Introduction

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The landscape of cancer biology has been consistently changed since the mid of the last century. The discovery of oncogenes and tumor suppressor genes, the identification of cancer stem cells and the study of tumor immunology could be deemed the most relevant steps of an evolving scenario. Many researchers argue the opportunity yielded by a combination of different therapeutic strategies concomitantly or subsequently.

Vogelstein was one of the first researchers who identified an association between specific genomic alterations and the stages of cancer development and progression. Since the proposal of his carcinogenetic model in colon cancer, various models have been proposed in different malignancies.

Then Hanahan and Weinberg suggested the main cancer cell functions, which characterize a malignant tumor. Recently the same authors highlighted the role of targeted therapy to address the action against each hallmark of cancer.

Several years ago the idea of "magic bullets" to target oncogenes arose as a new fascinating strategy, which would have led to a definitive cure for cancer patients. This concept was based on the potential selective action on cancer cells, sparing normal cells.

Nowadays we know that targeted agents can achieve high antitumor activity, as monotherapy or as a combination with standard chemotherapy. However some side effects may develop as a consequence of the action of targeted agents on normal tissue, which express the relative target oncogenes. These adverse events are usually different from those observed when standard chemotherapy is delivered. A proper management of targeted therapy-related toxicity is needed, and international guidelines and recommendations have already included some suggestions for oncologists to manage it.

This volume about "Targeted Therapies for solid tumors" aims to help and to lead the update in this widespread field of clinical oncology.

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