index beat, with small bias and narrow limits of agreement [in brackets]: intra -1.1 [-4.9 to 2.7] and inter -0.7 [-5.4 to 3.9]; verses 3 averaged beats -1.1 [-5.4 to 3.1] and -2 [-6.5 to 4.7]; 5 averaged beats -1.1 [-5.6 to 3.4] and -1.2 [-6.6 to 4.2]; and 10 averaged beats -1.0 [-5.0 to 3.0] and -0.9 [-6.2 to 4.3]. Inter-observer limits of agreement for E/e’ were also the narrowest for the index beat method: -1.6 [-0.4 to 3.7]; verses 3 averaged beats -0.6 [-3.5 to 2.2]; 5 averaged beats -0.4 [-3.1 to 2.2]; and 10 averaged beats -0.1 [-2.5 to 2.2].

**Conclusion**
In patients with AF, an index beat method is more reproducible than the conventional method of averaging multiple consecutive beats. This approach can enhance the reliability of measurements for both systolic and diastolic left ventricular function in patients with AF.

**Conflict of Interest**
Nothing to declare.

### THE IMPACT OF MISCLASSIFYING LEFT VENTRICULAR SIZE IF INDEXING TO BODY SURFACE AREA IS NOT PERFORMED

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**Introduction**
Guidelines recommend indexing measurements of left ventricle (LV) size to body surface area (BSA) to improve clinical validity. We sought to highlight the potential impact of misclassifying LV size in patients if indexing is not performed.

**Methods**
We reviewed the reports of all trans-thoracic echocardiograms performed at a large tertiary centre for cardiology and compared proportions of patients with LV dilatation based on LV internal diastolic dimension (LVIDd) > 5.8 cm (male), > 5.2 cm (female) or indexed (Dubois) LVIDd > 3.0cm/m² (male), > 3.1cm/m² (female). We also identified all reports that would reach the threshold for surgical intervention when indexed and non-indexed values are used.

**Results**
20397 echocardiogram reports were reviewed. LV dilatation was present in 2821 (13.8%) based on non-indexed LVIDd compared to 2083 (10.2%) using indexed LVDD. After indexing for BSA 2202 (10.8%) patients changed category: 1470 (7.2%) patients deemed to have a dilated LV based on LVIDd were reclassified as normal, whereas 732 (3.6%) patients deemed to have a normal sized LV were reclassified as dilated when LVIDd was indexed.

Reports of 71 patients with moderate-severe or severe aortic regurgitation were reviewed. 5 (7.0%) had a LV internal systolic dimension (LVIDs) >5cm meeting criteria to consider surgery. When indexed to BSA, 15 (21.1%) had indexed LVIDs >2.5cm/m² with 11 (15.5%) changing from normal LVIDs to dilated LVIDs when indexed.

**Conclusion**
Indexing left ventricular dimensions results in reclassification of 10.8% of patients, which could have implications on clinical management decisions. Furthermore, up to 15.5% of patients with aortic regurgitation may transition from non-dilated to dilated LVIDs when indexed values are used and so impact on timing of surgical referral. Uncorrected and BSA corrected quantitative measurements should be available on all echocardiogram reports.

**Conflict of Interest**
None