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

Fan Guohui1,2,7, Tu Chao3,7, Zhou Fei2,4,7, Liu Zhibo2,4,7, Wang Yeming2,4,5,7, Song Bin3, Gu Xiaoying1,2, Wang Yimin2,4, Wei Yuan3, Li Hui2,4, Wu Xudong3, Xu Jiuyang6, Tu Shengjin3, Zhang Yi2,4, Wu Wenjuan3,8, Cao Bin2,4,5,8

1 Institute of Clinical Medical Sciences, China-Japan Friendship Hospital, Beijing, China. 2 Institute of Respiratory Medicine, Chinese Academy of Medical Sciences, National Clinical Research Center for Respiratory Disease, National Center for Respiratory Disease, Beijing, China. 3 Jin Yin-tan Hospital, Wuhan, China. 4 Dept of Pulmonary and Critical Care Medicine, Center of Respiratory Medicine, China-Japan Friendship Hospital, Beijing, China. 5 Dept of Respiratory Medicine, Capital Medical University, Beijing, China. 6 Tsinghua University School of Medicine, Beijing, China. 7 Contributed equally to this work. 8 Wenjuan Wu and Bin Cao contributed equally to this article as lead authors and supervised the work.

Correspondence: Bin Cao, Dept of Pulmonary and Critical Care Medicine, China-Japan Friendship Hospital, Institute of Respiratory Medicine, Chinese Academy of Medical Sciences; National Clinical Research Center for Respiratory Disease, Clinical Center for Pulmonary Infections, Capital Medical University; Tsinghua University-Peking University Joint Center for Life Sciences, No 2, East Yinchua Road, Chaoyang District, Beijing, China. 100029. E-mail: caobin_ben@163.com

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.

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