Results There were 18171 patients left once patients discharged with a diagnosis of MI (122) and those suspected of MI (1707) by the clinical team were excluded. There were 4759 inpatients, 9280 outpatients and 4132 patients in the emergency department with 7.3%, 2.0% and 7.4% of these having an hs-cTn above the manufacturer-provided ULN respectively. Table 1 demonstrates the prevalence of hs-cTn levels above the ULN in hospitalised patients by speciality. In terms of outpatients; cardiovascular, renal and oncology/haematology patients were the most likely to have an hs-cTn above the ULN with 7.4%, 4.9% and 2.6% respectively above this level. There were 4265 (46%) outpatients in whom there was at least one coded co-morbidity present. These patients were more likely to have an hs-cTn above the ULN than those without a coded co-morbidity (2.8% versus 1.2%, P<0.0001). Table 2 demonstrates the prevalence of outpatients with an hs-cTn above the ULN by coded co-morbidity.

Conclusion These data suggest that application of a manufacturer-derived 99th centile for hs-cTn assay to a hospital population may be flawed, particularly if any assumption is made that a result above this level may represent acute MI in patients without a classical history. Caution and a good understanding of the assay is imperative for accurate diagnosis and management of hospital patients with an apparently elevated level, but these results also raise interesting questions about what the levels actually indicate in patients in whom the suspicion of acute MI is low. More data are required.

Conflict of Interest Educational support from BAYER

Abstract 105 Figure 1

Introduction Lipids of the endocannabinoid (eCB), N-acyl ethanolamine (NAE), and ceramide (CER) classes are potential novel biomarkers of coronary artery disease and type-2 diabetes. Major-gene effects have been discovered for certain lipid species, notably lipoprotein(a). We sought to establish the heritability of eCB, NAE, and CER species, and identify DNA variants influencing their concentrations in plasma.

Methods We undertook heritability (QTDT, GCTA) and GWAS analyses (FaST-LMM) of 11 eCBs and NAEs, and 37 CERs in 1,016 plasma samples from 196 British Caucasian families ascertained through a hypertensive proband, using targeted lipidomics by mass spectrometry, and Illumina 660W-Quad genotyping.

Results Anandamide (AEA), a potent eCB, was found heritable (h2AEA = 32–35%; P<5.80 × 10–11), however other less studied NAE species, presented higher estimates of heritability (h2NAEs = 41–79%; P<3.89 × 10–13). 24–46% of the variation in potential biomarker CER is due to genetic factors (P<1.00 × 10–7). GWAS identified associations with eQTLs of proteins involved in the metabolism of eCB and NAE (e.g. FAAH; PNAEDHEA <6.33 × 10–12), as well as CER