
Preface

This book is the second volume of our series *Breast Cancer: Early Detection with Mammography*. The series describes the paradigm shift that early detection of breast cancer can accomplish. In each volume the approach used emphasizes the importance of familiarity with the subgross anatomy of the breast, the pathogenesis of different disease processes, and the capabilities and limitations of the imaging methods in order to be able to understand the nature of the imaging findings. The long-term follow-up of patients diagnosed with the earliest detectable phases of breast cancer completes the circle. Our goal is to inform both the medical community and the women at risk that the development of technology capable of revealing breast cancer at an ever earlier stage has opened the door into a new era in the diagnosis and treatment of breast cancer.

It is important to emphasize the enormous difference between the advanced, palpable breast cancers and the mammographically detected in situ or 1–9 mm invasive carcinomas in every respect, particularly in terms of outcome and treatment requirements. The mammographic tumor features, upon which this series of volumes is based, provide a reliable and reproducible tool for prognostic classification. A characteristic mammographic image of each particular prognostic feature is attached to the corresponding, specific long-term survival curves published in these books. These provide a reliable tool to assist in planning custom-tailored treatment.

Our previous volume *Casting Type Calcifications: Sign of a Subtype with Deceptive Features* singled out one well-

defined subgroup of breast cancer having a surprisingly poor prognosis despite its being currently classified as belonging to the size range of small, 1–14 mm tumors. In contrast, this volume deals with a subgroup having a far better prognosis. These books demonstrate how the mammographic prognostic features are capable of distinguishing the breast cancer subtypes originating within the TDLUs (crushed stone-like calcifications) from those subtypes originating within the ducts (casting type calcifications). This important distinction helps describe the precise origin and location of the breast cancer subtypes with distinctly different outcomes. For these reasons we have attempted to clarify the terminology, based on a thorough analysis of the subgross, 3D histological features and the long-term disease outcome. In particular, we point out that the accumulation of malignant cells confined to the TDLUs should not be called “ductal” carcinoma in situ. Also, the growth of cancer cells within the ducts is often associated with an unexpectedly poor outcome, which brings into question whether the term ductal carcinoma “in situ” correctly describes the actual process. Combining these separate disease entities under a common term “ductal carcinoma in situ” (DCIS) leads to confusion in communication and potentially impairs custom-tailored management.

László Tabár
Tibor Tot
Peter B. Dean