

The Sixth Conference on the "Standards of Laboratory Practice Series" sponsored by the National Academy of Clinical Biochemistry (NACB), was held on August 4-5, 1998, at the Annual Meeting of the American Association for Clinical Chemistry, in Chicago, IL. An expert committee was assembled to write recommendations on the use of cardiac markers in coronary artery diseases. The NACB Committee prepared a preliminary draft of the guidelines, made them available on the World Wide Web (www.nacb.org), and distributed them before the presentations. The recommendations were divided into four areas: the use of markers in the triage of patients with chest pain, acute coronary syndromes, clinical applications other than acute myocardial infarction and research, and assay platforms and markers of acute myocardial infarction. The recommendations were revised and subsequently re-presented in part at the "Biomarkers in Acute Cardiac Syndromes Conference", sponsored by the Jewish Hospital Heart and Lung Institute, Louisville KY, on October 16-17, 1998. This report lists each recommendation, its scientific justification, and a summary of discussions from conference participants and reviewers. The majority of this work has been published in *Clinical Chemistry* 1999;45:1104-1121.

Approximately 100 individuals responded to various versions of these recommendations via direct correspondences, telephone calls to Committee members, electronic mail correspondence to the Committee Chairman, or oral questions and comments raised during one of the two conference presentations. Some of the recommendations were changed to reflect the consensus opinion. In cases in which there was no consensus, the Committee included pertinent discussion without necessarily changing the original recommendations. At times, the Committee members felt that although a particular recommendation might not be the current standard of care today, they anticipate that it likely will be adopted in the near future.

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⁷Nonstandard abbreviations: NACB, National Academy of Clinical Biochemistry; ED, emergency department; AMI, acute myocardial infarction; CK and CK-MB, creatine kinase and CK MB isoenzyme; cTnT and cTnI, cardiac troponins T and I; POC, point-of-care; TIMI, Thrombolysis in Myocardial Infarction; and TAT, turnaround time.

⁸Listed with each recommendation is the degree of evidence from the literature and/or agreement from the consensus of participants who attended either presentation. Using a modified classification scheme defined by the American College of Cardiology/American Heart Association (AHA/ACC), the NACB Committee defined a Class I recommendation as one for which there is evidence and/or general agreement; a Class II recommendation as one for which there is conflicting evidence and/or a divergence of opinion about its usefulness/efficacy, but where the weight of evidence/opinion is in its favor; and a Class III recommendation as one for which there is evidence and/or general agreement that a procedure is not useful or effective (12).

Although entitled "Standards of Laboratory Practice," the statements made in this document are "recommendations" and not practice standards. These recommendations represent the individual experiences of experts in the field of clinical biochemistry, cardiology, and emergency medicine, and should be examined for appropriateness in individual or unique settings. These recommendations were authored, in part, to provide education and guidance as to the use of these tests. Discussions contained herein may also stimulate new research studies to be conceived. Members of the discussion panels for the two meetings were as follows (alphabetically): Jesse E. Adams III, Jewish Hospital, Louisville, KY; Eugene Braunwald, Harvard Medical School, Boston, MA; Robert H. Christenson, University of Maryland, Baltimore, MD; Paul O. Collinson, Mayday University Hospital, Surrey, UK; Robert C. Hendel, Northwestern University, Chicago, IL; James W. Hoekstra, Ohio State University, Columbus, OH; Allan S. Jaffe, State University of New York, Syracuse, NY; Hugo A. Katus, Medizinische Universitat zu Lubeck, Lubeck, Germany; Jack H. Ladenson, Washington University, St. Louis, MO; E. Magnus Ohman, Duke University, Durham, NC; David B. Sacks, Brigham & Womens Hospital, Boston, MA; and Michael H. Salinger, Evanston Northwestern Healthcare, Evanston, IL. Mauro Panteghini, Brescia, Italy (Chair) and Francesco Dati, DiaSys Diagnostics, Holzheim, Germany also participated in discussions of these recommendations as members of the International Federation of Clinical Chemistry Committee for the Standardization of Markers of Cardiac Damage.