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Nota di contenuto	Cover; Title Page; Copyright; Contents; List of Contributors; Chapter 1 Pharmacokinetics and Pharmacodynamics (PK/PD) of Bionanomaterials; 1.1 Introduction; 1.2 Commonly Utilized NMs in Pharmaceutical Research; 1.2.1 Natural NMs; 1.2.1.1 Lipid-Based NMs; 1.2.1.2 Protein-Based NMs; 1.2.1.3 Polysaccharide-Based NMs; 1.2.2 Synthetic NMs; 1.2.2.1 Diversity of Synthetic NMs in Forms; 1.2.2.2 Drug Release Behaviors; 1.2.3 Inorganic NMs; 1.2.4 Other NMs; 1.3 In vivo Biodistribution and the Evolving Targeting Principles for NMs; 1.3.1 Organ Distribution versus Cell-Specific Targeting 1.3.2 Targeting Delivery Strategies1.4 Processing NMs by the Biological Systems; 1.4.1 Anatomic Basis of NMs' in vivo Biodistribution Behavior; 1.4.2 Factors Affecting in vivo Biodistribution of NMs; 1.4.2.1 Size; 1.4.2.2 Zeta Potential; 1.4.2.3 Shape and Deformability; 1.4.2.4 Hydrophilicity and Hydrophobicity; 1.4.3 Metabolism and Elimination of NMs; 1.4.3.1 Common Metabolism; 1.4.3.2 Degradable versus Nondegradable NMs; 1.4.3.3 Free Drug versus Drug Encapsulated by NMs; 1.5 Rational Design of Long-Circulating NMs; 1.5.1 NMs with Optimal Physicochemical Characters 1.5.2 Surface Modification to Improve the Intrinsic Features of NMs1.6 Mathematic Simulation of NM-Mediated Cancer Drug Delivery; 1.6.1 Progress: From Experiment to Simulation; 1.6.2 Compartment Models

for PK Assessment of NMs; 1.6.3 Physiologically Based Compartment Models; 1.6.3.1 Protocols of Building a PBPK Model for NMs; 1.6.3.2 Examples; 1.6.4 Brief Summary; 1.7 Experimental PK Data of the Applied NMs; 1.7.1 PK Data of NMs Without Drugs; 1.7.2 PK Differences Between Drugs Encapsulated by Different NMs; 1.7.3 Reciprocal Blood and Tissue PK  
1.7.4 PK Differences Between Different Components of the Drug-NM System  
1.7.5 PK Variations Among Different Routes of Administration;  
1.8 Perspectives; 1.8.1 Development of NMs; 1.8.2 Pharmacokinetic Study and Model Development; References; Chapter 2 Targeted Dendrimers for Cancer Diagnosis and Therapy; 2.1 Introduction; 2.2 Targeted Dendrimers for Cancer Therapy; 2.2.1 Low Molecular Weight Ligand-Modified Dendrimers; 2.2.1.1 Folic Acid-Modified Dendrimers; 2.2.1.2 Carbohydrate-Modified Dendrimers; 2.2.1.3 Biotin-Modified Dendrimers; 2.2.1.4 Riboflavin-Modified Dendrimers  
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2.3.4 Targeted Dendrimers in NIR Fluorescence Imaging

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