## **Contents**

Foreword Martin B. Leon .... vii Preface .... ix Contributors .... xiii

- 1. Epidemiology and Historical Perspectives 1 Peter Clemmensen and Kari Saunamäki
- 2. Prehospital Diagnosis and Management of Acute Myocardial Infarction 9 Gilles Montalescot and Patrick Goldstein
- 3. Presentation of AMI—Symptoms, Examination, Biomarkers, and Atypical Presentations 29 Christopher P. Moriates, Kabir J. Singh, and Alan S. Maisel
- 4. The Definition of Myocardial Infarction 40 Kristian Thygesen, Joseph S. Alpert, and Allan S. Jaffe
- 5. Optimal Reperfusion Therapy: Clinical Trial Evidence of Primary Angioplasty and (Prehospital) Fibrinolysis 47 Freek W. A. Verheugt
- **6.** Adjunctive Pharmacologic Therapies 54 Gregory Ducrocq and Philippe Gabriel Steg
- 7. Primary Percutaneous Coronary Intervention: Role of Stenting versus Balloon Angioplasty and Drug-Eluting Stents versus Bare Metal Stents: Trial Evidence and Current Concepts 65 Robert A. Byrne and Adnan Kastrati
- 8. Primary Percutaneous Coronary Intervention: Culprit-Lesion Only versus Multivessel Intervention 78 Thomas Pilgrim and Stephan Windecker
- 9. Management of Mechanical Complications of Myocardial Infarction: Ventricular Septal Defect, Mitral Regurgitation, Free-Wall Rupture 91

Imran Saeed and Marjan Jahangiri

**xii** Contents

10.	Primary Coronary An	gioplasty: The Role of Mechanical
	Circulatory Support	102
	Luiz Alberto Mattos and	l Pedro Beraldo de Andrade

**11.** Primary Angioplasty: Methods of Reducing Infarct Size and Reperfusion Injury 114

Michael Gick, Jan Minners, and Franz-Josef Neumann

- **12.** Primary Angioplasty: The Importance of Time to Reperfusion, Door to Balloon Times, and How to Reduce Them 126 Atman P. Shah and William J. French
- **13.** Systems of Care for Primary Percutaneous Coronary Intervention 131

  Abhiram Prasad
- **14.** Utilization of Facilitated and Rescue Angioplasty 143 Rajiv Gulati and Bernard J. Gersh
- **15.** Opportunities and Challenges of Stem Cell Therapy: Is there a Role in AMI? 153

  Barry H. Trachtenberg and Joshua M. Hare
- **16a.** Primary Angioplasty in Health Care Delivery:

  The European Model 166

  Jacob Thorsted Sorensen, Christian Juhl Terkelsen, and Steen Dalby Kristensen
- **16b.** Primary Angioplasty in Health Care Delivery: The North American Model 173

  Faisal Latif, Kintur Sanghvi, and Cindy L. Grines
- **16c.** Primary Angioplasty in Health Care Delivery: The Economics 179
  Allan J. Wailoo
- **17.** Special Management of Diabetic Patients with STEMI 183 Salvatore Brugaletta and Manel Sabaté
- **18.** Role of Surgery in Acute Myocardial Infarction 197 *Yasir Abu-Omar and David P. Taggart*

Index .... 205