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Sommario/riassunto	This book presents artificial intelligence applications that may help in detecting disease, defining tissue characterization (benign vs malignant), staging and correlation with molecular biomarkers. Originally positioned as a means for noninvasive molecular phenotyping and quantification in the 1970s, PET's technological

improvements in the 2000s generated renewed interest in quantification, which has grown over the last five years. This progress is parallel with the development of Artificial intelligence (AI) systems for Oncology which aim at providing the best possible treatment to patients suffering from lung, breast, brain, prostate, liver and other types of cancer. The chapters provide an overview of the use of AI in PET/CT imaging for various types of cancer, and it will be an invaluable tool especially for nuclear medicine physicians and oncologists.