Meet The Professors:
Pancreatic Cancer Edition, 2016

CME Information

TARGET AUDIENCE

This activity is intended for medical oncologists and other healthcare providers involved in the treatment of pancreatic cancer.

OVERVIEW OF ACTIVITY

An estimated 53,070 people will be diagnosed with pancreatic cancer in the United States in 2016, and approximately 41,780 will die of the disease. For the better part of the past 2 decades, gemcitabine chemotherapy had been the main systemic therapy used to treat locally advanced and metastatic pancreatic adenocarcinoma. However, its actual clinical benefit was a modest 1-month extension in overall survival when compared to 5-FU alone. Despite the recent breakthroughs with FOLFIRINOX and *nab* paclitaxel, systemic options for patients with advanced pancreatic adenocarcinoma remain limited. However, ongoing research into other therapeutic strategies continues. One chemotherapeutic agent in particular, nanoliposomal irinotecan (nal-IRI), has recently garnered the attention of gastrointestinal oncologists and patients alike. As more and better treatment options become available and patients are living longer, a variety of supportive care issues, including pain management and palliative care, become more relevant considerations. In fact, the institution of early palliative care, including adequate pain control, can now be considered a life-extending intervention in and of itself.

Although pessimism has reigned for some time in the management of pancreatic adenocarcinoma, the past few years have witnessed the emergence of a variety of therapeutic and investigational strategies such as FOLFIRINOX, *nab* paclitaxel and nal-IRI that have already changed clinical practice. The use of PARP inhibitors and immune-directed therapies also holds promise to do so in the future. To offer optimal patient care, clinicians need educational interventions designed to increase their knowledge of recent advancements and appropriately counsel them regarding how those new strategies can be safely and effectively integrated into current protocol and off-protocol treatment algorithms for patients with pancreatic cancer.

LEARNING OBJECTIVES

- Apply the results of emerging clinical research to the best-practice management of pancreatic adenocarcinoma.
- Develop an evidence-based strategy for the initial diagnosis and treatment of resectable pancreatic cancer, exploring the role of neoadjuvant and adjuvant chemotherapy and/or radiation therapy.
- Consider age, performance status and other clinical and logistical factors in the selection of systemic therapy for patients with locally advanced or metastatic pancreatic cancer.
- Appreciate the recent FDA approval of nal-IRI in the management of treatment-refractory metastatic pancreatic cancer, and optimally incorporate this agent into patient care algorithms.
- Recall new data with other investigational agents demonstrating promising activity in pancreatic cancer.
- Review the potential impact of early palliative care, pain management and end-of-life planning on clinical outcomes for patients with advanced pancreatic cancer, and integrate this information, where applicable, into routine practice.

ACCREDITATION STATEMENT

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Successful completion of this CME activity enables the participant to earn up to 3.5 MOC points in the American Board of Internal Medicine's (ABIM) Maintenance of Certification (MOC) program. Participants will earn MOC points equivalent to the amount of CME credits claimed for the activity. It is the

CME activity provider's responsibility to submit participant completion information to ACCME for the purpose of granting ABIM MOC credit.

Please note, this program has been specifically designed for the following ABIM specialty: **medical oncology**.

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This CME activity consists of a video component. To receive credit, the participant should watch the video, complete the Post-test with a score of 80% or better and fill out the Educational Assessment and Credit Form located at **ResearchToPractice.com/MTPPancreatic116/CME**.

CONTENT VALIDATION AND DISCLOSURES

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FACULTY — The following faculty (and their spouses/partners) reported relevant conflicts of interest, which have been resolved through a conflict of interest resolution process:

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COMMUNITY ONCOLOGISTS — The following community oncologists (and their spouses/partners) reported relevant conflicts of interest, which have been resolved through a conflict of interest resolution process:

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No relevant conflicts of interest to disclose.

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No relevant conflicts of interest to disclose.

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No relevant conflicts of interest to disclose.

MODERATOR — **Dr Love** is president and CEO of Research To Practice, which receives funds in the form of educational grants to develop CME activities from the following commercial interests: AbbVie Inc, Acerta Pharma, Agendia Inc, Amgen Inc, Ariad Pharmaceuticals Inc, Array BioPharma Inc, Astellas Pharma Global Development Inc, AstraZeneca Pharmaceuticals LP, Baxalta Inc, Bayer HealthCare Pharmaceuticals, Biodesix Inc, bioTheranostics Inc, Boehringer Ingelheim Pharmaceuticals Inc, Boston Biomedical Pharma Inc, Bristol-Myers Squibb Company, Celgene Corporation, Clovis Oncology, CTI BioPharma Corp, Daiichi Sankyo Inc, Dendreon Pharmaceuticals Inc, Eisai Inc, Exelixis Inc, Foundation Medicine, Genentech BioOncology, Genomic Health Inc, Gilead Sciences Inc, Halozyme Therapeutics, ImmunoGen Inc, Incyte Corporation, Infinity Pharmaceuticals Inc, Janssen Biotech Inc, Jazz Pharmaceuticals Inc, Lilly, Medivation Inc, Merck, Merrimack Pharmaceuticals Inc, Myriad Genetic Laboratories Inc, NanoString Technologies, Natera Inc, Novartis Pharmaceuticals Corporation, Novocure, Onyx Pharmaceuticals, an Amgen subsidiary, Pharmacyclics LLC, an AbbVie Company, Prometheus Laboratories Inc, Regeneron Pharmaceuticals, Sanofi, Seattle Genetics, Sigma-Tau Pharmaceuticals Inc, Sirtex Medical Ltd, Spectrum Pharmaceuticals Inc, Taiho Oncology Inc, Takeda Oncology, Tesaro Inc, Teva Oncology, Tokai Pharmaceuticals Inc and VisionGate Inc.

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This activity is supported by educational grants from Celgene Corporation and Merrimack Pharmaceuticals Inc.

Hardware/Software Requirements:
A high-speed Internet connection
A monitor set to 1280 x 1024 pixels or more
Internet Explorer 7 or later, Firefox 3.0 or later, Chrome, Safari 3.0 or later
Adobe Flash Player 10.2 plug-in or later
Adobe Acrobat Reader
(Optional) Sound card and speakers for audio

Last review date: January 2017

Expiration date: January 2018

Select Publications

Blazer M et al. **Neoadjuvant modified (m) FOLFIRINOX for locally advanced unresectable (LAPC) and borderline resectable (BRPC) adenocarcinoma of the pancreas.** *Ann Surg Oncol* 2015;22(4):1153-9.

Bullock A et al. **Final analysis of stage 1 data from a randomized phase II study of PEGPH20 plus *nab*-Paclitaxel/gemcitabine in stage IV previously untreated pancreatic cancer patients (pts), utilizing Ventana companion diagnostic assay.** *Proc ASCO* 2016;**Abstract 4104**.

Bupathi M et al. **Modified irinotecan and infusional 5-fluorouracil (mFOLFIRI) in patients with refractory advanced pancreas cancer (APC): A single-institution experience.** *Med Oncol* 2016;33(4):37.

Cartwright T et al. **Use of first-line chemotherapy for advanced pancreatic cancer: FOLFIRINOX versus gemcitabine-based therapy.** *Proc ASCO* 2014;**Abstract 4132**.

Chiorean E et al. **Second-line therapy after *nab*-paclitaxel plus gemcitabine or after gemcitabine for patients with metastatic pancreatic cancer.** *Br J Cancer* 2016;115(9):e13.

Chiorean EG et al. **Second-line therapy after *nab*-paclitaxel plus gemcitabine or after gemcitabine for patients with metastatic pancreatic cancer.** *Br J Cancer* 2016;115(2):188-94.

Conroy T et al. **FOLFIRINOX versus gemcitabine for metastatic pancreatic cancer.** *N Engl J Med* 2011;364(19):1817-25.

Evans D et al. **Preoperative gemcitabine-based chemoradiation for patients with resectable adenocarcinoma of the pancreatic head.** *J Clin Oncol* 2008;26(21):3496-502.

Goldstein D et al. ***Nab*-paclitaxel plus gemcitabine for metastatic pancreatic cancer: Long-term survival from a phase III trial.** *J Natl Cancer Inst* 2015;107(2);pii:dju413.

Gourgou-Bourgade S et al. **Impact of FOLFIRINOX compared with gemcitabine on quality of life in patients with metastatic pancreatic cancer: Results from the PRODIGE 4/ACCORD 11 randomized trial.** *J Clin Oncol* 2013;31(1):23-9.

Hidalgo M et al. **SPARC expression did not predict efficacy of *nab*-paclitaxel plus gemcitabine or gemcitabine alone for metastatic pancreatic cancer in an exploratory analysis of the phase III MPACT Trial.** *Clin Cancer Res* 2015;21(21):4811-8.

Holter S et al. **Germline BRCA mutations in a large clinic-based cohort of patients with pancreatic adenocarcinoma.** *J Clin Oncol* 2015;33(28):3124-9.

Katz MH et al. **Preoperative modified FOLFIRINOX treatment followed by capecitabine-based chemoradiation for borderline resectable pancreatic cancer: Alliance for Clinical Trials in Oncology trial A021101.** *JAMA Surg* 2016;151(8):e161137.

Kaufman B et al. **Olaparib monotherapy in patients with advanced cancer and a germline BRCA1/2 mutation.** *J Clin Oncol* 2015;33(3):244-50.

Kindler HL et al. **POLO: A randomized phase III trial of olaparib tablets in patients with metastatic pancreatic cancer (mPC) and a germline BRCA1/2mutation (gBRCAm) who have not progressed following first-line chemotherapy.** *Proc ASCO* 2015;**Abstract TPS4149**.

Ko AH et al. **A multinational phase 2 study of nanoliposomal irinotecan sucrosofate (PEP02, MM-398) for patients with gemcitabine-refractory metastatic pancreatic cancer.** *Br J Cancer* 2013;109(4):920-5.

Ko A et al. **A phase II study of fixed-dose rate gemcitabine plus low-dose cisplatin followed by consolidative chemoradiation for locally advanced pancreatic cancer.** *Int J Radiat Oncol Biol Phys* 2007;68(3):809-16.

Krishna K et al. **Modified gemcitabine and *nab*-paclitaxel in patients with metastatic pancreatic cancer (MPC): A single-institution experience.** Gastrointestinal Cancers Symposium 2015;**Abstract 366**.

Le DT et al. **PD-1 blockade in mismatch repair deficient non-colorectal gastrointestinal cancers.** Gastrointestinal Cancers Symposium 2016;**Abstract 195**.

Le DT et al. **PD-1 blockade in tumors with mismatch-repair deficiency.** *N Engl J Med* 2015;372(26):2509-20.

Lohse I et al. **BRCA1 and BRCA2 mutations sensitize to chemotherapy in patient-derived pancreatic cancer xenografts.** *Br J Cancer* 2015;113(3):425-32.

Neoptelmos J et al. **ESPAC-4: A multicenter, international, open-label randomized controlled phase III trial of adjuvant combination chemotherapy of gemcitabine (GEM) and capecitabine (CAP) versus monotherapy gemcitabine in patients with resected pancreatic ductal adenocarcinoma.** *Proc ASCO* 2016;**Abstract LBA4006**.

Select Publications

Noonan AM et al. **Randomized phase 2 trial of the oncolytic virus pelareorep (Reolysin) in upfront treatment of metastatic pancreatic adenocarcinoma.** *Mol Ther* 2016;24(6):1150-8.

O'Reilly EM. **BRCA-mutated pancreas adenocarcinoma: Emerging therapeutic implications.** *Proc AACR* 2014;**Abstract IA28**.

Oettle H et al. **Second-line oxaliplatin, folinic acid, and fluorouracil versus folinic acid and fluorouracil alone for gemcitabine-refractory pancreatic cancer: Outcomes from the CONKO-003 trial.** *J Clin Oncol* 2014;32(23):2423-9.

Ramanathan RK et al. **Pilot study in patients with advanced solid tumors to evaluate feasibility of ferumoxytol (FMX) as tumor imaging agent prior to MM-398, a nanoliposomal irinotecan (nal-IRI).** *Proc AACR* 2014;**Abstract CT224**.

Roy AC et al. **A randomized phase II study of PEP02 (MM-398), irinotecan or docetaxel as a second-line therapy in patients with locally advanced or metastatic gastric or gastro-oesophageal junction adenocarcinoma.** *Ann Oncol* 2013;24(6):1567-73.

Salo-Mullen EE et al. **Identification of germline genetic mutations in patients with pancreatic cancer.** *Cancer* 2015;121(24):4382-8.

Scheithauer W et al. **Dose modification and efficacy of *nab*-paclitaxel plus gemcitabine vs gemcitabine for patients with metastatic pancreatic cancer: Phase III MPACT trial.** *J Gastrointest Oncol* 2016;7(3):469-78.

Soares KC et al. **PD-1/PD-L1 blockade together with vaccine therapy facilitates effector T-cell infiltration into pancreatic tumors.** *J Immunother* 2015;38(1):1-11.

Stein SM et al. **Final analysis of a phase II study of modified FOLFIRINOX in locally advanced and metastatic pancreatic cancer.** *Br J Cancer* 2016;114(7):737-43.

Study of nanoliposomal irinotecan (Nal-IRI)-containing regimens in patients with previously untreated, metastatic pancreatic adenocarcinoma. NCT02551991

Suker M et al. **FOLFIRINOX for locally advanced pancreatic cancer: A systematic review and patient-level meta-analysis.** *Lancet Oncol* 2016;17(6):801-10.

Varadhachary GR et al. **Preoperative gemcitabine and cisplatin followed by gemcitabine-based chemoradiation for resectable adenocarcinoma of the pancreatic head.** *J Clin Oncol* 2008;26(21):3487-95.

Von Hoff DD et al. **Increased survival in pancreatic cancer with *nab*-paclitaxel plus gemcitabine.** *N Engl J Med* 2013;369(18):1691-703.

Waddell N et al. **Whole genomes redefine the mutational landscape of pancreatic cancer.** *Nature* 2015;518(7540):495-501.

Wang-Gillam A et al. **Nanoliposomal irinotecan with fluorouracil and folinic acid in metastatic pancreatic cancer after previous gemcitabine-based therapy (NAPOLI-1): A global, randomised, open-label, phase 3 trial.** *Lancet* 2016;387(10018):545-57.

Yang SH et al. **Perspectives on the combination of radiotherapy and targeted therapy with DNA repair inhibitors in the treatment of pancreatic cancer.** *World J Gastroenterol* 2016;22(32):7275-88.