1. Record Nr. UNINA9910830634103321 Novel techniques for imaging the heart : cardiac MR and CT / / edited **Titolo** by Marcelo F. Di Carli, Raymond Y. Kwong Pubbl/distr/stampa Chichester, West Sussex, England : : Hoboken, New Jersey : . : Wiley-Blackwell. . 2008 ©2008 **ISBN** 1-4443-0059-8 1-4443-0324-4 Descrizione fisica 1 online resource (384 p.) The AHA clinical series Collana Disciplina 616.1/207548 616.120754 Soggetti Heart - Tomography Heart - Magnetic resonance imaging Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references and index. Nota di contenuto Contents; Contributors; Preface; Forewords; PART I General Considerations and Fundamentals of Imaging; 1 Principles of CT and MRI; 2 Clinical Considerations on the Use of Contrast Agents for CT and MRI; 3 Radiation Dose Considerations in Cardiac CT; 4 Safety Considerations of Current and Evolving CMR Techniques and Hardware; PART II Clinical Applications of CT and CMR Imaging; 5 Evaluating the Symptomatic Patient with Suspected CAD: 6 Evaluation of Atherosclerotic Plaques with CT and MRI; 7 Evaluating Chest Pain in Patients with Known CAD 8 Evaluating the Patient with LV Dysfunction for Potential Revascularization Prole of Hybrid Imaging: PET/CT and SPECT/CT; 10 Critical Review of Imaging Approaches for the Diagnosis and Prognosis of CAD: 11 Evaluating the Patient with New Onset Heart Failure: 12 Evaluating the Patient before Noncardiac Surgery; 13 Evaluating the Patient before Interventional Electrophysiology; 14 Assessment of Blood Flow and Heart Valve Disease by CMR; 15 Relative Merits of CTA and

MRA for Coronary Artery Imaging; 16 Can Atherosclerosis Imaging

Improve Patient Management?

PART III Advanced Applications of CT and CMR Imaging17
Atherosclerosis Imaging: A Biological and Clinical Perspective; 18 Stem Cell Imaging; 19 Myocardial Imaging in CAD: Beyond Ischemia and Viability; 20 Technical Advances and the Future Prospects of High Field Strength MRI; 21 Technical Advances in MDCT for Imaging Coronary Artery Stenoses and Physiology; 22 Imaging of Myocardial Mechanics; 23 Cardiovascular Interventional MRI; Index; Color Plate

## Sommario/riassunto

This book brings the recent dramatic changes in the field of cardiovascular imaging into the clinical setting to enable the clinician to best use the technology at hand. Novel Techniques for Imaging the Heart opens with three chapters reviewing the general considerations and fundamentals of imaging, followed by a series of chapters that address clinical applications of CT and CMR, includingcritical review of imaging approaches for diagnosis and prognosis of CADevaluating the patient with new onset heart failure evaluating the patient before non-cardiac surgery evalua