with and without concomitant AF could improve the detection of LVDys.

**Purpose** To compare the predictive value of clinical characteristics, ECG parameters, and NT-proBNP for prediction of LVDys in patients with and without concomitant AF. We also compared the performance of 6 other common cardiac biomarkers which have been associated with AF.

**Methods** ECGs from 1487 patients (36% with LVDys, 39% female, 44% with AF, mean [SD] age 68[12] years) presenting to a large teaching hospital were analysed for abnormalities. All patients underwent a standardised transthoracic echocardiogram to determine left ventricular function at baseline. All biomarkers were centrally quantified from plasma using Elisa assays. Using forward selection and logistic regression, 6 ECG parameters (resting heart rate, QRS, QT, QTc durations, presence of AF, and blocks) were modelled and adjusted for clinical characteristics (age, sex, age:sex interaction, history of myocardial infarction, and hypertension). The inclusion of biomarkers was evaluated by examining the C-statistic and 95% confidence interval.

**Results** In the overall cohort, after adjustment for clinical characteristics, LVDys was associated with increased heart rate (OR per 10 beats increase = 1.20 [95%CI 1.12–1.28], p<0.001), prolonged QRS interval (OR per 10 ms increase = 1.15 [1.10–1.22], p<0.001) and prolonged QTc (OR per 10 ms increase = 1.08 [1.04–1.11], p<0.001). QRS and QTc remained strongly associated with LVDys in patients with and without AF, while heart rate only distinguished between patients with and without LVDys in patients with AF (OR per 10 beats increase = 1.30 [95%CI 1.18–1.42], p<0.001), but not in patients in sinus rhythm (p=0.238). NT-proBNP levels were significantly elevated in patients with LVDys compared to no LVDys, and further increased in patients with AF (figure 1a). NT-proBNP, (adjusted for clinical characteristics) performed comparably to ECG and clinical characteristics only (C-statistic = 0.70 [95%CI 0.67–0.73]; figure 1b) to predict LVDys. NT-proBNP outperformed IL-6, Troponin T, GDF15, Creatinine, CRP, and D-dimer even though all biomarkers were elevated in LVDys patients. NT-proBNP combined with ECG parameters improved the C-statistic for patients without AF from 0.70 (95%CI 0.66–0.74) to 0.73 (0.69–0.77) and with AF from 0.76 (0.73–0.80) to 0.77 (0.73–0.81).

**Conclusion** (s): Two ECG parameters obtained from automated analysis (QRS duration and QTc interval), adjusted for a combination of simple clinical characteristics, robustly identify reduced left ventricular function in unselected patients seen in hospital. NT-proBNP contributes a little to improve the identification of LVDys patients on top of these ECG parameters, with a clear need to adjust normal range in the patients presenting with AF.

**Conflict of Interest** None

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**CARDIAC ARREST PATIENTS PRESENTING TO HOSPITALS AT WEEKENDS ARE NOT SUBJECT TO THE WEEKEND EFFECT: INSIGHTS FROM THE ACALM BIG DATA, UNITED KINGDOM**

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Abstract 24 Figure 1 5 year survival for cardiac arrest patients presenting to hospital at weekdays vs weekends