1. Record Nr. UNINA9910373913203321

Titolo	Translational Research and Onco-Omics Applications in the Era of Cancer Personal Genomics / / edited by Erika Ruiz-Garcia, Horacio Astudillo-de la Vega
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-24100-9
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (X, 171 p. 19 illus. in color.)
Collana	Advances in Experimental Medicine and Biology, , 0065-2598 ; ; 1168
Disciplina	611.01816
Soggetti	Molecular biology Cancer - Research Pharmaceutical technology Immunology Biomedical engineering Genetics Molecular Medicine Cancer Research Pharmaceutical Sciences/Technology Biomedical Engineering/Biotechnology Genetics and Genomics Medicina personalitzada Càncer Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface -- Pharmaco-Geno-Proteo-Metabolomics and Translational Research in Cancer -- Next generation sequencing (NGS): a revolutionary technology in pharmacogenomics and personalized medicine in Cancer -- Pharmaco-epigenomics: on the road of translation medicine -- Design and Implementing Pharmacogenomics Study in Cancer -- Onco-omics approaches and applications in Clinical Trials for Cancer patients -- Issues and Ethical Considerations in

Pharmaco-oncogenomics -- Pharma-oncogenomics in the era of personal genomics: a quick guide to online resources and tools -- Inmuno-Oncology in the era of Personalized Medicine -- CAR T Cell and Personalized Medicine -- Oncobiome at the forefront of a novel molecular mechanism to understand the Microbiome and Cancer -- Nutrition, Cancer and Personalized Medicine -- Index.

Sommario/riassunto

This book presents concise chapters written by internationally respected experts on various important aspects of translational cancer genomics, offering a comprehensive overview of the onco-omics applications in the new era of cancer personal genomics research field. Being a complex disease that affects millions of people worldwide, cancer research has assumed great significance. Translational cancer research transforms scientific discoveries in the laboratory into clinical application to reduce incidence of cancer, morbidity and mortality. In the other hand, personalized medicine in cancer is the concept that selection of a treatment should be tailored according to the individual patient’s specific genomic characteristics, including mutations, chromosomal aberrations, protein interactions, and even more, considering the immune system, the metabolism and in the near future the microbiome, all areas nowadays related in the prognosis and treatment of cancer patients. These contributions are either critical reviews or clinical and basic research reports. The topics discussed here include evidence-based medicine and provides useful information on translational cancer research to clinicians and biomedical scientists in order to offer another vision of cancer origin beyond the traditional causes or the oncogenic maintenance concept proposed by the oncogene addiction theory.