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Nota di contenuto	Preface -- Author Information -- Introduction -- Guide to Pharmaceutical Product Quality -- Bio-Nano: Theranostic at Cellular Level -- Moving Liposome Technology from the Bench to the Oncological Patient: Towards Performance by Design -- Fundamentals of Dry Powder Inhaler Technology -- Blending and Characterization of Pharmaceutical Powders -- Guidance on Drug Substance Particle Size Controls -- Effects of Particle Size, Surface Nature and Crystal Type on Dissolution Rate -- Amorphous APIs: Improved Release, Preparation, Characterization -- Particle Properties: Impact on the Processing and Performance of Oral Extended-Release Hydrophilic Matrix Tablets -- The Role of Particulates in Film Coating of Pharmaceutical Tablets -- Particulates in Semi-solid Pharmaceutical Products -- The Side Effects

of Drugs: Nanopathological Hazards and Risks -- Subject Index. .

Sommario/riassunto

This edited volume brings together the expertise of numerous specialists on the topic of particles – their physical, chemical, pharmacological and toxicological characteristics – when they are a component of pharmaceutical products and formulations. The book discusses in detail properties such as the composition, size, shape, surface properties and porosity of particles with respect to how they impact the formulations and products in which they are used and the effective delivery of pharmaceutical active ingredients. It considers all dosage forms of pharmaceuticals involving particles, from powders to tablets, creams to ointments, and solutions to dry-powder inhalers, also including the latest nanomedicine products. Further, it discusses examples of particle toxicity, as well as the important subject of pharmaceutical industry regulations, guidelines and legislation. The book is of interest to researchers and practitioners who work on testing and developing pharmaceutical dosage and delivery systems.