



## Evaluating the Impact of Therapeutic Anticoagulation on Acute Kidney Injury in COVID-19: Insights and Future Directions

Dear Editor,

The study by Bansal *et al.*<sup>1</sup> provides valuable insights into the incidence, risk factors, and outcomes of acute kidney injury (AKI) in high-risk COVID-19 patients from a tertiary care center in India. The findings highlight a significant burden of AKI, particularly among intensive care unit (ICU) patients, with 88% developing AKI. Many of these cases required kidney replacement therapy (KRT) and were associated with a high mortality rate of 74%. These results underscore the severe implications of AKI, especially in patients with comorbidities like diabetes and coronary heart disease, as well as those with elevated inflammatory markers such as C-reactive protein, ferritin, and lactate dehydrogenase.<sup>2</sup>

A critical limitation, however, is the absence of data on the number of patients receiving therapeutic dose anticoagulants, such as heparin. This gap limits our ability to assess whether therapeutic-dose anticoagulation could reduce AKI risk in COVID-19 patients. Given COVID-19's tendency to induce thrombotic and inflammatory complications, therapeutic-dose anticoagulants may protect the kidneys by reducing microvascular thrombosis and inflammation—key factors in AKI pathophysiology.<sup>3</sup> Including such data could provide valuable insights, revealing whether a significant association exists between therapeutic-dose anticoagulation and reduced AKI incidence or improved recovery outcomes. Notably, therapeutic-dose heparin has shown promise in other studies for potentially reducing AKI risk, which makes this an important area for further investigation.<sup>4,5</sup>

Understanding the role of therapeutic-dose anticoagulation could be transformative, potentially influencing treatment protocols to reduce AKI incidence and improve patient survival.<sup>6</sup> If protective effects are confirmed, therapeutic-dose anticoagulation may inform optimized care strategies, enhancing outcomes and quality of life for critically ill COVID-19 patients.

In conclusion, while this study sheds light on AKI's burden in COVID-19, addressing the missing data on therapeutic anticoagulation could unlock new avenues in AKI prevention and shape treatment strategies for critically ill patients.

### Conflicts of interest

There are no conflicts of interest.

Chia Siang Kow<sup>1</sup>, Dinesh Sangarran Ramachandram<sup>2</sup>, Syed Shahzad Hasan<sup>1</sup>,  
Kaeshaelya Thiruchelvam<sup>3</sup>

<sup>1</sup>School of Applied Sciences, University of Huddersfield, Huddersfield, United Kingdom, <sup>2</sup>School of Pharmacy, Monash University Malaysia, Bandar Sunway, Selangor, <sup>3</sup>School of Pharmacy, International Medical University, Kuala Lumpur, Malaysia

**Corresponding author:** Kaeshaelya Thiruchelvam, School of Pharmacy, International Medical University, Kuala Lumpur, Malaysia. E-mail: kaeshaelya@imu.edu.my

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