

CONTENTS

Preface v

Contributors ix

Part I. Basic Research

1 Introduction to Hematopoietic Growth Factors: *A General Overview* 3
George Morstyn and MaryAnn Foote

2 Animal Models of Hematopoietic Growth Factor Perturbations
in Physiology and Pathology 11
Graham J. Lieschke

3 The Jak/Stat Pathway of Cytokine Signaling 45
Ben A. Croker and Nicos A. Nicola

4 Small-Molecule and Peptide Agonists: *A Literature Review* 65
Ellen G. Laber and C. Glenn Begley

Part II. Hematopoietic Growth Factors

5 Granulocyte Colony-Stimulating Factor 83
Graham Molineux

6 Erythropoietic Factors: *Clinical Pharmacology and Pharmacokinetics* 97
Steven Elliott, Anne C. Heatherington, and MaryAnn Foote

7 Thrombopoietin Factors 125
David J. Kuter

8 Stem Cell Factor and Its Receptor, c-Kit 153
Keith E. Langley

9 Hematopoietic Growth Factors: *Preclinical Studies of Myeloid
and Immune Reconstitution* 185
Ann M. Farese and Thomas J. MacVittie

Part III. Use of Hematopoietic Growth Factors in Oncology

10 Commentary on the ASCO and ESMO Evidence-Based Clinical Practice
Guidelines for the Use of Hematopoietic Colony-Stimulating Factors 211
Richard M. Fox

11 Neutropenia and the Problem of Fever and Infection
in Patients With Cancer 219
David C. Dale

12 Thrombocytopenia and Platelet Transfusions in Patients With Cancer 235
Lawrence T. Goodnough

13	Hematopoietic Growth Factors in Lung Cancer	249
	<i>Johan F. Vansteenkiste and Christophe A. Doms</i>	
14	Role of Hematopoietic Growth Factors As Adjuncts to the Treatment of Hodgkin's and Non-Hodgkin's Lymphomas	275
	<i>Marcie R. Tomblyn and Jane N. Winter</i>	
15	Use of Granulocyte Growth Factors in Breast Cancer	285
	<i>Eric D. Mininberg and Frankie Ann Holmes</i>	
16	Role of Cytokines in the Management of Chronic Lymphocytic Leukemia	311
	<i>Carol Ann Long</i>	
17	Hematopoietic Growth Factor Therapy for Myelodysplastic Syndromes and Aplastic Anemia	333
	<i>Jason Gotlib and Peter L. Greenberg</i>	
18	Use of Hematopoietic Growth Factors in AIDS-Related Malignancies	357
	<i>MaryAnn Foote</i>	
Part IV. Safety and Economic Implications		
19	The Safety of Hematopoietic Growth Factors	375
	<i>Roy E. Smith and Barbara C. Good</i>	
20	Long-Term Safety of Filgrastim in Chronic Neutropenias	395
	<i>Karl Welte</i>	
21	Economics of Hematopoietic Growth Factors	409
	<i>Gary H. Lyman and Nicole M. Kuderer</i>	
Part V. Future Directions		
22	Potential for Hematopoietic Growth Factor Antagonists in Oncology	447
	<i>Hayley S. Ramshaw, Timothy R. Hercus, Ian N. Olver, and Angel F. Lopez</i>	
	Acronyms and Selected Abbreviations	467
	Index	475