

M. D. ANDERSON
CANCER CARE
SERIES

BREAST CANCER

SECOND EDITION



KELLY K. HUNT • GEOFFREY L. ROBB
ERIC A. STROM • NAOTO T. UENO
EDITORS

AMAN U. BUZDAR • RALPH S. FREEDMAN
SERIES EDITORS

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Series Editors

Aman U. Buzdar, MD **Ralph S. Freedman, MD, PhD**

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The University of Texas M. D. Anderson Cancer Center, Houston, Texas

Breast Cancer

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Foreword by John Mendelsohn, MD



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FOREWORD

This second edition of *Breast Cancer* continues the tradition of the M. D. Anderson Cancer Care Series. The book is oriented towards the needs of clinicians who manage breast cancer at every stage of the disease. Chapters are written by experts with a strong knowledge of research findings who also are active in the clinic and understand the practical needs of the patient and her physician.

Multidisciplinary care is a popular term today, but such care has been practiced at M. D. Anderson Cancer Center for decades. The physicians who assembled this book are experienced practitioners of multidisciplinary care. The authors of each chapter carry out their clinical activities at our Nellie B. Connally Breast Center, where they collaborate in providing complete patient care services at a single site.

The chapters start, logically, with prevention of breast cancer and personalized risk assessment, including genetics. These topics are followed by chapters on early detection, with emphasis on a variety of sophisticated imaging techniques and sampling of tissue. The various surgical options, including reconstruction, are thoroughly presented. Before medical oncology is introduced there are chapters dealing with the growing use of markers to predict prognosis and to select hormonal or chemotherapy treatments that are likely to succeed. The book concludes with issues related to survivorship, including re-entering social and job-related activities and dealing with questions related to sexuality and reproduction.

I recommend this book to anyone seeking to apply the science and art of medicine to patients with breast cancer and to women who wish to prevent the disease or have survived it. Readers will become up to date on recent discoveries in, for example, human cancer genetics, expression arrays, magnetic resonance imaging, and ultrasonography, as well as current approaches to managing the mental and social challenges with which breast cancer patients must deal. Clinicians who read this book will become more skillful health care providers, which is the aim of each of the volumes in the M. D. Anderson Cancer Care Series.

John Mendelsohn, MD

President

The University of Texas M. D. Anderson Cancer Center

PREFACE

This second edition of *Breast Cancer* marks a milestone in the M. D. Anderson Cancer Care Series, which now includes seven volumes. This second edition also serves as a reminder to us of the dramatic progress that is being made in molecular diagnostics and therapies for breast cancer.

A number of newer therapies have become available since the first edition of this book was published in 2001 and are discussed in this new edition. The preoperative systemic therapy approach long practiced at M. D. Anderson Cancer Center is now being adapted to allow rapid evaluation of newer therapies with small numbers of patients. To reflect advances in the pathologic characterization of breast cancer, the first edition chapter “Serum and Tissue Markers for Breast Cancer” has been replaced by two chapters: “Serum Tumor Markers and Circulating Tumor Cells” and “Histopathologic and Molecular Markers of Prognosis and Response to Therapy.” All the original chapters have been revised to include important new information. For example, this edition includes new data on tamoxifen and raloxifene in breast cancer prevention, MRI screening in breast cancer, and the integration of bevacizumab and trastuzumab into current therapy—topics that highlight developments in prevention, screening, and therapeutics, respectively. A number of new tables and figures have been added as well.

The success of this series in providing a resource to clinicians in the community and elsewhere is a tribute to its many contributors and also to M. D. Anderson’s Department of Scientific Publications, where the series has been carefully nurtured by Walter Pagel and many scientific editors.

Aman U. Buzdar, MD
Ralph S. Freedman, MD, PhD

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