

Contents

1	Introduction	1
	Leonard Berliner and Heinz U. Lemke	
2	The Digital Patient Model and Model Guided Therapy	9
	Leonard Berliner and Heinz U. Lemke	
3	Hepatocellular Carcinoma and Patient Assessment	21
	Smruti Mohanty, Sid Verma, David Dosik, Hesham Hazin and Leonard Berliner	
4	Imaging in Hepatocellular Carcinoma: Radiologic Assessment	33
	Irene Bargellini, Valentina Battaglia, Davide Caramella and Carlo Bartolozzi	
5	Imaging in Hepatocellular Carcinoma: PET/CT	45
	Giuseppe Esposito	
6	Personalized Chemotherapy for Hepatocellular Carcinoma	53
	Hesham Hazin and David Dosik	
7	Surgical Treatment for Hepatocellular Carcinoma	61
	Smruti Mohanty, Leonard Berliner and Syed Shah	
8	Minimally Invasive Therapies for Hepatocellular Cancer: Ablation Technologies	69
	Paul Morrison and Eric vanSonnenberg	
9	Minimally Invasive Therapies for Hepatocellular Cancer: Ablation Therapies	77
	Eric vanSonnenberg and Leonard Berliner	

10 Minimally Invasive Therapies for Hepatocellular Cancer: Catheter-Directed Therapies.....	85
Leonard Berliner and Smruti Mohanty	
11 Radiation Oncology in the Treatment of Hepatocellular Carcinoma.....	93
Hani Ashamalla and Malcolm D. Mattes	
12 Design of an IT System for Hepatocellular Carcinoma.....	103
Leonard Berliner and Heinz U. Lemke	
13 Outlook and Expert Recommendations for Predictive, Preventive and Personalized Medicine and Hepatocellular Carcinoma.....	119
Leonard Berliner, Heinz U. Lemke, Hani Ashamalla and Smruti Mohanty	
Index.....	129

An Information Technology Framework for Predictive,
Preventive and Personalised Medicine

A Use-Case with Hepatocellular Carcinoma

Berliner, L.; Lemke, H.U. (Eds.)

2015, XX, 130 p. 23 illus., 15 illus. in color., Hardcover

ISBN: 978-3-319-12165-9