

1. Record Nr.	UNINA9910782612503321
Autore	Airley Rachel
Titolo	Cancer chemotherapy [[electronic resource] /] / Rachel Airley
Pubbl/distr/stampa	Chichester, West Sussex ; ; Hoboken, NJ, : J. Wiley, 2009
ISBN	1-282-11217-1 9786612112171 0-470-09254-8 0-470-09256-4
Edizione	[1st ed.]
Descrizione fisica	1 online resource (362 p.)
Disciplina	616.99/4061 616.994061
Soggetti	Cancer - Chemotherapy Chemotherapy
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Cancer Chemotherapy; Contents; Preface; 1 Cancer epidemiology; 1.1 Cancer incidence, prevalence and mortality; 1.2 Childhood cancers; 1.3 Global epidemiology; 2 Histopathology of cancer; 2.1 Introduction; 2.2 Malignant, benign and normal (non-malignant) tissue; 2.3 Cell death; 3 Carcinogenesis, malignant transformation and progression; 3.1 Introduction; 3.2 Chemical carcinogenesis; 4 Molecular biology of cancer: oncogenes and tumour suppressor genes; 4.1 Introduction; 4.2 Oncogenesis; 4.3 Tumour suppressor genes; 5 Tumour metastasis: a convergence of many theories; 5.1 Introduction 5.2 Detachment and migration from the primary tumour 5.3 Intravasation; 5.4 Transport; 5.5 Extravasation; 5.6 Growth of the metastatic tumour mass; 6 Health professionals in the treatment of cancer; 6.1 Introduction; 6.2 Pathology; 6.3 Radiology; 6.4 Role of the surgical oncologist; 6.5 Oncology pharmacy; 6.6 Oncology nursing; 6.7 The NHS Cancer Plan; 7 Principles of cancer chemotherapy; 7.1 Introduction; 7.2 Timing of chemotherapy; 7.3 Biomarkers and their uses; 7.4 Clinical assessment of biomarkers; 7.5 Pharmacogenetics and pharmacogenomics of cancer chemotherapy 8 Classical anticancer agents 8.1 Introduction; 8.2 Alkylating agents;

8.3 Antimetabolites; 8.4 Agents derived from natural or semisynthetic products; 8.5 Hormonal anticancer agents; 8.6 Clinically used chemotherapy regimens; 9 The philosophy of cancer research; 9.1 Introduction; 9.2 Structure of cancer research organizations in the United Kingdom; 9.3 Cancer research in the United States; 10 Novel anticancer agents; 10.1 Introduction; 10.2 Target validation; 10.3 Identification and optimization of lead drugs; 10.4 Preclinical pharmacology; 11 Clinical trials; 11.1 Introduction 11.2 Evaluation of treatment response 11.3 Assessment of vascularity and angiogenesis by nuclear medicine technology; 12 Tumour hypoxia; 12.1 Introduction; 12.2 Bioreductive drugs; 12.3 Inhibitors of HIF-1 and HIF-1-regulated genes; 13 Antiangiogenic and antivascular agents; 13.1 History of angiogenesis as a therapeutic target; 13.2 Anti-angiogenic drug targets; 13.3 The return of thalidomide; 13.4 Monoclonal antibodies as anti-angiogenic agents; 13.5 The hollow fibre assay as a drug screen for anti-angiogenic drugs; 13.6 Vascular disrupting agents; 14 Tyrosine kinase inhibitors 14.1 Introduction 14.2 Tyrosine kinase inhibitors targeting angiogenesis; 14.3 Non-receptor tyrosine kinase inhibitors; 15 Ras inhibitors; 16 Inhibitors of the Akt/PKB pathway; 17 Targeting stress proteins: HSP90 inhibitors; 18 The proteasome; 18.1 Introduction; 18.2 The proteasome as a target for novel drug strategies; 18.3 Ubiquitylation as a target; 19 Checkpoint protein kinases as novel targets - mammalian target of rapamycin (mTOR); 19.1 Mammalian target of rapamycin; 19.2 Structure and activation of mTOR; 19.3 Novel anticancer agents targeting mTOR; 20 Telomerase 21 Histone deacetylase: an epigenetic drug target

Sommario/riassunto

This textbook is a clear and accessible introduction to the scientific and clinical aspects of the creation, development and administration of drugs or drug regimens used in the treatment of cancer. Unique in its approach, this book enables the student to gain an understanding of the pathological, physiological and molecular processes governing malignancy, whilst also introducing the role of health professionals and scientists in the research and treatment of cancer. The book consolidates all the essential information necessary for a full understanding of cancer chemotherapy, providing an info
