Body: Background The CURB-65 scoring system performs well at identifying patients with pneumonia who have a low risk of death. Whether it predicts mortality in community-acquired pneumonia (CAP) better than the 2007 Infectious Disease Society of America (IDSA)/American Thoracic Society (ATS) minor criteria in low-mortality-rate settings is not clear. The purpose of this study was to determine the speculation. Methods 1230 adult patients admitted to our hospital from 2005 to 2009 for CAP were reviewed retrospectively. Results The hospital mortality was 1.3%. Percentage mortality increased significantly with CURB-65 score and the increasing number of IDSA/ATS minor criteria present. The number of CURB-65 criteria or IDSA/ATS minor criteria present had significant increased odds ratios for mortality of 7.547 and 2.711, respectively. The sensitivities of a CURB-65 score of $\geq 3$ and the presence of at least 3 minor criteria in
predicting mortality from CAP was only 25% and 37.5%, with specificities of 99.2% and 96%, respectively. However, the sensitivities and specificities of a CURB-65 score of $\geq 2$ and the presence of $\geq 2$ minor criteria were 75% and 62.5%, and 91.8% and 86.5%, respectively. The area under the receiver operating characteristic curve for CURB-65 was 0.915 for predicting mortality, and the corresponding area for IDSA/ATS minor criteria was 0.805. Conclusions CURB-65 score predicted hospital mortality better than IDSA/ATS minor criteria, and a CURB-65 score of $\geq 2$ or the presence of 2 or more minor criteria might be more valuable cut-off values for “severe” CAP in a low-mortality-rate setting.