

# Contents

WHO classification of tumours of the breast	8	9 Myoepithelial and epithelial–myoepithelial lesions	119
TNM classification of tumours of the breast	10	Myoepithelial and epithelial–myoepithelial lesions	120
1 Introduction and general features	13	Adenomyoepithelioma and adenomyoepithelioma with carcinoma	122
2 Invasive carcinoma of no special type	33	10 Mesenchymal tumours	125
3 Special subtypes	39	Nodular fasciitis	126
Invasive lobular carcinoma	40	Benign vascular lesions	127
Tubular carcinoma and cribriform carcinoma	43	Pseudoangiomatous stromal hyperplasia	129
Carcinoma with medullary features	46	Myofibroblastoma	130
Metaplastic carcinoma	48	Desmoid-type fibromatosis	131
Carcinoma with apocrine differentiation	53	Inflammatory myofibroblastic tumour	133
Salivary gland/skin adnexal type tumours	55	Lipoma	133
Adenoid cystic carcinoma	56	Granular cell tumour and benign peripheral nerve-sheath tumour	134
Mucoepidermoid carcinoma	58	Angiosarcoma	135
Polymorphous carcinoma	59	Liposarcoma	137
Mucinous carcinoma and carcinoma with signet-ring-cell differentiation	60	Rhabdomyosarcoma	137
Carcinoma with neuroendocrine features	62	Osteosarcoma	138
Invasive papillary carcinoma	64	Leiomyoma and leiomyosarcoma	139
Invasive micropapillary carcinoma	65		
Inflammatory carcinoma	67		
Bilateral breast carcinoma and non-synchronous breast carcinoma	69		
Exceptionally rare types and variants	71	11 Fibroepithelial tumours	141
Secretory carcinoma	71	Fibroadenoma	142
Oncocytic carcinoma	72	Phyllodes tumour	143
Sebaceous carcinoma	73	Hamartoma	147
Lipid-rich carcinoma	74	12 Tumours of the nipple	149
Glycogen-rich clear cell carcinoma	74	Nipple adenoma	150
Acinic cell carcinoma	75	Syringomatous tumour	151
4 Lobular neoplasia	77	Paget disease	152
5 Intraductal proliferative lesions	81	13 Lymphoid and haematopoietic tumours	155
Introduction and overview	82	Introduction	156
Usual ductal hyperplasia	84	Diffuse large B-cell lymphoma	156
Columnar cell lesions	86	Burkitt lymphoma	157
Atypical ductal hyperplasia	88	T-cell lymphoma	158
Ductal carcinoma in situ	90	Extranodal marginal zone lymphomas of mucosa-associated lymphoid tissue	159
6 Microinvasive carcinoma	95	Follicular lymphoma	160
7 Intraductal papillary lesions	99	14 Metastases of extramammary malignancies to the breast	161
Intraductal papilloma	100	15 Tumours of the male breast	165
Intraductal papillary carcinoma	103	Gynaecomastia	166
Encapsulated papillary carcinoma	106	Carcinoma of the male breast	168
Solid papillary carcinoma	108	16 Genetic susceptibility: inherited syndromes	171
8 Benign epithelial proliferations	111	Introduction and historical perspectives	172
Introduction	112	Inherited syndromes associated with an increased risk of breast cancer: Introduction	174
Adenosis, sclerosing adenosis and apocrine adenosis	112	BRCA1 and BRCA2 syndromes	176
Microglandular adenosis, atypical microglandular adenosis and microglandular adenosis with carcinoma	113	Li-Fraumeni syndrome	183
Radial scar and complex sclerosing lesion	114	Ataxia telangiectasia syndrome	186
Tubular adenoma	115	Cowden syndrome	188
Lactating adenoma	116	Lynch syndrome	192
Apocrine adenoma	116	Other breast cancer-predisposing genes	194
Ductal adenoma	117		
Pleomorphic adenoma	117		
		Contributors	196
		Sources of figures	203
		References	205
		Subject index	236