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   Titolo Advanced Hemodynamic Monitoring: Basics and New Horizons / / edited by Mikhail Y. Kirov, Vsevolod V. Kuzkov, Bernd Saugel

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   Nota di bibliografia Includes bibliographical references.

   Nota di contenuto Preface -- Introduction -- Section I. Measurement of pressures -- Pressure physiological background -- Systemic arterial pressure -- Central venous pressure -- Pulmonary pressures -- Section II. Measurement of cardiac output -- Cardiac output physiological background -- Pulmonary artery thermodilution -- Transpulmonary thermodilution -- Pulse wave analysis -- Doppler techniques -- Echocardiography -- Bioimpedance and bioreactance -- Section III. Monitoring of volumetric parameters -- Volumetric parameters physiological background -- Global end-diastolic volume -- Extravascular lung water -- Section IV. Assessment of fluid responsiveness and dynamic tests -- Fluid responsiveness and dynamic tests physiological background -- Dynamic variables -- Dynamic tests -- Section V. Monitoring of microcirculation -- Microcirculation physiological background -- Vital microscopy -- Other techniques -- Section VI. Hemodynamic monitoring and therapy in perioperative

medicine -- Hemodynamic monitoring and optimization in cardiac surgery -- Hemodynamic monitoring and optimization in non-cardiac surgery -- Section VII. Hemodynamic monitoring and therapy in Intensive care medicine -- Hypovolemic shock -- Cardiogenic shock -- Distributive shock -- Pulmonary edema -- Section VIII. Future of hemodynamic monitoring and therapy -- New methods and sensors -- Closed loop hemodynamic management -- Artificial intelligence and predictive analytics -- Conclusions.

Sommario/riassunto	This book describes how to monitor and optimize cardiovascular dynamics using advanced hemodynamic monitoring in perioperative and intensive care medicine. The book outlines basic skills of hemodynamic monitoring, different techniques including invasive, minimally invasive, and non-invasive methods, and algorithms and treatment strategies for perioperative goal-directed hemodynamic therapy in different groups of surgical patients. Thus, the book reflects current diagnostic and therapeutic approaches in perioperative and intensive care medicine. All sections of this book have a learning-oriented style and are illustrated with tables and figures summarizing the main content. The volume is addressed both to specialists and residents using advanced hemodynamic monitoring; it reflects indications and limitations of current monitoring tools and discuss therapeutic strategies. It also helps readers to integrate new knowledge on monitoring of cardiovascular dynamics into clinical practice.