

Contents

Preface	v
Contributors	xi
 PART I CHEMISTRY AND PHYSICS	
1 Radiopharmaceuticals for Radioguided Surgery	3
<i>Esteban Obenaus, Paola A. Erba, Marco Chinol, Christophe Van de Wiele, Gyoza A. Janoki, Rudy A. Dierckx, Francesco Scopinaro, and Alberto Signore</i>	
2 Physical Performance Parameters of Intraoperative Probes	12
<i>Carlo Chiesa, Francesca Toscano, Mario Mariani, and Emilio Bombardieri</i>	
3 Positron-Sensitive Probes	23
<i>Schlomo Schneebaum, Richard Essner, and Einat Even-Sapir</i>	
4 Gamma Ray Imaging Probes for Radioguided Surgery and Site-Directed Biopsy	29
<i>Francesco Scopinaro and Alessandro Soluri</i>	
5 Radiation Protection in Radioguided Surgery	37
<i>Edwin C. Glass and Wendy A. Waddington</i>	
6 Training and Credentialing for Radioguided Surgery	48
<i>Eric D. Whitman</i>	
 PART II SENTINEL LYMPH NODES	
7 The Anatomy and Physiology of Lymphatic Circulation	57
<i>Preya Ananthakrishnan, Giuliano Mariani, Luciano Moresco, and Armando E. Giuliano</i>	
8 The Role of Lymph Node Staging for Clinical Decision Making in Patients with Solid Cancers	72
<i>Fausto Badellino, Ilaria Pastina, Elisa Borsò, Sergio Ricci, H. William Strauss, and Giuliano Mariani</i>	
9 Sentinel Lymph Node Biopsy in Patients with Breast Cancer	81
<i>Charles E. Cox, John M. Cox, Giuliano Mariani, Caren E.G. Wilkie, Laura B. White, Samira Khera, and Danielle M. Hasson</i>	
10 Sentinel Lymph Node Biopsy in Cutaneous Melanoma	92
<i>Jeffrey E. Gershenwald, Roger F. Uren, Giuliano Mariani, and John F. Thompson</i>	

11	Dynamic Sentinel Lymph Node Biopsy in Penile Carcinoma	111
	<i>Simon Horenblas, Bin K. Kroon, Renato A. Valdés Olmos, and Omgo E. Nieweg</i>	
12	Sentinel Lymph Node Biopsy in Cancer of the Head and Neck	120
	<i>Luca Calabrese, David Soutar, Jochen Werner, Roberto Bruschini, Concetta De Cicco, and Fausto Chiesa</i>	
13	Sentinel Lymph Node Biopsy in Gynecologic Malignancies	130
	<i>Emilio Bombardieri, Marco Maccauro, Rosanna Fontanelli, Francesco Raspagliesi, and Giovanni Paganelli</i>	
14	Sentinel Lymph Node Biopsy in Cancers of the Gastrointestinal Tract	142
	<i>Yuko Kitagawa, Sukamal Saha, and Masaki Kitajima</i>	
15	Sentinel Lymph Node Biopsy in Prostatic Cancer	151
	<i>Alexander Winter, Harry Vogt, Dorothea Weckermann, Rolf Harzmann, and Friedhelm Wawroschek</i>	
16	Radioguided Biopsy of the Sentinel Lymph Node in Patients with Non-Small Cell Lung Cancer	166
	<i>Giuseppe Boni, Gianpiero Manca, Franca M.A. Melfi, Marco Lucchi, Alfredo Mussi, and Giuliano Mariani</i>	
17	Sentinel Lymph Node Biopsy in Thyroid Cancer	172
	<i>Massimo Salvatori, Domenico Rubello, Michael J. O'Doherty, Maria Rosa Pelizzo, and Giuliano Mariani</i>	
18	Histopathology of Sentinel Lymph Nodes	184
	<i>Giuseppe Viale, Giovanni Mazzarol, and Eugenio Maiorano</i>	
19	Frozen Section and Imprint Cytology in Sentinel Lymph Node Biopsy for Breast Cancer	195
	<i>Santo V. Nicosia and Charles E. Cox</i>	
20	Molecular Assessment of Sentinel Lymph Nodes	206
	<i>Farin Amersi, Armando E. Giuliano, and Dave S.B. Hoon</i>	

PART III OCCULT LESION LOCALIZATION

21	Where It All Began: The Heritage of Radioimmunoguided Surgery	221
	<i>Fausto Badellino, Mario Roselli, Marzio Perri, Fiorella Guadagni, and Giuliano Mariani</i>	
22	Radioguided Occult Lesion Localization in the Breast	226
	<i>Giovanni Paganelli, Concetta De Cicco, Giovanna Gatti, and Alberto Luini</i>	
23	Minimally Invasive Radioguided Parathyroidectomy in Primary Hyperparathyroidism	233
	<i>James Norman, Domenico Rubello, Armando E. Giuliano, and Giuliano Mariani</i>	
24	Radioguided Surgery of Neuroendocrine Tumors	252
	<i>Richard P. Baum, Sergio Sandrucci, and Stefan Adams</i>	
25	Radioguided Surgery of Solitary Pulmonary Nodules	262
	<i>Giuseppe Boni, Franca M.A. Melfi, Gianpiero Manca, Marco Lucchi, Alfredo Mussi, and Giuliano Mariani</i>	

26	Radioguided Surgery of Occult Lesions in Patients with Thyroid Cancer	269
	<i>Domenico Rubello, Massimo Salvatori, Maria Rosa Pelizzo, Giuseppe Boni, and Giuliano Mariani</i>	
27	Radioguided Bone Lesion Localization	278
	<i>Gianpiero Manca, Giuliano Mariani, and Lary A. Robinson</i>	
	Index	285