

RESPONSE TO LETTER TO THE EDITOR

Response by Brener et al to Letter Regarding Article “Effective Arterial Elastance in the Pulmonary Arterial Circulation: Derivation, Assumptions, and Clinical Applications”

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In Response:

Thanks to Dr Tedford et al for their thoughtful comments. We agree with all the points raised in their critique. It is clear that under normal physiological conditions or in World Health Organization group 2 pulmonary hypertension, where ejection proceeds past end-systole or pulmonary capillary wedge pressure is significant compared with mean pulmonary arterial pressure, defining effective pulmonary arterial elastance as end-systolic pressure/stroke volume will not be a pure index of pulmonary vascular properties and a modified definition is warranted: $E_{a,PA} = (mPAP - PCWP) / SV$. Thus, the issues Dr Tedford et al raise boil down to a simple matter of where you draw the line of when the assumptions routinely used to estimate arterial elastance in the systemic circulation apply

to the pulmonary circulation. Moving forward, we suggest that for the sake of consistency and to reduce confusion in the literature that a single, universally applicable definition for effective pulmonary arterial elastance be adopted.

ARTICLE INFORMATION

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Disclosures

None.