

Authors' Reply to "Corticosteroids in Exacerbations of Chronic Obstructive Pulmonary Disease: Yes, but Less"

To the editor: We would like to thank Dr. Vereza-Hernández for his interest and enriching critical reading of our work.¹ Systemic corticosteroids are effective in the treatment of exacerbations of chronic obstructive pulmonary disease (COPD).² Nevertheless, as indicated in our review, there are no conclusive studies on the optimum dosage and duration of treatment with corticosteroids in these circumstances.¹ The best available medical evidence in this regard comes from the study by Niewoehner et al.,³ the most extensive study available (271 patients) that has been specifically designed to evaluate clinical variables in exacerbated COPD as a primary objective. The results show that using high initial dosages of corticosteroids (125 mg of methylprednisolone every 6 hours) reduces treatment failure, shortens the stay in hospital and improves the lung function of these patients.³

It is true that lower dosages of corticosteroids (30 to 40 mg every 24 h) have led to positive results in shorter studies on outpatients or patients who continued to take inhaled corticosteroids during the study.^{4,5} This information *a)* confirms the usefulness of systemic corticosteroids in the treatment of exacerbated COPD; *b)* supports the assertion of a lack of definition regarding the optimum dosage for beginning treatment; and *c)* allows us to assume that the less severe exacerbations may be treated with lower doses of corticosteroids. We do not believe, however, that there is sufficient medical evidence to recommend low dosages of corticosteroids in the initial treatment of patients with exacerbated COPD who require admission to hospital. For this reason, in our review, we recommend initial dosages of 0.5 mg/kg every 6 to 8 hours of prednisolone, in accordance with the recommendations of the Spanish Society of Pulmonology and Thoracic Surgery

(SEPAR) and with an evidence grade of D (opinion of consensus groups).^{1,6} At the other extreme and with the same grade of evidence, the consensus statement of the American Thoracic Society/European Respiratory Society recommends the use of low dosages of corticosteroids (30 to 40 mg per day of prednisone) and considers administering them via inhalation, even in patients requiring intensive care.⁷ To conclude, the initial optimum dosage is not properly established and any recommendation can only have an evidence grade of D.

M. Carrera, E. Sala, B.G. Cosío, and A.G.N. Agustí
 Servicio de Neumología, Hospital Universitario Son Dureta, Palma de Mallorca, Mallorca, Spain.

1. Carrera M, Sala E, Cosío BG, Agustí AGN. Tratamiento hospitalario de los episodios de agudización de la EPOC. Una revisión basada en la evidencia. Arch Bronconeumol. 2005;41:220-9.
2. Wood-Baker RR, Gibson PG, Hannay M, Walters EH, Walters JA. Systemic corticosteroids for acute exacerbations of chronic obstructive pulmonary disease. Cochrane Database Syst Rev. 2005;(1): CD001288.
3. Niewoehner DE, Marcia LE, Deupree RH, Collins D, Gross NJ, Light RW, et al. Effect of systemic glucocorticoids on exacerbations of chronic obstructive pulmonary disease. N Engl J Med. 1999;340:1941-7.
4. Davies L, Angus RM, Claverley PMA. Oral corticosteroids in patients admitted to hospital with exacerbations of chronic obstructive pulmonary disease: a prospective randomised trial. Lancet. 1999;354:456-60.
5. Aaron SD, Vandemheen KL, Hebert P, Dales R, Stiell IG, Ahuja J, et al. Outpatient oral prednisone after emergency treatment of chronic obstructive pulmonary disease. N Engl J Med. 2003;348:2618-25.
6. Barberá J, Peces-Barba G, Agustí A, Izquierdo J, Monso E, Montemayor T, et al. Guía clínica para el diagnóstico y el tratamiento de la enfermedad pulmonar obstructiva crónica. Arch Bronconeumol. 2001; 37:297-316.
7. Celli BR, MacNee W. Standards for the diagnosis and treatment of patients with COPD: a summary of the ATS/ERS position paper. Eur Respir J. 2004;23:932-46.