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Nota di contenuto	Part I Imaging as a “Common Language” for Treatment Response Evaluations in Oncology -- Conventional Tumor Response Criteria and Limitations -- Response Evaluations for Precision Cancer Therapy and Immunotherapy -- Part II Practical Pitfalls in Therapy Response Imaging in Cancer Patients -- Drug Toxicity, Approach to Cancer as a Systemic Disease, and imaging modality-specific considerations -- Part III Disease-specific Approach for Therapy Response Imaging -- Therapy Response Imaging in Central Nervous System (CNS) Malignancy -- Therapy Response Imaging in Breast Cancer -- Therapy Response Imaging in Thoracic Malignancy -- Therapy Response Imaging in Gastrointestinal Malignancy -- Therapy Response Imaging in Hepatobiliary and pancreatic malignancies -- Therapy Response Imaging in Genitourinary Malignancies -- Therapy Response Imaging in Gynecologic malignancies -- Therapy Response Imaging in Lymphoma and Hematologic Malignancies -- Therapy Response Imaging in Sarcoma and musculoskeletal malignancies -- Part IV: Emerging Approaches and Future Directions -- Radiomics and Imaging Genomics for Evaluation of Tumor Response -- Evolution of Clinical Trial Imaging and Co-clinical Imaging -- Molecular and Functional Imaging in Oncology Therapy Response.

Sommario/riassunto

This book is a detailed guide to therapy response imaging in cancer patients that fully takes into account the revolutionary progress and paradigm shift in treatment approaches for advanced disease. The opening chapters describe the role of imaging as a “common language” for tumor response evaluation in oncology and address challenges and strategies in the era of precision cancer therapy and cancer immunotherapy. Practical pitfalls are discussed, with emphasis on the importance of approaching cancer as a systemic disease and the need for increased awareness of drug toxicity due to novel therapies. Therapy response imaging in a wide range of cancer types is then comprehensively described and illustrated, using a disease-specific approach. A concluding section focuses on emerging approaches and future directions, including radiomics/radiogenomics, co-clinical imaging, and molecular and functional imaging. Therapy Response Imaging in Oncology will be of high value for radiologists, nuclear medicine physicians, and oncologists. It will also be of interest to cancer care providers and oncology trial investigators.