Abstract 58 Figure 1

scores have a comparable safety profile, they identify a significantly lower proportion of patients as low risk.

| 59 | ARE TYPE 2 MYOCARDIAL INFARCTIONS CLOUDING THE MINAP DATABASES MORTALITY DATA? |

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Background The Myocardial Ischemia National Audit Project (MINAP) is a national clinical registry of the management of Myocardial Infarctions (MIs) and Acute Coronary Syndromes. It was established in 1998 to allow participating hospitals to compare performance against national standards. There are 5 separate classifications for MIs(1) – MINAP should only include Type 1 (spontaneous myocardial infarction) and Type 3 (Myocardial infarction resulting in death when biomarkers unavailable) MIs(2). Type 2 MIs (MI secondary to ischaemic imbalance), have a heterogeneous aetiology, commonly have ECG changes and troponin rises, have a high mortality and are often reported to MINAP. Different hospitals have different mechanisms for determining whether an MI is reported to MINAP. Our institution report to MINAP if a diagnosis of NSTEMI or ACS is documented after clinical evaluation.

Objective To retrospectively determine the rate of type 2 MIs amongst patients who died that were reported to MINAP over a 3 year period, in a single tertiary centre over a 3 year period.

Method We analysed all deaths over a 3 year period (15th March 2012 – 31st March 2016) sent to MINAP. Two independent researchers reviewed each set of notes to determine the diagnosis (type of MI) and appropriateness of inclusion within MINAP. If there remained doubt about the diagnosis, cases were referred to an independent panel. (n=2)

Results A total of 142 patients (mean age of 79±12, 46% female). The final diagnosis was type 1(n=113 – 80%), type 2 (n=22 – 15%), type 3 (n=7 – 5%). Of the 22 cases with type 2 MI, all had an elevated troponin (range 7 – 3231 ng/L); abnormal ECGs (n=22: LBBB (n=5), ST depression (n=9), T wave changes (n=6) or no acute changes (n=2)). In 22 cases the troponin rise was in the context of a secondary illness sepsis (n=12), end stage heart failure (n=4), other (n=6). 18 patients died in an acute admissions unit (A and E or AMU). None of these patients had a review by a consultant cardiologist prior to their demise.

Conclusions If the government is to publish MINAP mortality rate league tables, inclusion or otherwise of type 2 MIs will influence results. Our audit identified a cohort of patients, with significant mortality but who were inappropriate for inclusion into the MINAP database. Centres should scrutinise their methods for MINAP inclusion.

REFERENCES
1. Thygesen K, Alpert JS, Jaffe AS, Simoons ML, Chaitman BR, White HD, *et al*. Third universal definition of myocardial infarction. *Eur Heart J* 2012;33(20):2551–67.
2. Herrett E, Smeeth L, Walker L, Weston C, Group MA. The Myocardial Ischaemia National Audit Project (MINAP). *Heart* 2010;96(16):1264–7.

| 60 | CARDIOGONIOMETRY VS THE 12-LEAD ELECTROCARDIOGRAM AT IDENTIFYING THE CULPRIT LESION IN PATIENTS WITH WITH NON-ST SEGMENT ELEVATION MYOCARDIAL INFARCTION: THE COGNITION STUDY |

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Introduction Cardiogoniometry (CGM) is a method of 3-dimensional electrocardiographic assessment which provides detailed spatial and temporal information about cardiac electrical activity. The 12-lead electrocardiogram (ECG) is instrumental at localising ischaemia in patients with ST-elevation myocardial infarction, however ECG changes in non-ST elevation myocardial infarction (NSTEMI) are often non-specific for an ischaemic territory. The aim our our study was to evaluate the ability of CGM to identify the culprit lesion in patients with NSTEMI

Methods At a tertiary cardiology centre, patients with a diagnosis of NSTEMI were consecutively recruited in a prospective, double blind, observational study. CGM and 12-lead ECG recordings were performed prior to coronary