

1. Record Nr.	UNINA9910620197303321
Titolo	Pancreatic cancer : a multidisciplinary approach // edited by Manoop S. Bhutani [and four others]
Pubbl/distr/stampa	Cham, Switzerland : , : Springer, , [2022] ©2022
ISBN	3-031-05724-4
Descrizione fisica	1 online resource (394 pages)
Disciplina	616.99437
Soggetti	Pancreas - Cancer
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Intro -- Foreword: The Evolution of Pancreatic Cancer Care -- Preface -- Contents -- Contributors -- 1: Pancreatic Cancer at a Glance -- Introduction -- Incidence -- Prevalence -- Mortality -- Human Development Index -- Incidence Projections -- Mortality Projections -- Conclusion -- References -- 2: Risk Factors and Genetic Predisposition -- Smoking -- Obesity -- Alcohol -- Chronic Pancreatitis -- Family History -- Genetic Predisposition -- References -- 3: Pancreatic Cancer and Diabetes Mellitus -- Background -- Multidirectional Interaction Between DM and PDAC (Fig. 3.1) -- Pathogenesis of Glycemic Disturbance due to PDAC -- New-Onset Diabetes as a Harbinger of PDAC -- Efforts to Use NOD for Early Detection of PDAC -- Summary -- References -- 4: Pancreatic Cancer Screening -- Introduction -- Pancreatic Cancer Risk Factors -- Pancreatic Cancer Precursor Lesions -- Who Should Be Screened? -- Screening Tests -- Screening Guidelines and Strategies -- MD ANDERSON Screening Algorithm -- Benefits and Harms -- Psychological Impact of Pancreatic Cancer Screening -- Future Directions -- Conclusions -- References -- Part I: Diagnosis and Staging of Pancreatic Cancer -- 5: Diagnosis and Staging of Pancreatic Cancer: Imaging Evaluations-Pancreatic Protocol CT and MRI, PET-CT -- Computed Tomography -- CT Protocol -- Diagnosis -- Differential Diagnosis -- Staging -- Positron Emission Tomography/Computed Tomography -- PET/CT Protocol -- Diagnosis -- Staging -- Treatment Response -- Detection of Recurrent Disease

-- Magnetic Resonance Imaging -- MRI Protocol -- Diagnosis -- Staging -- Assessment of Recurrent Cancer -- Conclusion -- References -- 6: Diagnosis and Staging of Pancreatic Cancer: Laparoscopy -- Introduction -- History -- Review of Contemporary Data -- Diagnostic Accuracy and Outcomes -- Cost-Effectiveness -- Principles of Management -- Indications. Preoperative Setting -- Staging Clarification Prior to Upfront Surgical Resection or Neoadjuvant Therapy -- Staging Clarification During Neoadjuvant Therapy -- Risk Stratification Prior to Surgery -- Intraoperative Setting -- Staging Clarification Immediately before Laparotomy -- Postoperative Setting -- Staging Clarification for Adjuvant Therapy -- Biospecimen Acquisition -- Technical Points -- Drawbacks -- Conclusion -- References -- 7: Diagnosis and Staging of Pancreatic Cancer: Role of Gastroenterologist: Endoscopic Ultrasound (EUS), EUS-Guided Biopsy -- Introduction -- Detection and Diagnosis -- Staging -- Management -- Adjuvant Molecular Testing -- Conclusion -- References -- 8: Diagnosis and Staging of Pancreatic Cancer: Role of Ca 19-9 in Diagnosis/Staging and Management -- References -- Part II: Management of Locally Advanced/Metastatic Disease -- 9: Management of Locally Advanced/Metastatic Disease: Medical Oncology -- Introduction -- Locally Advanced Disease -- Metastatic Disease -- Approach to LAPC at MD Anderson -- MD Anderson Approach to Metastatic Pancreatic Cancer -- Conclusion -- References -- 10: Management of Locally Advanced/Metastatic Disease: Radiation Oncology -- Introduction -- Radiation Therapy Treatment Strategies for Unresectable Disease -- Chemoradiation -- Proton and Carbon Ion Therapy -- Stereotactic Body Radiation Therapy (SBRT) -- Magnetic Resonance Linac-Based Treatment -- Treatment Planning Procedures -- Pre-simulation Instructions -- Patient Set-Up -- Image Acquisition -- Treatment Planning -- Planning Aims and Dose Constraints -- Treatment Verification -- Summary -- References -- Part III: Management of Resectable and Borderline Resectable Disease -- 11: Management of Resectable and Borderline Resectable Disease: Surgery -- Introduction -- History of Pancreatoduodenectomy -- Preoperative Management. Preoperative Period: Opportunity for Optimization -- Decision for Surgery -- Operative Steps -- Pancreatoduodenectomy -- Considerations for Vein Involvement -- Reconstruction -- Distal Pancreatectomy -- Postoperative Management -- Enhanced Recovery -- Quality Measures -- Future Directions -- References -- 12: Management of Resectable and Borderline Resectable Disease: Medical Oncology -- Introduction -- Definition of Resectability -- Adjuvant Therapy -- Borderline Resectable PDAC -- Neoadjuvant Therapy for PDAC -- Role of Neoadjuvant Chemotherapy without Radiation -- Locally Advanced PDAC -- What Is the Role of Radiotherapy in the Neoadjuvant Setting for PDAC? -- Histopathologic Assessment Following Neoadjuvant Therapy -- Tumor Surveillance in PDAC Using Circulating DNA (ctDNA) -- Neoadjuvant Therapy Followed by Metastasectomy for PDAC -- References -- 13: Management of Resectable and Borderline Resectable Disease: Radiation Oncology -- Introduction -- Indications for Radiation -- Adjuvant Radiation -- Neoadjuvant Radiation -- Definitive Radiation -- The Impact of Advanced Technologies in Radiation Delivery -- Imaging and Target Delineation -- Internal Motion Management -- Image-Guided Radiation Therapy -- MR-Linac -- Innovations in Radiation Techniques -- Intensity-Modulated Radiation Therapy -- SBRT -- Particle Beam Radiation -- Conclusions -- References -- Part IV: Endoscopic Management of Pancreatic Cancer Symptoms -- 14: Jaundice/Biliary

Obstruction: ERCP/EUS BD -- Introduction -- Options for Biliary Decompression -- References -- 15: Gastric Outlet Obstruction: Antroduodenal Stenting, Venting PEG, EUS Guided Gastrojejunostomy -- Introduction -- Pathophysiology -- Diagnosis -- Principles of Management -- Surgical Gastrojejunostomy -- Enteral Stent Placement -- Technique -- Outcomes and Efficacy -- Adverse Events. Enteral Stents Versus Surgical Gastrojejunostomy -- EUS-Guided Gastroenterostomy -- Technique -- Outcomes and Efficacy -- EUS-GE Versus Surgical Gastrojejunostomy -- EUS-GE Versus Enteral Stents -- Adverse Events -- Venting Gastrostomy -- Special Considerations -- mGOO in the Post-Whipple Anatomy -- Delayed Gastric Emptying -- Summary and Management Algorithm -- References -- 16: Pain Control: Celiac Plexus Neurolysis -- Percutaneous Celiac Plexus Neurolysis -- Method -- Anterior Approach -- Posterior Approach -- Complications -- Endoscopic Ultrasound-Guided Celiac Plexus Neurolysis -- Method -- Instruments -- Drugs -- Procedure -- Bilateral Approach (Fig. 16.1) -- Central Injection Approach (Fig. 16.2) -- Complications -- References -- Part V: Emerging Paradigms in Pancreatic Cancer -- 17: Minimally Invasive Surgical Approaches -- Introduction -- Minimally Invasive DP -- Minimally Invasive PD -- Foregut Robotic Surgery Program at MD Anderson -- Conclusion -- References -- 18: EUS-Guided Local Therapies -- Introduction -- EUS-Guided Fine Needle Injection of Anti-Tumor Agents -- EUS-Assisted Radiotherapy -- EUS-Guided Brachytherapy -- EUS-Guided Fiducial Placement -- EUS-Guided Tumor Ablation -- Conclusion -- References -- 19: Imaging-Based Biomarkers for Pancreatic Cancer -- Introduction: Different Contexts of Imaging for Pancreatic Cancer and How Imaging-Derived Biomarkers May Play a Role -- Considerations for Early Detection -- Prognostic Stratification of Tumors -- Treatment Response -- Specific Imaging Modalities -- Endoscopic Ultrasound {EUS} -- Computed Tomography (CT) -- MRI -- Artificial Intelligence -- Future Applications -- References -- 20: Liquid Biopsies in Pancreatic Cancer -- Introduction -- CTCs in Pancreatic Cancer -- Circulating Free DNA (cfDNA) and Circulating Tumor DNA (ctDNA) -- EVs -- References. 21: Molecular Profiling and Precision Medicine for Pancreatic Cancer -- Introduction -- Sequencing Efforts Have Revealed Actionable Mutations -- Best Examples to Date -- BRCA1/2 (and PALB2) -- MSI-High -- NTRK -- Promising Targets -- Other DDR Mutations -- KRAS Wild Type PDAC: Mutations in BRAF, and Other Receptor Tyrosine Kinases -- Targeting the WNT Pathway: RNF43 Mutations and RSPO2/3 Fusions -- Survival Benefit-A National Registry for Precision Medicine (the Know Your Tumor Program) -- Elusive Drivers -- KRAS, TP53, CDKN2A/2B, and SMAD4 -- Immunotherapy -- Future Directions: Other Considerations and Biomarker Driven Approaches -- Concluding Remarks -- References -- 22: The Prospects of Immunotherapy in Pancreatic Cancer -- The Formation of Immune-Suppressive Microenvironment -- Tumor Cell-Intrinsic Factors -- Stroma Fibroblast -- T Lymphocytes -- Myeloid Cells -- Metabolism Environment -- Microbiome -- The Current Status and Prospect of Immunotherapy -- Immune Checkpoint Blockade -- Tumor Vaccine -- Adoptive Cell Therapy (ACT) -- Targeting TME -- Conclusion -- References -- 23: Microbiome in Pancreatic Cancer -- Introduction on Microbiome -- Microbial Biomarkers in Pancreatic Cancer -- Role of Pancreatic Microbiome in Preclinical Studies: Exploring Functional Relevance -- Ongoing Clinical Trials for Targeting the Microbiome During Cancer -- References -- 24: Early Drug Development in Pancreatic Cancer -- Introduction -- Targeting the Tumor Microenvironment -- T-Cell

Checkpoint Inhibitors -- Other Immune Based Strategies -- Targeting the Stroma -- Targeting Tumor Cells -- KRAS-Based Targets -- Autophagy -- Other Targets -- Conclusions -- References -- 25: Mechanisms and Evidence on Pancreatic Cancer Prevention -- Introduction -- Metformin -- General Background and PC Risk Association -- Anti-tumoral and Immunomodulatory Mechanisms. Clinical Use and Potential for PC Prevention.
