

Preface

Solid tumors have been traditionally evaluated using a combination of anatomic, pathological, and radiological tools. The AJCC staging classification provides important prognostic information for planning treatment modalities. In reality, cancer is a disease characterized by complex genomic changes (e.g., mutations, gene rearrangements) resulting in activating pathways associated with treatment resistance and disease progression. Furthermore, an additional level of complexity is represented by tumor heterogeneity, particularly in the metastatic setting due to the existence of cancer cell clones with distinct biological features. Molecular diagnostics has evolved allowing the *real-time* assessment of cancer complexity by a simple blood test to interrogate the “liquid phase” of solid tumors. A revolutionary approach to cancer diagnostics that complements and expands the role of standard pathology. Today, liquid biopsy technologies allow to collect circulating cancer cells or DNA fragments representative of the disease but also expression of resistance clones seeding various metastatic sites providing clinicians with the advantage to understand, predict, and intervene. In this book, we have collected contribution from experts in the field of blood-based diagnostics to present the silent diagnostic revolution and the perspectives and impact on patients’ management. The future of cancer early detection, characterization, and monitoring using liquid biopsies will mirror the management of chronic diseases such as diabetes and hypercholesterolemia.

Chicago, IL, USA

Massimo Cristofanilli



<http://www.springer.com/978-3-319-50955-6>

Liquid Biopsies in Solid Tumors

Cristofanilli, M. (Ed.)

2017, X, 161 p. 14 illus., 12 illus. in color., Hardcover

ISBN: 978-3-319-50955-6

A product of Humana Press