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Nota di contenuto	Basic clinics on diagnosis and treatment of brain tumors -- Advancements in brain tumor classification -- State of the art in radiological imaging -- Positron emission tomography with radiolabeled amino acid tracers -- New radiopharmaceuticals for brain tumor imaging -- Incremental role of radiomics and artificial intelligence -- Next frontiers in surgical management -- Current and future drugs for brain tumor treatment -- Radiation oncology and heavy ion therapy in brain tumor.
Sommario/riassunto	This book covers all diagnostic and therapeutic aspects of neuro-oncological diseases. In the last decade, the management of brain tumors has been revolutionized following the new WHO classification and thanks to the introduction of molecular markers into the clinical routine. From an imaging point of view, the continuous technological developments and the implementation of various radiopharmaceuticals have paved the way to new clinical indications and has helped optimize patient management. In this context, a major breakthrough could derive from the introduction of radiomics and artificial intelligence in the diagnostic and therapeutic pathway. Not forgetting the emerging role of heavy-ion therapy as a complement to the innovative drugs and treatments adopted in medical oncology and radiation therapy. In the

present book, all above-mentioned aspects are covered, starting with the novel standards for the WHO classification of brain tumors, to the up-to-date surgical techniques and advanced therapeutic approaches, passing through the currently available imaging modalities and ongoing developments embracing both radiology and nuclear medicine discipline. Imaging represents indeed the “trait d’union” for all the arguments described in the book; therefore, in most chapters there are dedicated sessions focused on the role of imaging in each specific context. The publication aims to fill the gap between the clinicians and all professionals directly involved in the management of patients with brain tumors and the newest scientific outreach. Moreover, thanks to the comprehensive insight into the latest technological developments, scientists and researchers interested in the topic will find the book a useful tool for future studies and perspective discoveries.

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