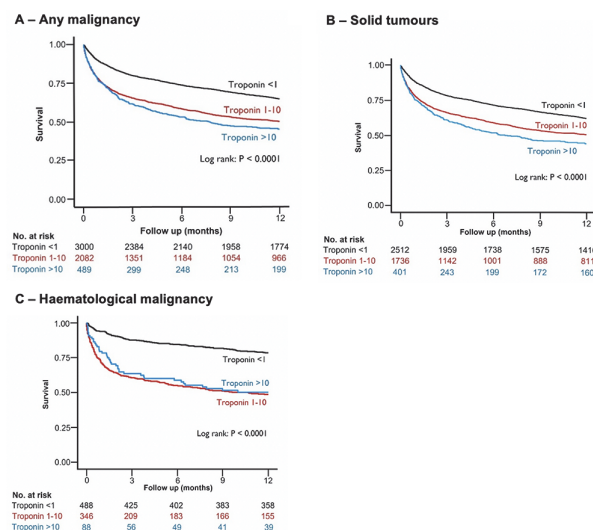


# **PROGNOSTIC SIGNIFICANCE OF TROPONIN IN PATIENTS WITH MALIGNANCY (NIHR HEALTH INFORMATICS COLLABORATIVE TROP-MALIGNANCY STUDY)**

<sup>1</sup>Amit Kaura, <sup>2</sup>Nathan A Samuel, <sup>3</sup>Alistair Roddick, <sup>4</sup>Benjamin Glampson, <sup>5</sup>Abdullah Mulla, <sup>6</sup>Jim Davies, <sup>7</sup>Vasileios Panoulas, <sup>8</sup>Kerrie Woods, <sup>9</sup>Anoop D Shah, <sup>10</sup>Sanjay Gautama, <sup>11</sup>Paul Elliott, <sup>12</sup>Harry Hemingway, <sup>13</sup>Bryan Williams, <sup>14</sup>Folkert W Asselbergs, <sup>15</sup>Narbeh Melikian, <sup>16</sup>Ajay M Shah, <sup>17</sup>Rajesh Kharbanda, <sup>18</sup>Divaka Perera, <sup>19</sup>Riyaz S Patel, <sup>20</sup>Keith M Channon, <sup>21</sup>Anoop SV Shah, <sup>22</sup>Jamil Mayet. <sup>1</sup>NIHR Imperial Biomedical Research Centre, Imperial College London and Imperial College Healthcare, Hammersmith Hospital, National Heart and Lung Institute, London, GLN W12 0HS, United Kingdom; <sup>2</sup>NIHR Oxford Biomedical Research Centre, University of Oxford and Oxford University Hospitals; <sup>3</sup>NIHR Oxford Biomedical Research Centre, University of Oxford and Oxford University Hospitals; <sup>4</sup>NIHR Imperial Biomedical Research Centre, Imperial College London and Imperial College Healthcare; <sup>5</sup>NIHR Imperial Biomedical Research Centre, Imperial College London and Imperial College Healthcare; <sup>6</sup>NIHR Oxford Biomedical Research Centre, University of Oxford and Oxford University Hospitals; <sup>7</sup>NIHR Imperial Biomedical Research Centre, Imperial College London and Imperial College Healthcare; <sup>8</sup>NIHR Oxford Biomedical Research Centre, University of Oxford and Oxford University Hospitals; <sup>9</sup>NIHR UCL Biomedical Research Centre, UCL and UCL Hospitals; <sup>10</sup>NIHR Imperial Biomedical Research Centre, Imperial College London and Imperial College Healthcare; <sup>11</sup>NIHR Imperial Biomedical Research Centre, Imperial College London and Imperial College Healthcare; <sup>12</sup>NIHR UCL Biomedical Research Centre, UCL and UCL Hospitals; <sup>13</sup>NIHR UCL Biomedical Research Centre, UCL and UCL Hospitals; <sup>14</sup>NIHR UCL Biomedical Research Centre, UCL and UCL Hospitals; <sup>15</sup>NIHR King's Biomedical Research Centre, King's College London and King's College Hospital; <sup>16</sup>NIHR King's Biomedical Research Centre, King's College London and King's College Hospital; <sup>17</sup>NIHR Oxford Biomedical Research Centre, University of Oxford and Oxford University Hospitals; <sup>18</sup>NIHR King's Biomedical Research Centre, King's College London and Guy's and St Thomas'; <sup>19</sup>NIHR UCL Biomedical Research Centre, UCL and UCL Hospitals; <sup>20</sup>NIHR Oxford Biomedical Research Centre, University of Oxford and Oxford University Hospitals; <sup>21</sup>NIHR Imperial Biomedical Research Centre, Imperial College London and Imperial College Healthcare; <sup>22</sup>NIHR Imperial Biomedical Research Centre, Imperial College London and Imperial College Healthcare

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**Background** Cardiac troponin is commonly raised in patients with malignancy and may aid clinicians in risk prediction. The prognostic significance of raised troponin in these patients with known malignancies remains unclear. We sought to investigate the relation between troponin and mortality in a large, well characterised cohort of patients undergoing cardiac troponin testing with a concomitant malignancy. **Methods** A retrospective cohort study was carried out using the National Institute for Health Research Health Informatics Collaborative Cardiovascular dataset of all consecutive patients who had a troponin measured at five hospitals (Imperial, University College London, Oxford, King's and Guy's and St Thomas') between 2010 and 2017. Patients with a primary inpatient diagnosis of malignancy who had at least one cTn measurement during their hospital stay were identified. Patients were classified into solid tumour or haematological malignancy subgroups. Survival analyses were performed using multivariate Cox-Regression analyses and Kaplan-Meier plots. The peak cTn level (highest level measured), standardised to the upper limit of normal (ULN), was used for all analyses. **Results** 5571 patients undergoing troponin testing had a primary diagnosis of malignancy and comprised of twenty-one different cancer types. 4649 patients were diagnosed with solid tumours and 922 patients were diagnosed with haematological malignancies. Patients with raised troponin had a higher burden of cardiovascular comorbidities compared to patients with a troponin level below the ULN. The median follow-up in the cohort



**Abstract 173 Figure 1** One-year Kaplan-Meier survival curves for different troponin levels in patients with (A) any malignancy, (B) solid tumours or (C) haematological malignancy

was 14 months (interquartile range 2–39 months). At 1-year follow-up, 2495 (42%) of patients died. Figure 1 shows Kaplan-Meier plots for patients stratified by troponin level. Patients with a troponin level  $>1 \times \text{ULN}$  had a higher risk of death compared to patients with a troponin level  $<1 \times \text{ULN}$  (Figure 1A). A similar trend was shown in cancer subtypes (Figure 1B-C). Raised troponin was an independent predictor of mortality in all patients with malignancy (adjusted hazard ratio 1.66, 95% confidence interval [CI] 1.52–1.81), in solid tumours (adjusted hazard ratio 1.63, 95% CI 1.48–1.81) and in haematological malignancy (adjusted hazard ratio 1.75, 95% CI 1.44 to 2.13) when compared to troponin level below the ULN.

**Conclusion** Raised troponin level was associated with increased mortality in patients with malignancy regardless of cancer subtype. Troponin may be more widely useful in the risk stratification of patients with cancer. Although the appropriate management of patients in response to raised troponin in the absence of acute coronary syndrome is not clear, stratification of clinical risk of mortality can be helpful in general decision making.

**Conflict of Interest** No conflicts of interest

## **CT CORONARY ANGIOGRAPHY SIGNIFICANTLY CHANGES TREATMENT TARGETS VERSUS CORONARY ARTERY CALCIUM SCORING IN HIGH-RISK DYSLIPIDAEMIA PATIENTS**

<sup>1</sup>John Graby, <sup>2</sup>James Sellek, <sup>3</sup>Graham Bayly, <sup>4</sup>Tony Avades, <sup>5</sup>Nigel Capps, <sup>6</sup>Kate Shipman, <sup>7</sup>Wycliffe Mbagaya, <sup>8</sup>Ahai Luvali, <sup>2</sup>Ali Khavandi, <sup>2</sup>Will Loughborough, <sup>2</sup>Benjamin Hudson, <sup>9</sup>Paul Downie, <sup>2</sup>Jonathan Rodrigues. <sup>1</sup>Royal United Hospital Bath NHS Foundation Trust, Royal United Hospitals BathCombe Park Bath, BAS BA1 3NG, United Kingdom; <sup>2</sup>Royal United Hospital NHS Foundation Trust; <sup>3</sup>University Hospital Bristol NHS Foundation Trust; <sup>4</sup>University Hospitals Plymouth NHS Trust; <sup>5</sup>The Shrewsbury and Telford Hospital NHS Trust; <sup>6</sup>University Hospitals Sussex NHS Foundation Trust; <sup>7</sup>University Hospitals Bristol NHS Trust; <sup>8</sup>The Newcastle upon Tyne Hospitals NHS Foundation Trust; <sup>9</sup>Salisbury NHS Foundation Trust

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**Introduction** Dyslipidaemia accelerates atherosclerosis. Patients with genetic dyslipidaemias, Familial Hypercholesterolaemia