

The DECAF Score is a Superior Predictor of In-hospital Death than the BAP-65 Score

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Tabet and others describe the use of the BAP-65 score to predict mortality and the need for mechanical ventilation in 980 patients admitted with an AECOPD to two Lebanese hospitals over an eight-year period [1]. In their introduction they state that the use of risk-stratification tools has not been recommended in practice in patients with AECOPD. However, in the British Thoracic Society COPD audit report, it is recommended that the DECAF score is documented routinely in all patients admitted with an AECOPD [2].

Tablet and others recommend the use of BAP-65 over DECAF, as scoring of BAP-65 is “consistent and generalisable”. However, DECAF showed consistent and excellent discrimination in the derivation and validation studies (area under the receiver operator characteristic (AUROC) curve 0.86 and 0.83 respectively) [3,4] and outperformed BAP-65, which performed inconsistently (AUROC 0.65 and 0.77 respectively). One potential weakness of BAP-65 is that the assessment of mental status may vary, despite their claim that the BAP-65 indices are objective. Furthermore, the provision of salbutamol nebulisers by paramedics prior to admission can elevate pulse rate, and reduce its prognostic power. In the DECAF derivation study [3], pulse rate was not associated with in-hospital mortality.

The authors raise concerns regarding the costs of performing investigations to calculate the DECAF score. In common with the GOLD COPD guidelines, we would recommend that chest radiograph, electrocardiogram, full blood count and arterial blood sampling are performed in the assessment of this population [5].

Finally, the authors also state that there are no precise risk stratification tools to help clinicians assess the severity of an AECOPD. In fact, there are multiple tools that perform well in this population, though DECAF has been shown to be superior to alternatives [4]. This is important to acknowledge, as readers are left with the impression that clinicians must rely on judgment alone, which is less accurate than using clinical tools [6].

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