

Features:

- Establishes the context of ECMO in the care of critically ill patients (patient selection, indications, contraindications), progressing from basic science information through advanced ECMO concepts.
- Explores physiologic fundamentals and builds on these concepts by applying them to extracorporeal support, equipping you with a sound framework for how those principles can be applied in the day-to-day management of patients with severe cardiac and respiratory failure.
- Covers key topics such as blood flow titration, sweep gas titration, ventilator management on ECMO, and anticoagulation and bleeding management.
- An eBook version is included with purchase. The eBook allows you to access all of the text, figures and references, with the ability to search, customize your content, make notes and highlights, and have content read aloud.

Περιεχόμενα:

Introduction

Part 1: Physiology fundamentals

Chapter 1: The delivery and consumption of oxygen

Chapter 2: Shock

Chapter 3: Recognition of shock

Chapter 4: Hypoxia

Chapter 5: The Failure of DO₂ – Did What I Do to the Patient Just Work?

Part 2: ECMO fundamentals

Chapter 6: Introduction to ECMO fundamentals

Chapter 7: Indications and selection of patients for ECMO

Chapter 8: Configurations

Chapter 9: Components, sensors, and circuit access

Part 3: Physiology of ECMO support

Chapter 10: Flow physiology

Chapter 11: Membrane physiology

Chapter 12: VV ECMO physiology: rationale and drawbacks

Chapter 13: VA ECMO physiology 1: rationale and drawbacks

Chapter 14: VA ECMO physiology 2: retrograde flow

Chapter 15: Central VA ECMO physiology

Part 4: ECMO management concepts

Chapter 16: Introduction to ECMO management principles

Chapter 17: Blood flow titration and weaning

Chapter 18: Sweep titration and weaning

Chapter 19: Ventilator management on ECMO

Chapter 20: Anticoagulation on ECMO

Chapter 21: Pharmacokinetics