

CONTENTS

Preface	v
Contributors	ix

PART I. A REVIEW

- 1 The Current Status of Tumor Targeting: *A Review*..... 3
Tarunendu Ghose
- 2 Clinical Applications of Targeted Therapeutics 79
Tarunendu Ghose

PART II. TARGETING TUMORS WITH DRUG ANTIBODY CONJUGATES

- 3 Targeting the CD22 Receptor with RNA Damaging Agents 109
Huaitian Liu, Dianne L. Newton, Hans J. Hansen, Stanislaw M. Mikulski, David M. Goldenberg, Edward A. Sausville, and Susanna M. Rybak
- 4 The Development of Liposomes for Enhanced Delivery of Chemotherapeutics to Tumors 119
Paul Tardi, Ludger Ickenstein, Marcel Bally, and Lawrence Mayer
- 5 Overcoming Multiple Drug Resistance with Anti-Pgp Carrier 137
Brigitte Pagé and Michel Pagé
- 6 Targeting with Transferrin 151
Mandip Singh
- 7 Synthesis and Evaluation of Paclitaxel Immunoconjugate with Antitumor Activity In Vitro 165
Jairo Jaime Correa and Michel Pagé
- 8 The Use of Drug-Monoclonal Antibody Conjugates for the Treatment of Cancer 179
Geoffrey A. Pietersz and Ian F. C. McKenzie

PART III. TARGETING TUMORS WITH ANTIBODIES

- 9 Targeting Vascular Endothelium with Antibodies 199
Przemek Twardowski and Kim Margolin
- 10 Targeting B-Cell Non-Hodgkin's Lymphoma with Monoclonal Antibodies 211
Christian Buske and W. Hiddemann
- 11 From Bench to Bedside: *Development of Rituximab (Rituxan ®), A Monoclonal Antibody for the Therapy of Non-Hodgkin's Lymphoma* 225
Roland Newman
- 12 Mylotarg: *The First Antibody-Targeted Chemotherapy Agent* ... 239
Philip R. Hamann and Mark S. Berger

PART IV. TARGETING TUMORS WITH RADIOIMMUNOCONJUGATES

- 13 ¹⁸⁸Rhenium-Labeled Trisuccin- Δ CH₂HuCC49
as a Radioimmunotherapy Model in Nude Mice 257
Ahmad Safavy and Donald J. Buchsbaum

PART V. TARGETING TUMORS WITH IMMUNOTOXINS

- 14 General Approach for Targeting Toxins 279
*Manish Monga, Richard A. Messmann,
and Edward A. Sausville*
- 15 Antibody-Toxin Conjugates: *Chemistry of Coupling
and Purification* 289
*Silvana Canevari, Maria Ines Colnaghi, Luigi Cattel,
and Franco Dosio*
- 16 Shiga-Like Toxins as Targeted Anticancer Agents 307
Paul LaPointe and Jean Gariépy

**PART VI. TARGETING TUMORS WITH ANTIBODY-ENZYME CONJUGATES
(ADEPT)**

- 17 Antibody-Directed Enzyme Prodrug Therapy
with Carboxypeptidase G2: *Clinical Studies* 321
Kenneth D. Bagshawe

PART VII. PHOTODYNAMIC THERAPY

- 18 Photodynamic Therapy: *Targeting Cancer Cells
with Photosensitizer-Bioconjugates* 329
*Cynthia M. Allen, Wesley M. Sharman,
and Johan E. van Lier*
- 19 Tumor Targeting Using PEG-m-THPC for Photodynamic
Therapy in a Rat Ovarian-Cancer Model 363
René Hornung

PART VIII. TARGETING TUMORS WITH MAGNETIC DRUGS

- 20 Targeting Tumors with Magnetic Drugs 379
*Andreas S. Lübke, Christian Bergemann,
and Christoph Alexiou*

PART IX. PRINCIPLES AND TECHNIQUES IN TARGETING

- 21 Internalization of Antibodies 391
Jairo Jaime Correa
- 22 Bioconjugation and Biodistribution 411
Francesco M. Veronese and Paulo Caliceti
- 23 Principles of Antitumor Targeting of Cytotoxic Drugs 431
Gene M. Dubowchik
- 24 Targeting by Antibody or Ligand: *Which Is Better?* 449
Douglas A. Lappi

Index 459



<http://www.springer.com/978-0-89603-919-3>

Tumor Targeting in Cancer Therapy

Pagé, M. (Ed.)

2002, X, 463 p. 39 illus., Hardcover

ISBN: 978-0-89603-919-3

A product of Humana Press