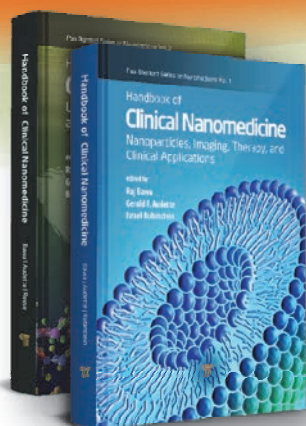


Handbook of Clinical Nanomedicine

Two-Volume Set



Available in Two Volumes

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Vol. 2: 9789814669221 (Hardcover), 9789814669238 (eBook)

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3,000 pages (approx.)

January 2016

US\$999.95 / £637 (Individual volumes are available separately at US\$590 / £376)

Readership

clinicians, researchers, engineers, physicians, lawyers, business professionals, regulators, policy makers, and venture capitalists

Pan Stanford Series on Nanomedicine

Diversity within the broad and evolving arena of nanomedicine and nanopharma is reflected in the expertise of the distinguished contributing authors. The chapters contain key words, figures in full-color and an extensive list of references. As compared to texts on the market, each handbook in the series is comprehensive and intended to be a stand-alone reference resource, presented in a user-friendly format for easy access. The editors have skillfully curated each chapter to reflect the most relevant and current information possible. The range of topics covered as well as the multidisciplinary approach of the handbooks will attract a global audience. The handbooks are essential reading for both the novice and expert in fields ranging from medicine, biotechnology, pharmaceutical sciences, engineering, FDA law, intellectual property, policy, future studies, ethics, licensing, commercialization, risk analysis, and toxicology.

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Series Editor

Raj Bawa, MS, PhD

(*Bawa Biotech LLC, USA, and
Rensselaer Polytechnic Institute, USA*)

Key Features

- Examines the entire "product wheel" from creation of nanomedical products to final market introduction in a stand-alone, easily accessible format
- Serves as an essential reference for the novice and expert alike in fields such as medicine, law, biotechnology, pharmaceutical sciences, engineering, policy, future studies, ethics, licensing, and toxicology
- Addresses critical topics such as personalized medicine, ethics, environmental health, nomenclature, nano-economics, business strategy, licensing, intellectual property, FDA law, EPA law, and governmental policy issues

Handbook of Clinical Nanomedicine. Vol. 1. Nanoparticles, Imaging, Therapy, and Clinical Applications, Raj Bawa, PhD, Gerald F. Audette, PhD, and Israel Rubinstein, MD (Editors)

This handbook (55 chapters) provides a comprehensive roadmap of basic research in nanomedicine as well as clinical applications. However, unlike other texts in nanomedicine, it not only highlights current advances in diagnostics and therapeutics but also explores related issues like nomenclature, historical developments, regulatory aspects, nanosimilars and 3D nanofabrication. While bridging the gap between basic biomedical research, engineering, medicine and law, the handbook provides a thorough understanding of nano's potential to address (i) medical problems from both the patient and health provider's perspective, and (ii) current applications and their potential in a healthcare setting.

Handbook of Clinical Nanomedicine. Vol. 2. Law, Business, Regulation, Safety, and Risk, Raj Bawa, PhD (Editor), Gerald F. Audette, PhD, and Brian E. Reese, PhD, MBA, JD (Assistant Editors)

This unique handbook (60 chapters) examines the entire "product life cycle," from the creation of nanomedical products to their final market introduction. While focusing on critical issues relevant to nanoprodut development and translational activities, it tackles topics such as regulatory science, patent law, FDA law, ethics, personalized medicine, risk analysis, toxicology, nano-characterization and commercialization activities. A separate section provides fascinating perspectives and editorials from leading experts in this complex interdisciplinary field.

Reviews for *Handbook of Clinical Nanomedicine: Nanoparticles, Imaging, Therapy, and Clinical Applications (Volume 1)*

“Dr. Bawa and his team have meticulously gathered the distilled experience of world-class researchers, clinicians and business leaders addressing the most salient issues confronted in product concept development and translation. Knowledge is power, particularly in nanomedicine translation, and this handbook is an essential guide that illustrates and clarifies our way to commercial success.”

Gregory Lanza, MD, PhD

Professor of Medicine and Oliver M. Langenberg Distinguished Professor
Washington University Medical School, USA

“This is an outstanding, comprehensive volume that crosscuts disciplines and topics fitting individuals from a variety of fields looking to become knowledgeable in medical nanotech research and its translation from the bench to the bedside.”

Shaker A. Mousa, PhD, MBA

Vice Provost and Professor of Pharmacology
Albany College of Pharmacy and Health Sciences, USA

“Masterful! This handbook will have a welcome place in the hands of students, educators, clinicians and experienced scientists alike. In a rapidly evolving arena, the authors have harnessed the field and its future by highlighting both current and future needs in diagnosis and therapies. Bravo!”

Howard E. Gendelman, MD

Margaret R. Larson Professor and Chair
University of Nebraska Medical Center, USA

“It is refreshing to see a handbook that does not merely focus on preclinical aspects or exaggerated projections of nanomedicine. Unlike other books, this handbook not only highlights current advances in diagnostics and therapies but also addresses critical issues like terminology, regulatory aspects and personalized medicine.”

Gert Storm, PhD

Professor of Pharmaceutics
Utrecht University, The Netherlands

Reviews for *Handbook of Clinical Nanomedicine: Law, Business, Regulation, Safety, and Risk (Volume 2)*

“The distinguished editors have secured contributions from the leading experts in nanomedicine law, business, regulation and policy. This handbook represents possibly the most comprehensive and advanced collections of materials on these critical topics. An invaluable standard resource.”

Gregory N. Mandel, JD

Peter J. Liacouras Professor of Law and Associate Dean
Temple University Beasley School of Law, USA

“This is an outstanding volume for those looking to become familiar with nanotechnology research and its translation from the bench to market. Way ahead of the competition, a standard reference on any shelf.”

Shaker A. Mousa, PhD, MBA

Vice Provost and Professor of Pharmacology
Albany College of Pharmacy, USA

“The editors have gathered the distilled experience of leaders addressing the most salient issues confronted in R&D and translation. Knowledge is power, particularly in nanotechnology translation, and this handbook is an essential guide that illustrates and clarifies our way to commercial success.”

Gregory Lanza, MD, PhD

Professor of Medicine and Oliver M. Langenberg Distinguished Professor
Washington University Medical School, USA

“The title of the handbook reflects its broad-ranging contents. The intellectual property chapters alone are worthy of their own handbook. Dr. Bawa and his coeditors should be congratulated for gathering the important writings on nanotech law, business and commercialization.”

Richard J. Apley, JD

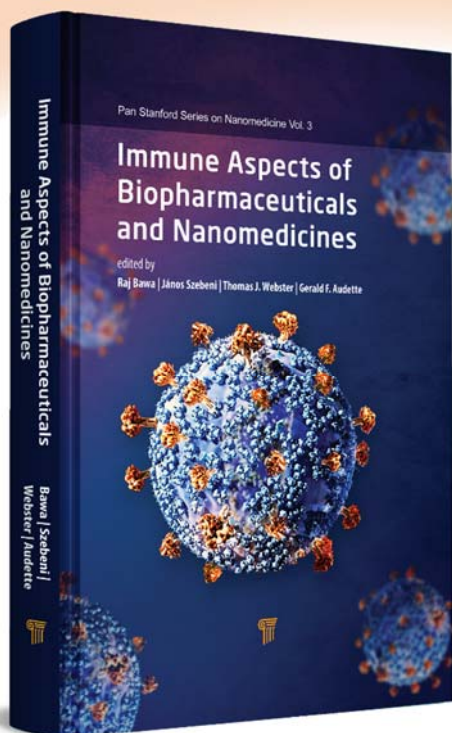
Chief Patent Officer
Litman Law Offices/Becker & Poliakoff, USA

“It is clear that this handbook will serve the interdisciplinary community involved in nanomedicine, pharma and biotech in a highly comprehensive way. It not only covers basic and clinical aspects but the often missing, yet critically important, topics of safety, risk, regulation, IP and licensing. The section titled ‘Perspectives and Editorials’ is superb.”

Yechezkel (Chezy) Barenholz, PhD

Professor Emeritus of Biochemistry and Daniel Miller Professor of Cancer Research
Hebrew University-Hadassah Medical School, Israel

Immune Aspects of Biopharmaceuticals and Nanomedicines



edited by

Raj Bawa, János Szebeni, Thomas J. Webster & Gerald F. Audette

Key Features

- A stand-alone, easily accessible volume that examines and provides a broad survey of various topics pertaining to the immune effects of biopharmaceuticals and nanomedicines, both beneficial and adverse
- An essential reference for the novice and expert alike in diverse areas such as medicine, law, biotechnology, nanotechnology, pharmaceutical sciences, toxicology, drug development, regulatory science, and governmental affairs
- Highlights both cutting-edge technological advances and also addresses critical topics such as nano-bio interactions, toxicity, and FDA regulatory issues.

Description

The enormous advances in the immunology of biotherapeutics and nanomedicines in the past two decades have necessitated an authoritative and comprehensive reference that can be relied upon by immunologists, biomedical researchers, physicians, pharmaceutical and formulation scientists, clinicians, regulatory personnel, technology transfer officers, venture capitalists, and policy makers alike. This book provides a broad survey of various interconnected topics, all accomplished in a user-friendly format. The chapters are devoted to the immune stimulatory and suppressive effects of antibodies, peptides and other biopharmaceuticals, drug carrier liposomes, micelles, polymers, polymeric vesicles, dendrimers, carbon nanotubes, and other nanomedicines (with and without surface targeting ligands). The text discusses the state of the art in nanoparticle-formulated therapeutic and preventive vaccines along with their potential molecular mechanisms underlying immunogenicity. The latter phenomenon is addressed as an adverse effect of monoclonal antibody-based biopharmaceuticals and nanomedicines. Yet another adverse immune effect of monoclonals and nanomedicines, complement activation-related pseudoallergy (CARPA), is discussed in unprecedented detail in terms of occurrence, prediction, prevention, and mechanism. The range of the contributing authors accurately reflects the diverse and rapidly evolving fields of biotherapeutics, nanomedicines, nanoimmunology, and nanotoxicology. The book's multidisciplinary and in-depth approach makes it a standard reference in this expansive and interdisciplinary field.

978-981-4774-52-9 (Hardback)

978-0-203-73153-6 (eBook)

US\$500, 1000 pages (approx.)

Winter 2018

Readership

Professionals in the public and private sectors involved in toxicology, immunology, medicine, nanotechnology, biomedical research, biotechnology, drug development, regulatory science and governmental affairs; academic researchers and scientists, professors, postdoctoral fellows, graduate and undergraduate students, physicians, engineers, patent lawyers, regulatory personnel, pharmaceutical and biotechnology industry personnel, technology transfer officers, business managers, venture capitalists and policy makers

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Immune Aspects of Biopharmaceuticals and Nanomedicines

Reviews

"This outstanding volume represents a review of the various effects of biopharmaceuticals and nanomedicines on the immune system: immunotherapy, vaccines, and drug delivery; challenges and overcoming translational barriers stemming from immunotoxicity; strategies to designing more immunologically friendly formulations."

África González-Fernández, PhD, MD - Professor of Immunology and President of the Spanish Society of Immunology, University of Vigo, Spain

"For those who are specialists, and for those interested in a broader understanding of biologics and nanomedicines, this is a superb book, with internationally accomplished contributors. It serves both as a reference and as a practical guide to the newest advances in these important fields. Highly recommended!"

Carl R. Alving, MD - Emeritus Senior Scientist, Walter Reed Army Institute of Research, Silver Spring, Maryland, USA

"A skillfully produced book that addresses an often-missed topic: immune aspects of biologicals and nanoscale therapeutics, with an emphasis on clinical relevance and applications."

Rajiv R. Mohan, PhD - Professor and Ruth M. Kraeuchi Missouri Endowed Chair Professor, University of Missouri, Columbia, USA

"An indispensable masterpiece! It represents a rich source of information on interactions of biologicals and nanodrugs with the immune system—all critical for medical applications. Volume 3, once again, achieves the series' high standards."

László Rosivall, MD, PhD, DSc Med, Med habil. - Széchenyi Prize Laureate and Professor, Faculty of Medicine, Semmelweis University, Budapest, Hungary

"Hats off to Dr. Bawa for producing yet another impressive volume in terms of scope, timeliness, and relevance. With expert contributions from around the globe, this book addresses topics germane to researchers, clinicians, drug and biotherapeutic companies, regulators, policymakers, and patients."

Sara Brenner, MD, MPH - Associate Professor and Assistant Vice President, SUNY Polytechnic Institute, Albany, New York, USA

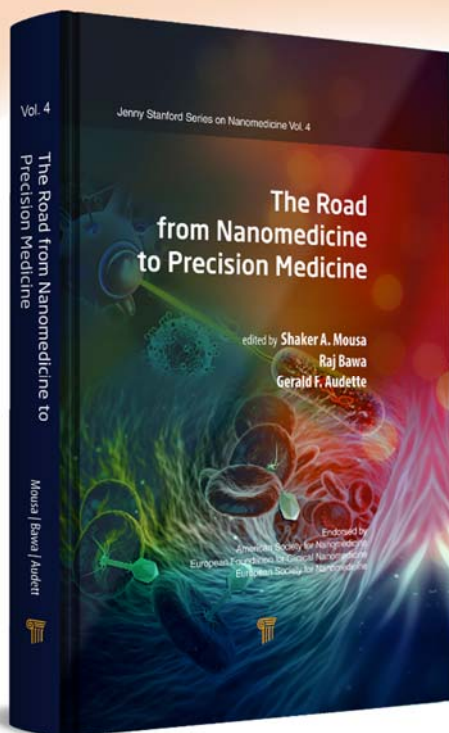
"Marvelous! This timely book shows clearly that while an immune reaction to "nano-exposure" is usually unwanted, the same response also bears an immense potential."

Silke Krol, PhD - IRCCS Istituto Tumori "Giovanni Paolo II" and Fondazione IRCCS Istituto Neurologico "Carlo Besta," Italy



Jenny Stanford Series on Nanomedicine Vol. 4

The Road from Nanomedicine to Precision Medicine



edited by
Shaker A. Mousa, Raj Bawa, & Gerald F. Audette

Key Features

- A stand-alone, easily accessible volume that provides a broad survey of various topics pertaining to nanomedicine and precision medicine, with a focus on the interrelationship between the two
- An essential reference for the novice and expert alike in diverse areas such as medicine, personalized medicine, law, biotechnology, nanotechnology, pharmaceutical sciences, drug R&D, and regulatory science
- Highlights specific medical specialities in reference to precision medicine along with the transition of nanomedicine to precision medicine

Description

The enormous advances in nanomedicine and precision medicine in the past two decades has necessitated a growing need for an authoritative and comprehensive reference source that can be relied upon by biomedical researchers, clinicians, pharmaceutical scientists, regulators, and lawyers alike. This stand-alone, full-color book provides a broad survey of various interconnected topics, all accomplished in a user-friendly format. Each chapter contains key words, tables and figures in color, future projections, and an extensive list of references. It is intended to be a standalone reference volume that broadly surveys and highlights innovative technologies and advances pertaining to nanomedicine and precision medicine. In addition, it also addresses often-neglected yet key issues such as translational medicine, intellectual property law, FDA regulatory issues, nanomedicine nomenclature and artificial nanomachines—all accomplished in a user-friendly, broad yet interconnected format. The book is essential reading for the novice and expert alike in diverse fields such as medicine, law, genomics, pharmaceutical sciences, biomedical sciences, ethics, and regulatory science. The book's multidisciplinary approach will attract a global audience. It will serve as a valuable reference resource for the industry, academia, and government.

978-981-4800-59-4 (Hardback)
978-0-429-29501-0 (eBook)
US\$600 / £462, 1208 pages
February 2020

Readership

This book is of particular interest to professionals in the public and private sectors involved in medicine, precision medicine, drug delivery, nanomedicine, biomedical research, drug development, FDA regulatory science, ethics, and patent law; academic researchers and scientists, professors, postdoctoral fellows, graduate and undergraduate students, physicians, engineers, patent lawyers, regulatory personnel, pharmaceutical and biotechnology industry personnel, technology transfer officers, business managers, venture capitalists and policy makers

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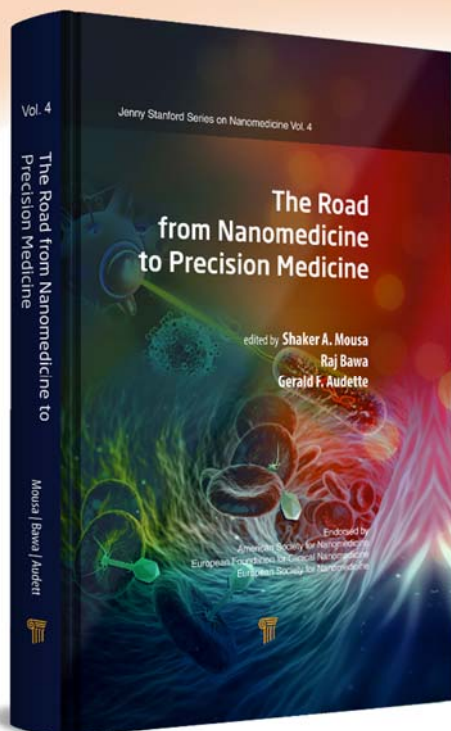
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JENNY STANFORD
PUBLISHING

The Road from Nanomedicine to Precision Medicine



Reviews

"The carefully-selected range of topics in this masterpiece will be equally beneficial to academia, physicians, drug industry, business, healthcare systems, policymakers, geneticists, regulatory bodies and governments. In the coming decade efforts in nanomedicine and precision medicine will be translated from the bench to the bedside, paving the way for more accurate diagnosis and more precise therapeutics. This review volume is a standard reference resource for anyone involved in the coming healthcare revolution."

Tatiana K. Bronich, University of Nebraska, USA

"The first 3 volumes in this series have been inspirational and form the most definitive and useful references for anyone wishing to know about the technical, clinical, legal, business and regulatory aspects of nanomedicine. The topic has in the past raised expectations to levels that were probably too high, but anyone reading these books will understand the opportunities and barriers much better. This fourth volume was awaited with great interest."

Peter J. Dobson, University of Oxford, UK

"It is wonderful to see that Nobel Laureate Paul Ehrlich's vision of "magic bullets" postulated in 1908 may eventually be fully realized along the road from nanomedicine to precision medicine. The power unleashed by elucidation of the genome coupled with the elegance of site-specific drug delivery will revolutionize healthcare in the next century. In my 70-years as a researcher and university professor, nothing has held a greater potential to diagnose and treat diseases in a more customizable, targeted manner. This masterful volume reflects the innovative developments, potential applications and possible bottle-necks in these two interrelated fields."

S. R. Bawa, Panjab University, India

"Precision medicine and targeted nanomedicines are the "Holy Grail" of medicine and drug delivery; this comprehensive volume highlights their salient features and interconnectivity. A team of distinguished editors and authors have done a superb job focussing on the critical and current issues, masterfully dissecting hype from reality."

János Szebeni, Semmelweis University School of Medicine, Budapest, Hungary

"The untapped solutions from nanotechnology will enable breakthroughs in customized healthcare. This comprehensive edition provides the groundwork of where nanomedicine will lead to tailoring precision medicine for individual patient care."

Neil Gordon, Guanine Inc., New York, USA

