

different scales, including the OARS (*Older Americans Resources and Services*) questionnaire, were used to evaluate dependence in both basic activities of daily living (BADL) and instrumental activities of daily living (IADL)<sup>5</sup>. Using the age-adjusted Charlson index, 83.3% of our patients had a predicted 1-year mortality rate of 85%, compared with a real mortality rate of 57.7% at 18 months. We too were surprised by the power of dependence in terms of mortality prediction, and that the degree of dependence in the subgroup with a predicted 1-year mortality rate of 85% was higher for both BADL ( $6.6 \pm 5$  vs.  $4.1 \pm 4$ ;  $p = 0.001$ ) and IADL ( $9.7 \pm 4.6$  vs.  $6.7 \pm 4.8$ ;  $p < 0.001$ ).

Multiple factors influence the overall mortality of our patients. Dependence is a factor that can predict mortality more reliably than other conventional indices such as the Charlson Index. As we mentioned above, this index overestimates the risk of 1-year mortality and proves ineffective, while the assessment of dependence adds more weight to the prediction of short-term mortality. In a healthcare setting in which demand is progressively increasing, we need better tools to predict mortality and to help us use resources rationally based on the benefit we can provide to our patients.

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The authors state that they have no conflict of interests.

### References

1. Fernández-García S, Represas-Represas C, Ruano-Raviña A, Botana-Rial M, Martínez-Reglero C, Fernández Villar A. La dependencia para actividades como

factor predictor de mortalidad tras una hospitalización por una agudización de enfermedad pulmonar obstructiva crónica. Archivos de Bronconeumología. 2020;56(5):291–7.

2. Martín Lesende I. Escalas y pruebas de valoración funcional y cognitiva en el mayor. AMF. 2013;9(9):508–14.
3. Tang VL, Jing B, Boscardin J, et al. Association of Functional, Cognitive, and Psychological Measures With 1-Year Mortality in Patients Undergoing Major Surgery. JAMA Surg. 2020;155(5):412–8. <http://dx.doi.org/10.1001/jamasurg.2020.0091>.
4. Wei MY, Kabeto MU, Galecki AT, Langa KM. Physical Functioning Decline and Mortality in Older Adults With Multimorbidity: Joint Modeling of Longitudinal and Survival Data. J Gerontol A Biol Sci Med Sci. 2019;74(2):226–32. <http://dx.doi.org/10.1093/geron/gly038>.
5. Briongos-Figuero LS, Cobos-Siles M, Gabella-Martín M, et al. Evaluation and characterization of multimorbidity profiles, resource consumption and healthcare needs in extremely elderly people. Int J Qual Health Care. 2020;32(4):266–70. <http://dx.doi.org/10.1093/intqhc/mzaa022>.

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### Reply to “The Importance of Dependence in Global Assessment of Hospitalized Patient”<sup>☆</sup>\*



### Respuesta a La importancia de la dependencia en la valoración global del paciente hospitalizado

To the Editor:

We have read with interest the letter published regarding our article entitled *The Importance of Dependence in the Global Assessment of Hospitalized Patients*.<sup>1,2</sup> We thank the authors for their comments on our research and agree with the main message of their letter, as it serves to reinforce the importance of dependence in performing activities (both basic and instrumental) in the prediction of mortality in patients with chronic diseases. We have observed that, independently or in addition to the many other clinical, demographic, or functional variables usually included in the scores used in clinical practice, variables related to dependence improve these scores and provide prognostic information.<sup>1–3</sup>

We would like to make a couple of comments on this communication. First, Briongos-Figuero et al.<sup>1</sup> comment on our surprise that dependence for performing activities was an independent factor for mortality, with a higher capacity for prediction than other clinical variables in patients admitted for COPD exacerbation. However, in the introduction to the article we said that what surprised us was the scant evidence available in this field in COPD, unlike

in other chronic diseases, since the results of our study were far from a surprise. In the SocioCOPD cohort itself, on which we carried out the mortality study, dependence for performing basic activities determined by non-specific COPD indices, such as Barthel, not only influences this event, but is also one of the variables that best predicts short- and long-term readmissions for any cause after a severe exacerbation of COPD<sup>4</sup>. Indeed, this is one of the alternative hypotheses of the initial research project. What surprised us, and still does, is that so little emphasis is placed on this area in the clinical practice guidelines on COPD.

Secondly, the authors refer to an interesting study that they published recently, and point out the limited value of comorbidities (determined by the Charlson index) when adjusted for disability in the prediction of mortality,<sup>3</sup> an outcome that differs from our findings. In all the predictive models explored in the SocioCOPD cohort, the number of comorbidities measured by this index did have a predictive capacity, although the power was less than for dependence for both basic and instrumental activities.<sup>2</sup> However, we would like to emphasize that these 2 studies are not at all comparable, as the mean upper age of our correspondents' series was almost 20 years older than ours, they had many more comorbidities, and, in particular, less than 20% of their patients were identified as having “chronic respiratory disease”.<sup>3</sup> In a large COPD population<sup>5</sup> with a high comorbidity burden and age closer to that included in the study of Briongos-Figuero et al.,<sup>3</sup> reported by a working group of the Spanish Society of Internal Medicine, the 2 factors that carried the greatest weight for predicting mortality were comorbidity and disability.

Therefore, we also believe that it is important to continue research in this line, as it does not appear to be exclusive to elderly patients with multiple diseases, but also affects to a large extent younger subjects with specific predominant diseases, such as COPD in this case.

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## References

- Briongos-Figuero LS, Cobos Siles M, Gabella Martín M, Abadía Otero J, Martín Escudero JC. La importancia de la dependencia en la valoración global del paciente hospitalizado. Arch Bronconeumol. 2020. <http://dx.doi.org/10.1016/j.arbres.2020.07.016>.
- Fernández-García S, Represas-Represas C, Ruano-Raviña A, Botana-Rial M, Martínez-Reglero C, Fernández Villar A. Dependence in performing activities as a predictor of mortality following hospitalization for chronic obstructive pulmonary disease exacerbation. Arch Bronconeumol. 2020;56:291–7. <http://dx.doi.org/10.1016/j.arbres.2019.10.005>.
- Briongos-Figuero LS, Cobos-Siles M, Gabella-Martín M, Abadía-Otero J, Lobo-Valentín R, Aguado-De-La-Fuente A, et al. Evaluation and characterization of multimorbidity profiles, resource consumption and healthcare needs in extremely elderly people. Int J Qual Health Care. 2020;32:266–70. <http://dx.doi.org/10.1093/intqhc/mzaa022>.
- Fernández-García S, Represas-Represas C, Ruano-Raviña A, Mouronte-Roibás C, Botana-Rial M, Ramos-Hernández C, et al. Social and clinical predictors of

short- and long-term readmission after a severe exacerbation of copd. PLoS One. 2020;15(2):e0229257. <http://dx.doi.org/10.1371/journal.pone.0229257>.

- Díez Manglano J, Bernabeu-Wittel M, Escalera-Zalvide A, Sánchez-Ledesma M, Mora-Rufete A, Nieto-Martín D, et al. Comorbilidad, discapacidad y mortalidad en pacientes pluripatológicos con enfermedad pulmonar obstructiva crónica [Comorbidity, disability and mortality in patients with multiple conditions and chronic obstructive pulmonary disease]. Rev Clin Esp. 2011;211:504–10. <http://dx.doi.org/10.1016/j.rce.2011.04.006>.

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## Short-course antibiotic regimens in community-acquired pneumonia in children<sup>☆</sup>



### Pautas cortas de antibioterapia en neumonías adquiridas en la comunidad en niños

To the Editor:

We have read with interest the recently published consensus document on community-acquired pneumonia (CAP) in children.<sup>1</sup> We thank the authors for their efforts in producing recommendations for a disease that is highly prevalent in the pediatric age and has a very significant impact on the use of antibiotics. However, with regard to the duration of antibiotic treatment, we believe that, given current scientific evidence, a reduction in the length of antibiotic regimens in uncomplicated pneumonias could be considered.

The use of shorter antimicrobial therapies not only reduces costs and improves therapeutic adherence, but also reduces the risk of acquiring bacteria with antibiotic resistance, a problem of increasing concern today.

Several studies in the adult population have demonstrated similar effectiveness with short- and long-term antibiotic regimens in CAP. For example, the clinical trial of Uranga et al.<sup>2</sup> found that an antibiotic regimen in which the antibiotic was discontinued 48 h after achieving clinical stability, with a minimum duration of 5 days, was not inferior to a full 10-day course.

Several studies have been published in the pediatric population on the treatment of CAP in patients aged 6 months and older with short antibiotic regimens. Same et al.<sup>3</sup> retrospectively compared the rate of therapeutic failure in uncomplicated CAP in patients who had received a short antibiotic regimen of 5–7 days (median of 6 days) versus a long regimen of 8–14 days, and found no differences in treatment failure 30 days after the start of therapy.

Along these same lines, Greenberg et al.<sup>4</sup> conducted a clinical trial in patients with CAP of probable bacterial etiology between 6 months and 5 years of age, in which they demonstrated the non-inferiority of a 5-day regimen of oral amoxicillin versus a 10-day regimen in terms of 30-day treatment failure rate. However, a 3-day regimen of antibiotic therapy increased the risk of treatment failure.

Patient recruitment in the SCOUT-CAP clinical trial (ClinicalTrials.gov: NCT02891915)<sup>5</sup> on short antibiotic regimens in CAP in children has recently been completed. This is a multicenter, randomized, phase IV trial conducted in the US that has included patients 6–71 months of age, with the aim of comparing the efficacy of beta-lactams in a 5-day or 10-day regimen, to help determine the best duration of antibiotic therapy in these patients.

This growing scientific evidence has prompted recent updates of various clinical practice guidelines in both adults and children to suggest antibiotic regimens with a duration of less than 7 days in the treatment of CAP. These include, in particular, the British NICE guidelines,<sup>6</sup> which recommend a 5-day regimen with amoxicillin, both in adults and in the pediatric population. Therefore, we believe that a recommendation of treatment regimens of less than 7 days in uncomplicated CAP may be more in line with current evidence.

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## References

- Andrés-Martín A, Escribano Montaner A, Figuerola Mulet J, García García ML, Muruae JK, Moreno-Pérez D, et al. Documento de consenso sobre la neumonía adquirida en la comunidad en los niños. SENP-SEPAR-SEIP. Arch Bronconeumol. 2020. <http://dx.doi.org/10.1016/j.arbres.2020.03.025>.
- Uranga A, España PP, Bilbao A, Quintana JM, Arriaga I, Intxausti M, et al. Duration of antibiotic treatment in community-acquired pneumonia. A multicenter randomized clinical trial. JAMA Intern Med. 2016;176:1257–65.

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