

TABLE OF CONTENTS

Handbook for Clinical Trials of Imaging and Image-Guided Interventions

Contributors

Chapter 1 Imaging technology assessment, 1

Pari V. Pandharipande and G. Scott Gazelle

Chapter 2 Clinical trials of therapy, 10

Sayeh Lavasani, Anthony F. Shields and Ali Mahinbakht

Chapter 3 Clinical trials of image-guided interventions including radiotherapy studies, 29

Gary S. Dorfman and Stephen M. Hahn

Chapter 4 Imaging as a predictor of therapeutic response, 57

David A. Mankoff and Anthony F. Shields

Chapter 5 Screening trials and design, 76

Janie M. Lee, Constance D. Lehman and Diana L. Miglioretti

Chapter 6 Practicalities of running a clinical trial, 91

Michael T. Lu, Elizabeth C. Adami and Udo Hoffmann

Chapter 7 Statistical issues in study design, 103

Nancy A. Obuchowski

Chapter 8 Introduction to biostatistical methods, 126

Diana L. Miglioretti, Todd A. Alonzo and Nancy A. Obuchowski

Chapter 9 Methods for studies of diagnostic tests, 147

Jeffrey D. Blume

Chapter 10 Methods for quantitative imaging biomarker studies, 170

Alicia Y. Toledano and Nancy A. Obuchowski

Chapter 11 Introduction to cost-effectiveness analysis in clinical trials, 189

Ruth C. Carlos and G. Scott Gazelle

Index, 208.