Preface

The incidence of cardiovascular disease has decreased in the last several years with a better understanding of the pathophysiology of acute coronary syndromes (ACS), widespread implementation of lipid lowering drugs, improved surgical treatments such as stent placements, and new therapeutic regimens such as the statins, low molecular weight heparins, and platelet glycoprotein IIb/IIIa receptor inhibitors. Nevertheless, it remains today as the leading cause of morbidity and mortality in the Western world.

Serologic markers of cardiac disease continues to grow in importance in the diagnosis and management of patients with ACS, as witnessed by the recent incorporation of cardiac troponin into new international guidelines for patients with acute coronary syndromes (1–5). Of paramount importance to the field of cardiac markers is the redefinition of myocardial infarction, putting emphasis on cardiac troponin (4).

Cardiac troponin are not only useful for diagnosis and risk stratification of ACS patients, but also in the optimum selection of therapies. Technical advances continue to be developed at a rapid pace, especially in the implementation of point-of-care testing (POCT) devices. Evidence for the efficacy of POCT has accumulated in the last few years.

Despite the success of cardiac troponin, there is still a need for development of early markers that can reliably rule out acute cardiac disease from the emergency room at presentation. The American College of Emergency Physicians concluded that none of the existing markers are reliably in early rule out reversible coronary ischemia (5). This second edition of Cardiac Markers documents the importance of early rule out, and the research markers that have been studies to date in this regard. With the population getting older, and more patients are surviving episodes of acute coronary disease, the incidence of congestive heart failure is growing at a dramatic rate. The second edition details discussion of cardiac markers for diagnosis and management of patients with heart failure, an area where biochemical tests have traditionally not played any role. With the characterization of the natriuretic peptides, this promises to be an emerging field of laboratory medicine.

As with the first edition, Cardiac Markers is intended for clinicians and laboratorians working in the fields of cardiology, pathology and laboratory medicine, and emergency medicine. With the emergence of the natriuretic peptides, this book also has relevance to critical care, geriatrics, and family practice medicine. This book is appropriate to clinical and research scientists, and sales, marketing and product support personnel who work in the in vitro worldwide diagnostics industry.

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REFERENCES