

ACC/AHA PRACTICE GUIDELINES—FULL TEXT

ACC/AHA 2002 Guideline Update for Exercise Testing

A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee on Exercise Testing)

COMMITTEE MEMBERS

Raymond J. Gibbons, MD, FACC, FAHA, *Chair*

Gary J. Balady, MD, FACC, FAHA
J. Timothy Bricker, MD, FACC
Bernard R. Chaitman, MD, FACC, FAHA
Gerald F. Fletcher, MD, FACC, FAHA
Victor F. Froelicher, MD, FACC, FAHA

Daniel B. Mark, MD, MPH, FACC, FAHA
Ben D. McCallister, MD, FACC, FAHA
Aryan N. Mooss, MBBS, FACC, FAHA
Michael G. O'Reilly, MD, FACC
William L. Winters, Jr., MD, FACC, FAHA

TASK FORCE MEMBERS

Raymond J. Gibbons, MD, FACC, FAHA, *Chair*
Elliott M. Antman, MD, FACC, FAHA, *Vice Chair*

Joseph S. Alpert, MD, FACC, FAHA
David P. Faxon, MD, FACC, FAHA
Valentin Fuster, MD, PhD, FACC, FAHA
Gabriel Gregoratos, MD, FACC, FAHA

Loren F. Hiratzka, MD, FACC, FAHA
Alice K. Jacobs, MD, FACC, FAHA
Richard O. Russell, MD, FACC, FAHA*
Sidney C. Smith, Jr., MD, FACC, FAHA

The ACC/AHA Task Force on Practice Guidelines makes every effort to avoid any actual or potential conflicts of interest that might arise as a result of an outside relationship or personal interest of a member of the writing panel. Specifically, all members of the writing panel are asked to provide disclosure statements of all such relationships that might be perceived as real or potential conflicts of interest. These statements are reviewed by the parent task force, reported orally to all members of the writing panel at the first meeting, and updated as changes occur.

This document was approved by the American College of Cardiology Board of Trustees in July 2002 and by the American Heart Association Science Advisory and Coordinating Committee in June 2002.

When citing this document, the American College of Cardiology Foundation and the American Heart Association request the following citation format be used: Gibbons RJ, Balady GJ, Bricker JT, Chaitman BR, Fletcher GF, Froelicher VF, Mark DB, McCallister BD, Mooss AN, O'Reilly MG, Winters WL Jr. ACC/AHA 2002 guideline update for exercise testing: a report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Committee on Exercise Testing). 2002. American College of Cardiology Web site. Available at: www.acc.org/clinical/guidelines/exercise/dirIndex.htm.

This document is available on the World Wide Web sites of the American College of Cardiology (www.acc.org) and the American Heart Association (www.americanheart.org). Copies of this document (the complete guidelines) are available for \$5 each by calling 800-253-4636 (US only) or writing the American College of Cardiology Resource Center, 9111 Old Georgetown Road, Bethesda, MD 20814-1699 (ask for No. 71-0231). To obtain a reprint of the shorter version (executive summary describing the changes to the guidelines) planned for subsequent publication in the *Journal of the American College of Cardiology and Circulation*, ask for reprint No. 71-0232. To purchase additional reprints (specify version and reprint number): up to 999 copies, call 800-611-6083 (US only) or fax 413-665-2671; 1000 or more copies, call 214-706-1789, fax 214-691-6342, or email pubauth@heart.org.

*Former Task Force member during this writing effort.

TABLE OF CONTENTS

Preamble.....	2
I. Introduction.....	2
Exercise Testing Procedure.....	4
General Overview.....	4
Indications and Safety.....	4
Equipment and Protocols.....	4
Exercise End Points.....	6
Interpretation of the Exercise Test.....	6
Cost and Availability.....	6
Clinical Context.....	7
II. Exercise Testing to Diagnose Obstructive Coronary Artery Disease.....	7
Rationale.....	8
Pretest Probability.....	8
Diagnostic Characteristics and Test Performance.....	8
Believability Criteria for Diagnostic Tests.....	10
Diagnostic Accuracy of the Standard Exercise Test.....	10
Confounders of Stress ECG Interpretation.....	12
Digoxin.....	12
Left Ventricular Hypertrophy With Repolarization Abnormalities.....	12
Resting ST Depression.....	12
Left Bundle-Branch Block.....	13
Right Bundle-Branch Block.....	13
ST-Segment Interpretation Issues.....	13
III. Risk Assessment and Prognosis in Patients With Symptoms or a Prior History of Coronary Artery Disease.....	15