Comparison of severity scores for COVID-19 patients with pneumonia: a retrospective study

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To the Editor:

Rapidly progressing hypoxemia and acute respiratory distress syndrome were commonly observed in patients with severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2) viral pneumonia [1]. Although several severity scores including Pneumonia Severity Index (PSI) [2], CURB-65 and CRB-65 (confusion, (urea >7 mmol·L−1), respiratory rate >30 breaths·min−1, blood pressure <90 mmHg (systolic) ≤60 mmHg (diastolic), age ≥65 years), [3], A-DROP [4] and SMART-COP [5] have been developed to identify community acquired pneumonia (CAP) patients at high risk and offer therapeutic advice, the underestimation of risk of death from viral pneumonia in these scores has been reported by previous studies [6, 7]. The National Early Warning Score 2 (NEWS2) was developed by National Health Service (NHS) England [8] and, along with quick sequential organ failure assessment score (qSOFA), was proposed as a candidate for prognostic prediction for severe coronavirus disease 2019 (COVID-19) in the situation of limited medical source [9]. The aim of this study was to compare the accuracy of current score rules in hospitalised patients with COVID-19 pneumonia for predicting the risk of death and evaluate feasibility in improving medical decisions by adopting appropriate scores in clinical practice.