Contents

1 Management of Peritoneal Surface Malignancy: A Short History
   Paul H. Sugarbaker ............................................ 1

2 The Natural History of Free Cancer Cells in the Peritoneal Cavity
   Yutaka Yonemura, Taiichi Kawamura, Etsurou Bandou,
   Gorou Tsukiyama, Yoshio Endou, and Masahiro Miura ........ 11

3 Pathological Evaluation and Implications of Serosal Involvement in Gastrointestinal Cancer
   Linmarie Ludeman and Neil A. Shepherd ...................... 25

4 Principles of Perioperative Intraperitoneal Chemotherapy for Peritoneal Carcinomatosis
   Eelco de Bree and Dimitris D. Tsiftsis ........................ 39

5 Experimental and Pharmacokinetic Studies in Intraperitoneal Chemotherapy: From Laboratory Bench to Bedside
   Eelco de Bree and Dimitris D. Tsiftsis ........................ 53

6 Technology for the Delivery of Hyperthermic Intraoperative Intraperitoneal Chemotherapy: A Survey of Techniques
   Amod A. Sarmaik, Jeffrey J. Sussman, Syed A. Ahmad,
   Benjamin C. McIntyre, and Andrew M. Lowy ................. 75

7 Adjuvant Intraperitoneal Chemotherapy: A Review
   Paul H. Sugarbaker ............................................ 83
8 Clinical Research Methodology in Peritoneal Surface Oncology: A Difficult Challenge
François-Noël Gilly, Olivier Glehen, Annie C. Beaujard, Eddy Cotte .................................................. 91

9 Lessons Learnt from Clinical Trials in Peritoneal Surface Oncology: Colorectal Carcinomatosis
Frans A. N. Zoetmulder, Vic J. Verwaal ......................... 99

10 Experimental Models and Questions in Basic Science Research for Pseudomyxoma Peritonei
Laura A. Lambert, Donald H. Lambert, Paul Mansfield .... 105

11 Peritoneal Carcinomatosis of Colorectal Origin: Recent Advances and Future Evolution Toward a Curative Treatment
Dominique Elias and Diane Goere ............................... 115

12 Pathological Characterization and Differential Diagnosis of Malignant Peritoneal Mesothelioma
Nelson G. Ordóñez .................................................. 123

13 Advances in Clinical Research and Management of Diffuse Peritoneal Mesothelioma
Marcello Deraco, Dario Baratti, Nadia Zaffaroni, Antonello Domenico Cabras, and Shigeki Kusamura .... 137

14 Advances in the Management of Gastric Cancer with Peritoneal Dissemination
Yutaka Yonemura, Taichi Kawamura, Etsuro Bandou, Gorou Tsukiyama, Masayuki Nemoto, Yoshio Endou, Masahiro Miura ................................................................. 157

15 Intraperitoneal Chemotherapy in the Management of Ovarian Cancer
Maurie Markman .................................................. 165