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**Title:** Multidrug-resistant pathogens in hospitalized patients coming from the community with pneumonia

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**Body:** Probabilistic scores have been recently suggested to identify pneumonia caused by multidrug-resistant (MDR) bacteria. The aim of the study was to evaluate the prevalence and characteristics of MDR pneumonia in hospitalized patients coming from the community and to validate both Aliberti and Shorr scores in predicting MDR pneumonia, comparing them with healthcare associated pneumonia (HCAP) classification. Two independent European cohorts of consecutive patients hospitalized with pneumonia were prospectively evaluated in Barcelona, Spain (BC) and Edinburgh, UK (EC). Data on admission and during hospitalization were collected. The predictive value of the three scores was explored for correctly indicating the presence of MDR pneumonia via a receiver-operating characteristic (ROC) curve. A total of 1,591 patients in the BC and 1,883 patients in the EC were enrolled. The prevalence of patients with MDR pathogen among those with isolated bacteria was 7.6% in the BC and 3.3% in the EC. The most common MDR pathogen found in both cohorts was MRSA, followed by MDR *P. aeruginosa*. A significantly higher prevalence of MDR bacteria was found among patients in the intensive care unit (ICU). The two probabilistic scores, and particularly the Aliberti one, showed an area under the ROC curve higher than the HCAP classification in predicting MDR pneumonia, especially in the ICU. Risk scores able to identify MDR pneumonia could help in developing strategies for antimicrobial stewardship.