



Special Issue Reprint

# Nanomedicine Formulations Based on PLGA Nanoparticles for Diagnosis, Monitoring and Treatment of Disease: From Bench to Bedside

www.mdpi.com/books/reprint/5741

Edited by Oya Tagit

ISBN 978-3-0365-4490-8 (Hardback) ISBN 978-3-0365-4489-2 (PDF)

Nanomedicine is among the most promising emerging fields that can provide innovative and radical solutions to unmet needs in pharmaceutical formulation development. Encapsulation of active pharmaceutical ingredients within nano-size carriers offers several benefits, namely, protection of the therapeutic agents from degradation, their increased solubility and bioavailability, improved pharmacokinetics, reduced toxicity, enhanced therapeutic efficacy, decreased drug immunogenicity, targeted delivery, and simultaneous imaging and treatment options with a single system.

Poly(lactide-co-glycolide) (PLGA) is one of the most commonly used polymers in nanomedicine formulations due to its excellent biocompatibility, tunable degradation characteristics, and high versatility. Furthermore, PLGA is approved by the European Medicines Agency (EMA) and the Food and Drug Administration (FDA) for use in pharmaceutical products. Nanomedicines based on PLGA nanoparticles can offer tremendous opportunities in the diagnosis, monitoring, and treatment of various diseases.

This Special Issue aims to focus on the bench-to-bedside development of PLGA nanoparticles including (but not limited to) design, development, physicochemical characterization, scale-up production, efficacy and safety assessment, and biodistribution studies of these nanomedicine formulations.



Order Your Print Copy You can order print copies at www.mdpi.com/books/reprint/5741



# **MDPIN**Books Publishing Open Access Books & Series

MDPI Books offers quality open access book publishing to promote the exchange of ideas and knowledge in a globalized world. MDPI Books encompasses all the benefits of open access - high availability and visibility, as well as wide and rapid dissemination. With MDPI Books, you can complement the digital version of your work with a high quality printed counterpart.



# **Open Access**

Your scholarly work is accessible worldwide without any restrictions. All authors retain the copyright for their work distributed under the terms of the Creative Commons Attribution License



#### **Author Focus**

Authors and editors profit from MDPI's over two decades of experience in open access publishing, our customized personal support throughout the entire publication process, and competitive processing charges as well as unique contributor discounts on book purchases.



#### **High Quality & Rapid Publication**

MDPI ensures a thorough review for all published items and provides a fast publication procedure. State-of-the-art research and time-sensitive topics are released with a minimum amount of delay.



# **High Visibility**

Due to our global network and well-known channel partners, we ensure maximum visibility and broad dissemination. Title information of books is sent to international indexing databases and archives, such as the Directory of Open Access Books (DOAB), and the Verzeichnis Lieferbarer Bücher (VLB).



# **Print on Demand and Multiple Formats**

MDPI Books are available for purchase and to read online at any time. Our print-on-demand service offers a sustainable, cost-effective and fast way to publish MDPI Books printed versions.

MDPI AG St. Alban-Anlage 66 4052 Basel Switzerland Tel: +41 61 683 77 34 www.mdpi.com/books books@mdpi.com

