

Contents

Overview	1
<i>I. Damjanov</i> Pathobiology of Human Germ Cell Neoplasia	1
Cells of Origin	21
<i>A. Giwercman, J. Müller, and N.E. Skakkebaek</i> Carcinoma in Situ of the Testis: Possible Origin, Clinical Significance, and Diagnostic Methods	21
<i>H. Walt, P. Emmerich, A. Jauch, and C.D. DeLozier-Blanchet</i> Characterization of Precancerous and Neoplastic Human Testicular Germ Cells	37
<i>I. Vorechovsky and K. Mazanec</i> Cytogenetic Investigation of Gonadal Carcinomas in Situ in Syndromes of Abnormal Sexual Differentiation	45
Cell Lines	51
<i>M.F. Pera, S. Cooper, W. Bennet, and I. Crawford-Bryce</i> Human Embryonal Carcinoma and Yolk Sac Carcinoma in Vitro: Cell Lineage Relationships and Possible Paracrine Growth Regulatory Interactions	51
<i>M.D. Mason and M.F. Pera</i> Biochemical Analysis and Cellular Location of the GCTM-2 Antigen in Embryonal Carcinoma and in Other Tumour Cell Lines	59

Differentiation Antigens	63
<i>P.W. Andrews, J. Marrink, G. Hirka, A. von Keitz, D. Th. Sleijfer, and E. Gönczöl</i>	
The Surface Antigen Phenotype of Human Embryonal Carcinoma Cells: Modulation Upon Differentiation and Viral Infection	63
<i>F.E. von Eyben, O. Blaabjerg, P.H. Pertersen, S. Mommsen, E.L. Madsen, F. Kirpekar, S.S.-L. Li, and K. Kristiansen</i>	
Lactate Dehydrogenase Isoenzyme 1 in Testicular Germ Cell Tumors	85
<i>P. Dráber</i>	
Expression of Developmentally Regulated Genes in Embryonal Carcinoma Cells	93
 Chromosomal Studies	 101
<i>S.M.M.J. Castedo, J.W. Oosterhuis, and B. de Jong</i>	
Cytogenetic Studies of Testicular Germ Cell Tumors: Pathogenetic Relevance	101
<i>P. Dal Cin and H. Van Den Berghe</i>	
Isochromosome (12p) in Germ Cell Tumors	107
 Molecular Genetics	 113
<i>A. Geurts van Kessel, R. Suijkerbuijk, B. de Jong, and J.W. Oosterhuis</i>	
Molecular Analysis of Isochromosome 12p in Testicular Germ Cell Tumors	113
<i>E. Dmitrovsky, E. Rodrigues, F. Samaniego, V.E. Reuter, W.H. Miller, Jr., N.L. Geller, G.J. Bosl, and R.S.K. Chaganti</i>	
Analysis of Chromosome 12 Abnormalities in Male Germ Cell Cancers	119
<i>M.P. Mulder, W. Keijzer, T.A.W. Splinter, and J.L. Bos</i>	
Frequent Occurrence of Activated <i>ras</i> Oncogenes in Seminomas but Not in Nonseminomatous Germ Cell Tumors	125

<i>L. Bottero, A. Simeone, L. Arcioni, D. Acampora, P.W. Andrews, E. Boncinelli, and F. Mavilio</i> Differential Activation of Homeobox Genes by Retinoic Acid in Human Embryonal Carcinoma Cells	133
Growth Factors and Their Receptors	145
<i>W. Engström, M. Tally, M. Granerus, E.P. Hedley, and P. Schofield</i> Growth Factors and the Control of Human Teratoma Cell Proliferation	145
<i>E.J.J. van Zoelen</i> Role of Heparin-Binding Growth Factors in Embryonic Tumors	155
<i>C.L. Mummery and S.M. Weima</i> Growth Factors and Receptors During Differentiation: A Comparison of Human and Murine Embryonal Carcinoma Cell Lines	165
<i>W.H. Miller, Jr. and E. Dmitrovsky</i> Growth Factors in Human Germ Cell Cancer	183
<i>Subject Index</i>	191