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Nota di contenuto	Part I: Basics -- Chapter 1. Physics, Instrumentation, and Radiation Safety and Regulations -- Chapter 2. Radiopharmaceutical Sciences -- Chapter 3. Radiomics as applied in Precision medicine -- . Part II: Diagnostic Nuclear Medicine -- Chapter 4. Brain -- Chapter 5. Heart -- Chapter 6. Lung -- Chapter 7. Liver, Spleen and Biliary Tree -- Chapter 8. The Kidney -- Chapter 9. Gastrointestinal System -- Chapter 10. Musculoskeletal System -- Chapter 11. Application of lymphatic mapping and sentinel node biopsy in surgical oncology -- Chapter 12. Lymphoscintigraphy in the management of the lymphatic disorders -- Chapter 13. Neuroendocrine System -- Chapter 14. Thyroid and Parathyroid Imaging -- Chapter 15. Molecular Imaging of Inflammation and Infection -- Chapter 16. Imaging of Atherosclerosis with 18F-FDG PET -- Chapter 17. PET/CT and PET/MRI Imaging, Normal Variations and Artifacts -- Chapter 18. PET in head and neck cancer -- Chapter 19. PET in Gastrointestinal, Pancreatic, and Liver Cancers -- Chapter 20. 18F-FDG-PET/CT in Breast and Gynecologic Cancer -- Chapter 21. PET in lung cancer and mediastinal malignancies -- Chapter 22. MELANOMA -- Chapter 23. PET in Lymphoma -- Chapter 24. PET/CT in renal, bladder and testicular cancer -- Chapter 25. PSMA-ligand imaging in the diagnosis of prostate cancer -- Chapter 26.

Miscellaneous -- Chapter 27. Radionuclide imaging of Children -- . PART III: Nuclear Medicine Therapy -- Chapter 28. Radioiodine Therapy for Benign Thyroid Disease -- Chapter 29. Differentiated thyroid cancer: Radioiodine therapy -- Chapter 30. Palliation of metastatic bone pain with radiolabeled phosphonates -- Chapter 31. Radionuclide therapy of bone metastases with radium-223 chloride in prostate cancer patients -- Chapter 32. Peptide Receptor Radionuclide Therapy -- Chapter 33. Treatment of neuroendocrine tumors (neuroblastoma stage III or IV, metastatic pheochromocytoma, etc.) with 131I-mIBG -- Chapter 34. Radioimmunotherapy -- Chapter 35. Radioactive microspheres -- Chapter 36. Radioembolization -- Chapter 37. Assessment of tumor response with MRI and CT after radioembolization -- Chapter 38. Radioisotope Therapy of Malignant Pleural and Peritoneal Effusions -- Chapter 39. Radiosynoviorthesis (Radiation Synovectomy) -- Chapter 40. Radioligand Therapy in Prostate Cancer using PSMA-Ligands.

Sommario/riassunto

In the new edition of this very successful book, European and North American experts present the state of the art in diagnostic and therapeutic radionuclide procedures. The aim is to examine established and emerging clinical applications in detail, rather than to consider everything included in the comprehensive texts already available within the field. This “practical” approach ensures that the book will be a valuable guide for nuclear medicine physicians, technologists, students, and interested clinicians alike. This edition of Clinical Nuclear Medicine has been extensively revised to take account of recent developments. The roles of SPECT/CT, PET/CT, and PET/MRI are clearly explained and illustrated, and the coverage extended to encompass, for example, novel PET tracers and therapeutic radionuclides, advanced techniques of brain imaging, and the development of theranostics. Readers will be fully persuaded of the ever-increasing value of nuclear medicine techniques in depicting physiology and function and complementing anatomic modalities such as CT, MRI, and ultrasound.