NEW Available November 2016

Problem Solving Through Precision Oncology:
A Case Study-Based Reference and Learning Resource

Key Features:
• Leaders in the field clearly demonstrate the latest developments in precision oncology
• A hands-on, practical guide for the cancer physician, including groundbreaking case studies
• A valuable training/learning tool for the graduate medical trainee

Summary:
The linking of specific cancer genetic alterations to molecular targeted therapies is driving a new era of personalised medicine. We now have the capacity to identify the abnormalities in genes and proteins that introduce the risk of individuals developing cancer; healthcare teams are able to better diagnose cancer, evolve preventive strategies, and develop and deploy targeted therapies. Precision oncology facilitates better prevention strategies and ensures that therapeutic interventions can be concentrated on those who will benefit, reducing expense and sparing side effects for those who will not.

This cutting-edge new resource, from editors who lead research and clinical teams at four UK centres of excellence, provides a succinct, practical overview of the latest progress in the field, and includes a ground-breaking collection of case studies (“Problems”) showing precision oncology in practice. The clear, readable summary of developments, alongside real-life case studies, provides a valuable update for all involved in the oncology community.

Editors: Ellen R. Copson, University Hospital, Southampton; Peter Hall, University of Edinburgh; Ruth Board, Lancashire Teaching Hospitals NHS Trust; Gordon Cook, University of Leeds; Peter Selby, St. James’s University Hospital, Leeds.


How to order
Available from your usual book supplier, or go to www.clinicalpublishing.co.uk/ProblemSolvingPrecisionOncology

www.clinicalpublishing.co.uk
Problem Solving Through Precision Oncology: A Case Study-Based Reference and Learning Resource

Contents

Perspectives:

1. An Introduction to Precision Oncology: Ellen R. Copson, Peter Hall, Ruth Board, Gordon Cook, Peter Selby
2. Testicular Cancer: a Successful Model for Biomarker-Guided Precision Cancer Care: Johnathan Joffe
3. Cancer Susceptibility Genes: Ellen R. Copson, Diana M. Eccles
4. Tumour Biology and Somatic Genetics as They Underpin Precision Oncology: Nicolai J. Birkbak, Mariam Jamal-Hanjani, Charles Swanton
5. Pharmacogenomics: Emma Beddowes, Leila Dorling, Jean E. Abraham
6. Introducing Next Generation Sequencing into Routine Practice: the Benefits and Challenges: Angela Hamblin, Anna Schuh
7. An Introduction to Proteomics and the Discovery of New Renal Cancer Biomarkers: Naveen Vasudev, Alexandre Zougman, Rosamonde Banks, Peter Selby
8. Precision Medicine for Multiple Myeloma: Chris Parrish, Gordon Cook
9. Diffuse Large B Cell Lymphoma: Thomas Cummin, Andrew Davies
10. Stratified Medicine in the UK: Colin R. Lindsay, Emily Shaw, Peter W.M. Johnson
11. The Economic Challenge of Healthcare Provision in Precision Oncology: Christopher McCabe, Peter Hall
12. Clinical Trials in Precision Oncology: Jenny Seligmann, Michael Messenger, Matt Seymour, Peter Selby
13. Developing Diagnostic Tests for Precision Oncology: Michael Messenger, Peter Hall, Bethany Shinkins, Sarah Byron, Catharine Sturgeon, Peter Selby
14. Use of Circulating Tumour-Derived Nucleic Acids in Precision Oncology: Charlotte Fribbens, Nicholas Turner
15. Ethical Issues in Precision Oncology/Cancer Genetics: Angela Fenwick, Anneke Lucassen

Case studies:

1. A Breast Cancer Patient with a BRCA1 Mutation: M.H. Ruhe Chowdhury, Ellen R. Copson
2. A Patient with DNA Mismatch Repair-Deficient Colorectal Cancer: Adam P. Januszewski, Matthew Seymour, Ellen Copson
3. A Patient with Advanced Melanoma for Systemic Therapy with a BRAF Inhibitor: Samantha Turnbull, James Larkin
4. Metastatic Non-Small-Cell Lung Carcinoma with Activating EGFR Mutation: Leena Mukherjee, Clive Mulatero
5. A Patient with an Advanced Gastrointestinal Stromal Tumour Tested for a KIT Mutation, with Important Drug–Drug Interactions: Stefan Symeonides, Michael Leahy
6. A Man with a Mediastinal Sarcoma Receiving Neoadjuvant Therapy: Salma Naheed, Peter Simmonds
7. A Patient with Relapsed Myeloma and High-Risk Cytogenetics: Mohamed Iftaz Hamid, Matthew W. Jenner
8. A Young Man with High-Grade Orbital Lymphoma: Cathy Burton, Jonathan Carmichael
10. Von Hippel–Lindau Disease and Renal Cancer: Rasheid Mekki, Peter Selby
11. Breast Cancer Patient Tested with Oncotype DX: Yun Yi Tan, Sophie Barrett
13. A Teenager with a Small-Round-Blue-Cell Tumour and a Diagnostic Translocation: Nicola Hughes, Dan Stark, Simone Wikins, Bob Phillips
14. Treatment Based on Clinical Prognostic Factors and Molecular Profiling in Medulloblastoma: Julia Cockle, Susan Short
15. A Patient with Locally Advanced Human Papillomavirus-Positive Oropharyngeal Squamous Cell Carcinoma: Joseph J. Sacco, Kapil Jaya, Andrew G. Schaeche
16. A Colorectal Cancer Patient: Colin Barrie, Lesley Dawson
17. A Patient with Advanced Upper Gastrointestinal Cancer and Poor Physical Fitness: Malcolm A. West, Timothy J. Underwood
18. A Patient with Localized Prostate Cancer: Sebastian Trainor, Naveen Vasudev, William Cross
19. A Patient with BRCA-Mutated Ovarian Cancer: Barbara Stanley, Charlie Gourley
20. High-Count T Cell Acute Lymphoblastic Leukaemia with Treatment Stratification Based on Minimal Residual Disease Response: Amy Mitchell, Juliet Gray
21. Application of Cancer Genomics to Routine Care: Jonessa Laskin