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Nota di contenuto	Chapter 1. Potential Role of Biomarkers, Biosensors, Technologies and Computational Methods in Early Detection of Gastrointestinal Cancer -- Chapter 2. Biomarkers as the Promising Tools for Early Detection of Gastrointestinal Cancer -- Chapter 3. Development and Evaluation of Biomarkers for Early Detection of Cancer -- Chapter 4. Prognostic Molecular Markers for Gastrointestitinal cancer -- Chapter 5. Metabolic Markers for Early Detection of Gastrointestinal Cancer -- Chapter 6. Current Status of MicroRNA-based Biomarkers for Gastric Cancer -- Chapter 7. Genetic Susceptibility Markers of Gastrointestinal Cancer -- Chapter 8. Approaches For Early Detection Of Gastrointestinal Cancer -- Chapter 9. Biosensors and its Applications for Early Detection of Gastrointestitinal Cancer -- Chapter 10. Application of Nanotechnology

in Early Detection of Gastrointestinal Cancer -- Chapter 11. Genetic Marker Identification for the Detection of Early-Onset Gastrointestinal Cancer Through Genome Wide Association Studies -- Chapter 12. Big Data Analytics to Discover Diagnostics and Therapeutics for Gastrointestinal Cancer -- Chapter 13. System Biology Approach for Early Prognosis of Gastrointestinal Cancer.

Sommario/riassunto

This book describes various novel biomarkers for the early diagnosis of gastrointestinal (GI) cancers. It also highlights recent advances in understanding the role of molecular markers and biomarkers, such as volatile biomarkers, serum biomarkers, predictive and prognostic molecular markers for the early detection of GI cancers. Further, it discusses novel biomarkers, including circulating microRNAs, serum microRNA and plasma microRNA in GI cancer. The book presents breakthrough technologies like ultra-sensitive nano-chips, nanosensors, nanodevices, biosensors, electrochemical biosensors, optical biosensors, DNA biosensors, synthetic biology devices, and 'omics' technologies for the early diagnosis of gastrointestinal cancer. In addition it examines the potential of genome-wide association studies, big data analytics, computation biology, systems biology, and nanotechnology for early diagnostics and therapeutics for gastrointestinal cancer, with a focus on personalized cancer treatment. The book is a valuable source for researchers and clinicians engaged in detection and diagnosis of gastrointestinal cancers.
