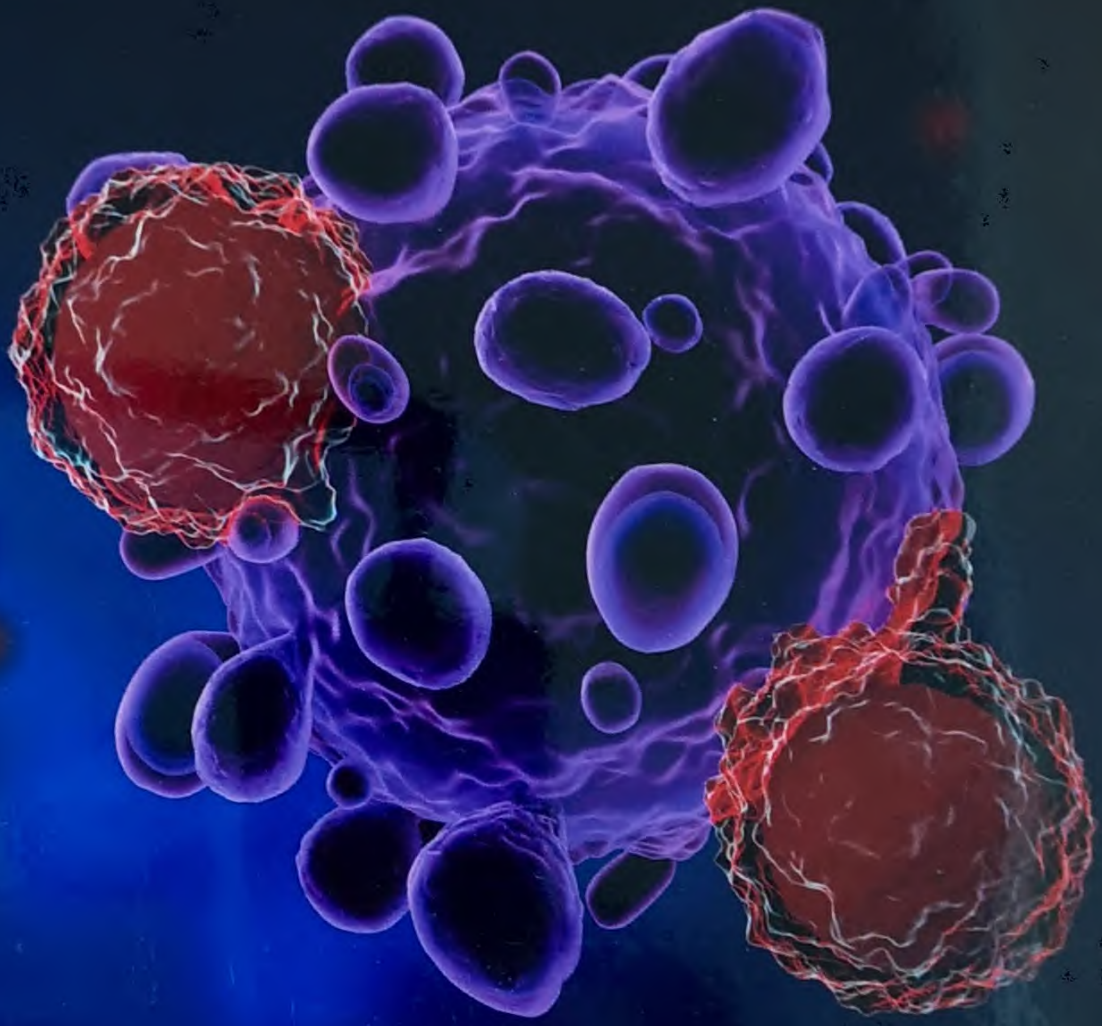
DELIVERY STRATEGIES AND ENGINEERING TECHNOLOGIES IN CANCER IMMUNOTHERAPY

VOLUME 1

CANCER IMMUNOLOGY AND IMMUNOTHERAPY



EDITED BY
MANSOOR M. AMIJI
LARA SCHEHERAZADE MILANE

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The series *Delivery Strategies and Engineering Technologies in Cancer Immunotherapy* examines the challenges and opportunities in the growing field of immuno-oncology (IO). IO has shown tremendous clinical potential for certain types of cancers, but broad application, especially for highly lethal cancers has yet to be validated. The three-volume series focuses on understanding the fundamentals of cancer immunotherapeutic strategies and evaluation of various approaches for targeted drug/nucleic acid delivery and engineering technologies. Each chapter is authored by world renowned experts in the field yielding a critical resource in the advancement of IO.

Key Features of the series

- Comprehensive treaty covering all aspects of immuno-oncology (IO)
- Novel strategies for systemic and local delivery of IO therapeutics and vaccines
- Forecasting on the future of nanotechnology and drug delivery for IO
- Use of engineering technologies in IO
- Challenges and opportunities for clinical translation

Volume 1 of the series focuses on Cancer Immunology and Immunotherapy with a specific focus on understanding the fundamentals of immunological approaches for both hematological and solid tumors. Specific chapters of Volume 1 address the challenges and opportunities in this exciting area of research and future clinical translation. Volume 1 covers the comprehensive concepts of IO from immunoediting to cancer vaccines.

About the editors

Dr. Mansoor M. Amiji is the University Distinguished Professor, Professor of Pharmaceutical Sciences, and Professor of Chemical Engineering at Northeastern University in Boston, MA. His primary areas of research interest are in the development of targeted therapeutic solutions for chronic diseases such as cancer, neurodegenerative diseases, and inflammatory diseases. Dr. Amiji has edited 10 books including *Applied Physical Pharmacy* (now in 3rd edition), *Nanotechnology for Cancer Therapy* (Taylor & Francis, 2007), *Handbook of Materials for Nanomedicine* (Pan Stanford Publishing, 2010), and *Diagnostic and Therapeutic Applications of Exosomes in Cancer* (Elsevier, 2018) along with over 70 published book chapters, and over 360 peer-reviewed articles.

Dr. Lara Scheherazade Milane is the Bouvé College of Health Sciences Distinguished Educator (2021) and Assistant Teaching Professor in the Department of Pharmaceutical Sciences, Northeastern University, Boston, MA. Her research interests include mitochondrial nanomedicine and developing nanotechnology based solutions to manipulate cell communication. Dr. Milane is particularly interested in applications for treating multidrug resistant cancer and neurodegenerative diseases. Dr. Milane is also an advocate for women in science, and has 21 peer-reviewed articles, 3 white papers, and 5 book chapters.

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