

1. Record Nr.	UNINA9910300082703321
Titolo	Decision Tools for Radiation Oncology : Prognosis, Treatment Response and Toxicity // edited by Carsten Nieder, Laurie E. Gaspar
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2014
ISBN	3-642-37102-7
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (307 p.)
Collana	Radiation Oncology, , 2731-4723
Disciplina	616.9940642
Soggetti	Radiology Oncology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Prognosis and Predictive Factors for Tumours and Organs at risk: Background and Purpose -- Specific issues for prognostic factors related to radiotherapy -- Role of ICT in decision models -- Statistics of Prediction of survival and toxicity and Nomogram Development -- Treatment decisions based on Gene Signatures: Methods and Caveats -- Brain tumors -- Head and neck cancer -- Breast cancer -- Lung cancer -- Esophageal cancer -- Gastric cancer -- Pancreas and biliary tract cancer -- Liver cancer and metastases -- Rectal and anal cancer -- Cervix and corpus uteri, vulva and vaginal cancers -- Bladder cancer -- Prostate cancer -- Sarcomas -- Lymphomas -- Brain metastases -- Bone metastases.
Sommario/riassunto	A look at the recent oncology literature or a search of one of the common databases reveals a steadily increasing number of nomograms and other prognostic models, some of which are also available in the form of web-based tools. These models may predict the risk of relapse, lymphatic spread of a given malignancy, toxicity, survival, etc. Pathology information, gene signatures, and clinical data may all be used to compute the models. This trend reflects increasingly individualized treatment concepts and also the need for approaches that achieve a favorable balance between effectiveness and side-effects. Moreover, optimal resource utilization requires prognostic

knowledge, for example to avoid lengthy and aggressive treatment courses in patients with a short survival expectation. In order to avoid misuse, it is important to understand the limits and caveats of prognostic and predictive models. This book provides a comprehensive overview of such decision tools for radiation oncology, stratified by disease site, which will enable readers to make informed choices in daily clinical practice and to critically follow the future development of new tools in the field.

---