

**Title:** Is measuring Troponin level post Percutaneous Coronary Intervention helpful

**FACULTY MENTOR:**

1. Muhammad Omer Zaman MD  
Assistant Professor of Medicine  
Department of Medicine  
Email [Muhammad.zaman@medicine.ufl.edu](mailto:Muhammad.zaman@medicine.ufl.edu)  
[omerzamman@gmail.com](mailto:omerzamman@gmail.com)

2. David E Winchester MD  
Department of Cardiology, University of Florida

**RESEARCH PROJECT DESCRIPTION**

Troponin enzyme is sensitive for myocardial ischemia and is routinely checked in patients who present with chest pain to help diagnose acute coronary syndrome. Patients who are diagnosed with acute myocardial infarction benefit from percutaneous coronary intervention (PCI). In most cases, a stent is placed to achieve reperfusion in culprit coronary vessel. During hospitalization, it is common to see physicians ordering troponin levels after percutaneous coronary intervention (PCI). Currently, there is no guideline to recommend checking post PCI troponin level. Some studies in the past concluded that post PCI troponin can predict long term event free survival. On the contrary, various studies do not support this hypothesis. Checking post PCI troponin without a change in clinical status of the patient can lead to unnecessary laboratory tests, imaging studies and increase length of stay. We plan to do a retrospective project to study the overall outcomes that resulted from checking troponin post PCI, its significance and effect on cost of care. Medical students will participate in data collection by doing a retrospective chart review, participate in poster presentation and publication of the study.

Vikenes K, Melberg T, Farstad M, Nordrehaug JE. Long-term prognostic value of CK-MB and the troponins after angioplasty in patients with stable angina. *Scand Cardiovasc J.* 2011 Jun;45(3):146-52.

Zimarino M, Cicchitti V, Genovesi E, Rotondo D, De Caterina R. Isolated troponin increase after percutaneous coronary interventions: does it have prognostic relevance? *Atherosclerosis.* 2012 Apr;221(2):297-302. doi: 10.1016/j.atherosclerosis.2011.10.010.