

1. Record Nr.	UNINA9910502660103321
Autore	Hays Priya <1968->
Titolo	Advancing healthcare through personalized medicine // Priya Hays
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2022] ©2022
ISBN	3-030-80100-4
Edizione	[2nd ed.]
Descrizione fisica	1 online resource (755 pages)
Disciplina	615.7
Soggetti	Precision medicine Medicina personalitzada Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Intro -- Preface to the Second Edition -- Acknowledgments -- Contents -- 1: "Introduction: Biomedical Innovation and Policy in the Twenty-First Century" -- Liquid Biopsy -- Challenges and Incentives for Implementation -- Components of the Book -- References -- 2: "The Rise of Genomics and Personalized Medicine" -- Human Genome Project, Sequencing, and Genomic Medicine -- New Innovative Studies in NGS -- Sanger Sequencing and Comparison with NGS -- Single-Cell RNA Sequencing -- Single-Cell Epigenetic Analysis -- Application of Single-Cell Analysis in Precision Cancer Therapy -- Genomic Medicine -- Genomic Sequencing for Assessment of Disease -- Potential Challenges of Genomic Medicine -- ENCODE: Mapping the Functional Genome -- Pharmacogenetics: Pharmacogenomics -- Thiopurine-Methyltransferase (TPMT) -- CYP2D6 -- CYP2C9 -- UDP-Glucuronyltransferase -- HIV and Abacavir -- Targeted Panel Sequencing -- Genomics-Enabled Medicine for Cancer Prognosis -- The Emergence of Personalized Medicine -- Biomarker Discovery -- Tumor Mutational Burden (TMB) as a Biomarker -- Germline Considerations -- Conclusion -- References -- 3: "Patient Narratives: Personalized Medicine in the Field" -- The Population of 1 Trial: The Story of Milasen -- The Narratives of Personalized Medicine -- Social Media's Avenues for Personalized Medicine -- Social Media

for Patient Engagement -- Role of Twitter in Identifying Barriers to Care Among Patients with Metastatic Breast Cancer [6] -- The Narrative of Xin Zheng: A Lung Cancer Success Story -- References -- 4: Alliances: Knowledge Infrastructures, and the Digitization of Precision Health -- Precision Medicine: Its Potential Development and Implementation -- Implications of Precision Medicine for Patient Care and Disease Treatment -- Monitoring the Personal Genome -- Macroeconomic Considerations of Precision Medicine.

Global Alliance for Genomics and Health -- Updates to Global Alliance for Genomics and Health: GA4GH 2020 (Figs. 4.7, 4.8, 4.9, and 4.10) -- Systems Thinking and -Omics Technologies -- Data Portals and Data Analysis -- Bridging the Gap for Translational Genomic Research -- Database Efforts -- Genomics and Artificial Intelligence -- Deep Learning Methods in Precision Medicine -- Digital Precision Health: The History of Machine Learning and the Power of Big Data for Clinical Medicine -- Digital Pathology -- Conclusion -- References -- 5: "Great Strides in Precision Medicine: Personalized Oncology, Immunotherapies, and Molecular Diagnostics" -- An Immunotherapy Case Report -- A Target Therapy Case Report -- The Basis for Targeted Therapies: Acquired Mutations and Biomarkers in Cancers -- Oncogenesis -- Implications of Tumor Heterogeneity -- Enrichment and Adaptive Strategies -- Molecular Abnormalities in Solid Tumors -- Germline Molecular Testing for Hereditary Cancer Risk -- Cell Cycle Checkpoints -- Understanding Clinical Trials in the Era of Precision Oncology: Data, Biomarkers, and Diagnostic Testing -- Analysis -- Action -- N of 1 Trial -- Tumor Subtypes -- Breast Cancer -- Incidence and Mortality -- Inherited Breast Cancer -- Targeted Therapy Options in Breast Cancer Care -- Tyrosine Kinase Inhibitor: Tucatinib -- HER2+ /HER2-Positive Breast Cancer -- Triple-Negative Breast Cancer (TNBC) and Metastatic Breast Cancer (mBC) -- Biomarker Predicting Response to PARP Inhibitors -- "Study Supports Using MRD as a Stratification Variable for Patients with TNBC" -- "Unexpected Survival Benefit Reported With Trilaciclib in Metastatic Triple-Negative Breast Cancer" -- Olaparib -- Talazoparib -- Immunotherapy and Immunotherapy Combinations -- Newer Generation Targeted Therapy Agents -- Abemaciclib -- Other Combination Agents -- Recent Immunotherapies. Tecentriq -- Pembrolizumab -- Avelumab -- Liquid Biopsy in Breast Cancer: A Systematic Review -- Current Breast Cancer Diagnosis Standards -- Oncotype DX -- MammaPrint -- PAM50 (Prosigna) -- Genomic Grade Index (GGI) (Ipsogen) -- Veridex Rotterdam Signature 76 Genes -- Ventana HER2 Dual ISH DNA Probe Cocktail Assay for Detection of HER2 -- RSClin TOOL: 21-Gene Recurrence Score (RS) -- HER2DX -- Signatera MRD Test -- Findings for Protein-Truncating and Missense Variants -- "Study Suggests 86-SNV Be Incorporated in Breast Cancer Risk Prediction Models" -- Conclusion -- Colorectal Cancer -- Incidence and Mortality -- Colorectal Cancer Classification Systems -- Molecular Pathology and Diagnosis of Colorectal Cancer -- "Molecular Testing in Metastatic Colorectal Cancer: Understanding How, When, and What to Profile" -- Inherited CRC Syndrome -- Hereditary Nonpolyposis Colorectal Carcinoma (Lynch Syndrome) -- Familial Adenomatous Polyposis -- De Novo Colorectal Cancer -- BRAF V600E -- Additional CRC Biomarkers and Mutations -- Targeted and Immunotherapies -- Bevacizumab -- Cetuximab -- Panitumumab -- Ramucirumab -- Ziv-aflibercept -- ASPECCT Trial [76] -- Immunotherapies for CRC: A Recent Development -- Immunotherapy for the Nonimmunogenic Tumors -- Liquid Biopsy -- Conclusion -- Melanoma -- Incidence and Mortality -- Targeted Therapies -- BRAF-V600E Inhibitors -- Immunotherapies for Melanoma -- Multicenter

Double-Blind Phase III IMMUNED Trial -- The Phase III Double-Blind EORTC 1325/KEYNOTE-054 Trial (continued) -- Immunotherapies in Combination with Targeted Agents -- Adoptive Cell Therapy for Metastatic Melanoma -- Liquid Biopsy -- "Pretreatment ctDNA May Help Predict Outcomes With First-Line-but Not Second-Line-Immunotherapy for Patients With Melanoma" -- Management of Brain Metastases from cuM -- Conclusion -- Lung Cancer -- Incidence and Mortality.

Targeted Therapies -- "Pyrotinib for Pretreated Patients with HER2-Mutated Advanced NSCLC" -- Erlotinib -- Gefitinib -- Afatinib -- Capmatinib -- Dacomitinib -- Summary of Erlotinib, Gefitinib, and Afatinib -- Sotorasib -- Ceritinib -- Alectinib -- Brigatinib -- Lorlatinib -- Selpercatinib -- Pralsetinib -- Newer Targeted Therapy Agents -- Osimertinib -- Tepotinib -- Use of Liquid Biopsy in the Trial -- Pozotinib -- Ramucirumab/Erlotinib -- Mobocertinib -- Capmatinib -- Brigatinib -- Adagrasib -- Immunotherapies -- Addition of Nivolumab to Neoadjuvant Chemotherapy in Resectable Stage IIIA NSCLC -- KEYNOTE-024 -- KEYNOTE-042 -- KEYNOTE-189 -- KEYNOTE-407 -- KEYNOTE Trials Adverse Events -- IMpower Trials -- IMpower 110 -- IMpower 130 -- IMpower 131 -- IMpower 150 -- Durvalumab -- Comparative Analysis of Pembrolizumab or Nivolumab in NSCLC -- The ORIENT-11 Trial Showed Sintilimab Plus Chemotherapy Improves PFS in Advanced NSCLC -- The PD-L1 Status Dilemma -- CheckMate Trials -- CheckMate 227 -- CheckMate 9LA -- Molecular Diagnosis -- Molecular Genotyping in NSCLC -- Role of Plasma-Based Molecular Genotyping in NSCLC -- Liquid Biopsy -- Case Studies of Liquid Biopsy in Lung Cancer -- Case Study 1 -- Case Study 2 -- Case Study 3 -- Case Studies 4 and 5 -- Case Study 6 -- Conclusion -- Prostate Cancer -- Incidence and Mortality -- Genomic Medicine and Sequencing -- Newer Generation Targeted Therapies -- Prostate-Specific Membrane Antigen -- PARP Inhibitors -- "Pan-BET Bromodomain Inhibitor Plus Enzalutamide in Advanced Prostate Cancer" -- Rucaparib -- Non-metastatic Prostate Cancer -- PROSPER -- SPARTAN -- ARAMIS -- Summary of PROSPER, SPARTAN, and ARAMIS -- Immunotherapies -- Molecular Diagnosis -- Liquid Biopsy -- Genetic Screening -- Which Men Should Be Evaluated for Prostate Cancer?.

Key Genomic Differences Identified in the Prostate Cancer of African-American Men -- "Series of Studies Identify Genetic Risk Factors for Prostate Cancer" -- "17q22 Loss Associated With Survival in Enzalutamide-Resistant mCRPC" -- Racial Differences in Genomic Profiles of Primary and Metastatic Prostate Cancer -- "Study Finds Differences in BRCA1/2 Male Pathogenic Variant Carriers" -- Diagnostic Tests -- 4 k Score -- Prostate Health Index (PHI) -- Prostate Cancer Antigen 3 Assay (PCA3) -- SelectMDx -- ExoDx Prostate Intelliscore (EPI) -- ConfirmMDx -- Prognostic Tests -- Decipher (GC) -- Post-operative Radiation Therapy Outcomes Score -- Promark -- Prolaris -- OncotypeDx Genomic Prostate Score (GPS) -- Precision Imaging -- Conclusion -- Central Nervous System Tumors -- Incidence and Mortality -- Molecular Classification of Glioblastoma -- Diffuse Astrocytic and Oligodendroglial Tumors -- IDH-Mutated Astrocytomas -- Biomarkers and Targeted Therapies -- Tumor Immunology -- Subset of Glioblastoma Tumors Identified as Immunotherapy Candidate -- Meningiomas -- Hemangioblastomas -- Conclusion -- Hematological Malignancies -- Incidence and Mortality -- Hematologic Oncology Highlights 2019-2020 Almanac -- Chronic Myeloid Leukemia and Acute Lymphocytic Leukemia -- Study Finds Asciminib Safer and More Effective than TKI Bosutinib in Chronic Phase CML -- "Effects

of Stopping Tyrosine Kinase Inhibitor Treatment for Chronic Myeloid Leukemia: -- Focus on Molecular Response and Patient-Reported Outcomes" -- "First-Line Dasatinib Plus Blinatumomab for Adult Patients With Philadelphia Chromosome-Positive Acute Lymphoblastic Leukemia" -- Clinical Trials Investigating the Efficacy and Safety of the Novel CART Therapies UCART 19 and UCART22 in R/R B-Cell ALL -- "Chemotherapy Plus Blinatumomab for Philadelphia Chromosome-Negative B-Cell ALL".
"FDA Grants Fast Track Designation to Allogeneic CAR T-Cell Therapy for Advanced ALL".
