

# Contents

<b>1 PET and PET/CT: Basic Principles and Instrumentation</b>	
M.-J. Martínez, S. I. Ziegler, and Th. Beyer .....	1
<b>2 Radiopharmacy</b>	
R. Michael .....	25
<b>3 Brain Tumors</b>	
G. Pöpperl, K. Tatsch, F.-W. Kreth, and J.-C. Tonn .....	33
<b>4 PET/CT Imaging in Head and Neck Tumours</b>	
R. Rödel .....	49
<b>5 PET and PET/CT in Thyroid Cancer</b>	
H. Palmedo and M. Wolff .....	59
<b>6 Esophageal Cancer</b>	
H. A. Wieder, A. Stahl, F. Lordick, and K. Ott .....	71
<b>7 Lung Cancer</b>	
H. C. Steinert .....	81
<b>8 FDG-PET and PET/CT in Malignant Lymphoma</b>	
S. N. Reske .....	93
<b>9 PET in Colorectal Cancer</b>	
S. Dresel and P. M. Schlag .....	109
<b>10 FDG-PET and FDG-PET/CT in Breast Cancer</b>	
A. Haug, R. Tiling, and H. L. Sommer .....	125
<b>11 Gynecologic Tumors</b>	
M. J. Reinhardt .....	141

- 12 Cutaneous Melanoma**  
M. J. Reinhardt..... 151
- 13 Value of PET and PET/CT in the Diagnostics of Prostate and Penile Cancer**  
B. Scher, M. Seitz, W. Albinger, M. Reiser, B. Schlenker,  
Ch. Stief, U. Mueller-Lisse, and S. Dresel..... 159
- 14 Pediatric PET: Indications and Value of Multimodal Imaging**  
Th. Pfluger, K. Hahn, and I. Schmid..... 181
- 15 Cancer of Unknown Primary**  
L. S. Freudenberg, S. J. Rosenbaum-Krumme, A. Bockisch,  
W. Eberhardt, and A. Frilling..... 193
- 16 FDG-PET in Paraneoplastic Syndromes**  
R. Linke and R. Voltz..... 203
- 17 PET and PET/CT with F-18 Fluoride in Bone Metastases**  
H. Palmedo, C. Grohé, Y. Ko, and S. Tasci..... 213
- 18 Receptor PET/CT Imaging of Neuroendocrine Tumors**  
R. P. Baum, V. Prasad, M. Hommann, and D. Hörsch..... 225
- 19 PET and PET/CT in Radiotherapy**  
S. Könemann and M. Weckesser..... 243