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Nota di contenuto	Early Detection, Diagnosis, and Treatment of Head and Neck Cancers -- Emerging Technologies in Head & Neck Cancer Detection: Industry landscape of Head and Neck Cancer Detection and Diagnosis -- Microfluidic Technologies for Head and Neck Cancer: from Single Cell Analysis to Tumor-on-a-chip -- Nanotechnology for Diagnosis Imaging and Treatment of Head & Neck Cancers -- The Role of Mass Cytometry in Early Detection, Diagnosis, and Treatment of Head and Neck Cancers -- Deep Learning based Cancer Detection from H&E Slide of HPV-associated Oropharyngeal Tumors -- Salivary Biomarkers for Non-invasive Early Detection of Head and Neck Cancer -- Surgical Ablative Treatment of Head and Neck Cancer -- Conventional Reconstructive Approaches following Resection of Head and Neck Cancers -- Dental Implants and their Management in the Treatment of Oral Cancers.

Head and neck cancer (HNC) is a heterogeneous group of cancers that, if combined, represent one of the most common cancer types. Patients with HNC suffer significant morbidity and mortality due to the importance of the structures involved. Over two-thirds of these patients are diagnosed at a late stage, leading to a poor prognosis. Therefore, advancements in early detection and treatment of HNC are crucial. Volume I begins with a general overview, including the industry landscape, of HNC detection, diagnosis, and treatment. Next, it covers the applications of innovative technologies such as microfluidics, nanotechnology, and deep learning to early detect as well as study HNC. For example, studying the cellular features at a single-cell level became possible with the advancement of technologies such as mass cytometry or specifically, Cytometry by Time Of Flight Mass Spectrometry (CyTOF), which has revolutionized the way we can study complex human diseases such as HNC. Finally, the last few chapters are dedicated to describing the standard of care of HNC. The first volume of Early Detection and Treatment of Head & Neck Cancers is highly pertinent to the next generation of interdisciplinary clinicians, scientists, residents, and students who are particularly interested in HNC and in the translation of early detection methods, technologies, and research to clinical practice.
