

|                                                                                                                             |     |
|-----------------------------------------------------------------------------------------------------------------------------|-----|
| <b><sup>90</sup>Y Microspheres: Concepts and Principles</b> . . . . .                                                       | 1   |
| Andrew S. Kennedy, William A. Dezarn and Patrick McNeillie                                                                  |     |
| <b>Regulations and Requirements of Hospitals Performing Radioembolization</b> . . . .                                       | 11  |
| C. Trumm, R. T. Hoffmann, T. F. Jakobs and M. F. Reiser                                                                     |     |
| <b>Radiological Evaluation of Patients with Liver Tumors</b> . . . . .                                                      | 15  |
| Christoph J. Zech and M. F. Reiser                                                                                          |     |
| <b>Vascular Anatomy and Its Implication in Radioembolization</b> . . . . .                                                  | 27  |
| Ramón Saiz-Mendiguren, Javier Arias, Isabel Vivas and José I. Bilbao                                                        |     |
| <b>Radioembolization: Identifying and Managing Anatomic Variants</b> . . . . .                                              | 41  |
| Rajesh P. Shah and Daniel Y. Sze                                                                                            |     |
| <b>Dosimetry and Dose Calculation</b> . . . . .                                                                             | 53  |
| Andrew S. Kennedy, William A. Dezarn, Patrick McNeillie and Bruno Sangro                                                    |     |
| <b>Nuclear Medicine Procedures for Treatment Evaluation<br/>and Administration</b> . . . . .                                | 63  |
| Javier Arbizu, Macarena Rodriguez-Fraile, Josep M. Martí-Climent,<br>Inés Domínguez-Prado and Carmen Vigil                  |     |
| <b>Radiological Detection and Assessment of Tumor Response</b> . . . . .                                                    | 77  |
| Tobias F. Jakobs                                                                                                            |     |
| <b>Evaluation of the Response by Multimodality Imaging</b> . . . . .                                                        | 91  |
| Alexander Haug and Gerwin P. Schmidt                                                                                        |     |
| <b>Results in Hepatocellular Carcinoma</b> . . . . .                                                                        | 105 |
| Mercedes Iñarrairaegui and Bruno Sangro                                                                                     |     |
| <b>HCC. Radioembolization Combined with Other Therapeutic Local<br/>and Systemic Treatment</b> . . . . .                    | 119 |
| Thomas Helmberger                                                                                                           |     |
| <b>Principles for Combining Radioembolisation with Systemic<br/>Chemotherapy for Metastatic Colorectal Cancer</b> . . . . . | 129 |
| Esme J. Hill, Ashley K. Clift and Ricky A. Sharma                                                                           |     |
| <b>Results in Liver Metastatic Colorectal Cancer</b> . . . . .                                                              | 141 |
| Javier Rodríguez, Ana Chopitea, Bruno Sangro and José Ignacio Bilbao                                                        |     |

|                                                                                               |     |
|-----------------------------------------------------------------------------------------------|-----|
| <b>Treatment of Neuroendocrine Tumors with Selective Internal Radiation Therapy</b> . . . . . | 151 |
| Douglas M. Coldwell, Martin Vyleta and Mahmood Samman                                         |     |
| <b>Yttrium-90 Microspheres for Other Liver Metastases</b> . . . . .                           | 157 |
| J. Rodriguez, A. Chopitea, B. Sangro and J. I. Bilbao                                         |     |
| <b>Surgical Treatment and Radioembolization</b> . . . . .                                     | 167 |
| Patricia Martínez-Ortega, Fernando Pardo and Bruno Sangro                                     |     |
| <b>Complications and Side Effects</b> . . . . .                                               | 171 |
| R. T. Hoffmann, Lourdes Diaz-Dorransoro and José I. Bilbao                                    |     |
| <b>Radioembolization-Induced Liver Disease</b> . . . . .                                      | 177 |
| Bruno Sangro, Mercedes Iñarrairaegui and Andrew S. Kennedy                                    |     |
| <b>Index</b> . . . . .                                                                        | 187 |