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It is well know today that malignant tumor ranks as a leading cause of death and the first or second leading cause of mortality before age 70 in a significant number of countries globally with lung cancer, notably non-small cell lung cancer (NSCLC), being the second most prevalent malignancy and the leading cause of mortality amongst cancers in men and women worldwide. In this context, NSCLC still constitutes nowadays a major burden despite many advances in diagnostic modalities such as genomic sequencing and evolution of tumor markers, early diagnostic screening, identification and prevention of risk factors, modification of environmental hazards as well as, finally many promising treatment. Therefore, NSCLC patients with driver gene mutations who are treated with targeted therapies have a more favorable survival outcomes and low toxicity. In this context, the development of drugs targeting EGFR mutations has revolutionized the stratified treatment paradigm for NSCLC patients with EGFR mutations. Moreover, molecular-driven treatments that were previously only available for advanced-stage NSCLC have recently been shown to be very effective for early- and locally advanced- stage disease (stage IB-IIIA). Moreover, studies have evaluated therapies that target a broader range of oncogenes to overcome drug resistance and treat patients who were previously excluded from clinical trials of advanced NSCLC. Finally, broad emerging data will certainly impact future treatment guidelines and then, will promote the use of stratified medicine by these ongoing trials. For all these reasons this textbook which results of great cases study mostly related to the impact of drug therapy in NSCLC demonstrating specific genomic aberrations, gives to the reader different new insights and different aspects in personalized medicine in thoracic oncology. Additionally, a few publications give more knowledge related to lung carcinogenesis, drug toxicities and some new basic science knowledge in the era of lung cancer.

At the end it is a great pleasure for me, to write this book preface, book which associated different interesting case reports related to NSCLC cases. Please take your time to read these clinical cases and enjoy all of them.



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