

The World Alliance of Societies of Echocardiography normative data on right ventricular motion components

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We sincerely appreciate the authors' thoughtful response to the practical aspects highlighted in our editorial piece. To recapitulate, we brought up two potential barriers that might limit the adoption of right ventricular (RV) motion component analyses beyond the research realm: challenges in three-dimensional (3D) RV image acquisition and analysis software availability. We extend our appreciation to the authors for acknowledging these barriers, welcoming discussion, and proposing practical solutions to overcome them.

We concur with the authors that despite inherent technical challenges, 3D RV imaging can be highly achievable, especially in experienced hands and in patients with good acoustic windows. 3D RV data set is versatile, allowing for shape and curvature analyses, strain analysis, and motion component analysis, beyond that of ejection fraction and volumetric measurements. The World Alliance of Societies of Echocardiography study exemplifies the richness of clinical information that a good 3D RV data set could yield. Like the authors, we strongly advocate for the ongoing emphasis on education and training in 3D RV image acquisition and data post-processing. Apart from technical skills mastery, a good understanding of the strengths and limitations of 3D echocardiographic RV assessment, including when to adopt a multi-modality imaging approach is equally important for a well-rounded imager.

We thank the authors for sharing the origin story of ReVISION (Right VentrIcular Separate wall motion quantification). It is a software solution by clinicians, for clinicians. A commercially available research tool, ReVISION, positioned itself as a stand-alone, cloud-based software service. The current workflow starts with 3D image acquisition, followed by offline 3D model reconstruction using a vendor-independent

software, i.e. TOMTEC-Arena, which will then be exported into ReVISION software.³ While a multi-step process that requires data transfer across analysis platforms is not unheard of in the research setting, for wider adoption in routine clinical practice, a more streamlined workflow is called for. Having a one-stop shop from data acquisition to result generation, e.g. seamless product integration into the ultrasound systems, could improve user experience, increase user-system interaction, improve efficiency, and ensure data security.

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Data availability

No new data were generated or analysed in support of this discussion forum submission.

References

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