1. Record Nr. UNINA9910751384503321 Stereotactic Body Radiation Therapy [[electronic resource]]: Principles **Titolo** and Practices / / edited by Yasushi Nagata Pubbl/distr/stampa Singapore:,: Springer Nature Singapore:,: Imprint: Springer,, 2023 **ISBN** 9789819939787 Edizione [2nd ed. 2023.] Descrizione fisica 1 online resource (320 pages) 905 Disciplina Soggetti Radiology Oncology Medical physics Medical Physics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Chapter 1. Introduction and History of SBRT -- Chapter 2. Radiobiology Nota di contenuto of Stereotactic Ablative Radiation Therapy -- Chapter 3. Physics of SBRT -- Chapter 4. Quality Assurance in SBRT -- Chapter 5. Patient Immobilization, IGRT, Respiratory Motion Management -- Chapter 6. Dose Calculation algorithm -- Chapter 7. Treatment Planning for SBRT -- Chapter 8. Lung: peripheral -- Chapter 9. Lung: central -- Chapter 10. Lung: toxicity -- Chapter 11. Liver -- Chapter 12. Kidney --Chapter 13. Spine -- Chapter 14. Oligo mets -- Chapter 15. Other Indications -- Chapter 16. Vero4DRT System -- Chapter 17. Real Time Tracking Radiotherapy (RTRT), SyncTrax -- Chapter 18. Cyberknife --Chapter 19. Tomotherapy -- Chapter 20. MRI-LINIAC: Elekta Unity --Chapter 21. MRI-linac: ViewRay MRIdian -- Chapter 22. Future of SBRT with AI (Artificial Intelligence) -- Chapter 23. Future of SBRT with photon & particle. The second edition of the well-received book updates the knowledge of Sommario/riassunto clinical treatment, radiobiology, physics, and instrumentations to provide a comprehensive description of stereotactic body radiation therapy (SBRT). Clinical aspects include indications and prescriptions for diseases treated with SBRT and clinical trial details. The chapters

associated with physics cover quality assurance, patient immobilization

devices, respiratory motion management, and treatment planning. It also illustrates the latest devices and provides know-how for safe and reliable treatment that differs from conventionally fractionated radiotherapy. In this second edition, the future of SBRT using artificial intelligence in the post-COVID-19 world also discussed. Stereotactic Body Radiation Therapy 2nd Edition - Principles and Practices enrich the readers' understanding of patient-friendly cancer care. Radiation oncologists, medical physicists, medical dosimetrists, radiation therapists, senior nurses, medical oncologists, and surgical oncologists interested in radiotherapy will benefit from this practical guide. Since the last edition, there has been significant progress in the field, and the book renews the facts and evidence based on cutting-edge research.