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**Title:** Presence of aspiration pneumonia is independently associated with mortality, after adjusting for age, disease severity, and comorbidities

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**Body:** Background: Patients with aspiration pneumonia are older and have more comorbid conditions. It is unknown whether presence of aspiration pneumonia independently increases mortality, or merely signifies greater comorbidities. Methods: We performed a secondary analysis of the Community-Acquired Pneumonia Organization (CAPO) database, which retrospectively collected data from 43 hospitals in 12 countries, between June 2001 and December 2012. We included adult patients who met criteria for community-acquired pneumonia (CAP). Presence of aspiration pneumonia was determined clinically. We performed a propensity-matched analysis, comparing patients with and without aspiration pneumonia, accounting for age, disease severity, and comorbidities. Results: We identified 451 patients with aspiration and 4734 patients with non-aspiration CAP. Patients with aspiration pneumonia were older (median 79 vs. 69,  $p < 0.001$ ), had greater comorbidities, and presented with greater disease severity. Patients with aspiration pneumonia had greater pneumonia severity index scores (median 123 vs. 92,  $p < 0.001$ ), increased hospital length-of-stay (median 9 vs. 7 days,  $p < 0.001$ ), and increased in-hospital mortality (41% vs. 26%,  $p < 0.001$ ). The propensity-matched analysis, adjusted for age, disease severity, and comorbidities, demonstrated that aspiration pneumonia independently conferred a 2.32 (95% CI 1.56-3.45,  $p < 0.001$ ) odds ratio for in-hospital mortality compared to non-aspiration pneumonia. Conclusions: Patients with aspiration pneumonia are more likely to die than those with non-aspiration pneumonia, even after adjusting for age, disease severity, and comorbidities.