

# Breast Oncology: Techniques, Indications, and Interpretation

Samantha L. Heller • Linda Moy  
Editors

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 Springer

*Editors*

Samantha L. Heller  
Department of Radiology  
New York University Langone  
Medical Center  
New York University School of Medicine  
New York  
USA

Linda Moy  
Department of Radiology  
New York University Langone  
Medical Center  
New York University School of Medicine  
New York  
USA

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Linda Moy

*To my parents, Fee and Helen, who taught  
me to persevere and pursue my dreams*

*To my children, Cindy and Ethan, who fill  
my life with joy and laughter*

*To my husband, Dale, who is a wonderful  
partner*

*To Dan Kopans who nurtured a passion for  
breast imaging*

*To Hildegard Toth for her unwavering  
support*

Samantha L. Heller

*Thank you to my wonderful colleagues—I am  
so very lucky to work with you.*

*Raj, Kannon, and Dashiell, this is for you—  
with love and a bottle of pie.*

# Foreword

Magnetic resonance imaging (MRI) has become a standard breast imaging tool. Breast MRI is widely accepted as a suitable screening exam for women at high risk for breast cancer and is often invaluable in the diagnostic setting. Yet despite an overall increase in understanding of the strengths and applications of breast MRI and despite increasingly nuanced and evidence-based guidelines, breast MRI techniques, protocols, and indications are not static and may vary from practice site to practice site. In addition, breast MRI has some limitations: it is an expensive exam with the potential to impact on overall health-care costs. As well, false-positive findings generated through the MRI exam can lead to additional imaging and biopsy.

Because the field of breast MR continues to evolve, we hope to introduce the reader to emerging breast MRI techniques and applications even as we offer a complete and thorough review of current breast MRI practice and guidelines. Because the stakes are high surrounding appropriate MR interpretation, we have also aimed to provide a book presenting practical tips regarding optimal MR technical parameters and pearls regarding study evaluation.

To accomplish these goals, we have organized our book into three themed sections. The first section focuses on MRI techniques with the goal of detailing the parameters of breast MRI from standard sequences to up-to-date, cutting-edge techniques. The second section reviews accepted indications for breast MRI and analyzes the available evidence-based support for these indications. The third section focuses on specific MRI findings, interpretation strategies, and management of breast MRI findings. Throughout this book, the authors contextualize controversies and debates within the field. The chapter authors provide both national and international perspective on these topics.

New York, NY, USA

Samantha L. Heller and Linda Moy

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# Contributors

**Steven Allen, MBBS, MRCS, FRCR** Department of Imaging, Royal Marsden Hospital, London, UK

**Pascal A. Baltzer, MD** Department of Biomedical Imaging and Image-Guided Therapy, Medical University of Vienna, Vienna, Austria

**Chloe Chhor, MD** Department of Radiology, NYU School of Medicine, New York, NY, USA

**Barbara J.G. Dall, MB ChB, FRCR, FRCP** Department of Radiology, Leeds Teaching Hospitals NHS Trust, St. James's University Hospital, Leeds, West Yorkshire, UK

**Wendy B. DeMartini, MD** Department of Radiology, Stanford University School of Medicine, Palo Alto, CA, USA

**Amy M. Fowler, MD, PhD** Department of Radiology, University of Wisconsin School of Medicine and Public Health, Madison, WI, USA

**Sarah Friedewald, MD** Department of Radiology, Northwestern Memorial Hospital, Chicago, IL, USA

**Yiming Gao, MD** Department of Radiology, NYU School of Medicine, New York, NY, USA

**Catherine S. Giess, MD** Department of Radiology, Section of Breast Imaging, Brigham and Women's Hospital, Boston, MA, USA

**Lea Gilliland, MD** Department of Radiology, Emory University Hospital, Atlanta, GA, USA

**Heather I. Greenwood, MD** Department of Radiology and Biomedical Imaging, University of California, San Francisco Medical Center at Mt. Zion, San Francisco, CA, USA



**Dipti Gupta, MD** Department of Radiology, Feinberg School of Medicine, Northwestern University, Chicago, IL, USA

**Samantha L. Heller, PhD, MD** Department of Radiology, New York University School of Medicine, New York, NY, USA

**Nola Hylton, PhD** Department of Radiology, University of California, San Francisco, San Francisco, CA, USA

**Bonnie N. Joe, MD, PhD** Department of Radiology and Biomedical Imaging, University of California San Francisco at Mt. Zion, San Francisco, CA, USA

**Su-Ju Lee, MD, FACR** Department of Radiology, University of Cincinnati Medical Center, Cincinnati, OH, USA

**H.T. Carisa Le-Petross, MD, FRCP** Department of Radiology, University of Texas MD Anderson Cancer Center, Houston, TX, USA

**Bora Lim, MD** Breast Medical Oncology, The University of Texas MD Anderson Cancer Center, Houston, TX, USA

**Mary C. Mahoney, MD, FACR** Department of Radiology, University of Cincinnati Medical Center, Cincinnati, OH, USA

**Victoria Mango, MD** Department of Radiology, Memorial Sloan Kettering Cancer Center, New York, NY, USA

**Maria Adele Marino, MD** Division of Molecular and Gender Imaging, Department of Biomedical Imaging and Image-Guided Therapy, Medical University of Vienna, Vienna, Austria

Department of Biomedical Sciences and Morphologic and Functional Imaging, Policlinico Universitario G. Martino, University of Messina, Messina, Italy

**Amy Melsaether, MD** Department of Radiology, NYU School of Medicine, New York, NY, USA

**Elizabeth A. Morris, MD, FACR** Department of Radiology, Memorial Sloan Kettering Cancer Center, New York, NY, USA

**Linda Moy, MD** Department of Radiology, New York University School of Medicine, New York University Langone Medical Center, Laura and Isaac Perlmutter Cancer Center, New York, NY, USA

**Adrienne Newburg, MD** Department of Radiology, University of Massachusetts Medical School, UMass Memorial Medical Center, Worcester, MA, USA

**Savannah C. Partridge, PhD** Department of Radiology, University of Washington, Seattle Cancer Care Alliance, Seattle, WA, USA

**Katja Pinker-Domenig, MD** Division of Molecular and Gender Imaging, Department of Biomedical Imaging and Image-Guided Therapy, Medical University of Vienna/General Hospital Vienna, Vienna, Austria

**Maria Piraner, MD** Department of Radiology and Imaging Sciences, Emory University Hospital, Atlanta, GA, USA

**Nina Purvis, MPhys** Department of Radiology, Memorial Sloan Kettering Cancer Center, New York, NY, USA

**Habib Rahbar, MD** Department of Radiology, University of Washington School of Medicine, Seattle Cancer Care Alliance, Seattle, WA, USA

**Sabrina Rajan, BMed Sci(Hons), BMBS, MRCP, FRCR** MRI Department, Leeds Teaching Hospitals NHS Trust, St. James's University Hospital, Leeds, West Yorkshire, UK

**Claudio Spick, MD** Department of Biomedical Imaging and Image-Guided Therapy, Medical University of Vienna, Vienna, Austria

**Roberta M. Strigel, MD, MS** Department of Radiology, University of Wisconsin School of Medicine and Public Health, Madison, WI, USA

**Claudia Seuss, MD** Department of Radiology, New York University School of Medicine, New York University Langone Medical Center, Laura and Isaac Perlmutter Cancer Center, New York, NY, USA

**Elizabeth J. Sutton, MDCM** Department of Radiology, Memorial Sloan Kettering Cancer Center, New York, NY, USA

**Lilian Wang, MD** Department of Radiology, Prentice Women's Hospital, Northwestern Medicine, Chicago, IL, USA

**Eren D. Yeh, MD** Department of Radiology, Section of Breast Imaging, Brigham and Women's Hospital, Boston, MA, USA