



pharmaceuticals

IMPACT
FACTOR
4.3

Indexed in:
PubMed

CITESCORE
6.1

Special Issue Reprint

Current Insights on Lipid-Based Nanosystems

www.mdpi.com/books/reprint/6557

Edited by

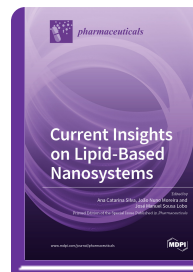
Ana Catarina Silva

João Moreira

José Manuel Sousa Lobo

ISBN 978-3-0365-6166-0 (Hardback)

ISBN 978-3-0365-6165-3 (PDF)



Lipid-based nanosystems, including solid lipid nanoparticles (SLNs) and nanostructured lipid carriers (NLCs), cationic lipid nanoparticles, nanoemulsions, and liposomes, have been extensively studied to improve drug delivery through different administration routes. The main advantages of these systems are their ability to protect, transport, and control the release of lipophilic and hydrophilic molecules (either small-molecular-weight molecules or macromolecules); the use of generally recognized as safe (GRAS) excipients that minimize the toxicity of the formulations; and the possibility to modulate pharmacokinetics and enable the site-specific delivery of encapsulated payloads. In addition, the versatility of lipid-based nanosystems has further been demonstrated for the delivery of vaccines, the protection of active cosmetic ingredients, and the improvement of moisturizing properties of cosmetic formulations.

Lipid-based nanosystems are well established and there are already different commercially approved formulations for various human disorders. This success has paved the way for the diversification of the pipeline of development, to address unmet medical needs for several indications, such as cancer, neurological disorders, and autoimmune, genetic, and infectious diseases.

This Special Issue aims to update readers on the latest research on lipid-based nanosystems, both at the preclinical and clinical levels. A series of 15 articles (six reviews and nine studies) is presented, with authors from 12 different countries, showing the globality of the research that are being carried out in this area.



Order Your Print Copy

You can order print copies at

www.mdpi.com/books/reprint/6557

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.