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Autore	Killeen Matthew J
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Arrhythmia Mechanisms and Novel Antiarrhythmic Approaches Identified Using the Hypokalemic Mouse Model Summary; References; Chapter 5 The Mechanisms Underlying Drug-Induced Arrhythmias; Introduction; The Classical Model of Drug-Induced QT Prolongation and Proarrhythmia: HERG Blockade; Additional Mechanisms Contributing to Drug-Induced Arrhythmias; Drug-Induction Activation of Depolarizing Ion Channels; Drug-Induced Changes in Ion Channel Expression; Drug-Induced Sodium Channel Dysfunction; Summary; References; Chapter 6 Assessing Cardiac Safety in Drug Development; Introduction
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Variability of repolarization

Sommario/riassunto

Ensuring the safety of new medical products remains a major challenge for the pharmaceutical industry. Cardiac safety, particularly drug-induced heart rhythm abnormalities, remains an important cause of pipeline attrition and has resulted in countless major product recalls or label changes. The risk of encountering this major adverse event continues to shape the drug development and regulatory landscape. Extensive research over the past decade has shed light on the root causes of arrhythmias that are triggered by medications and has helped drive, and optimize, drug safety testing.However,

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Nota di contenuto	Cover -- Title Page -- Copyright -- Contents -- List of Contributors -- Acknowledgments -- Part I Introduction and Background -- Chapter 1 Introduction to Modeling Terminology and Concepts -- 1.1 Mapping or Modeling - Which Is Correct? -- 1.1.1 Definition of the Term "Model" -- 1.1.2 Evolution of the Geological Model Concept -- 1.2 Why Use "Multidimensional"? -- 1.3 Evolution of Digital Geological Modeling -- 1.4 Overview of the Book -- 1.4.1 Intended Audience -- 1.4.2 Part I: Introduction and Background -- 1.4.3 Part II: Building and Managing Models -- 1.4.3.1 Technical Considerations - Chapters 5-8 -- 1.4.3.2 Alternative Model Building Approaches - Chapters 9-12 -- 1.4.3.3 Model Application and Evaluation - Chapters 13-15 -- 1.4.4 Part III: Using and Disseminating Models -- 1.4.5 Part IV: Case Studies -- 1.4.6 Part V: Future Possibilities and Challenges -- References -- Chapter 2 Geological Survey Data and the Move from 2-D to 4-D -- 2.1 Introduction -- 2.2 The Role of Geological Survey Organizations -- 2.2.1 Establishment of Geological Surveys -- 2.2.2 Systematic versus Strategic Mapping Approaches -- 2.2.3 Geological Mapping by

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