

Multiple Drug Resistance in Cancer 2: Molecular, Cellular and Clinical Aspects // 9789401723749 // 2013 // Springer Science & Business Media, 2013 // Martin Clynes // 344 pages

Clinical circumstance for resistance development. The approach to chemotherapy for tuberculosis is very different from that for other bacterial infections. Diagrammatic representation of the link between mutation rate, population size, and clinical complication in the emergence of resistance in M. tuberculosis infection. This demonstrates that individuals with tuberculosis in which the bacterial population increases or drug penetration is compromised by empyema or poor adherence are more likely to produce resistant mutants. Molecular Oncology is an open access journal for new discoveries, approaches, and technical developments in basic, clinical, and discovery-driven translational cancer research. We focus on work that significantly advances understanding of disease processes leading to human tumour development and/or establishes novel concepts of clinical significance in diagnosis, prognosis, and prevention strategies. LATEST ISSUE >. Volume 15, Issue 1. Abstract. Wee1 up-regulation is a major and novel mechanism of acquired resistance to Chk1 inhibitors in SCLC. Wee1 expression levels are correlated with resistance levels. Combination of Chk1 and Wee1 inhibitors may overcome this resistance. There has been an explosion of research activity related to angiogenesis in recent years, and hundreds of laboratories worldwide are actively involved in many aspects of angiogenesis. The literature on angiogenesis increases exponentially every year, and more than 16,000 peer-reviewed articles have been published the past 25 years, which are scattered in basic science and clinical journals. The complexity of the cascade of events leading to new vessel formation from preexisting ones has challenged scientists in cell biology, biochemistry, physiology, pharmacology, molecular biology, development Kinetic aspects of transport-mediated drug resistance. Bacterial metabolism and chemotherapy. Bacterial genetic flexibility. Clinical and physiological aspects are outlined where this seems useful to appreciate the significance of a drug's action. Finally, we have tried to heed Bacon's advice and point out some of the open questions that will need to be solved by future researchers. In selecting the topics for a teaching text, one has to balance breadth and depth. We chose to forgo comprehensive coverage in favor of treating selected drugs in some more detail. This book deals with drugs and their biochemical mechanisms of action. The term "drug" is used here in an inclusive sense, and we will neglect the following possible distinctions: (1) Some drugs are legal, others are not.