



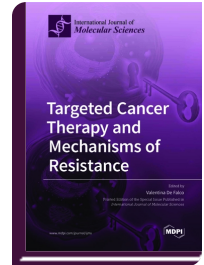
Special Issue Reprint

Targeted Cancer Therapy and Mechanisms of Resistance

www.mdpi.com/books/reprint/4826

Edited by
Valentina De Falco

ISBN 978-3-0365-2857-1 (Hardback)
ISBN 978-3-0365-2856-4 (PDF)



Tumor cells commonly exhibit dependence on a single activated oncogenic pathway or protein to maintain their malignant proliferation and survival, a phenomenon called “oncogene addiction”. According to this concept, protein kinases have been identified as promising molecular targets for cancer therapy. There are several possibilities for targeting these proteins in cancer, including monoclonal antibodies, compounds able to favor the proteolytic degradation of the kinase, small-molecule protein kinase inhibitors (PKIs). Moreover, new anticancer treatments have increasingly been developed focusing on tumor suppressor genes and RNA interference. Despite promising results in cancer treatment with targeted cancer drugs, clinical experience has shown that only a fraction of patients respond to targeted therapies, even if their tumor expresses the altered target. This is known as primary resistance. Otherwise, secondary or acquired resistance to the treatment arises, almost invariably, when tumors are treated with cancer drugs. We set out to select some studies containing emerging developments on the subject. In essence, this collection aims to highlight some recent findings regarding resistance mechanisms and reviews of molecular targeting and resistance with 14 contributions, including 10 original research papers and 4 reviews. Aspects relating to solid cancers, such as breast, ovary, colon, and blood cancers such as leukemia, and the identification of resistance mechanisms and new molecular targets, help to create the basis for the preclinical and clinical development of more effective next-generation drugs.



Order Your Print Copy
You can order print copies at
www.mdpi.com/books/reprint/4826

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.