

Metastatic breast cancer actually is the most leading cause of cancer death in women worldwide, accounting for 14% of cancer deaths each year. About 10% of the new breast cancer diagnosis unfortunately are diagnosed in stage IV, and nearly 30% of women initially diagnosed with early-stage breast cancer will develop metastatic lesions.

Metastatic breast cancer is a heterogeneous disease and, albeit it remains in almost all cases an incurable disease, some patients can live for 10 years or more with a good quality of life. The goals of therapy are to improve survival taking into account the toxicities of the therapies and the quality of life. Some particular sites of distant metastases, such as bone and brain, require specific treatments.

Over the years, thanks to preclinical and translational evidence, we have obtained an increasingly in-depth knowledge of the mechanisms that lead to metastasis. Today we know that this process not only affects the specific characteristics of cancer cells, but also involves the interactions between cancer cells and the tumor microenvironment, the promotion of angiogenesis, the immune response and the effects of systemic therapies that can lead to selection of resistant clones. This increasingly in-depth knowledge of the molecular mechanisms underlying the development of, firstly, micrometastatic disease and then macrometastatic disease is a fundamental step to develop any new target therapies that overcome the inevitable resistances to systemic therapy.

Unfortunately, despite the undeniable progress in the treatment of metastatic breast cancer achieved in recent years (e.g., the introduction of CDK4/6 inhibitors or alpelisib as standard therapies), there are still some unmet clinical needs and open issues. Some examples of these are represented by the optimal sequence of endocrine or cytotoxic therapies, the role of the gene expression signatures in circulating tumor cells as predictive factor, the role of TILs in triple negative and HER2 positive metastatic breast cancer, etc.

This book is an organic, multidisciplinary and comprehensive collection of articles aimed at clarifying the most important and the most innovative aspects in the local or systemic treatments of metastatic breast cancer.

They are divided into seven sections: in the first section there is an interesting overview on metastatic breast cancer which mainly evaluates emerging new biomarkers and rare sites of breast cancer metastasis. There are also three sections dedicated to chemotherapy, endocrine therapy and target therapy (including immunotherapy). Local treatment strategies (radiotherapy, surgery) are also considered. There is also a specific section for the treatment of metastases in “special” sites such as brain and bone. Finally, there is a section dedicated to palliative care and the general management of this heterogeneous group of pathologies.

I think that any clinician or biologist who has an interest in having a comprehensive view of the state of the art on the treatment of metastatic breast cancer should use this book as one of their favorite references.

I warmly thank the Publisher for this high-quality editorial effort.



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