

Contents

Part I Biology of Renal Cell Carcinoma

1 The Genetic Basis of Kidney Cancer and Implications for Targeted Therapies	3
Laura S. Schmidt, Ramaprasad Srinivasan, and W. Marston Linehan	
2 Molecular Biology of Clear Cell Renal Carcinoma	27
William G. Kaelin Jr.	
3 HIF Biology in RCC: Implications for Signaling, Disease Progression, and Treatment.....	49
W. Kimryn Rathmell	
4 Tissue Biomarkers in Renal Cell Carcinoma: Intermediate Endpoints in the Selection of Targeted Agents for RCC.....	69
Brittany Bahamon and Sabina Signoretti	
5 Molecular Characterization of Renal Cell Carcinoma.....	91
Bin Tean Teh, Leslie J. Farber, and Kyle Furge	

Part II Current and Future Molecular Targets for RCC

6 Targeting the VEGF Pathway in Renal Cell Carcinoma.....	115
Cristina Suarez and Brian I. Rini	
7 Angiopoietins and Other Non-VEGF Antiangiogenic Targets in Advanced Renal Cell Carcinoma.....	135
C. Lance Cowey and Thomas E. Hutson	
8 Research Translation and Personalized Medicine	161
James Brugarolas	

9	Epigenetic Targeting and Histone Deacetylase Inhibition in RCC	193
	Swathi Ramakrishnan and Roberto Pili	
10	C-MET as a Novel Target for the Treatment of Renal Cell Carcinoma	213
	Hema Vankayala, Patricia LoRusso, and Ulka Vaishampayan	
11	Characterizing and Modulating the Tumor Microenvironment in Renal Cell Carcinoma: Potential Therapeutic Strategies.....	239
	Sumanta Kumar Pal, Karen Reckamp, Hua Yu, and Robert A. Figlin	
12	Carbonic Anhydrase IX: Its Role as a Biomarker, Diagnostic, and Therapeutic Target in Renal Cell Carcinoma	253
	E. Oosterwijk, A.B. Stillebroer, and P.F.A. Mulders	
13	Presurgical Therapy for Renal Cell Carcinoma and Implications for Window-of-Opportunity Trials	271
	Hyung L. Kim, Edwin M. Posadas, and Robert A. Figlin	
14	Mechanisms of Resistance to VEGF-Directed Therapy and Implications for Future Trial Design	283
	James W. Mier	
15	Vaccine-Based Immunotherapy and Targeting the Tumor Microenvironment in Renal Cell Carcinoma	305
	Johannes Vieweg	
	Index.....	323

Renal Cell Carcinoma

Translational Biology, Personalized Medicine, and Novel
Therapeutic Targets

Figlin, R.A.; Rathmell, W.K.; Bloom, J. (Eds.)

2012, XII, 328 p., Hardcover

ISBN: 978-1-4614-2399-7