



Special Issue Reprint

Polyamine Metabolism in Disease and Polyamine-Targeted Therapies

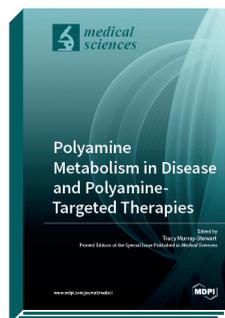
Edited by

Tracy Murray-Stewart

mdpi.com/books/pdfview/book/xxxx

ISBN 978-3-03921-152-4 (Pbk)

ISBN 978-3-03921-153-1 (PDF)



Spermine, spermidine, and putrescine constitute the mammalian polyamines, abundant polycations with essential roles in critical cell functions. As such, intracellular polyamine concentrations are tightly regulated through biosynthesis, catabolism, and transport. The multifaceted effects of polyamine dysregulation have contributed to its role in multiple disease processes but have also implicated it as target for preventive or therapeutic intervention. The correlation between oncogene-mediated elevation of polyamine biosynthesis and cancer is well established, and induced polyamine catabolism contributes to carcinogenesis that is associated with certain forms of chronic infection and/or inflammation. In addition to cancer, polyamines are involved in the pathologies of neurodegenerative diseases, parasitic and infectious diseases, wound healing, ischemia/reperfusion injuries, and certain age-related conditions, as polyamine concentrations are reported to decrease with age. As in cancer, polyamine-based therapies for these conditions are an area of active investigation. With recent advances in immunotherapy, interest has increased regarding polyamine-associated modulation of immune responses as well as potential immunoregulation of polyamine metabolism, the results of which could have relevance to multiple disease processes. The goal of this Special Issue of *Medical Sciences* is to present the most recent advances in polyamine research as it relates to health, disease, and/or therapy.



Order Your Print Copy

Print copies (170x244 mm, Pbk) can be ordered at:

► www.mdpi.com/books/pdfview/book/XXX

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), 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.