

## Letter to the Editor

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### Response to Letter to the Editor by Dr Kobayashi and Colleagues

#### To the Editor:

We appreciate the clarification provided by Kobayashi et al. The modified Duarte formula<sup>1</sup> does not provide an absolute plasma volume (PV) assessment but rather an estimate, and unlike the Kaplan-Hakim formula, the Duarte formula has the unit of dL/g. Although the commonly used PV formulas do not accurately reflect the measured PV, a distinction of our analysis was to point out that although such estimates can not be used to guide volume management therapy in the individual patient, there remains a prognostic value of the formula estimates<sup>2–4</sup> correlating with short- and mid-term clinical outcomes in patients with heart failure.<sup>1,2,4</sup>

Volume assessment remains at the center of heart failure management strategies, yet clinicians continue to struggle with the accurate assessment of intravascular volume and associated congestion.<sup>5</sup> Volume measurements provide encouraging findings that such a tool can be used to guide strategies by clinicians in the evaluation of congestion and decongestion. However, further prospective studies are needed. Formula-derived estimates of volume can potentially help to assess the success of such strategies.

### Disclosures

None.

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### References

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