidiscip Respir Med</i> . 2013; 8:40.	BW/BC outcome is not a primary independent variable (not the primary predictor).
Marino DM, Marrara KT, et al. Study of peripheral muscle strength and severity indexes in individuals with chronic obstructive pulmonary disease. <i>Physiother Res Intl</i> . 2010; 15(3):135-43. PMID: 20108234	BMI was not separated from BODE index and reported separately.
Marino DM, Marrara KT, et al. Determination of exacerbation predictors in patients with COPD in physical therapy -- a longitudinal study. <i>Braz J Phys Ther</i> . 2014; 18(2):127-36.	No outcomes of interest (mortality or lung function) were reported.
Marquez-Martin E, Ramos PC, et al. Components of physical capacity in patients with chronic obstructive pulmonary disease: relationship with phenotypic expression. <i>Int J Chron Obstr Pulm Dis</i> , 2011; 6(0):105-12. PMID: 21407823	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Marquis K, Debigare R, et al. Midthigh muscle cross-sectional area is a better predictor of mortality than body mass index in patients with chronic obstructive pulmonary disease. <i>Amer J Respir Crit Care Med</i> . 2002; 166(6):809-13. PMID: 12231489	Evaluated muscle cross-sectional area and mortality; not a measure of body composition. Published prior to 2005.
Maatman RC, Spruit MA, et al. Effects of obesity on weight-bearing versus weight-supported exercise testing in patients with COPD. <i>Respirology</i> . 2016 Apr; 21(3): 483-8. Epub 2015 Dec 9. PMID: 26647921	No outcomes of interest (mortality or lung function) were reported.

Article	Reason for Exclusion ¹
Matsumura T, Mitani Y, et al. Comparison of Geriatric Nutritional Risk Index scores on physical performance among elderly patients with chronic obstructive pulmonary disease. <i>Heart Lung</i> . 2015 Nov-Dec; 44(6):534-8. Epub 2015 Sep 26. PMID: 26409897	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
McCormack MC, Belli AJ, et al. Obesity as a susceptibility factor to indoor particulate matter health effects in COPD. <i>Eur Respir J</i> . 2015 May; 45(5):1248-57. Epub 2015 Jan 8. PMID: 25573407	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
McDonald M, Diaz AA, et al. (2014) Quantitative computed tomography measures of pectoralis muscle area and disease severity in chronic obstructive pulmonary disease. A cross-sectional study. <i>Annals Amer Thoracic Soc</i> . 2014; 11(3):326-34. PMID: 24558953.	Evaluated pectoralis muscle area and mortality; not a measure of body composition.
McDonald MN, Diaz AA, et al. Chest computed tomography-derived low fat-free mass index and mortality in COPD. <i>Eur Respir J</i> . 2017 Dec 14; 50(6). pii: 1701134. PMID: 29242259	Secondary exclusion: Cross-sectional study design.
McKeough ZJ, Alison JA, et al. Reduction in resting energy expenditure following lung volume reduction surgery in subjects with chronic obstructive pulmonary disease. <i>Chron Respir Dis</i> . 2004; 1(4):197-202. PMID: 16281646	No BW/BC data in relation to outcomes of interest; published prior to 2005.
McKeough ZJ, Alison JA, et al. Exercise capacity and quadriceps muscle metabolism following training in subjects with COPD. <i>Respir Med</i> . 2006; 100(10): 1817-25. PMID: 16516454	No outcomes of interest (mortality or lung function) were reported.
Meek PM, Petersen H, et al. Chronic Bronchitis Is Associated With Worse Symptoms and Quality of Life Than Chronic Airflow Obstruction. <i>Chest</i> . 2015 Aug; 148(2):408-16. PMID: 25741880	No BW/BC data in relation to outcomes of interest.
Mehrotra N, Freire AX, et al. Predictors of mortality in elderly subjects with obstructive airway disease: the PILE score. <i>Ann Epidemiol</i> . 2010 Mar; 20(3):223-32. doi: 10.1016/j.annepidem.2009.11.005. PMID: 20159492	Data for COPD patients were not reported separately from airway obstruction and low FVC patients (OAD population).
Mekal D, Doboszynska A, et al. Nutritional status in chronic obstructive pulmonary disease and systemic sclerosis: two systemic diseases involving the respiratory system. <i>Adv Exp Med Biol</i> . 2015; 840:45-9. PMID: 25310942	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Meral M, Araz O, et al. Nutritional assessment via anthropometric and biochemical measurements with stable COPD. <i>Turk J Med Sci</i> . 2012; 42 (Sup.2):1490-3.	No BW/BC data in relation to outcomes of interest.
Milacic N, Milacic B, et al. Correlation of C-Reactive Protein and COPD Severity <i>Acta clinica Croatica</i> . 2016; 55(1): 41-48.	No outcomes of interest (mortality or lung function) were reported.
Mineo D, Ambrogi V, et al. Recovery of body composition improves long-term outcomes after lung volume reduction surgery for emphysema. <i>Eur Respir J</i> . 2010; 36(2):408-16. PMID: 20675780	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Minet C, Vivodtzev I, et al. Reduced six-minute walking distance, high fat-free-mass index and hypercapnia are associated with endothelial dysfunction in COPD. <i>Respir Physiol Neurobiol</i> . 2012 Aug 15; 183(2):128-34. Epub 2012 Jun 18. PMID: 22721944	Mortality or lung function were not primary outcomes of the study.
Mittal N, Raj R, et al. The Frequency of Frailty in Ambulatory Patients With Chronic Lung Diseases. <i>J Prim Care Comm Health</i> . 2016 Jan; 7(1): 10-5. PMID: 26333537	Not all COPD population; chronic lung disease. Data for COPD population were not reported separately.
Mkacher W, Tabka Z, Trabelsi, Y. Relationship between postural balance, lung function, nutritional status and functional capacity in patients with chronic obstructive pulmonary disease. <i>Sci Sports</i> . 2016; 31(2) Apr 2016, 88-94.	Mortality or lung function were not primary outcomes of the study.
Moermans C, Heinen V. et al. (2011) Local and systemic cellular inflammation and cytokine release in chronic obstructive pulmonary disease. <i>Cytokine</i> . 2011. 56(2): 298-304. PMID: 21880505	No BW/BC data in relation to outcomes of interest.

Article	Reason for Exclusion ¹
Mohapatra PR, Janmeja AK. Factors associated with hospital admission in patients with acute exacerbation of chronic obstructive pulmonary disease. <i>Indian J Chest Dis Allied Sci.</i> 2010; 52(4): 203-206. PMID: 21302596	No BW/BC data in relation to outcomes of interest.
Mohktar MS, Redmond SJ, et al. Predicting the risk of exacerbation in patients with chronic obstructive pulmonary disease using home telehealth measurement data. <i>Artif Intell Med.</i> 2015 Jan; 63(1): 51-9. PMID: 25704112	BW was a component of a predictive algorithm; data for BW alone was not reported.
Monteiro F, Camillo CA, et al. (2012) Obesity and physical activity in the daily life of patients with COPD. <i>Lung</i> , 2012; 190(4):403-10. PMID: 22382442	No outcomes of interest (mortality or lung function) were reported.
Montes de Oca M, Talamo C, et al. Chronic obstructive pulmonary disease and body mass index in five Latin America cities: the PLATINO study. <i>Respir Med.</i> 2008; 102(5):642-50. PMID: 18314321	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Mostert R, Goris A, et al. Tissue depletion and health related quality of life in patients with chronic obstructive pulmonary disease. <i>Respir Med.</i> 2000; 94(9):859-67. PMID: 11001077	No outcomes of interest (mortality or lung function) were reported; published prior to 2005.
Muller U, Jungblut S, et al. Assessment of body composition of patients with COPD. <i>Eur J Med Res.</i> 2006; 11(4):146-51. PMID: 16720278.	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Nadeem A, Raj HG, Chhabra SK. Effect of vitamin E supplementation with standard treatment on oxidant-antioxidant status in chronic obstructive pulmonary disease. <i>Indian J Med Res.</i> 2008; 128(6):705-11. PMID: 19246793	No BW/BC data in relation to outcomes of interest.
Nakahara Y, Yasunaga H, et al. Mortality-Reducing Effect of Rehabilitation for COPD: Observational Propensity-Matched Cohort Study Using a Nationwide Database. <i>Respir Care.</i> 2016 Nov; 61(11):1497-504. Epub 2016 May 31. PMID: 27247432	Not all COPD subjects.
Nambu, A, Zach J, et al. Quantitative computed tomography measurements to evaluate airway disease in chronic obstructive pulmonary disease: Relationship to physiological measurements, clinical index and visual assessment of airway disease <i>Euro J Radiol.</i> 2016; 85(11): 2144-2151. PMID: 27776670	BMI was not separated from BODE index and reported separately.
Napolis LM, Dal Corso S, et al. Neuromuscular electrical stimulation improves exercise tolerance in chronic obstructive pulmonary disease patients with better preserved fat-free mass. <i>Clinics (Sao Paulo, Brazil)</i> , 2011; 66(3):401-6. PMID: 21552662	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Nava S, Fuccella LM, et al. Physiological effects of intravenous fructose 1.6-diphosphate on diaphragmatic function in malnourished patients with COPD. <i>Monaldi Arch Chest Dis</i> 2004; 61(4):203-8. PMID: 15909609	No BW/BC data in relation to outcomes of interest; published prior to 2005.
Negi H, Sarkar M, et al. Health-related quality of life in patients with chronic obstructive pulmonary disease in North India. <i>J Postgrad Med.</i> 2014; 60(1):7-11. PMID: 24625932	No outcomes of interest (mortality or lung function) were reported.
Nellessen AG, Donária L, et al. Analysis of three different equations for predicting quadriceps femoris muscle strength in patients with COPD. <i>J Bras Pneumol.</i> 2015 Jul-Aug; 41(4):305-12. English, Portuguese. PMID: 26398750	No BW/BC data in relation to outcomes of interest.
Nezu K, Yoshikawa M, et al. The effect of nutritional status on morbidity in COPD patients undergoing bilateral lung reduction surgery. <i>Thorac Cardiovasc Surg.</i> 2001; 49(4) 216-20. PMID: 11505317	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes; published prior to 2005.
Nizet TA, van den Elshout, FJ, Survival of chronic hypercapnic COPD patients is predicted by smoking habits, comorbidity, and hypoxemia. <i>Chest.</i> 2005; 127(6):1904-10. PMID: 15947301	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.

Article	Reason for Exclusion ¹
Nonato NL, Diaz O, et al. Behavior of Quality of Life (SGRQ) in COPD Patients According to BODE Scores. <i>Arch Bronconeumol</i> . 2015 Jul; 51(7):315-21. Epub 2015 Jan 23. PMID: 25622995	BMI was not separated from BODE index and reported separately.
Norden J, Gronberg AM, Bosaeus I, et al. Nutrition impact symptoms and body composition in patients with COPD. <i>Eur J Clin Nutr</i> . 2015; 69(2): 256-61. PMID: 24801370	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Nordenson A, Gronberg AM, et al. A validated disease specific prediction equation for resting metabolic rate in underweight patients with COPD. <i>Intl J Chron Obstruct Pulmon Dis</i> . 2010; 5(0): 271-276. PMID: 20856826	BW/BC outcome is not the primary independent variable (not the primary predictor); Predictive equation validation.
Obaseki DO, Erhabor GE, et al. Determinants of health-related quality of life in a sample of patients with chronic obstructive pulmonary disease in Nigeria using the St. George's respiratory questionnaire. <i>African Health Sci</i> . 2013; 13(3): 694-702. PMID: 24250309	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Odenocrants S, Bjustrom T, et al. Nutritional status, gender and marital status in patients with chronic obstructive pulmonary disease. <i>J Clin Nurs</i> . 2013; 22(19-20): 2822-9. PMID: 23675677	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Odenocrants S, Ehnfors M, Ehrenberg A. Nutritional status and patient characteristics for hospitalised older patients with chronic obstructive pulmonary disease. <i>J Clin Nurs</i> . 2008; 17(13): 1771-1778. PMID: 18578781	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Odenocrants S, Ehnfors M, Grobe SJ. Living with chronic obstructive pulmonary disease: part I. Struggling with meal-related situations: experiences among persons with COPD. <i>Scand J Caring Sci</i> . 19(3):230-9. PMID:16101851	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Odenocrants S, Ehnfors M, et al. (2009). Nutritional status and body composition among persons with chronic obstructive pulmonary disease. <i>J Nurs Health Chron Illnesses</i> , 2009; 1(1), 60-70.	No outcomes of interest (mortality or lung function) were reported.
Oga T, Nishimura K, et al. Relationship between different indices of exercise capacity and clinical measures in patients with chronic obstructive pulmonary disease. <i>Heart Lung</i> . 2002; 31(5):374-81. PMID: 12487016	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes; published prior to 2005.
Ogawa E, Nakano Y, et al. Body mass index in male patients with COPD: correlation with low attenuation areas on CT. <i>Thorax</i> . 2009; 64(1): 20-25. PMID: 18852156	No outcomes of interest (mortality or lung function) were reported.
Ogura-Tomomatsu H, Asano K, et al. Predictors of osteoporosis and vertebral fractures in patients presenting with moderate-to-severe chronic obstructive lung disease. <i>COPD</i> . 2012; 9(4):332-7. PMID: 22489911	BW/BC outcome is not the primary independent variable (not the primary predictor).
Ohara T, Hirai T, et al. Relationship between pulmonary emphysema and osteoporosis assessed by CT in patients with COPD. <i>Chest</i> . 2008; 134(6):1244-49. PMID: 18641115	BW/BC outcome is not a primary independent variable (not the primary predictor).
Omar MM, Issa HA, et al. Serum adiponectin level in obese and non-obese COPD patients during acute exacerbation and stable conditions. <i>Egypt J Chest Dis Tuberc</i> . 2014; 63(2), 313-319.	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Ong KC, Lu SJ, Soh CS. Does the multidimensional grading system (BODE) correspond to differences in health status of patients with COPD? <i>Intl J Chron Obstruct Pulmon Dis</i> , 2006; 1(1) 91-6. PMID: 18046907	BMI was not separated from BODE index and reported separately.

Article	Reason for Exclusion ¹
Ong KC, Earnest A, Lu S. A multidimensional grading system (BODE index) as predictor of hospitalization for COPD. <i>Chest</i> , 2005; 128(6):3810-6. PMID: 16354849	BMI was not separated from BODE index and reported separately.
Oostenbrink JB, Rutten-van Molken MP. Resource use and risk factors in high-cost exacerbations of COPD. <i>Respir Med</i> .2004; 98(9):883-91. PMID: 15338802	No outcomes of interest (mortality or lung function) were reported; published prior to 2005.
Oraby SS, Ahmed ES, et al. Adiponectin as inflammatory biomarker of chronic obstructive pulmonary disease. <i>Egypt J Chest Dis Tubercul</i> . 2014. 63(3):583-87.	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Ozalevli S, Karaali H, et al. Comparison of Short Form-36 Health Survey and Nottingham Health Profile in moderate to severe patients with COPD. <i>J Eval Clin Prac</i> . 2008; 14(4):493-9. PMID: 18462293.	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Özkan, S. Investigation of the relationship between functional performance, quality of life and respiratory parameters in patients with chronic obstructive pulmonary disease (COPD). <i>Nobel Medicus</i> . 2012. 8:91-97.	Not in English language.
Pandolfi P, Zanasi A, et al. Socio-Economic and Clinical Factors as Predictors of Disease Evolution and Acute Events in COPD Patients. <i>PLoS One</i> . 2015 Aug 7; 10(8): e0135116. doi: 10.1371/journal.pone.0135116. eCollection 2015. PMID: 26252571	Mortality and hospitalization for respiratory causes are grouped together as an "acute event." Unable to separate outcome data for mortality only.
Park JH, Lee JK, et al. The effect of obesity on patients with mild chronic obstructive pulmonary disease: results from KNHANES 2010 to 2012. <i>Int J Chron Obstruct Pulmon Dis</i> . 2017 Feb 24; 12: 757-763. eCollection 2017. PMID: 28280320	Secondary exclusion: Cross-sectional study design.
Park SK, Larson J. The relationship between physical activity and metabolic syndrome in people with chronic obstructive pulmonary disease. <i>J Cardiovasc Nurs</i> . 2014; 29(6):499-507. PMID: 24165700	No BW/BC data in relation to outcomes of interest.
Park HJ, Leem AY, et al. Comorbidities in obstructive lung disease in Korea: data from the fourth and fifth Korean National Health and Nutrition Examination Survey. <i>Int J Chron Obstruct Pulmon Dis</i> . 2015 Aug 7; 10: 1571-82. PMID: 26300636	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Parry A, Higginson R, Gleeson A. End-of-life prognostic indicators in patients with COPD: part 2. <i>Int J Palliat Nurs</i> . 2016 Nov 2;22(11):560-7. Review. PMID: 27885911	Review article; not primary research.
Parry A, Higginson R, Gleeson A. End-of-life prognostic indicators in patients with COPD: part 2. <i>Intl J Palliative Nurs</i> . 2016; 22(11): 560-567. PMID: 27885911	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Pelegriano NR, Lucheta PA, et al. (2009) Influence of lean body mass on cardiopulmonary repercussions during the six-minute walk test in patients with COPD. <i>J Bras Pneumol</i> 2008; 35(1):20-6. PMID: 19219327	No outcomes of interest (mortality or lung function) were reported.
Perez T, Burgell PR, et al. Modified Medical Research Council scale vs Baseline Dyspnea Index to evaluate dyspnea in chronic obstructive pulmonary disease. <i>Int J Chorn Obstruct Pulmon Dis</i> . 2015; Aug 18(10):1663-72. PMID: 26316740	BMI was not separated from BODE index and reported separately.
Perimenis P, Karkoulis K, et al. The impact of long-term conventional treatment for overlap syndrome (obstructive sleep apnea and chronic obstructive pulmonary disease) on concurrent erectile dysfunction. <i>Respir Med</i> . 2007; 101(2):210-6. PMID: 16872821	No outcomes of interest (mortality or lung function) were reported.
Persson LJ, Aanerud M, et al. Vitamin D, vitamin D binding protein, and longitudinal outcomes in COPD. <i>PLoS One</i> . 2015 Mar 24; 10(3): e0121622. PMID: 25803709	No BW/BC data in relation to outcomes of interest.
Petersen AM, Penkowa M, et al. Elevated levels of IL-18 in plasma and skeletal muscle in chronic obstructive pulmonary disease. <i>Lung</i> . 2007;185(3):161-71. PMID: 17436040	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for

Article	Reason for Exclusion ¹
	relationships between BW/BC and COPD outcomes.
Piehl-Aulin K, Jones I, et al. Increased serum inflammatory markers in the absence of clinical and skeletal muscle inflammation in patients with chronic obstructive pulmonary disease. <i>Respir.</i> 2009; 78(2):191-6. PMID: 19270439	No BW/BC data in relation to outcomes of interest.
Piitulainen E, Areberg J, et al. Nutritional status and muscle strength in patients with emphysema and severe alpha(1)-antitrypsin deficiency. <i>Chest</i> 2002; 122(4):1240-6. PMID: 12377848	No BW/BC data in relation to outcomes of interest; published prior to 2005.
Pitta F, Troosters T, et al. Physical activity and hospitalization for exacerbation of COPD. <i>Chest.</i> 2006; 129(3):536-44. PMID: 16537849	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Pitta F, Troosters T, et al. Characteristics of physical activities in daily life in chronic obstructive pulmonary disease. <i>Amer J Respir Crit Care Med</i> , 2005; 171(9):972-7. PMID: 15665324	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Planas M, Alvarez J, et al. Nutritional support and quality of life in stable chronic obstructive pulmonary disease (COPD) patients. <i>Clin Nutr.</i> 2005; 24(3):433-41. PMID: 15896431	No BW/BC data in relation to outcomes of interest.
Pleava RM, Ardelean C, et al. (2017). Comparing body-mass index in chronic obstructive pulmonary disease patients. <i>Sleep Med.</i> 2017; 40, e223.	Not a research study; Meeting abstract.
Pohle-Krauzar RJ, McCarroll ML, et al. (2014) Body mass index moderates the effects of portable oxygen transport modality on 6-minute walk distance in patients with COPD. <i>J Cardiopul Rehabil Prev</i> 2014; 34(1):62-8. PMID: 24370761	No outcomes of interest (mortality or lung function) were reported.
Popovic-Grle S, Ladic A, et al. Waist circumference does not correlate with functional lung capacity in moderate and severe chronic obstructive pulmonary disease. <i>Acta Clin Croatica.</i> 2013; 52(1):69-77. PMID: 23837275	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Pothirat C, Phetsuk N, et al. Clinical characteristics, management in real world practice and long-term survival among COPD patients of Northern Thailand COPD club members. <i>J Med Assoc Thai.</i> 2007 Apr; 90(4):653-62. PMID: 17487118	Secondary exclusion: Cross-sectional study design.
Poulain M, Doucet M, et al. Metabolic and inflammatory profile in obese patients with chronic obstructive pulmonary disease. <i>Chron Respir Dis.</i> 2008; 5(1):35-41. PMID: 20067162	No outcomes of interest (mortality or lung function) were reported.
Prescott E, Almdal T, et al. Prognostic value of weight change in chronic obstructive pulmonary disease: results from the Copenhagen City Heart Study. <i>Euro Respir J.</i> 2002; 20(3):539-44. PMID: 12358326	Secondary exclusion: Cross-sectional study design; published prior to 2005.
Pouw EM, Ten Velde GP, et al. Early non-elective readmission for chronic obstructive pulmonary disease is associated with weight loss. <i>Clin Nutr.</i> 2000; 19(2): 95-9. PMID: 10867726	No outcomes of interest (mortality or lung function) were reported; published prior to 2005.
Puentes-Maestu L, Perez-Parra J, et al. Abnormal transition pore kinetics and cytochrome C release in muscle mitochondria of patients with chronic obstructive pulmonary disease. <i>Amer J Respir Cell Molecul Biol</i> , 2009; 40(6):746-50. PMID: 19011161	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Puhan MA, Siebeling L, et al. Simple functional performance tests and mortality in COPD. <i>Euro Respir J.</i> 2013; 42(4):956-63.	No BW/BC data in relation to outcomes of interest.
Puig-Vilanova E, Rodriguez DA, et al. Oxidative stress, redox signaling pathways, and autophagy in cachectic muscles of male patients with advanced COPD and lung cancer. <i>Free Radic Biol Med.</i> 2015 Feb; 79:91-108. Epub 2014 Nov 18. PMID: 25464271	No BW/BC data in relation to outcomes of interest.
Rabinovich RA, Drost E, et al. Genome-wide mRNA expression profiling in vastus lateralis of COPD patients with low and normal fat free mass index and healthy controls. <i>Respir Res.</i> 2015 Jan 8; 16:1. PMID: 25567521	BW/BC was not evaluated in relation to outcomes.

Article	Reason for Exclusion ¹
Rabinovich RA, Ardite E, et al. Training depletes muscle glutathione in patients with chronic obstructive pulmonary disease and low body mass index. <i>Respir</i> 2006; 73(6): 757-761. PMID: 16825756	Less than 10 subjects per study group.
Ramachandran K, McCusker, C. et al. The influence of obesity on pulmonary rehabilitation outcomes in patients with COPD. <i>Chron Respir Dis</i> 2008; 5(4):205-9. PMID: 19029231	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Rambod M, Porszasz J, et al. Six-minute walk distance predictors, including CT scan measures, in the COPDGene cohort. <i>Chest</i> . 2012; 141(4):867-75. PMID: 21960696	Data for COPD patients were not separated from those with normal spirometry.
Ramirez-Venegas A, Sansores RH, et al. Survival of patients with chronic obstructive pulmonary disease due to biomass smoke and tobacco. <i>Amer J Respir Crit Care Med</i> . 2006; 173(4):393-7. PMID: 16322646	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Reed RM, Wise RA, et al. Elevated HDL cholesterol levels are associated with osteoporosis in lung transplant candidates with chronic obstructive pulmonary disease. <i>Respir Med</i> . 2010; 104(12):1943-50. PMID: 20801628	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Remels AH, Schrauwen P, et al, Peroxisome proliferator-activated receptor expression is reduced in skeletal muscle in COPD. <i>Euro Respir J</i> . 2007; 30(2):245-52. PMID: 17459894	Less than 10 subjects per study group.
Renvall MJ, Friedman P, Ramsdell JW. Predictors of body mass index in patients with moderate to severe emphysema. <i>COPD</i> . 2009; 6(6):432-6. PMID: 19938965	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Ringbaek TJ, Lange P. Outdoor activity and performance status as predictors of survival in hypoxaemic chronic obstructive pulmonary disease (COPD). <i>Clin Rehabil</i> , 2005; 19(3): 331-338. PMID: 15859534	No BW/BC data in relation to outcomes of interest.
Ringbaek TJ, Viskum K, Lange P. BMI and oral glucocorticoids as predictors of prognosis in COPD patients on long-term oxygen therapy. <i>Chron Respir Dis</i> . 2004; 1(2): 71-8. PMID: 16279261	Secondary exclusion: Cross-sectional study design; published prior to 2005.
Roberts MH, Mapel DW, et al. Development of a modified BODE index as a mortality risk measure among older adults with and without chronic obstructive pulmonary disease. <i>Amer J Epidemiol</i> . 2013; 178(7):1150-60. PMID: 23928262	BMI for COPD patients was not reported separately from those without COPD.
Robles PG, Sussman MS, et al. Intramuscular Fat Infiltration Contributes to Impaired Muscle Function in COPD. <i>Med Sci Sports Exerc</i> . 2015 Jul; 47(7):1334-41. PMID: 25373483	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Roca M, Mitu F, et al. Characteristics of respiratory mechanics in chronic obstructive pulmonary disease. <i>Rev Med Chir Soc Med Nat Iasi</i> . 2015 Apr-Jun; 119(2):361-7. PMID: 26204637	No BW/BC data in relation to outcomes of interest.
Roca M, Mitu F, et al. (2013) Body composition alterations in chronic obstructive pulmonary disease, <i>Rev Med Chir Soc Med Nat Iasi</i> . 2013; 117(1):29-35. PMID: 24505889	No outcomes of interest (mortality or lung function) were reported.
Rodriguez DA, Alcarraz-Vizan G, et al. Plasma metabolic profile in COPD patients: Effects of exercise and endurance training. <i>Metabolism</i> . 2012; 8(3):508-16.	BW/BC outcome is not a primary independent variable (not the primary predictor).
Rodriguez DA, Garcia-Aymerich J, et al. Determinants of exercise capacity in obese and non-obese COPD patients. <i>Respir Med</i> . 2014; 108(5):745-51.	No outcomes of interest (mortality or lung function) were reported.

Article	Reason for Exclusion ¹
Romieu I, Garcia-Esteban R, et al. The effect of supplementation with omega-3 polyunsaturated fatty acids on markers of oxidative stress in elderly exposed to PM (2.5). <i>Environ Health Persp.</i> 2008; 116(9):1237-42. PMID: 18795169	Not COPD population.
Romme EA, Rutten EP, et al. Bone stiffness and failure load are related with clinical parameters in men with chronic obstructive pulmonary disease. <i>J Bone Miner Res.</i> 2013 Oct; 28(10): 2186-93. PMID: 23553944	Less than 10 subjects per study group.
Romme EA, Murchison JT, et al. CT-measured bone attenuation in patients with chronic obstructive pulmonary disease: relation to clinical features and outcomes. <i>J Bone Miner Res.</i> 2013 Jun; 28(6):1369-77. doi: 10.1002/jbmr.1873. PMID: 23361992	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Rossman MJ, Groot HJ, et al. Oxidative Stress and COPD: The Effect of Oral Antioxidants on Skeletal Muscle Fatigue. <i>Med Sci Sports Exerc.</i> 2013; 45(7):1235-43 PMID: 3299763	No BW/BC data in relation to outcomes of interest.
Rubinsztajn R, Przybyłowski T, et al. Effect of exacerbation frequency on body composition and serum ghrelin and adiponectin concentrations in patients with chronic obstructive pulmonary disease. <i>Pol Arch Med Wewn</i> 2014; 124(7):403-9. PMID: 24881626	No outcomes of interest (mortality or lung function) were reported.
Rubinsztajn R, Przybyłowski T, et al. Correlation between hyperinflation defined as an elevated RV/TLC ratio and body composition and cytokine profile in patients with chronic obstructive pulmonary disease. <i>Pneumonol Alergol Pol.</i> 2015; 83(2): 120-5. PMID: 25754053	Secondary exclusion: Cross-sectional study design.
Rutten EPA, Wouters EFM, et al. Preliminary study on the assessment of visceral adipose tissue using dual-energy x-ray absorptiometry in chronic obstructive pulmonary disease. <i>Multidiscip Respir Med.</i> 2016; 11(1):33. eCollection 2016. PMID: 27729977	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Rutten FH, Moons KG, et al. Recognising heart failure in elderly patients with stable chronic obstructive pulmonary disease in primary care: cross sectional diagnostic study. <i>BMJ</i> 2005; 331(7529):1379. PMID: 16321994	No outcomes of interest (mortality or lung function) were reported.
Rutten EP, Grydeland TB, et al. Quantitative CT: Associations between Emphysema, Airway Wall Thickness and Body Composition in COPD. <i>Pulm Med.</i> 2011; 419328. Epub 2011 Jan 16. PMID: 21647214	Mortality or lung function were not primary outcomes of the study.
Rutten EP, Breyer MK, et al. Abdominal fat mass contributes to the systemic inflammation in chronic obstructive pulmonary disease. <i>Clin Nutr.</i> 2010; 29(6): 756-60. PMID: 20566396	No outcomes of interest (mortality or lung function) were reported.
Rutten EP, Spruit MA, et al. Continuous fat-free mass decline in COPD: fact or fiction? <i>Eur Respir J.</i> 2015 Nov; 46(5): 1496-8. Epub 2015 Sep 17. No abstract available. Erratum in: <i>Eur Respir J.</i> 2016 Nov;48(5):1533. PMID: 26381518	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Rutten EP, Engelen MP, et al. Metabolic and functional effects of glutamate intake in patients with chronic obstructive pulmonary disease (COPD). <i>Clin Nutr.</i> 2008 Jun; 27(3): 408-15. doi: 10.1016/j.clnu.2008.03.001. Epub 2008 Apr 22. PMID: 18433945	Less than 10 subjects per study group.
Rutten EP, Engelen MP, et al. Metabolic effects of glutamine and glutamate ingestion in healthy subjects and in persons with chronic obstructive pulmonary disease. <i>Am J Clin Nutr.</i> 2006 Jan; 83(1): 115-23. PMID: 16400059	Less than 10 subjects per study group.
Ryynanen OP, Soini EJ, et al. Bayesian predictors of very poor health related quality of life and mortality in patients with COPD. <i>BMC Med Inform Decis Mak.</i> 2013; 13(0): 7-13-34. Doi: 1186/1472-5947-13-34. PMID: 23496851.	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Sabino PG, Silva BM, Brunetto AF. Nutritional status is related to fat-free mass, exercise capacity and inspiratory strength in severe chronic obstructive pulmonary disease patients. <i>Clinics (Sao Paulo)</i> 2010; 65(6):599-605. PMID: 20613936	Less than 10 subjects per study group.
Sahebajami H, Sathianpitayakul E. Influence of body weight on the severity of dyspnea in chronic obstructive pulmonary disease. <i>Amer J Respir Crit Care Med.</i> 2000; 161(3): 886-890. PMID: 10712338	Mortality or lung function were not primary outcomes of the study; published prior to 2005.

Article	Reason for Exclusion ¹
Şahin H, Naz İ, et al. The effect of obesity on dyspnea, exercise capacity, walk work and workload in patients with COPD. <i>Tuberk Toraks</i> . 2017 Sep; 65(3):202-9. PMID: 29135398	Secondary exclusion: Cross-sectional study design.
Saito H, Nomura K, et al. Long-term effects of gastrectomy in patients with spirometry-defined COPD and patients at risk of COPD: a case-control study. <i>Int J Chron Obstruct Pulmon Dis</i> . 2015 Oct 29; 10:2311-8. doi: 10.2147/COPD.S87135. eCollection 2015. PMID: 26604730	Data for patients at risk for COPD were not separated from patients diagnosed with COPD.
Sakamoto Y, Yamauchi Y, et al. Development of a nomogram for predicting in-hospital mortality of patients with exacerbation of chronic obstructive pulmonary disease. <i>Intl J Chron Obstr Pulmon Dis</i> . 2017; 12:1605-11. PMID 28615933.	Mortality or lung function were not primary outcomes of the study.
Salepci B, Eren A, et al. The glycemic index (or GI) is a ranking of carbohydrates on a scale from 0 to 100 according to the extent to which they raise blood sugar (glucose) levels after eating. <i>Tuberk Toraks</i> . 2007; 55(4):342-9. PMID: 18224501	Secondary exclusion: Cross-sectional study design.
Sanchez FF, Faganello MM, et al. Relationship between disease severity and quality of life in patients with chronic obstructive pulmonary disease. <i>Braz J Med Biol Res</i> . 2008; 41(10): 860-865. PMID: 19037530	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Sand JM, Martinez G, et al. Characterization of serological neo-epitope biomarkers reflecting collagen remodeling in clinically stable chronic obstructive pulmonary disease. <i>Clin Biochem</i> . 2016; 49(15): 1144-1151. PMID: 27614218	No BW/BC data in relation to outcomes of interest.
Sarc I, Jeric T, et al. Adherence to treatment guidelines and long-term survival in hospitalized patients with chronic obstructive pulmonary disease. <i>J Eval Clin Pract</i> . 2011; 17(4): 737-743. PMID: 21223458	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Sarioglu N, Alpaydin AO, et al. Relationship between BODE index, quality of life and inflammatory cytokines in COPD patients. <i>Multidiscip Respir Med</i> . 2010 Apr 30;5(2):84-91. PMID: 22958780.	BMI was not separated from BODE index and reported separately.
Sarkar SK, Basuthakur S, et al. Evaluation of correlation of BODE index with health-related quality of life among patients with stable COPD attending a tertiary care hospital. <i>Lung India</i> . 2015 Jan-Feb; 32(1):24-8. PMID: 25624592	BMI was not separated from BODE index and reported separately.
Sato M, Shibata Y, et al. Retrospective analysis of the relationship between decline in FEV(1) and abdominal circumference in male smokers: the Takahata study. <i>Intl J Med Sci</i> . 2013; 10(1):42742. PMID: 23288999	Population was healthy smokers, not COPD.
Saure EW, Eagan TM, et al. Predictors for PaO2 and hypoxemic respiratory failure in COPD-A three-year follow-up. <i>COPD</i> . 2014; 11(5) 531-8. PMID: 24831555	Mortality or lung function were not primary outcomes of the study.
Saure EW, Eagan TM, et al. Explained variance for blood gases in a population with COPD. <i>Clin Respir J</i> . 2012; 6(2): 72-80.	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Sava F, Laviolette L, et al. The impact of obesity on walking and cycling performance and response to pulmonary rehabilitation in COPD. <i>BMC Pulmon Med</i> . 2010; 10(0): 55-2466-10-55. PMID: 21054892	No outcomes of interest (mortality or lung function) were reported.
Schembri S, Anderson W, et al. A predictive model of hospitalisation and death from chronic obstructive pulmonary disease. <i>Respir Med</i> . 2009; 103(10):1461-7. PMID: 19515547	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Schönmann M, Sievi NA, et al. Physical activity and the frequency of acute exacerbations in patients with chronic obstructive pulmonary disease. <i>Lung</i> . 2015 Feb; 193(1):63-70. Epub 2014 Dec 13. PMID: 25503750	No BW/BC data in relation to outcomes of interest.
Schoos MM, Dalsgaard M, et al. Echocardiographic predictors of exercise capacity and mortality in chronic obstructive pulmonary disease. <i>BMC Cardiovasc Disord</i> . 2013; 13(0):84-2261-13-84. PMID: 24118827	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.

Article	Reason for Exclusion ¹
Seichilone N, Paglino G, et al. The mini nutritional assessment is associated with the perception of dyspnoea in older subjects with advanced COPD. <i>Age Ageing</i> . 2008; 37(2):214-7. PMID: 17965044.	No BW/BC data in relation to outcomes of interest.
Sergi, G. Coin, A. Met al. Body composition and resting energy expenditure in elderly male patients with chronic obstructive pulmonary disease. <i>Respir Med</i> . 2006; 100(11): 1918-1924. PMID: 16635565	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Seymour JM, Ward K, et al. Ultrasound measurement of rectus femoris cross-sectional area and the relationship with quadriceps strength in COPD. <i>Thorax</i> , 2009; 64(5):418-23. PMID: 19158125	No BW/BC data in relation to outcomes of interest.
Shan X, Liu J, et al. Relationship between nutritional risk and exercise capacity in severe chronic obstructive pulmonary disease in male patients. <i>Int J Chron Obstruct Pulmon Dis</i> . 2015 Jun 23; 10: 1207-12. PMID: 26150712	BMI was not analyzed separately from risk score, which included other components, such as age.
Shankar P, McMillan, J, Carter R. Nutritional support, body weight, and chronic obstructive pulmonary disease. <i>J Respir Care Pract</i> , 2004; 17(4),31-41.	Review article; not primary research; published prior to 2005.
Sharma SK, Reddy TS, et al. Sleep disordered breathing in chronic obstructive pulmonary disease. <i>Indian J Chest Dis Allied Sci</i> . 2002; 44(2): 99-105. PMID: 12026259	No outcomes of interest (mortality or lung function) were reported; published prior to 2005.
Shimray AJ, Kanan W, et al. Association body mass index and spirometric lung function in chronic obstructive pulmonary disease (COPD) patients attending RIMS Hospital, Manipur. <i>J Med Soc</i> 2014; 28: 157-61.	Secondary exclusion: Cross-sectional study design.
Shirai T, Suda T, Inui N, Chida K. Correlation between peripheral blood T-cell profiles and clinical and inflammatory parameters in stable COPD. <i>Allergology Intl</i> 2010; 59(1)75-82. PMID: 20035145	No BW/BC data in relation to outcomes of interest.
Sievi NA, Senn O, et al. Impact of comorbidities on physical activity in COPD. <i>Respirology</i> . 2015 Apr; 20(3):413-8. Epub 2015 Jan 6. PMID: 25565363	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Silva BSA, Lira FS, et al. Severity of COPD and its relationship with IL-10. <i>Cytokine</i> . 2018 Jun; 106: 95-100. Epub 2017 Nov 3. PMID: 29108795	No outcomes of interest (mortality or lung function) were reported.
Silva DR, Coelho AC, et al. Osteoporosis prevalence and associated factors in patients with COPD: a cross-sectional study. <i>Respir Care</i> . 2011; 56(7):961-8. PMID: 21352667	No outcomes of interest (mortality or lung function) were reported.
Silva DR, Gazzana MB, et al. C-reactive protein levels in stable COPD patients: a case-control study. <i>Int J Chron Obstruct Pulmon Dis</i> . 2015 Aug 31; 10:1719-25. eCollection 2015. PMID: 26357470	No BW/BC data in relation to outcomes of interest.
Silveira L, Teixeira PJ, et al. The relationship between fat-free mass index and pulmonary hyperinflation in COPD patients. <i>Respirology</i> 2014; 19(8):1204-8	Mortality or lung function were not primary outcomes of the study.
Sin DD, Wu L, et al. Inhaled corticosteroids and mortality in chronic obstructive pulmonary disease. <i>Thorax</i> , 2005; 60(12): 992-997. PMID: 16227327	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Singanayagam A, Schembri S, Chalmers JD. Predictors of mortality in hospitalized adults with acute exacerbation of chronic obstructive pulmonary disease. <i>Ann Am Thorac Soc</i> . 2013; 10(2):81-9. PMID: 23607835.	Review article; not primary research.
Singer RB. Mortality in a recent study of 625 patients with chronic obstructive pulmonary disease compared with results of 3 older studies. <i>J Insur Med</i> . 2005; 37(3):179-84. PMID: 16259207	BMI was not separated from BODE index and reported separately.
Skyba P, Kluchova Z, et al. Nutritional status in relation to respiratory impairment and systemic inflammation in patients with acute exacerbations of COPD. <i>Med Sci Monit</i> . 2009 Oct; 15(10): CR528-533. PMID: 19789512	Secondary exclusion: Cross-sectional study design.
Slinde F, Ellegard L, et al. Total energy expenditure in underweight patients with severe chronic obstructive pulmonary disease living at home. <i>Clin Nutr</i> . 2003; 22(2):159-65. PMID: 12706133	BW/BC was not evaluated in relation to outcomes; energy equation study; published prior to 2005.

Article	Reason for Exclusion ¹
Slinde F, Gronberg AM, et al. Individual dietary intervention in patients with COPD during multidisciplinary rehabilitation. <i>Respir Med</i> , 2002; 96(5):330-6. PMID: 12113383	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes; published prior to 2005.
Slinde F. Body composition and energy expenditure in patients with chronic obstructive pulmonary disease. <i>Scand J Nutr</i> , 2005; 49(1):40-1.	Secondary exclusion: Cross-sectional study design.
Snider JT, Jena AB, et al. Effect of hospital use of oral nutritional supplementation on length of stay, hospital cost, and 30-day readmissions among Medicare patients with COPD. <i>Chest</i> . 2015 Jun; 147(6):1477-84. PMID: 25357165	No BW/BC data in relation to outcomes of interest.
Soler-Cataluna JJ, Martinez-Garcia MA, et al. Severe acute exacerbations and mortality in patients with chronic obstructive pulmonary disease. <i>Thorax</i> , 2005; 60(11): 925-31. PMID: 16055622	No BW/BC data in relation to outcomes of interest.
Spruit MA, Pennings HJ, et al. Extra-pulmonary features in COPD patients entering rehabilitation after stratification for MRC dyspnea grade. <i>Respir Med</i> . 2007; 101(12): 2454-63. PMID: 17765532	No BW/BC data in relation to outcomes of interest.
Spruit MA, Franssen FME, et al. Age-graded reductions in quadriceps muscle strength and peak aerobic capacity in COPD. <i>Brazil J Phys Ther</i> , 2012; 16(2):148-56.	No outcomes of interest (mortality or lung function) were reported.
Steiner MC, Singh SJ, Morgan MD. The contribution of peripheral muscle function to shuttle walking performance in patients with chronic obstructive pulmonary disease. <i>J Cardiopulm Rehabil</i> , 2005; 25(1): 43-49. PMID: 15714112	Population that is not COPD; Fibrosis (without COPD).
Steuten LM, Creutzberg EC. COPD as a multicomponent disease: inventory of dyspnoea, underweight, obesity and fat free mass depletion in primary care. <i>Prim Care Respir J</i> 2006; 15(2):84-91. PMID: 16701766	No outcomes of interest (mortality or lung function) were reported.
Stojkovic J, Stevcevska G. Quality of life, forced expiratory volume in one second and body mass index in patients with COPD, during therapy for controlling the disease. <i>Prilozi</i> . 2009; 30(1): 129-142. PMID: 19736536	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Stratelis G, Fransson SG, et al. High prevalence of emphysema and its association with BMI: a study of smokers with normal spirometry. <i>Scand J Prim Health Care</i> . 2008; 26(4):241-7. PMID: 18846446	Population that is not COPD; Smokers with normal lung function.
Stump TE, Callahan CM, Hendrie HC. Cognitive impairment and mortality in older primary care patients. <i>J Amer Geriat Soc</i> , 2001; 49(7): 934-40. PMID: 11527485	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes; published prior to 2005.
Sugawara K, Takahashi H, et al. Effect of anti-inflammatory supplementation with whey peptide and exercise therapy in patients with COPD. <i>Respir Med</i> . 2012; 106(11):1526-34. PMID: 22857881 DOI: 10.1016/j.rmed.2012.07.001.	BW/BC outcome is not a primary independent variable (not the primary predictor); not powered to assess relationships between BW/BC and COPD outcomes.
Sugino M, Yoshimori K, et al. Nutritional status and resting energy expenditure in patients with chronic obstructive pulmonary disease. <i>Rev Espanola Nutricion Humana Dietetica</i> , 2016; 20(440):2173-92	Not a research study; poster abstract.
Sundh J, Ställberg B, et al. Comparison of the COPD Assessment Test (CAT) and the Clinical COPD Questionnaire (CCQ) in a Clinical Population. <i>COPD</i> . 2016; 13(1):57-65. Epub 2015 Sep 14. PMID: 26367315	No BW/BC data in relation to outcomes of interest.
Sundh J, Stallberg B, et al. Co-morbidity, body mass index and quality of life in COPD using the Clinical COPD Questionnaire. <i>COPD</i> . 2011; 8(3):173-181. PMID: 21513436	No outcomes of interest (mortality or lung function) were reported.
Sund Levander M, Milberg A, et al. Differences in predictors of 5-year survival over a 10-year period in two cohorts of elderly nursing home residents in Sweden. <i>Scand J Caring Sci</i> . 2016 Dec; 30(4):714-20. Epub 2016 Feb 4. PMID: 26842844	Not all COPD subjects.
Sundvall P, Grönberg A, et al. Energy and nutrient intake in patients with chronic obstructive pulmonary disease hospitalized owing to an acute exacerbation. <i>Scandin J Nutr</i> 2005; 49(3): 116-121 6p. Accession Number: 106381558.	No BW/BC data in relation to outcomes of interest.

Article	Reason for Exclusion ¹
Suzuki M, Makita H, et al. Clinical features and determinants of COPD exacerbation in the Hokkaido COPD cohort study. <i>Europ Respir J</i> . 2014; 43(5): 1289-97.	Mortality or lung function were not primary outcomes of the study.
Swallow EB, Reyes D, et al. Quadriceps strength predicts mortality in patients with moderate to severe chronic obstructive pulmonary disease. <i>Thorax</i> . 2007; 62(2):115-20. PMID: 17090575.	Evaluated quadricep muscle strength and mortality; muscle strength is not a measure of body composition.
Szczegieliński J, Bogacz K, et al. Usage of BODE index to estimate the results of rehabilitation of patients with chronic obstructive lung disease, <i>Physiotherapy</i> . 2008; 16(1), 64-71. doi: https://doi.org/10.2478/v10109-009-0007-x	BMI was not separated from BODE index and reported separately.
Takabatake N, Arao T, et al. Circulating levels of soluble Fas ligand in cachexic patients with COPD are higher than those in non-cachexic patients with COPD. <i>Inter Med</i> . 2005; 44(11):1137-43. PMID: 16357450	BW/BC was not evaluated in relation to outcomes.
Takabatake N, Sata M, Inoue S, et al. A novel polymorphism in secretory phospholipase A2-IIID is associated with body weight loss in chronic obstructive pulmonary disease. <i>Amer J Respir Criti Care Med</i> . 2005; 172(9):1097-104. PMID: 16002569	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Takigawa N, Tada A, et al. Distance and oxygen desaturation in 6-min walk test predict prognosis in COPD patients. <i>Respir Med</i> . 2007; 101(3):561-67. PMID: 16899358	No BW/BC data in relation to outcomes of interest.
Tamai K, Matsuoka H, et al. Nocturnal Oxygen Desaturation Index is Inversely Correlated with Airflow Limitation in Patients with Chronic Obstructive Pulmonary Disease. <i>COPD</i> . 2016; 13(2):235-40. PMID: 26625298	Population is not COPD; Oxygen Desaturation Index is related to sleep apnea.
Tanni SE, Zamuner AT, et al. Are metabolic syndrome and its components associated with 5-year mortality in chronic obstructive pulmonary disease patients? <i>Metab Syndr Relat Disord</i> . 2015 Feb; 13(1):52-4. Epub 2014 Oct 29. PMID: 25353094	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Tanni SE, Pelegrino NR, Angeleli AY, Correa C, Godoy I. Smoking status and tumor necrosis factor-alpha mediated systemic inflammation in COPD patients. <i>J Inflamm</i> . 2010; Jun 9(7) 7:29. PMID: 20534161.	No BW/BC data in relation to outcomes of interest.
Taskiran OO, Lacin A, Ozturk G, et al. Clinical and demographic characteristics of patients with chronic obstructive pulmonary disease engaged in pulmonary rehabilitation during exacerbation. <i>Turkiye Fiziksel Tip ve Rehabilitasyon Dergisi - Volume 57, Issue 0, pp. 273</i>	Not in English language.
Tateishi Y, Yoshikawa T, et al. Evaluation of peripheral muscle oxygenation during exercise by spatially resolved spectroscopy in patients with chronic obstructive pulmonary disease. <i>Osaka City Med J</i> , 2005; 51(2): 65-72. PMID: 16617683	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Teixeira PJ, Costa CC, et al. Six-minute walk work is not correlated to the degree of airflow obstruction in patients with Chronic Obstructive Pulmonary Disease (COPD). <i>Rev Portuguesa Pneum</i> , 2006; 12(3):241-4. PMID: 16967174	Mortality or lung function were not primary outcomes of the study.
Teopompi E, Tzani P, Aiello M, Ramponi S, Andrani F, Marangio E, Clini E, Chetta A. Fat-free mass depletion is associated with poor exercise capacity irrespective of dynamic hyperinflation in COPD patients. <i>Respir Care</i> . 2014 May; 59(5):718-25. Epub 2013 Oct 29. PMID: 24170915	Mortality or lung function were not primary outcomes of the study.
Thorleifsson SJ, Margretardottir OB, et al. Chronic airflow obstruction and markers of systemic inflammation: results from the BOLD study in Iceland. <i>Respir Med</i> . 2009; 103(10):1548-53. PMID: 19427181	BW/BC outcome is not the primary independent variable (not the primary predictor); No outcomes of interest (mortality or lung function) were reported.
Thorsdottir I, Gunnarsdottir I, et al. Screening method evaluated by nutritional status measurements can be used to detect malnourishment in chronic obstructive pulmonary disease. <i>J Amer Diet Assoc</i> , 2001;101(6):648-54. PMID: 11424543	No BW/BC data in relation to outcomes of interest; published prior to 2005.
Tkacova R, Ukropec J, et al. Increased adipose tissue expression of proinflammatory CD40, MKK4 and JNK in patients with very severe chronic obstructive pulmonary disease. <i>Respir</i> , 2011; 81(5):386-93. PMID: 20699612	Less than 10 subjects per study group.
Tomoda K, Yoshikawa M, et al. Elevated circulating plasma adiponectin in underweight patients with COPD. <i>Chest</i> , 2007; 132(1):135-40. PMID: 17625082	BW/BC was not evaluated in relation to outcomes.

Article	Reason for Exclusion ¹
Torres-Sánchez I, Valenza MC, et al. Results of a Multimodal Program During Hospitalization in Obese COPD Exacerbated Patients. <i>COPD</i> . 2016; 13(1):19-25. PMID: 26418629	No BW/BC measures in relation to outcomes.
Toth S, Tkacova R, et al. (2004) Nutritional depletion in relation to mortality in patients with chronic respiratory insufficiency treated with long-term oxygen therapy. <i>Wien Klin Wochenschr</i> , 2004; 116(17): 617-621. PMID: 15515880	Population that is not COPD; chronic respiratory insufficiency; published prior to 2005.
Travassos A, Rodrigues A, et al. Fat-free mass depletion in patients with COPD in Brazil: development of a new cutoff point and its relation with mortality and extrapulmonary manifestations. <i>Euro J Clin Nutr</i> . 2017; 71: 1285-1290. PMID 28722028.	Study developed a cut-off for FFM depletion and mortality; did not study relationship between FFM and mortality.
Tsai CL, Camargo CA, Jr. The role of body mass index in acute exacerbations of chronic obstructive pulmonary disease. <i>Emerg Med J</i> . 2009; 26(10):701-5. PMID: 19773486.	No outcomes of interest (mortality or lung function) were reported.
Tsao S, Yin M, Liu W. Oxidant stress and B vitamins status in patients with non-small cell lung cancer. <i>Nutr Can</i> . 2007; 59(1):8-13 PMID: 17927496.	Not a COPD population.
Tsimogianni AM, Papis SA, et al. Predictors of positive sputum cultures in exacerbations of chronic obstructive pulmonary disease. <i>Respir</i> 2009; 14(8):1114-20. PMID: 19761538	No BW/BC data in relation to outcomes of interest.
Tunsupon P, Mador MJ. The Influence of Body Composition on Pulmonary Rehabilitation Outcomes in Chronic Obstructive Pulmonary Disease Patients. <i>Lung</i> . 2017 Dec; 195(6):729-38. Epub 2017 Oct 9. PMID: 28993936	No outcomes of interest (mortality or lung function) were reported.
Uppal M, Gupta B, et al. Factors affecting severity, functional parameters, and quality of life in COPD patients. <i>J Indian Acad Clin Med</i> . 2014; 15(1):42-46.	No outcomes of interest (mortality or lung function) were reported.
Ussetti P, Laporta R. Predicting outcomes in chronic obstructive pulmonary disease. <i>NEJM</i> , 2004; 350(22):2308-10; author reply 2308-10. PMID: 15168424	Not primary research; author reply; published prior to 2005.
Vagaggini B, Costa F, et al. Clinical predictors of the efficacy of a pulmonary rehabilitation programme in patients with COPD. <i>Respir Med</i> . 2009 Aug; 103(8): 1224-30. Epub 2009 Mar 21. PMID: 19304473	No BW/BC data in relation to outcomes of interest.
Torres-Sánchez I, Valenza MC, et al. Results of a Multimodal Program During Hospitalization in Obese COPD Exacerbated Patients. <i>COPD</i> . 2016; 13(1):19-25. PMID: 26418629	No BW/BC data in relation to outcomes of interest.
van de Bool C, Rutten EP, et al. Antagonistic implications of sarcopenia and abdominal obesity on physical performance in COPD. <i>Eur Respir J</i> . 2015 Aug; 46(2):336-45. Epub 2015 Apr 16. PMID: 25882802	No outcomes of interest (mortality or lung function) were reported.
van de Bool C, Mattijssen-Verdonschot C, et al. Quality of dietary intake in relation to body composition in patients with chronic obstructive pulmonary disease eligible for pulmonary rehabilitation. <i>Eur J Clin Nutr</i> . 2014 ;68(2):159-65. PMID: 24327123	No outcomes of interest (mortality or lung function) were reported.
van den Borst B, Koster A, et al. Is age-related decline in lean mass and physical function accelerated by obstructive lung disease or smoking? <i>Thorax</i> . 2011; 66(11): 961-69. PMID: 21724748	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
van den Borst B, Slot IG, et al. Loss of quadriceps muscle oxidative phenotype and decreased endurance in patients with mild-to-moderate COPD. <i>J App Phys</i> . 2013; 114(9):1319-1328. PMID: 22815389	No outcomes of interest (mortality or lung function) were reported.
van den Borst B, Gosker HR, et al. The influence of abdominal visceral fat on inflammatory pathways and mortality risk in obstructive lung disease. <i>Am J Clin Nutr</i> . 2012 Sep; 96(3): 516-26. Epub 2012 Jul 18. PMID: 22811442	Adiposity was not directly related to mortality. Adiposity was related to inflammation, which was then related to mortality.
Vanfleteren LE, van Meerendonk, et al. A possible link between increased metabolic activity of fat tissue and aortic wall inflammation in subjects with COPD. A retrospective 18F-FDG-PET/CT pilot study. <i>Respir Med</i> . 2014; 108(6):883-90. PMID: 24785152	No BW/BC data in relation to outcomes of interest.
van Helvoort HA, Heijdra YF, et al. Exercise-induced systemic effects in muscle-wasted patients with COPD. <i>Med Sci Sports Exerc</i> 2006; 38(9):1543-52. PMID: 16960513	No BW/BC data in relation to outcomes of interest.
van Wetering CR, Hoogendoorn M, Broekhuizen R, et al. Efficacy and costs of nutritional rehabilitation in muscle-wasted patients with chronic obstructive	No outcomes of interest (mortality or lung function) were reported.

Article	Reason for Exclusion ¹
pulmonary disease in a community-based setting: a prespecified subgroup analysis of the INTERCOM trial. <i>J Am Med Dir Assoc.</i> 2010; 11(3):179-87. PMID: 20188315	
van Wetering CR, van Nooten FE, et al. Systemic impairment in relation to disease burden in patients with moderate COPD eligible for a lifestyle program. Findings from the INTERCOM trial. <i>Intl J Chron Obstruct Pulmon Dis</i> , 2008; 3(3):443-51. PMID: 18990973	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Varraso R, Fung TT, et al. Prospective study of dietary patterns and chronic obstructive pulmonary disease among US women. <i>Amer J Clin Nutr.</i> 2007; 86(2):488-95 PMID: 17684223	No BW/BC data in relation to outcomes of interest.
Vaughan P, Oey IF, et al. A prospective analysis of the inter-relationship between lung volume reduction surgery and body mass index. <i>Europ J Cardio Thor Surg</i> 2007; 32(6):839-42. PMID: 17933547	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Velasco R, Pirraglia PA, et al. Influence of body mass index on changes in disease-specific quality of life of veterans completing pulmonary rehabilitation <i>J Cardiopulm Rehabil Prev.</i> 2010; 30(5): 334-339. PMID: 20562710	Not a COPD population; chronic respiratory disease.
Verhage T, Heijdra Y, et al. Associations of muscle depletion with health status. Another gender difference in COPD? <i>Clin Nutr</i> 2011; 30(3):332-8. PMID: 21081257	Mortality or lung function were not primary outcomes of the study.
Vermeere, MA, Creutzberg EC, et al. COSMIC Prevalence of nutritional depletion in a large out-patient population of patients with COPD. <i>Respir Med.</i> 2006 100(8): 1349-55. PMID: 16412624	Mortality or lung function were not primary outcomes of the study.
Vestbo J, Prescott E, et al. Body mass, fat-free body mass, and prognosis in patients with chronic obstructive pulmonary disease from a random population sample: findings from the Copenhagen City Heart Study. <i>Am J Respir Crit Care Med.</i> 2006 Jan 1; 173(1):79-83. PMID: 16368793	Grouped individuals at risk for COPD with those diagnosed with COPD.
Vibhuti A, Arif E, et al. (2007) Correlation of oxidative status with BMI and lung function in COPD <i>Clin Biochem.</i> 2007; 40(13): 958-963. PMID: 17631288	Mortality or lung function were not primary outcomes of the study.
Vilaro J, Rabinovich R, et al. Clinical assessment of peripheral muscle function in patients with chronic obstructive pulmonary disease. <i>Amer J Phys Med Rehabil.</i> 2009; 88(1):39-46. PMID: 18971770	Less than 10 subjects per study group.
Vilaro J, Ramirez-Sarmiento A, et al. Global muscle dysfunction as a risk factor of readmission to hospital due to COPD exacerbations. <i>Respir Med</i> , 2010; 104(12): 1896-1902. PMID: 20541383	BW/BC outcome is not a primary independent variable (not the primary predictor); muscle dysfunction.
Villalobos N, Davidson R, et al. External Validation of the Comorbidity Test. <i>COPD.</i> 2017 Oct; 14(5): 513-517. PMID: 28876204	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Villaca DS, Lerario MC, dal Corso S, et al. Clinical value of anthropometric estimates of leg lean volume in nutritionally depleted and non-depleted patients with chronic obstructive pulmonary disease. <i>Br J Nutr.</i> 2008; 100(2): 380-6. PMID: 18184453	No BW/BC data in relation to outcomes of interest.
Vivodtzev I, Pépin JL, Vottero G, et al. Improvement in Quadriceps Strength and Dyspnea in Daily Tasks After 1 Month of Electrical Stimulation in Severely Deconditioned and Malnourished COPD. <i>Chest.</i> 2006; 129(6): 1540-48. PMID: 16778272	No BW/BC data in relation to outcomes of interest.
Vondracek SF, Voelkel NF, et al. The relationship between adipokines, body composition, and bone density in men with chronic obstructive pulmonary disease. <i>Intl J Chron Obstruct Pulmon Dis.</i> 2009; 4(0):267-77. PMID: 19657401	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Vogiatzis I, Simoes DC, Stratakos G, Kourepini E, Terzis G, Manta P, Athanasopoulos D, Roussos C, Wagner PD, Zakyntinos S. (2010) Effect of pulmonary rehabilitation on muscle remodelling in cachectic patients with COPD. <i>The European respiratory journal</i> , 36(2): 301-310. PMID: 20110400	No BW/BC data in relation to outcomes of interest.

Article	Reason for Exclusion ¹
Vozoris NT, O'Donnell DE. Prevalence, risk factors, activity limitation and health care utilization of an obese, population-based sample with chronic obstructive pulmonary disease. <i>Canad Respir J.</i> 2012; 19(3): e18-24. PMID: 226796.	No BW/BC data in relation to outcomes of interest.
Vukovic DS, Nagorni-Obradovic LM, et al. Lifestyle and perceived health in subjects with chronic bronchitis or emphysema: a cross-sectional study. <i>BMC Pub Health.</i> 2010 Sep 9; 10:546. PMID: 20828414	No BW/BC data in relation to outcomes of interest.
Waatevik M, Johannessen A, et al. Different COPD disease characteristics are related to different outcomes in the 6-minute walk test. <i>COPD.</i> 2012; 9(3):227-34 PMID: 22497532	No outcomes of interest (mortality or lung function) were reported.
Wang TY, Lo YL, et al. Associated bone mineral density and obstructive sleep apnea in chronic obstructive pulmonary disease. <i>Int J Chron Obstruct Pulmon Dis.</i> 2015 Jan 29; 10: 231-7. eCollection 2015. PMID: 25673983	No BW/BC data in relation to outcomes of interest.
Waschki B, Kirsten AM, et al. Disease Progression and Changes in Physical Activity in Patients with Chronic Obstructive Pulmonary Disease. <i>Am J Respir Crit Care Med.</i> 2015 Aug 1; 192(3): 295-306. PMID: 26020495	No BW/BC data in relation to outcomes of interest.
Watson L, Vonk JM, et al. Predictors of lung function and its decline in mild to moderate COPD in association with gender: results from the Euroscop study. <i>Respir Med,</i> 2006; 100(4): 746-753. PMID: 16199147	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Watson L, Schouten JP, Löfdahl CG, Pride NB, Laitinen LA, Postma DS; European Respiratory Society Study on Chronic Obstructive Pulmonary Disease. Predictors of COPD symptoms: does the sex of the patient matter? <i>Eur Respir J.</i> 2006 Aug; 28(2): 311-8. Epub 2006 May 17. PMID: 16707516	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Waseem SMA, Hussain MM, Ahmad Z, Islam N. A Study of Pulmonary Functions and Lipid Peroxidation Biomarker in COPD: Correlation between Malondialdehyde and Lung Functions. <i>Biomed Res.</i> 2012. 23. 66-71.	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Wijnhoven HA, van Bokhorst-de van der Schueren MA, et al. Low mid-upper arm circumference, calf circumference, and body mass index and mortality in older persons. <i>J Gerontol A Biol Sci Med Sci.</i> 2010; 65(10):1107-14. PMID: 20547497	Not all COPD population; Elderly population.
Williams NP, Coombs NA, et al. Seasonality, risk factors and burden of community-acquired pneumonia in COPD patients: a population database study using linked health care records. <i>Int J Chron Obstruc Pulmon Dis.</i> 2017; 12(0):313-22. PMID: 28176888	No BW/BC data in relation to outcomes of interest.
Wilson R, Anzueto A, et al. Prognostic factors for clinical failure of exacerbations in elderly outpatients with moderate-to-severe COPD. <i>Int J Chron Obstruct Pulmon Dis.</i> 2015 Jun 2; 10: 985-93. eCollection 2015. PMID: 26082623	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Wu F, Chang CFu, et al. (2010). Prevalence of macrocytosis in patients with chronic obstructive pulmonary disease. <i>N Z J Med Lab Sci.</i> 2010; 64. 86-87.	No BW/BC data in relation to outcomes of interest.
Xiao D, Wang C, et al. Relationship between polymorphisms of genes encoding microsomal epoxide hydrolase and glutathione S-transferase P1 and chronic obstructive pulmonary disease. <i>Chinese Med J.</i> 2004; 117(5): 661-7. PMID: 15161530	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes. Published prior to 2005.
Yamamoto Y, Yoshikawa M, et al. Distribution of bone mineral content is associated with body weight and exercise capacity in patients with chronic obstructive pulmonary disease. <i>Respir.</i> 2014; 87(2): 158-64. Epub 2013 Dec 7. PMID: 24334752	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Yamagata T, Sugiura H, et al. Overexpression of CD-11b and CXCR1 on circulating neutrophils: its possible role in COPD. <i>Chest,</i> 2007; 132(3): 890-9. PMID: 17573488	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for

Article	Reason for Exclusion ¹
	relationships between BW/BC and COPD outcomes.
Yang H, Xiang P, et al. Is hypercapnia associated with poor prognosis in chronic obstructive pulmonary disease? A long-term follow-up cohort study. <i>BMJ Open</i> . 2015 Dec 15; 5(12): e008909. PMID: 26671953	No BW/BC data in relation to outcomes of interest.
Yang L, Zhou M, et al. Body mass index and chronic obstructive pulmonary disease-related mortality: a nationally representative prospective study of 220,000 men in China. <i>Int J Epidemiol</i> . 2010; 39(4): 1027-36. PMID: 20400495	Not all COPD population; general population.
Yang YM, Sun TY, et al. The role of serum leptin and tumor necrosis factor-alpha in malnutrition of male chronic obstructive pulmonary disease patients. <i>Chinese Med J</i> , 2006; 119(8): 628-33. PMID: 16635406	No BW/BC data in relation to outcomes of interest.
Yende S, Waterer GW, et al. Inflammatory markers are associated with ventilatory limitation and muscle dysfunction in obstructive lung disease in well-functioning elderly subjects. <i>Thorax</i> , 2006; 61(1):10-6; Epub 2005 Nov 11 PMID: 16284220	BW/BC measures were not related to outcomes.
Ye, SS, Hafner A, et al. Relationship between body composition and cytokines in cachectic patients with chronic obstructive pulmonary disease. <i>J Amer Ger Soc</i> , 2003; 51(6): 890-1. PMID: 12757590	Less than 10 subjects per study group; published prior to 2005.
Yılmaz D, Çapan N, Canbakan S, Besler HT. Dietary intake of patients with moderate to severe COPD in relation to fat-free mass index: a cross-sectional study. <i>Nutr J</i> . 2015 Apr 10; 14:35. PMID: 25855019	Mortality or lung function were not primary outcomes of the study.
Yquel RJ, Tessonneau F, et al. Peak anaerobic power in patients with COPD: gender related differences. <i>Europ J App Phys</i> , 2006; 97(3):307-15. PMID: 16770466	BW/BC outcome is not a primary independent variable (not the primary predictor); BW/BC was not powered for relationships between BW/BC and COPD outcomes.
Yohannes AM, Baldwin RC, Connolly M. Mortality predictors in disabling chronic obstructive pulmonary disease in old age. <i>Age Ageing</i> . 2002 Mar; 31(2): 137-40. PMID: 11937477	Secondary exclusion: Cross-sectional study design; published prior to 2005.
Yoneda T, Yoshikawa M, Fu A, et al. Plasma levels of amino acids and hypermetabolism in patients with chronic obstructive pulmonary disease. <i>Nutr</i> . 2001; 17(2) :95-9. PMID: 11240335.	No BW/BC data in relation to outcomes of interest; published prior to 2005.
Yoshikawa M, Fujita Y, et al. Mini Nutritional Assessment Short-Form predicts exacerbation frequency in patients with chronic obstructive pulmonary disease. <i>Respir</i> . 2014; 19(8): 1198-1203	BW/BC outcome is not a primary independent variable (not the primary predictor).
Yoshikawa M, Yoneda T, et al. Distribution of muscle mass and maximal exercise performance in patients with COPD. <i>Chest</i> , 2001; 119(1): 93-98. PMID: 11157589	Mortality or lung function were not primary outcomes of the study; published prior to 2005.
Zagaceta J, Zulueta JJ, et al. Epicardial adipose tissue in patients with chronic obstructive pulmonary disease. <i>PloS One</i> . 2013; 8(6): e65593. PMID: 23762399.	Mortality or lung function were not primary outcomes of the study.
Zamarron C, Morete E. Health-related quality of life in patients with chronic obstructive pulmonary disease: Effects of home-care program Minerva <i>Pneumol</i> . 2011 December; 50(4): 247-55.	BW/BC outcome is not a primary independent variable (not the primary predictor).
Zanoria SJ, ZuWallack R. Directly measured physical activity as a predictor of hospitalizations in patients with chronic obstructive pulmonary disease. <i>Chron Respir Dis</i> . 2013; 10(4): 207-213. PMID: 24177682	BW/BC outcome is not a primary independent variable (not the primary predictor).

¹Abbreviations: BC=body composition; BODE Index=body mass index, lung obstruction, dyspnea, and exercise capacity; BW=body weight; OAD=obstructive airway disease.