Record Nr. UNINA9910300173703321 Stereotactic Body Radiation Therapy: Principles and Practices / / edited **Titolo** by Yasushi Nagata Pubbl/distr/stampa Tokyo:,: Springer Japan:,: Imprint: Springer,, 2015 **ISBN** 4-431-54883-1 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (246 p.) 610 Disciplina Soggetti Radiotherapy Oncology Medical physics Radiation Oncology Medical and Radiation Physics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references at the end of each chapters and Nota di bibliografia index. Nota di contenuto Part I: Introduction -- Chapter 1 Introduction and History of Stereotactic Body Radiation Therapy (SBRT) -- Part II: Basic Principles -- Chapter 2 Radiobiology of SBRT -- Chapter 3 Physics -- Chapter 4 Techniques -- Chapter 5 Quality Assurance -- Part III: Clinical Applications -- Chapter 6 Fixation -- Chapter 7 Respiratory motion management -- Chapter 8 Dose Prescription and Calculation --Chapter 9 Treatment Planning -- Chapter 10 Verification of Target localization -- Part IV: Lung Cancer -- Chapter 11 Japanese Experiences -- Chapter 12 International Experience -- Chapter 13 Toxicity and Treatment Evaluation -- Part V: Liver Cancer -- Chapter 14 Liver Cancer (Hepatocellular Carcinoma; HCC) -- Part VI: Other Indications -- Chapter 15 Other Indications -- Part VII: Development of Machines -- Chapter 16 Development and Clinical Application of Vero4DRT System -- Chapter 17 Real time tracking radiotherapy (RTRT) system -- Chapter 18 Others: Four-dimensional Cone-Beam CT during SBRT -- Part VIII: Future Perspectives -- Chapter 19 Future of

Stereotactic Irradiation - Dose Composition Radiotherapy (DCRT).

Sommario/riassunto

This book serves as a practical guide for the use of stereotactic body radiation therapy in clinics. On the basis of more than 10 years of clinical experience with lung cancer, liver cancer and other cancers, a remarkable volume of knowledge has been accumulated. At the same time, great progress in techniques has been achieved. Various new fixing apparatuses, new respiratory regulation techniques, new dose fractionation schedules and new image-guided radiation therapy machines have been developed. This book reviews the history of those developments and reports on various types of toxicities. Review of recent clinical studies is also included. The authors were key members of the JCOG 0403 clinical trials on stereotactic body radiation therapy (SBRT) for both inoperable and operableT1N0M0 primary lung cancer. Readers will learn of the superior outcomes obtained with SBRT for lung cancer and other cancers in terms of local control and toxicities. With its practical focus, this book will benefit radiation oncologists, medical physicists, medical dosimetrists, radiation therapists and senior nurses as well as medical oncologists and surgical oncologists who are interested in radiotherapy.