

CONTENTS

PREFACE	ix
CONTRIBUTORS	xi
PART I LIVE/ATTENUATED BACTERIA AND VIRUSES AS ANTICANCER AGENTS	1
1 <i>Salmonella Typhimurium</i> Mutants Selected to Grow Only in Tumors to Eradicate Them in Nude Mouse Models	3
<i>Robert M. Hoffman</i>	
2 The Use of Living <i>Listeria Monocytogenes</i> as an Active Immunotherapy for the Treatment of Cancer	13
<i>John Rothman, Anu Wallecha, Paulo Cesar Maciag, Sandra Rivera, Vafa Shahabi, and Yvonne Paterson</i>	
3 <i>Bacillus Calmette–Guerin (BCG)</i> for Urothelial Carcinoma of the Bladder	49
<i>Timothy P. Kresowik and Thomas S. Griffith</i>	
4 Live <i>Clostridia</i>: A Powerful Tool in Tumor Biotherapy	71
<i>Lieve Van Mellaert, Ming Q Wei, and Jozef Anné</i>	
5 <i>Bifidobacterium</i> as a Delivery System of Functional Genes for Cancer Gene Therapy	99
<i>Geng-Feng Fu, Yan Yin, Bi Hu, and Gen-Xing Xu</i>	

6	Replication-Selective Viruses for the Treatment of Cancer	119
	<i>Padma Sampath and Steve H. Thorne</i>	
7	Engineering Herpes Simplex Virus for Cancer Oncolytic Virotherapy	141
	<i>Jason S. Buhrman, Tooba A. Cheema, and Giulia Fulci</i>	
PART II BACTERIAL PRODUCTS AS ANTICANCER AGENTS		179
8	Promiscuous Anticancer Drugs from Pathogenic Bacteria: Rational Versus Intelligent Drug Design	181
	<i>Arsénio M. Fialho and Ananda M. Chakrabarty</i>	
9	Arginine Deiminase and Cancer Therapy	199
	<i>Lynn Feun, M. Tien Kuo, Ming You, Chung Jing Wu, Medhi Wangpaichitr, and Niramol Savaraj</i>	
10	Cytosine Deaminase/5-Fluorocytosine Molecular Cancer Chemotherapy	219
	<i>Sergey A. Kaliberov and Donald J. Buchsbaum</i>	
11	Bacterial Proteins Against Metastasis	243
	<i>Anna Maria Elisabeth Walenkamp</i>	
12	<i>Pseudomonas</i> Exotoxin A-Based Immunotoxins for Targeted Cancer Therapy	269
	<i>Philipp Wolf and Ursula Elsässer-Beile</i>	
13	Denileukin Diftitox in Novel Cancer Therapy	289
	<i>Lin-Chi Chen and Nam H. Dang</i>	
14	The Application of Cationic Antimicrobial Peptides in Cancer Treatment: Laboratory Investigations and Clinical Potential	309
	<i>Ashley L. Hilchie and David W. Hoskin</i>	
15	Prodinines and Their Potential Utility as Proapoptotic Anticancer Agents	333
	<i>Neil R. Williamson, Suresh Chawrai, Finian J. Leeper, and George P.C. Salmond</i>	
16	Farnesyltransferase Inhibitors of Microbial Origins in Cancer Therapy	367
	<i>Jingxuan Pan and Sai-Ching Jim Yeung</i>	
17	The Use of RNA and CpG DNA as Nucleic Acid-Based Therapeutics	379
	<i>Jörg Vollmer</i>	

PART III PATENTS ON BACTERIA/BACTERIAL PRODUCTS AS ANTICANCER AGENTS	403
18 The Role and Importance of Intellectual Property Generation and Protection in Drug Development <i>Arsénio M. Fialho and Ananda M. Chakrabarty</i>	405
INDEX	421