Record Nr. UNINA9910300456403321 Hypofractionated and Stereotactic Radiation Therapy: A Practical Guide **Titolo** // edited by Orit Kaidar-Person, Ronald Chen Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2018 **ISBN** 3-319-92802-3 Edizione [1st ed. 2018.] 1 online resource (XXVII, 406 p. 51 illus., 40 illus. in color.) Descrizione fisica Disciplina 615.842 Soggetti Radiotherapy Oncology Oncology Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Biological Rationale for Hypofractionated Radiation Therapy -- Modern Nota di contenuto Physics and Technological Developments for Delivery of Hypofractionated Radiation Therapy -- Prostate Cancer -- Breast Cancer -- Lung Cancer -- Skin Cancer -- Central Nervous System Tumors -- Gastrointestinal Cancer -- Gynecologic Cancer -- Pediatric Cancer -- Palliation. . Sommario/riassunto This handbook summarizes the data and techniques for hypofractionation and stereotactic radiation in a clinically-accessible way. Hypofractionated radiation therapy, which consists of larger-dose radiation treatments that are given over a shorter time period compared to conventional radiation fraction sizes, is used to treat a variety of cancers, including prostate, breast, lung, and colorectal. Conventional radiation therapy and hypofractionated radiation therapy have different effectiveness rates for cancer treatment and have different impacts on normal tissues in terms of causing toxicity. There is a significant and growing body of literature on the use of different dosing regimens to treat a variety of cancers and radiation oncologists need to keep up with the various dosing schedules, the effect of each regimen on cancer control in different cancers, and how the different schedules affect each organ in terms of toxicity. The book thus

provides concise information ranging from commonly-used dose-

fractionation schemes for hypofractionated and stereotactic body radiotherapy to simulation and treatment specifications to published safety and efficacy data. Chapters additionally examine the biological rationales for the efficacy of hypofractionated radiation; present clinical studies that demonstrate the efficacy and safety of hypofractionated radiation treatment in a variety of cancers; and describe the advances in technology that have allowed hypofractionated radiation to be safely given. This is an ideal guide for radiation oncology clinicians and trainees. .