Record Nr. UNINA9910437856103321 Autore Sonis Stephen T Titolo Pathobiology of cancer regimen-related toxicities / / Stephen T. Sonis, Dorothy M. Keefe, editors New York, : Springer, 2013 Pubbl/distr/stampa 1-299-33578-0 **ISBN** 1-4614-5438-7 Edizione [1st ed. 2013.] Descrizione fisica 1 online resource (291 p.) Altri autori (Persone) KeefeDorothy M Disciplina 616.99 616.99406 Cancer - Chemotherapy - Complications Soggetti Antineoplastic agents - Toxicology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Preface.-Epidemiology and outcomes of regimen-related toxicities --Nota di contenuto The biological basis for differences in normal tissue response to radiation therapy and strategies to establish predictive assays for individual complication risk -- The bystander effect: Ionizing radiationinduced non-targeted effects: Evidence, mechanism and significance --The role of genes on the metabolism of chemotherapeutic agents and their impact on toxicity.- Animal models of regimen-related toxicities -- Nausea and Vomiting -- Mucositis -- Dermatitis and Alopecia. - Fibrosis.- Myelosuppression -- Neuropathy -- Fatigue --Xerostomia -- Osteonecrosis -- Conclusions and therapeutic opportunities -- Index. Sommario/riassunto Toxicities have been consistent undesirable companions of every form of radiation and drug cancer treatment regimens. In addition to the potential for toxicities to devastate patients' quality of life, they generate huge incremental financial costs, and sap patients' ability to tolerate definitive cancer therapy. And every new drug or biological has come with new side effects. Historically, regimen-related toxicities were viewed as the inevitable cost of treating cancer. But this

may be about to change. Discoveries in the past dozen years have painted a new picture of the pathobiology of almost all regimen-related

toxicities. The mechanistic complexities that underlie radiation- and chemotherapy-induced tissue injury or systemic symptoms have been pieced together in an incremental sequence which now provides multiple targets for effective toxicity interventions. This book brings together, for the first time in a single volume, the most current information regarding both general principles guiding current thinking about the pathogenesis of regimen-related toxicities and the specific biological underpinnings of the most common side effects of cancer therapy. The contents provide information that is essential to clinicians and basic and translational scientists interested in cancer therapy and its toxicities.