Reviewer's report

**Title:** Real-Time Three-Dimensional Transthoracic Echocardiography in Daily Practice: Initial Experience

**Version:** 1 **Date:** 12 January 2012

**Reviewer:** Jaroslaw Kasprzak

**Reviewer's report:**

This is a nice original paper from a single center with considerable experience in 3Decho. It reflects a current clinical application in a variety of patient and thus may be of interest for the readership of CVU. There are a few specific comments regarding the paper:

1. the selection process except echo quality (what was the threshold in 2D echo?) should be more specific - were the patients believed to have insufficient 2D assessment of the pathology or just intended for the study comparison?
2. The reporting of 3DE clinical benefit might be strengthened by a comparison with 2D - some form of quantifying additional clinical information.
3. Pulmonary valve information is based solely on stenotic patients which should be emphasized as the usual PV 3DE quality is suboptimal.
4. Reporting of LAA thrombi should be more critically reported - there is no fair way to assess sensitivity/specificity with this study design. Were all LAAthr patients known to have it from previously performed TEE?
5. Unicuspid AV image is of suboptimal quality and the benefit from incorporating this specific stillframe in the publication is controversial.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**

I have been a speaker and lecturer in events related to 3Decho manufacturers. Philips, GE, Toshiba.

No further relevant relationships.