

Basics of Oncology

Second Edition

Frederick O. Stephens
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Springer

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Working in oncology is a very satisfying career. It is particularly satisfying to be able to help people with this most distressing and worrying health problem. Most patients are cured but for some cure is not a possibility with our present state of knowledge. All can be helped. In most cases our patients become our friends and some become very special friends. They honour us with their friendship and trust, and this makes our work feel more than worthwhile, indeed a special reward.

We are also grateful for our teachers of the past and for our present colleagues without whose cooperation our work would be of limited value and progress would be difficult.

Like all teachers, we are inspired by our students. We not only pass on knowledge to them, but we also learn from them. To have interested and enthusiastic students is a real stimulus and privilege.

As is obvious from the authorship of this book, we have been privileged to make close and lasting friendships across national borders and across borders of traditional disciplines. We treasure these friendships dearly from their personal aspects as well as being able to learn from each other and to stimulate each other in clinical work and research. It is sad that so much cancer is still with us, but the constant mutual commitment to improving methods of care and discovering new

information on prevention and treatment for the betterment of people everywhere is itself a reward, which we all share with respect and gratitude.

Finally we acknowledge that our work is demanding of time and energy. This is time and energy in which our wives, families and friends have so often had to make allowances for our absence. Without their love, support and acceptance of the conditions of our work, this work and our efficiency would be severely compromised. They have often joined us and at other times have had to stand by without us when we were concentrating on other things we could not always share with them. We especially owe our loved ones a debt of thanks and gratitude.

We proudly dedicate this book to all of these people.

Preface

Who Should Read This Book

In Western societies and other developed countries, cancer is the leading cause of death, after cardiovascular disease. It is therefore a major component of medical undergraduate curricula and of primary concern to nurses and allied health workers.

Presently most undergraduate students learn about cancer from a broad range of general and specialist books and journals. Medical students read about cancer in textbooks of surgery, pathology and cancer medicine as well as in general and specialist journals and from time to time in newspaper reports, in magazines and from various other sources.

We the authors teach, practise and conduct research in different specialty areas in different parts of the world. We agreed that we should write this book as an easily understood and general overview of cancer for students of medicine, nurse oncologists, students of medical sciences and other health professionals in all parts of the world. It is intended to serve as a basis for more detailed or specialised studies that will be needed in different areas of practice and in different countries. Different countries will emphasise different aspects according to their more specific community needs, incidence, traditions and available healthcare facilities and systems.

What This Book Is About

This book is intended to give an introduction to the scientific and clinical aspects of cancer, that is, the broad range of concepts of causes, pathology, clinical features, possible investigations, treatments and outcomes both for cancers in general and for the common cancers in different countries. It should be a basis for further study as appropriate for all areas of oncology no matter where it is practised or in what particular professional discipline. The purpose of this book is not to cover all social, personal, environmental or financial aspects of cancer nor to discuss details of supportive services available. These important aspects will differ in different countries with different social, medical and administrative services and facilities as well as different traditional practices and requirements. Ideal comprehensive facilities and

services may or may not be available. Other books, specifically written for students and practitioners in different countries with different curriculum requirements, may be needed to cover these aspects.

Objective of This Book

The objective of this book is to develop graded information from very basic to more sophisticated understanding of present knowledge about cancer. For some students, this may well meet all their needs, but for students wishing to undertake further studies in cancer, this book will serve as a sound basis for more detailed or specific studies.

To achieve this, the book will:

- Cover basic medical, scientific and clinical aspects of cancer.
- Explain how and why people develop cancer.
- Indicate how the body reacts to cancer.
- Describe how cancer presents.
- Outline principles of cancer prevention, investigation, diagnosis and management.

This information applies in all countries. It is the essential requirement for understanding cancer no matter where studied or practised. We believe this basic information about cancer is best introduced early in a student's career before other details of personal, psychological, social and management practices and traditions are studied in detail in different communities.

More detailed and comprehensive information on specialised areas of knowledge, research and practice is expanded in more specialised books and publications, some of which are listed in the final section of this book.

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Contents

Part I The Cancer Problem

1	What Is Malignancy?	3
1.1	Nature of a Malignancy	5
1.2	What Is the Prevalence of Cancer?	6
1.3	Tumours: Benign and Malignant?	7
1.4	Dangers of Malignant Tumours	8
1.5	What Causes Cancer	9
1.5.1	Is There a Single Cause or a Single Common Pathway?	9
1.5.2	Apoptosis	10
1.5.3	Carcinogens	10
1.5.4	Tobacco Smoking	10
1.5.5	Alcohol	10
1.5.6	Betel Nut	11
1.5.7	Sunshine	12
1.5.8	Other Forms of Irradiation: X-Rays and Atomic Irradiation	12
1.5.9	Industrial Irritants and Carcinogens	13
1.5.10	Chemical Carcinogens	13
1.5.11	Hormones	13
1.5.12	Viruses	14
1.5.13	Bacteria	15
1.5.14	Pre-existing Abnormalities	15
1.5.15	Nutritional Deficiencies and Food Habits	15
1.5.16	Estimate of Known Risk Factors and Associations with Cancer	15
2	Epidemiology	17
2.1	Comparative Cancer Incidence	17
2.2	People Most at Risk	18
2.3	Viral and Other Infection Associations	18

2.4	Heredity and Genetic Factors.....	19
2.4.1	Tumour Suppressors, Proto-Oncogenes and Cancer Oncogenes.....	19
2.4.2	Tumour Suppressor Genes.....	21
2.4.3	Cell Cycle Regulatory Genes.....	21
2.5	Molecular Biological Changes in Controlling Cell Division.....	22
2.5.1	Inherited Cancer Genes: Inherited and Familial Cancers	23
2.6	Age.....	24
2.6.1	Infants	24
2.6.2	Children, Adolescents and Young Adults	24
2.6.3	Increasing Age	25
2.7	Predisposing and Pre-malignant Risk Factors	26
2.7.1	Skin	26
2.7.2	Oesophagus	26
2.7.3	Stomach	26
2.7.4	Bowel	27
2.7.5	Mouth and Throat	27
2.7.6	Stones: Gallstones and Kidney and Bladder Stones	27
2.7.7	Chronic Inflammation	27
2.7.8	Acute Injury	27
2.7.9	Pre-existing Lumps and Benign Tumours	28
2.7.10	Congenitally Abnormal Tissues.....	28
2.7.11	Gender	28
2.8	Diet and Cancer: Special Dietary Preventive Ingredients	29
2.9	Stomach Cancer	31
2.10	Bowel Cancer: Cancers of the Colon and Rectum.....	31
2.11	Other Cancers.....	32
2.12	Vegetarian Diets.....	32
2.13	Special Dietary Ingredients: Phytoestrogens and Lycopene	32
2.14	Vitamins, Anti-oxidants and Trace Elements	33
2.15	Race	33
2.16	Geographic Associations	33
2.17	Environment.....	34
2.17.1	Sunshine.....	34
2.17.2	Air Pollution.....	34
2.17.3	Ionising Irradiation.....	34
2.17.4	Goitre Belts	35
2.18	Occupation.....	35
2.19	Habits and Lifestyle.....	35
2.19.1	Smoking.....	35
2.19.2	Alcohol.....	36
2.19.3	Sun Exposure.....	36
2.19.4	Betel Nut	36
2.19.5	Pregnancies and Breast Cancer	36
2.19.6	Cultural and Social Customs	37

2.20	Psychological Factors: The Possible Role of Stress or Emotion in Cancer Development.	37
2.21	Cancer Registries	38
3	Summary of Practical Measures to Prevent Cancer	39
3.1	Smoking	39
3.2	Viral and Bacterial Protection	40
3.3	Genetic Protection	40
3.4	Skin Cancers	41
3.5	Diets: Stomach and Bowel Cancer, Breast Cancer	41
3.5.1	Prostate Cancer	41
3.5.2	Thyroid Cancer	41
3.5.3	Dioxins.	41
3.5.4	Breast Cancer.	42
3.6	Industrial Cancers	42
3.7	Ionising Irradiation.	43
3.8	Treatment of Pre-malignant and Potentially	43
3.8.1	Pre-malignant Conditions	43

Part II General Features of Cancer-Presentation and Management

4	Symptoms of Cancer: Local and General	47
4.1	Lump	48
4.2	Ulcer.	48
4.3	Pain	48
4.4	Bleeding.	48
4.5	Weight Loss	49
4.6	Interference with Tissue or Organ Function	50
4.7	Symptoms of Metastatic Spread	50
4.7.1	Lymph Nodes.	50
4.7.2	Liver.	50
4.7.3	Lungs	51
4.7.4	Bones	51
4.7.5	Fat and Muscles.	51
4.7.6	Bowel	51
4.7.7	The Brain	51
4.7.8	The Unknown Primary Syndrome	51
5	Signs of Cancer: Local and General	53
5.1	Lump	53
5.2	Ulcer.	54
5.3	Bleeding and Evidence of Blood Loss.	54
5.4	Lymph Node Enlargement.	54
5.5	Other Swellings	55
5.6	Findings of a General Examination Including the Mouth, Throat, Abdomen, Rectum and Anus	55
5.7	Rare and Seemingly Unrelated Indications of Cancer.	56

6 Clinico-Pathology of Cancers	57
6.1 Typing, Grading and Staging of Cancer.	58
6.2 Cancer Typing	58
6.3 Cancer Grading	58
6.4 Clinico-Pathological Staging of Cancer.	59
6.5 Clinical Decisions Based on Pathology Information.	60
7 Investigations That May Be Useful in Detecting Cancer	61
7.1 Screening Programmes	61
7.2 Screening Tests	62
7.2.1 The Cervical Smear or “Pap” (Papanicolaou) Test	62
7.2.2 Occult Blood Tests	62
7.2.3 Gastro-Oesophageal Screening	62
7.2.4 Breast Screenings: Mammography	63
7.2.5 Skin Cancer Screening: Especially the “Mole Check”	63
7.2.6 PSA Screening Test	63
7.2.7 Genetic Testing	63
7.3 Organ Imaging	65
7.3.1 X-Rays	65
7.3.2 Barium (Baryum) and Iodine Contrast X-Rays	66
7.3.3 Radiographic Screening	67
7.3.4 Mammography	68
7.3.5 Chest X-Ray	68
7.3.6 Skeletal X-Rays	69
7.3.7 Angiography	69
7.3.8 Isotope Scans (Nuclear Scintigraphy)	69
7.3.9 CT Scan or CAT Scan (Computerised Axial Tomography)	71
7.3.10 Ultrasound Scans	72
7.3.11 MRI (Magnetic Resonance Imaging)	73
7.3.12 PET (Positron Emission Tomography) Scan	73
7.4 Endoscopic Examinations: Rigid and Flexible Scopes	74
7.4.1 Rigid Scopes	74
7.4.2 Sigmoidoscopy	74
7.4.3 Proctoscopy	75
7.4.4 Vaginal Speculum	75
7.4.5 Laryngoscopy and Bronchoscopy	75
7.4.6 Oesophagoscopy	75
7.4.7 Cystoscopy	75
7.4.8 Echo-Endoscopy	76
7.4.9 Flexible Scopes	76
7.4.10 Gastroscopy or Endoscopy	76
7.4.11 Colonoscopy	76
7.4.12 Laparoscopy (Peritoneoscopy) and Thoracoscopy	76
7.4.13 Culdoscopy	77
7.5 Indirect Evidence of Cancer	77
7.5.1 Blood and Serum Tests	77

7.5.2	White Cell Count (WCC)	77
7.5.3	Erythrocyte Sedimentation Rate (ESR)	77
7.5.4	Serum Biochemistry	78
7.5.5	Tumour Markers	78
7.5.6	The Future	78
7.6	Direct Evidence of Cancer	79
7.6.1	Biopsy	79
7.6.2	Needle Aspiration or “Punch-Out” Biopsy	79
7.6.3	Aspiration Cytology	79
7.6.4	Bone Marrow Biopsy	80
7.6.5	Standard Paraffin Section Biopsy and Frozen Section Biopsy	81
8	Treating Cancer	83
8.1	Can Cancer Be Cured? An Outline of Prognosis	83
8.2	In Western Societies More Cancers Are Cured than Not Cured	84
8.3	Methods of Treatment	85
8.3.1	Principles of Treatment of Potentially Curable Regional Cancers	85
8.3.2	Surgery	86
8.3.3	Radiotherapy	88
8.3.4	Chemotherapy (Cytotoxic Drug Treatment)	90
8.4	Other Important Treatments	103
8.4.1	Hormone Therapy	103
8.4.2	Immunotherapy	106
8.5	Some Further Treatments Under Study	109
8.5.1	Heat Therapy	109
8.5.2	Gene Therapy	111
8.6	General Care	112
8.6.1	Care of General Health	112
8.6.2	Treatment of Complications	112
8.6.3	Supportive Care and Supportive Care Teams	113
8.6.4	Pain Relief	114
8.6.5	Psychological and Spiritual Help	114
8.6.6	Follow-Up Care	115
8.6.7	The Specialty of Palliative Care	116
8.6.8	Alternative Medicine	117
9	Relationship Between Patients, Their Doctors and the Healthcare Team	119
Part III Most Common Cancers		
10	Skin Cancers	123
10.1	Skin Cancer Prevention	123
10.2	Basal Cell Carcinoma (BCC)	124
10.2.1	Treatment	125
10.3	Squamous Cell Carcinoma (SCC)	127

10.4	10.3.1 Treatment	127
	10.4.1 Melanoma	131
	10.4.2 Pathology	131
	10.4.3 Causes and Incidence	131
	10.4.3 Early Features of Melanoma	133
	10.4.4 Treatments of Melanoma	133
	10.4.5 Investigations to Guide Surgical Treatment	134
	10.4.6 Other Treatments	136
	10.4.7 Vaccine Studies	137
11	Lung Cancer (Bronchogenic Carcinoma)	141
	11.1 Symptoms	142
	11.2 Investigations	143
	11.3 Significance of Histological Findings	144
	11.4 Treatments	144
	11.5 Mesothelioma	145
	11.6 Metastatic Cancer in the Lung	145
12	Cancer of the Breast: An Overview	147
	12.1 Introduction	147
	12.1.1 Epidemiology	147
	12.1.2 Workup	148
	12.1.3 Breast Biopsy	149
	12.1.4 Histological Types and Molecular Subtypes	149
	12.1.5 Triple-Negative Breast Cancer	153
	12.1.6 Staging	154
	12.2 Breast Cancer Treatment: Concepts	155
	12.2.1 Lobular Carcinoma In Situ	155
	12.2.2 Ductal Carcinoma In Situ	156
	12.2.3 Invasive Breast Cancer: Stages I, IIA and IIB or T3, N1, M0	158
	12.2.4 Pre-operative (Induction or Neoadjuvant) Chemotherapy for Large Clinical Stage IIA and IIB Tumours and T3, N1, M0 Tumours	160
	12.2.5 Radiation Therapy	166
	12.2.6 Breast Reconstruction	167
	12.2.7 Systemic Adjuvant Therapy	168
	12.2.8 Stage III, Locally Advanced, Inflammatory Breast Cancer	177
	12.2.9 Inflammatory Breast Cancer (IBC)	178
	12.2.10 Advanced Breast Cancer (ABC): Recurrent or Metastatic	181
	12.2.11 First-Line Regimens for HER2-Positive Tumours	188
	12.2.12 Tumours Previously Exposed to Trastuzumab	189
	12.2.13 Endocrine Therapy	190
	12.3 Breast Cancer and Bone-Modifying Drugs	192
	References	194

13	Cancers of the Digestive System (Alimentary Tract).....	211
13.1	Cancer of the Oesophagus	211
13.1.1	Pathology	212
13.1.2	Symptoms	212
13.1.3	Signs	212
13.1.4	Investigations	212
13.1.5	Treatment	213
13.2	Cancer of the Stomach	214
13.2.1	Pathology	215
13.2.2	Symptoms	215
13.2.3	Signs	216
13.2.4	Investigations	216
13.2.5	Treatment	217
13.3	Cancers of the Liver	218
13.3.1	Primary Liver Cancer (Hepatoma or Hepatocellular Carcinoma)	218
13.3.2	Secondary (Metastatic) Liver Cancer	220
13.4	Cancer of the Gall Bladder and Bile Ducts	224
13.4.1	Symptoms	224
13.4.2	Signs	225
13.4.3	Pathology and Treatment	225
13.5	Cancer of the Pancreas	225
13.5.1	Presentation	225
13.5.2	Investigations	226
13.5.3	Treatment	226
13.6	Cancers of the Small Intestine	228
13.6.1	Carcinoid Tumour	228
13.7	Cancer of the Large Bowel (Colon and Rectum).....	228
13.7.1	Clinical Features	231
13.7.2	Investigations	231
13.7.3	Treatment	232
13.7.4	Follow-Up Care	232
13.8	Cancer of the Anus	233
13.8.1	Presentation and Pathology	233
13.8.2	Treatment	234
14	Head and Neck Cancers	235
14.1	Cancers of the Lips	236
14.2	Cancers of the Floor of the Mouth (Under the Tongue), Anterior Two-Thirds of the Tongue and Buccal Mucosa (Inside the Cheek)	236
14.3	Cancer in the Posterior Third of Tongue, Tonsillar Region and Pharynx	241
14.4	Cancers of the Post-nasal Space (the Air Passage at the Back of the Nose).....	242
14.4.1	Presentation	243
14.4.2	Treatment	243

14.5	Cancer of the Larynx	243
14.5.1	The Lost Chord Club	244
14.6	Salivary Gland Cancers	245
14.7	Cancers of the Thyroid Gland	246
14.7.1	Causes and Presentation.	246
14.7.2	Accidental Irradiation	248
14.7.3	Investigations	249
14.7.4	Types of Thyroid Cancer	249
14.7.5	Papillary Cancer.	249
14.7.6	Follicular Cancer	249
14.7.7	Medullary Cancer.	250
14.7.8	Anaplastic Cancer	250
14.7.9	Other Types	250
15	Cancers of Female Genital Organs	253
15.1	Cancers of the Uterus.	253
15.2	Cancer of the Cervix	253
15.2.1	Presentation and Risk Factors	253
15.2.2	Investigations	254
15.2.3	Treatment	254
15.2.4	Prevention	255
15.3	Cancer of the Body of the Uterus (Endometrial Cancer).	256
15.3.1	Presentation	256
15.3.2	Investigations	256
15.3.3	Treatment	257
15.4	Choriocarcinoma	258
15.5	Cancer of the Ovary	258
15.5.1	Presentation	259
15.5.2	Investigations	259
15.5.3	Treatment	260
15.5.4	Prevention	260
15.5.5	Metastatic Cancer of the Ovary	261
15.6	Cancer of the Vagina	263
15.7	Cancer of the Vulva	263
16	Cancers of the Male Genital Organs.	265
16.1	Cancer of the Penis.	265
16.2	Cancer of the Testis	266
16.2.1	Presentation	266
16.2.2	Investigations	267
16.2.3	Pathology	267
16.2.4	Treatment	267
16.3	Cancer of the Prostate Gland	268
16.3.1	Presentation	269
16.3.2	Investigations	270

16.3.3	Screening Tests: The PSA (Prostate-Specific Antigens) and the DRE (Digital Rectal Examination).....	271
16.3.4	Controversies in Management of Men with Prostate Cancer	271
16.3.5	Treatments	273
16.3.6	Treatment of Bone Metastases.....	275
17	Cancers of Bladder and Kidneys.....	279
17.1	Bladder Cancer.....	279
17.1.1	Investigations	280
17.1.2	Types of Bladder Cancer (Pathology)	280
17.1.3	Treatment.....	280
17.2	Kidney Cancers	281
17.2.1	Wilm's Tumour (Nephroblastoma)	281
17.2.2	Adenocarcinoma (Hypernephroma or Grawitz Tumour)	281
17.2.3	Carcinoma of the Renal Pelvis or Ureter (Transitional Cell Carcinoma).....	282
17.2.4	Investigations	282
17.2.5	Treatment.....	282
18	Cancers of the Brain and Nervous System.....	285
18.1	Brain Cancers.....	285
18.1.1	Clinical Features (Symptoms and Signs).....	286
18.1.2	Pathology Types.....	287
18.1.3	Investigations	287
18.1.4	Treatment.....	287
18.2	Secondary Cancers in the Brain.....	290
18.3	Nerve Cell Cancers	291
18.3.1	Neuroblastoma.....	291
18.3.2	Presentation	291
18.4	Retinoblastoma.....	291
18.4.1	Presentation	291
19	The Leukaemias and Lymphomas.....	293
19.1	The Leukaemias.....	293
19.1.1	Incidence and Prevalence of Leukaemias	294
19.2	The Acute Leukaemias	295
19.2.1	Clinical Presentation	295
19.2.2	Investigations	296
19.2.3	Treatment.....	296
19.3	Chronic Lymphocytic (Lymphatic) Leukaemia	298
19.3.1	Clinical Presentation	298
19.3.2	Investigations	299
19.3.3	Treatment.....	299

19.4	Chronic Myeloid Leukaemia (CML)	300
19.4.1	Clinical Presentation	300
19.4.2	Investigations	300
19.4.3	Treatment	300
19.4.4	Hairy Cell Leukaemia	301
19.5	The Lymphomas	303
19.5.1	Causes of Lymphoma	304
19.6	Hodgkin Lymphoma	305
19.6.1	Presentation	305
19.6.2	Investigations	306
19.6.3	Staging and the Staging Laparotomy	306
19.6.4	Treatment	306
19.7	Non-Hodgkin Lymphomas	308
19.7.1	Presentation	308
19.7.2	Investigations	309
19.7.3	Treatment	309
19.8	Multiple Myeloma	311
19.8.1	Investigations	311
19.8.2	Treatment	311
20	Soft Tissue Sarcomas	313
20.1	Classification: Pathological Types	315
20.1.1	Fibrosarcoma	315
20.1.2	Liposarcoma	315
20.1.3	Rhabdomyosarcoma	316
20.1.4	Leiomyosarcoma	316
20.1.5	Neurosarcoma	316
20.1.6	Malignant Fibrous Histiocytoma (MFH)	317
20.1.7	Angiosarcoma	317
20.1.8	Synovial Sarcoma (Synoviosarcoma or Malignant Synovioma)	317
20.1.9	Presentation	318
20.1.10	Investigations	318
20.1.11	Treatment	318
21	Malignant Tumours of Bone and Cartilage	323
21.1	Osteosarcoma	323
21.1.1	Presentation	323
21.1.2	Investigations	324
21.1.3	Treatment	324
21.1.4	Intra-operative Irradiation	326
21.2	Osteoclastoma (Central Giant Cell Tumour of Bone)	327
21.2.1	Presentation	327
21.2.2	Investigations	327
21.2.3	Treatment	327

21.3	Ewing's Tumour.....	327
21.3.1	Presentation	327
21.3.2	Investigations	328
21.3.3	Treatment.....	328
21.4	Chondrosarcoma	328
21.4.1	Presentation	328
21.4.2	Investigations	328
21.4.3	Treatment.....	329
22	Metastatic (Secondary) Cancer	331

Part IV Making Progress

23	Techniques and Evidence of Progress.....	337
23.1	Evidence-Based Medicine	337
23.1.1	Randomised Trials	338
23.1.2	Other Historic Methods of Gathering Evidence	338
23.2	Clinical Trials.....	342
23.2.1	Ethics Approval	343
24	Future Directions	345
24.1	Prevention.....	346
24.2	Improved Cancer Screening and Diagnostic Techniques	347
24.2.1	MRS (Magnetic Resonance Spectroscopy)	348
24.2.2	Combined Imaging Using PET and CT or PET and MRI	348
24.2.3	Magnetic Resonance-Guided Focused Ultrasound Surgery	348
24.3	Vaccines	348
24.4	Improved Treatment Agents.....	349
24.5	Self-Rescuing Concept (SRC)	349
24.6	New Agents	350
24.7	Therapeutic Viruses	350
24.8	Targeted Therapies.....	350
24.9	Improvements in Radiotherapy	351
24.9.1	Improvements in Focusing Radiotherapy	352
24.10	More Effective Use of Chemotherapy and Radiotherapy Integrated with Surgery	352
24.11	Prevention of Metastases	352
24.12	Heat Therapy	353
24.13	Other Physical Treatments.....	353
24.14	Immunotherapy	353
24.15	Stem Cell Research	354
24.16	Studies in Cell-Mediated Anti-cancer Activity	354

24.17	Genetic Engineering and Gene Therapy	354
24.18	Developments in Antibody Treatment.....	355
24.19	Molecular Characterisation in Future Cancer Treatment.....	355
24.20	Gene Expression Profiling for Prediction of Response to Chemotherapy	356
24.21	Molecular Heterogeneity	356
24.22	Learning from Alternative and Naturopathic Practices	356
24.23	Improved Palliative Care and Supportive Care	356
24.24	Personalised Medicine	357
24.24.1	Background: The Variety of Tumours	357
24.24.2	Rapid Improvement of Diagnostic Methods	358
24.24.3	Biomarker.....	358
24.24.4	Heterogeneity: The Evolution of Cancer	358
24.24.5	Immune Therapy	359
24.24.6	Immune Therapy: Checkpoints and Their Inhibitors...	359
24.24.7	Immune Therapy: Adoptive Therapies.....	360
24.24.8	Immune Therapy: Tumour-Specific Antibodies.....	360
24.24.9	Outlook.....	360
24.25	Hope for the Future	361
Appendix A: Further Reading.....		363
Appendix B: Appendix		367
Glossary		379

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Part I

The Cancer Problem