[62]   D. Donaire-Gonzalez,   E. Gimeno-Santos,   E. Balcells,   J. de Batlle,   M. A.   Ramon, E. Rodriguez, E. Farrero, M. Benet, S. Guerra, J. Sauleda *et al.*, "Benefits of physical activity on copd hospitalisation depend on intensity," *European Respiratory Journal*, pp. ERJ–01699, 2015.

[63]   M. A. Spruit, F. Pitta, E. McAuley, R. L. ZuWallack, and L. Nici, "Pulmonary rehabilitation and physical activity in patients with chronic obstructive pulmonary disease," *American journal of respiratory and critical care medicine*, vol. 192, no. 8, pp. 924–933, 2015.

[64]   V. Cavalheri, L. Straker, D. F. Gucciardi, P. A. Gardiner, and K. Hill, "Changing physical activity and sedentary behaviour in people with copd," *Respirology*, 2015.

[65]   J. Bestall, E. Paul, R. Garrod, R. Garnham, P. Jones, and J. Wedzicha, "Usefulness of the medical research council (mrc) dyspnoea scale as a measure of disability in patients with chronic obstructive pulmonary disease," *Thorax*, vol. 54, no. 7, pp. 581–586, 1999.

[66]   M. A. Puhan, J. Garcia-Aymerich, M. Frey, G. ter Riet, J. M. Antó, A. G. Agust, F. P. Gómez, R. Rodrguez-Roisn, K. G. Moons, A. G. Kessels *ét al.*, "Expansion of the prognostic assessment of patients with chronic obstructive pulmonary disease: the updated bode index and the ado index," *The Lancet*, vol. 374, no. 9691, pp. 704–711, 2009.

[67]   K. F. Rabe, S. Hurd, A. Anzueto, P. J. Barnes, S. A. Buist, P. Calverley, Y. Fukuchi, C. Jenkins, R. Rodriguez-Roisin, C. Van Weel *et al.*, "Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease: Gold executive summary," *American journal of respiratory and critical care medicine*, vol. 176, no. 6, pp. 532–555, 2007.

[68]   M. M. Sharif, A. S. BaHammam *et al.*, "Sleep estimation using bodymedia's sensewear armband in patients with obstructive sleep apnea," *Annals of thoracic medicine*, vol. 8, no. 1, p. 53, 2013.

[69]   S. Dolnicar, "A review of unquestioned standards in using cluster analysis for data-driven market segmentation," *Faculty of Commerce-Papers*, p. 273, 2002.

[70]   A. K. Formann, *Die latent-class-analyse: Einführung in Theorie und Anwendung*. Beltz, 1984.

[71]   J. Garcia-Aymerich, F. P. Gómez, M. Benet, E. Farrero, X. Basagaña, À. Gayete, C. Paré, X. Freixa, J. Ferrer, A. Ferrer *et al.*, "Identification and prospective validation of clinically relevant chronic obstructive pulmonary disease (copd) subtypes," *Thorax*, vol. 66, no. 5, pp. 430–437, 2011.

[72]   M. Weatherall, J. Travers, P. Shirtcliffe, S. Marsh, M. Williams, M. Nowitz, S. Aldington, and R. Beasley, "Distinct clinical phenotypes of airways disease defined by cluster analysis," *European Respiratory Journal*, vol. 34, no. 4, pp. 812–818, 2009.

[73]   P. R. Burgel, J. Paillasseur, D. Caillaud, I. Tillie-Leblond, P. Chanez, R. Escamilla, T. Perez, P. Carré, N. Roche *et al.*, "Clinical copd phenotypes: a novel approach using principal component and cluster analyses," *European Respiratory Journal*, vol. 36, no. 3, pp. 531–539, 2010.

[74]   L. E. Vanfleteren, M. A. Spruit, M. Groenen, S. Gaffron, V. P. van Empel, P. L. Bruijnzeel, E. P. Rutten, J. Op't Roodt, E. F. Wouters, and F. M. Franssen, "Clusters of comorbidities based on validated objective measurements and systemic inflammation in patients with chronic obstructive pulmonary disease," *American journal of respiratory and critical care medicine*, vol. 187, no. 7, pp. 728–735, 2013.

[75]   S. Harrison, N. Robertson, C. Graham, J. Williams, M. Steiner, M. Morgan, and S. Singh, "Can we identify patients with different illness schema following an acute exacerbation of copd: a cluster analysis," *Respiratory medicine*, vol. 108, no. 2, pp. 319–328, 2014.