

Contents

1	Multidrug Resistance Mediated by MDR-ABC Transporters	1
	Gergely Szakács, Kenneth Kin Wah To, Orsolya Polgár, Robert W. Robey, and Susan E. Bates	
2	Metastasis and Drug Resistance	21
	Dominic Fan, Sun-Jin Kim, Robert L. Langley, and Isaiah J. Fidler	
3	The Role of Autophagy and Apoptosis in the Drug Resistance of Cancer	53
	Tomohisa Yokoyama, Yasuko Kondo, Oliver Böglér, and Seiji Kondo	
4	Mechanisms of Resistance to Targeted Tyrosine Kinase Inhibitors . . .	73
	Stacey J. Baker and E. Premkumar Reddy	
5	Targeting Transglutaminase-2 to Overcome Chemoresistance in Cancer Cells	95
	Kapil Mehta and Jansina Y. Fok	
6	Extracellular Matrix-Mediated Drug Resistance	115
	P.S. Hodgkinson and Tariq Sethi	
7	Oxidative Stress and Drug Resistance in Cancer	137
	Dunyaporn Trachootham, Wan Zhang, and Peng Huang	
8	Nuclear Factor-κB and Chemoresistance: How Intertwined Are They?	177
	Ajaikumar B. Kunnumakkara, Preetha Anand, and Bharat B. Aggarwal	
9	Drug Resistance and the Tumor Suppressor p53: The Paradox of Wild-Type Genotype in Chemorefractory Cancers	209
	Zahid H. Siddik	

10	Resistance to Differentiation Therapy	233
	Bulent Ozpolat	
11	MicroRNAs and Drug Resistance	257
	Elisa Barbarotto and George A. Calin	
12	Molecular Signatures of Drug Resistance	271
	Melissa A. Troester, Jason I. Herschkowitz, and Katherine A. Hoadley	
13	Assessment of Drug Resistance in Anticancer Therapy by Nuclear Imaging	295
	Natalie Charnley, Catharine West, and Pat Price	
14	Overcoming Drug Resistance by Phytochemicals	315
	Marion M. Chan and Dunne Fong	
	Index	343

Drug Resistance in Cancer Cells

Mehta, K.; Siddik, Z.H. (Eds.)

2009, XVII, 363 p. 30 illus., Hardcover

ISBN: 978-0-387-89444-7