What is already known on this topic – summarise the state of scientific knowledge on this subject before you did your study and why this study needed to be done

Cardiac troponin is an essential component in the diagnosis (or exclusion) of type 1 myocardial infarction. There are a range of data demonstrating that cardiac troponin is frequently elevated outside the context of type 1 myocardial infarction and that this is more often seen with newer assays with increased sensitivity. Data are developing to suggest that elevated cardiac troponin outside the context of type 1 myocardial infarction is associated with a worse prognosis.

What this study adds – summarise what we now know as a result of this study that we did not know before

In a cohort of 20,000 patients, the majority of whom had cardiac troponin testing performed without a clinical indication, a cardiac troponin concentration was independently associated with mortality out to a median of 809 days for both cardiovascular and non-cardiovascular causes. Landmark analysis demonstrated that this relationship was not driven purely by short term mortality. In addition, those patients who had cardiac troponin requested for clinical reasons had a lower hazard mortality.

How this study might affect research, practice or policy – summarise the implications of this study

This study suggests that cardiac troponin may have a more general role as a marker of prognosis outside type 1 myocardial infarction. Further research is required to confirm these findings across multiple settings and to evaluate whether any intervention can adjust the increased risk demonstrated. Further studies should include a complete population because this study demonstrates that patients in whom a cardiac troponin is requested for clinical reasons have a different risk profile to the remainder of the population.