Pancreatic Cancer Update

Issue 1, 2018 (Video Program)

CME Information

TARGET AUDIENCE

This activity is intended for medical oncologists, hematologists-oncologists, hematology-oncology fellows and other healthcare providers involved in the treatment of pancreatic cancer.

OVERVIEW OF ACTIVITY

Pancreatic cancer is the fourth most common cause of cancer-related death among US men and women. The overwhelming majority of pancreatic cancers are ductal adenocarcinomas (approximately 90%). Unfortunately, many patients diagnosed with pancreatic adenocarcinoma (PAD) do not exhibit disease-specific symptoms (eg, weight loss, jaundice, pain, dyspepsia, nausea) until the cancer has reached a more advanced stage, and for all stages of PAD the combined 1-year survival rate for patients who do not receive surgery is approximately 29% and the 5-year rate is an appalling 7%. Published results from ongoing trials have led to the emergence of new therapeutic targets and regimens, and the poor clinical course for many patients with progressive PAD mandates the investigation of even more new approaches. In order to offer optimal patient care — including the option of clinical trial participation — the practicing medical oncologist must be well informed of these advances. To bridge the gap between research and patient care, *Pancreatic Cancer Update* presents one-on-one discussions with leading gastrointestinal oncology investigators. By providing access to the latest scientific developments and the perspectives of experts in the field, this CME activity assists medical oncologists with the formulation of up-to-date management strategies.

LEARNING OBJECTIVES

- Develop an evidence-based strategy for the treatment of resectable or borderline-resectable PAD, 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 PAD.
- Educate patients with PAD about the potential side effects of various chemotherapeutic regimens, and provide preventive and emergent strategies to reduce or ameliorate these toxicities.
- Appreciate the efficacy and tolerability profile of nanoliposomal irinotecan for treatment-refractory metastatic PAD, and optimally incorporate this agent into patient-care algorithms.
- Recall available and emerging data with other investigational agents currently in clinical testing for PAD and, where applicable, refer eligible patients for trial participation.

ACCREDITATION STATEMENT

Research To Practice is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

CREDIT DESIGNATION STATEMENT

Research To Practice designates this enduring material for a maximum of 2.75 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

AMERICAN BOARD OF INTERNAL MEDICINE (ABIM) — MAINTENANCE OF CERTIFICATION (MOC)

Successful completion of this CME activity, which includes participation in the evaluation component, enables the participant to earn up to 2.75 Medical Knowledge 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**.

Personal information and data sharing: Research To Practice aggregates deidentified user data for program-use analysis, program development, activity planning and site improvement. We may provide aggregate and deidentified data to third parties, including commercial supporters. We do not share or sell personally identifiable information to any unaffiliated third parties or commercial supporters. Please see our privacy policy at **ResearchToPractice.com/Privacy-Policy** for more information.

HOW TO USE THIS CME ACTIVITY

This CME activity consists of a video component. To receive credit, the participant should review the CME information, 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/PancreaticCancerUpdate118/Video/CME**. The corresponding audio program is

available as an alternative at **ResearchToPractice.com/PancreaticCancerUpdate118**.

CONTENT VALIDATION AND DISCLOSURES

Research To Practice (RTP) is committed to providing its participants with high-quality, unbiased and state-of-the-art education. We assess conflicts of interest with faculty, planners and managers of CME activities. Conflicts of interest are identified and resolved through a conflict of interest resolution process. In addition, all activity content is reviewed by both a member of the RTP scientific staff and an external, independent physician reviewer for fair balance, scientific objectivity of studies referenced and patient care recommendations.

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

Philip A Philip, MD, PhD
Professor of Oncology and Pharmacology
Director of GI and Neuroendocrine Tumors
Vice President of Medical Affairs
Karmanos Cancer Institute
Wayne State University
Detroit, Michigan

Advisory Committee: Bayer HealthCare Pharmaceuticals, Celgene Corporation, Genentech BioOncology, Halozyme Inc, Lilly, Merrimack Pharmaceuticals Inc, Novartis; **Consulting Agreements:** Celgene Corporation, Halozyme Inc, Lilly; **Contracted Research:** Bayer HealthCare Pharmaceuticals, Celgene Corporation, Lilly, Merck, Novartis; **Speakers Bureau:** Amgen Inc, Bayer HealthCare Pharmaceuticals, Celgene Corporation, Genentech BioOncology, Lilly, Merrimack Pharmaceuticals Inc, Novartis, Sanofi Genzyme.

Ramesh K Ramanathan, MD
Professor of Medicine
Mayo Clinic College of Medicine
Director, GI Medical Oncology
Mayo Clinic, Arizona
Associate Director, Early Cancer Therapeutics Program
Mayo Clinic Cancer Center
Scottsdale, Arizona

Consulting Agreements: Pharmacyclics Inc, an AbbVie Company; **Contracted Research:** AbbVie Inc, Berg LLC, Celgene Corporation, Ipsen Biopharmaceuticals Inc, Medimark Scientific, Merck.

EDITOR — **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, Adaptive Biotechnologies, Agendia Inc, Agios Pharmaceuticals 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, Dendreon Pharmaceuticals Inc, Eisai Inc, Exelixis Inc, Foundation Medicine, Genentech BioOncology, Genomic Health Inc, Gilead Sciences Inc, Halozyme Inc, ImmunoGen Inc, Incyte Corporation, Infinity Pharmaceuticals Inc, Ipsen Biopharmaceuticals Inc, Janssen Biotech Inc, administered by Janssen Scientific Affairs LLC, Jazz Pharmaceuticals Inc, Kite Pharma Inc, Lexicon Pharmaceuticals Inc, Lilly, Medivation Inc, a Pfizer Company, Merck, Merrimack Pharmaceuticals Inc, Myriad Genetic Laboratories Inc, NanoString Technologies, Natera Inc, Novartis, Novocure, Onyx Pharmaceuticals, an Amgen subsidiary, Pfizer Inc, Pharmacyclics LLC, an AbbVie Company, Prometheus Laboratories Inc, Puma Biotechnology Inc, Regeneron Pharmaceuticals Inc, Sanofi Genzyme, Seattle Genetics, Sigma-Tau Pharmaceuticals Inc, Sirtex Medical Ltd, Spectrum Pharmaceuticals Inc, Taiho Oncology Inc, Takeda Oncology, Tesaro Inc, Teva Oncology and Tokai Pharmaceuticals Inc.

RESEARCH TO PRACTICE STAFF AND EXTERNAL REVIEWERS — The scientific staff and reviewers for Research To Practice have no relevant conflicts of interest to disclose.

This educational activity contains discussion of published and/or investigational uses of agents that are not indicated by the Food and Drug Administration. Research To Practice does not recommend the use of any agent outside of the labeled indications. Please refer to the official prescribing information for each product for discussion of approved indications, contraindications and warnings. The opinions expressed are those of the presenters and are not to be construed as those of the publisher or grantors.

This activity is supported by educational grants from Celgene Corporation and Ipsen Biopharmaceuticals Inc.

Hardware/Software Requirements:
A high-speed Internet connection
A monitor set to 1280 x 1024 pixels or more
Internet Explorer 11 or later, Firefox 56 or later, Chrome 61 or later, Safari 11 or later, Opera 48 or later
Adobe Flash Player 27 plug-in or later
Adobe Acrobat Reader
(Optional) Sound card and speakers for audio

Last review date: March 2018

Expiration date: March 2019

Select Publications

A phase 3, randomized, double-blind, placebo-controlled, multicenter study of pegylated recombinant human hyaluronidase (PEGPH20) in combination with *nab*-paclitaxel plus gemcitabine compared with placebo plus *nab*-paclitaxel and gemcitabine in participants with hyaluronan-high stage IV previously untreated pancreatic ductal adenocarcinoma. NCT02715804

Barrett MT et al. **Clinical study of genomic drivers in pancreatic ductal adenocarcinoma.** *Br J Cancer* 2017;117(4):572-82.

Borazanci EH et al. **A phase II pilot trial of nivolumab (N) + albumin bound paclitaxel (AP) + paricalcitol (P) + cisplatin (C) + gemcitabine (G) (NAPPCG) in patients with previously untreated metastatic pancreatic ductal adenocarcinoma (PDAC).** Gastrointestinal Cancers Symposium 2018;**Abstract 358**.

Carnevale J, Ashworth A. **Assessing the significance of BRCA1 and BRCA2 mutations in pancreatic cancer.** *J Clin Oncol* 2015;33(28):3080-1.

Chiorean GE et al. **Randomized phase II study of 2nd-line FOLFIRI versus modified FOLFIRI with PARP inhibitor ABT-888 (veliparib) (NSC-737664) in metastatic pancreatic cancer (mPC): SWOG S1513.** *Proc ASCO* 2017;**Abstract TPS4147**.

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

Davendra S et al. **SWOG S1505: A randomized phase II study of perioperative mFOLFIRINOX vs gemcitabine/*nab*-paclitaxel as therapy for resectable pancreatic adenocarcinoma.** P*roc ASCO* 2017;**Abstract TPS4152**.

Doherty GJ et al. **HALO-109-301: A Phase III trial of PEGPH20 (with gemcitabine and *nab*-paclitaxel) in hyaluronic acid-high stage IV pancreatic cancer.** *Future Oncol* 2017;14(1):13-22.

Goldstein D et al. **Nomogram for predicting overall survival (OS) in patients (pts) treated with *nab*-paclitaxel (*nab*-P) plus gemcitabine (gem) or gem alone for metastatic pancreatic cancer (MPC).** *Proc ASCO* 2017;**Abstract 4109**.

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).

Hingorani SR et al. **HALO 202: Randomized phase II study of PEGPH20 plus *nab*-paclitaxel/gemcitabine versus *nab*-paclitaxel/gemcitabine in patients with untreated, metastatic pancreatic ductal adenocarcinoma.** *J Clin Oncol* 2018;36(4):359-66.

Jameson GS et al. **A phase Ib/II pilot trial with *nab*-paclitaxel plus gemcitabine plus cisplatin in patients (pts) with stage IV pancreatic cancer.** Gastrointestinal Cancers Symposium 2017;**Abstract 341**.

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.

Kunzmann V et al. **Tumor reduction in primary and metastatic pancreatic cancer lesions with *nab*-paclitaxel and gemcitabine: An exploratory analysis from a phase 3 study.** *Pancreas* 2017;46(2):203-8.

Neoptolemos JP et al. **Comparison of adjuvant gemcitabine and capecitabine with gemcitabine monotherapy in patients with resected pancreatic cancer (ESPAC-4): A multicentre, open-label, randomised, phase 3 trial.** *Lancet* 2017;389(10073):1011-24.

Nywening TM et al. **Targeting tumour-associated macrophages with CCR2 inhibition in combination with FOLFIRINOX in patients with borderline resectable and locally advanced pancreatic cancer: A single-centre, open-label, dose-finding, non-randomised, phase 1b trial.** *Lancet Oncol* 2016;17(5):651-62.

Ouyang G et al. **Gemcitabine plus cisplatin versus gemcitabine alone in the treatment of pancreatic cancer: A meta-analysis.** *World J Surg Oncol* 2016;14:59.

Picozzi VJ et al. **Initial gemcitabine/*nab*-paclitaxel (GA) followed by sequential (S) mFOLFIRINOX or alternating (A) mFOLFIRI in metastatic pancreatic cancer (mPC): The SEENA-1 study.** Gastrointestinal Cancers Symposium 2017;**Abstract 359**.

Ramanathan RK et al. **Correlation between ferumoxytol uptake in tumor lesions by MRI and response to nanoliposomal irinotecan in patients with advanced solid tumors: A pilot study.** *Clin Cancer Res* 2017;23(14):3638-48.

Sonbol MB et al. **Second-line treatment in patients with pancreatic ductal adenocarcinoma: A meta-analysis.** *Cancer* 2017;123(23):4680-6.