

Update to Clinical Reportable Range for the High Sensitivity Troponin I Assay

Effective Date: 05/07/2026

Background: Due to a mandated Beckman Coulter software update, the UC Irvine Rapid Response Laboratory at Orange is updating the clinical reportable range (CRR) for the high sensitivity troponin I (hs-cTnI) performed on the Beckman Coulter platform. This change reflects the validated measurement range of the assay specified by Beckman Coulter.

Change in Reporting: The upper limit of the CRR for hs-cTnI assay will now be 135,000 ng/L, a decrease from the previous CRR upper limit of 270,000 ng/L. Troponin results above 135,000 ng/L will no longer be numerically reported. Instead, results exceeding this threshold will be reported as: ">135,000 ng/L".

How to Interpret: Results above the CRR indicate markedly elevated troponin levels, consistent with significant myocardial injury. Quantitative values beyond this range exceed the assay's reliability and are not considered analytically reliable. For appropriate clinical management, all results should be interpreted within the context of the patient's signs, symptoms, and overall clinical history.

Additional Information: There are no changes to specimen requirements, methodology, or turnaround time. This update applies to hs-cTnI testing performed only at the UC Irvine Medical Center, Orange Rapid Response Laboratory.

For questions or concerns regarding this change, please contact the laboratory at 714-456-2213 or the Clinical Chemistry Medical Directors.

Sincerely,

Ming Jin, PhD, DABCC

Medical Director, Clinical Chemistry, Special Chemistry, and Toxicology

(mingj4@hs.uci.edu)

Kyana Garza, PhD, DABCC

Associate Medical Director, Clinical Chemistry, Special Chemistry, and Toxicology

(khuertar@hs.uci.edu)

Sherif Rezk, MD

Chief of Clinical Pathology and CLIA Director

Ryan O'Connell, MD

Interim Chair of Pathology

UCI Health Pathology and Laboratory Medicine