



Research

PANCREATIC CANCER ACTION NETWORK

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PANCREATIC CANCER: NEWS & UPDATES

June 2010

Adjuvant Chemoradiation Plus Interferon Alfa-2b Did Not Improve Survival in Pancreatic Cancer

<http://www.hemonctoday.com/article.aspx?rid=65798>

Treatment with adjuvant chemoradiation plus interferon alfa-2b did not result in statistically significant improvements in overall survival or disease-free survival for patients with resected pancreatic adenocarcinoma compared with treatment with 5-FU alone. Following resection, 110 patients were randomly assigned 5-FU plus folinic acid for 6 months or 5-FU, cisplatin and interferon alfa plus radiation. At follow-up at 26.9 months, median survival of patients treated with 5FU/FA was 28.5 months vs. 32.1 months for patients treated with chemoradiation and interferon. While there was clear separation between the survival curves, the difference in survival was not statistically significant.

New Therapeutic Intervention for Patients with Pancreatic Ductal Adenocarcinoma

<http://www.sciencedaily.com/releases/2010/06/100624104534.htm>

Pancreatic ductal adenocarcinoma (PDAC) is a highly malignant digestive tumor. Hypoxia-inducible transcription factor-1 α (HIF-1 α) is involved in malignant progression in many solid tumors, including pancreatic adenocarcinoma and upregulation of HIF-1 α . This study revealed that TLR4, NF- κ B p65 and HIF-1 α were overexpressed in PDAC. The expression of TLR4 and HIF-1 α was associated with tumor size, lymph node metastasis, venous invasion and pathological stage. Furthermore, the expression of TLR4 was positively correlated with expression of HIF-1 α . Thus, TLR4 may be a novel marker for the progression and prognosis of PDAC, and may provide a new strategy for therapeutic intervention.

Millions of Cancer Survivors Delay Care

<http://www.msnbc.msn.com/id/37683842/ns/health-cancer/>

According to a new study by Wake Forest University researchers, millions of cancer survivors put off getting medical care because they are unable to afford it. More than 2 million of 12 million US adult cancer survivors did not get one or more needed medical services. The study is being called the first to estimate how often current and former patients have skipped getting care because of financial concerns regardless of their insurance status, noting those with insurance may still have trouble with copays, deductibles and care not covered by their plan.

Popular Blood Pressure Pills Linked to Cancer

<http://www.msnbc.msn.com/id/37677091/ns/health-cancer/>

Some of the world's most popular blood pressure pills may slightly increase an individual's risk of getting cancer. In an analysis of five previous studies following about 60,000 patients, experts found a link between people taking medicines known as angiotensin-receptor blockers, or ARBs, and cancer. Researchers found that people who took these drugs had about a 1% higher risk of getting cancer than people who weren't on these drugs. The risk for the individual patient is modest, but from a population level, researchers note it can cause a lot of excess cancer worldwide. Scientists aren't sure why ARBs might raise the possibility of developing cancer, but animal studies suggest the medications help produce new blood vessels, which would speed tumor growth.

Expert Answers on Pancreatic Cancer: Genetics and Screening

<http://consults.blogs.nytimes.com/2010/06/10/experts-answers-on-pancreatic-cancer-genetics-and-screening/>

Dozens of readers recently posed questions about pancreatic cancer to the *New York Times* Consults blog. Dr. Eileen O'Reilly, a pancreatic cancer expert at Memorial Sloan-Kettering Cancer Center in New York, addresses concerns about the role of genetics in pancreatic cancer and screening for the disease.

AMG 479 Produces Promising Results in Metastatic Pancreatic Cancer

<http://news.cancerconnect.com/amg-479-produces-promising-results-in-metastatic-pancreatic-cancer/>

According to the results of a phase II clinical trial, treatment of metastatic pancreatic cancer with a combination of AMG 479 and gemcitabine resulted in better progression-free and overall survival than treatment with gemcitabine alone.

Scientists Uncover Protein That Thwarts Tumor Invasion

<http://www.sciencedaily.com/releases/2010/06/100607101802.htm>

Researchers at UT Southwestern Medical Center have determined that cancer cells lacking a key protein are more invasive and more likely to metastasize, providing a possible drug target to combat certain tumor types.

Reprogramming Immune System Cells to Produce Natural Killer Cells for Cancer

<http://www.medicalnewstoday.com/articles/191554.php>

A team of researchers developed a method to produce cells that kill tumor cells in the lab and prevent tumors forming in mouse models of cancer. If the research transfers to human biology, the new type of cell could be a new source for cell-based anticancer therapies.

Pivotal Phase III Trial of Novartis Drug Afinitor® met Primary Endpoint in Study of Patients with Advanced Pancreatic Neuroendocrine Tumors

<http://www.novartis.com/newsroom/media-releases/en/2010/1421290.shtml>

Novartis announced that a phase III study of Afinitor® (everolimus) tablets plus best supportive care met its primary endpoint, showing the drug significantly extended progression-free survival, or time without tumor growth, in patients with advanced pancreatic neuroendocrine tumors (NETs). The study, RADIANT-3 (RAD001 In Advanced Neuroendocrine Tumors) will be submitted for presentation at the European Society for Medical Oncology (ESMO) annual meeting taking place in Italy in October. Additionally, worldwide regulatory filings are planned for 2010.

Cysts Hold Clues to Pancreatic Cancer; Detection and Removal May Lower Cancer Risk

<http://www.sciencedaily.com/releases/2010/06/100603194005.htm>

The University of Michigan and Indiana University researchers have developed a method that can predict whether pancreatic cysts are benign or are precursors to invasive cancer. Pancreatic ductal adenocarcinoma develops from three types of cysts; current methods can only distinguish pre-cancerous cysts from those that are benign with up to 79% accuracy. Using fluid from a variety of cyst types, researchers looked to determine if any biomarkers could more accurately distinguish between pre-cancerous and benign cysts. They found several candidates, some of which could be used in combination to determine cyst type. Further study is needed to validate their findings but researchers are hopeful that this will provide more accuracy than current methods.

Small Advances Against Pancreatic Cancer

<http://www.nytimes.com/2010/06/08/health/08brod.html>

The New York Times published an article in the June 7th edition titled, "Small Advances Against Pancreatic Cancer." The article discusses the challenges and genetic components of the disease and includes interviews with Drs. Eileen O'Reilly, James Abbruzzese, and Terri Brentnall, the latter of whom is a member of the Pancreatic Cancer Action Network's Scientific Advisory Board.

Tiny Chemotherapy Bubbles Deliver a One-Two Punch to Knock Out Cancer

<http://www.cancercompass.com/cancer-news/article/33558.htm>

A new way to deliver cancer-fighting drugs using tiny particles made from lipids and chemotherapy drugs may have the power to knock out malignancies with a one-two punch. The strategy holds promise for patients with many different kinds of cancers. In a collaboration involving John Wayne Cancer Institute, Penn State College of Medicine and the University of Connecticut, researchers are testing microscopic "nanoliposomes" engineered to deliver therapeutic drugs that can both kill malignant cells and cripple the cancer's ability to resist further attack.

The Difference Between Palliative and Hospice Care: An Expert Interview

<http://www.medscape.com/viewarticle/723058?sssdmh=dm1.620579&src=nldne&uac=61043Sj>

This article addresses the difference between palliative and hospice care, and the ways clinicians can help patients make more use of those services.

NewLink Genetics' HyperAcute® Immunotherapy Phase 2 Study Shows Promise in Disease Free and Overall Survival for Resectable Pancreatic Cancer

<http://www.prnewswire.com/news-releases/newlink-genetics-hyperacute-immunotherapy-phase-2-study-shows-promise-in-disease-free-and-overall-survival-for-resectable-pancreatic-cancer-95718579.html>

NewLink Genetics Corporation today announced positive phase 2 clinical trial data of its HyperAcute®-pancreas cancer immunotherapy combined with standard adjuvant chemotherapy in patients with surgically resectable pancreatic cancer. The study results suggest a potentially longer disease-free survival and one-year overall survival in this patient group than reported in previous studies of surgery and adjuvant therapy alone. "The reported overall one year survival rate of 96 percent (based on Kaplan Meier Analysis) in this study was substantially higher than previously observed in similar pancreatic cancer patients undergoing surgical resection followed by chemotherapy and chemoradiotherapy," said lead investigator Jeffrey M. Hardacre, MD, University Hospitals Case Medical Center, Cleveland, Ohio.

Study Finds Cancer Information on Wikipedia is Accurate, But Not Very Readable

<http://www.acor.org/news/display.html?id=9569>

Most hold the belief that information on Wikipedia should not be trusted, since it is written and edited by Researchers from the Kimmel Cancer Center at Jefferson found that cancer information found on a wikipedia was similar in accuracy and depth to the information on a peer-reviewed, patient-oriented cancer web site. There is one caveat, however: the information on the peer-reviewed site was written in plainer English.

Threshold Pharmaceuticals Presents Promising Trial Results Using TH-302: Upcoming Phase 2 Trial for Metastatic Pancreatic Cancer

<http://investor.thresholdpharm.com/releasedetail.cfm?ReleaseID=476998>

Threshold presented results of two clinical trials; one phase 1/2 study looked at the safety, efficacy and pharmacokinetics of TH-302 in combination with gemcitabine or docetaxel or pemetrexed in patients with advanced solid tumors. In the gemcitabine treatment arm, 34 patients with advanced or metastatic pancreatic cancer have had at least one evaluable post-treatment tumor assessment, including one patient (3%) with a complete response and 8 patients (24%) with a partial response. Twenty-two patients (65%) achieved stable disease. Of the 34 assessed patients, 28 had elevated CA 19-9 levels at baseline and 17 of 28 (61%) had a CA19-9 reduction of greater than 50%. These clinical results provide the basis for moving forward with a randomized, controlled phase 2 clinical trial in 1st line pancreatic cancer. This trial is expected to start mid-year 2010 with interim and primary endpoint results available during 2011.

Targeted Immunotherapy Shows Promise for Metastatic Pancreatic Cancers

<http://www.sciencedaily.com/releases/2010/06/100601124137.htm>

Early trials using targeted monoclonal antibodies in combination with existing therapies show promise in treating pancreatic cancer and metastatic breast cancer. Penn researchers utilized CP-870,893, a CD40 agonist monoclonal antibody produced by Pfizer that enhances anti-tumor cellular immunity by activating tumor antigens and triggering the release of inflammatory cytokines. The antibody was combined with gemcitabine to treat pancreatic cancer patients who had not received any previous chemotherapy. The phase I study demonstrated that the combined therapy produced promising results without causing any significant toxicity. Three of the first 21 patients treated experienced partial regressions of their tumors, and 11 patients' disease stabilized, with the positive effects of the treatment observed in both the primary and metastatic tumors.

ASCO and FDA Work Together to Help Physicians Secure Investigational, Unapproved Drugs For Seriously Ill Patients in Need

<http://www.asco.org/ASCOv2/Press+Center/Latest+News+Releases/ASCO+News/ASCO+and+FDA+Work+Together+to+Help+Physicians+Secure+Investigational%2C+Unapproved+Drugs+For+Seriously+Ill+Patients+in+Need>

ASCO and the US Food and Drug Administration (FDA) jointly announced the launch of a new set of online resources to help physicians fully understand requirements for Expanded Access to investigational therapies. If there is scientific evidence to suggest that treatment with an unapproved therapy may be beneficial, and the patient has exhausted all other treatment options and is not eligible for a clinical trial, the FDA-regulated Expanded Access pathways allow physician access to an investigational agent for treatment purposes. The online module provides an introduction to the Expanded Access regulations,

outline the process for requesting Expanded Access, and explain physicians' legal responsibilities for treating patients with an investigational agent outside of a clinical trial.

Abstracts

Activism among Exceptional Patients with Cancer

<http://www.ncbi.nlm.nih.gov/pubmed/20512358>

"Exceptional patients" with cancer are survivors who had advanced cancer that was considered incurable by medical report and who subsequently became disease-free or experienced unexplained survival time given the nature of their disease or treatment. This study sought to understand advanced cancer patients' accounts of their experience with various cancers including breast, colorectal, pancreatic, ovarian cancer, glioblastoma multiforme, and others. The main recurrent theme was personal activism that was manifested in taking charge and getting involved in the process of diagnosis and treatment, as well as becoming more altruistic in their relationships with others.

Utility of Dynamic Contrast-enhanced MR Imaging in Assessment of Antiangiogenic Therapy

<http://www.ncbi.nlm.nih.gov/pubmed/20515976>

Pretreatment K(trans) measurement in pancreatic tumors can predict response to antiangiogenic therapy. All perfusion parameters showed substantial reduction after 28 days of combined chemotherapy and antiangiogenic therapy.

Prospective Study on Radiofrequency Ablation Locally Advanced Pancreatic Cancer

<http://www.ncbi.nlm.nih.gov/pubmed/20525559>

Radiofrequency ablation (RFA) has been suggested as a new treatment option for patients with locally advanced cancer. This study evaluated the efficacy and safety of intraoperative RFA in patients with unresectable, locally advanced, non-metastatic carcinoma of the pancreatic head. Researchers report RFA is a feasible procedure, but it presents a very high rate of postoperative complications and suggests no impact on survival.

Dietary Intake of Selected Micronutrients and the Risk of Pancreatic Cancer

<http://www.ncbi.nlm.nih.gov/pubmed/20530201>

Several studies have shown an inverse relation between vegetable and fruit intake and pancreatic cancer, but no specific beneficial component of such foods has been consistently identified. Researchers considered the role of 15 selected vitamins and carotenoids, and six minerals on pancreatic cancer risk in an Italian case-control study. The study involved 326 patients with incident pancreatic cancer and 652 controls. Micronutrient computation was based on a validated and reproducible food-frequency questionnaire. Comparing the highest to the lowest quintile of intake, the OR were 0.60 (95% CI 0.36-0.98) for vitamin E, 0.44 (95% CI 0.27-0.73) for vitamin C, 0.56 (95% CI 0.34-0.93) for folate, and 0.57 (95% CI 0.35-0.92) for potassium. The study's finding supports a favorable role of vitamins E and C, selected carotenoids, and folate on pancreatic carcinogenesis.

Salirasib in the Treatment of Pancreatic Cancer

<http://www.ncbi.nlm.nih.gov/pubmed/20528225>

The K-ras gene is mutated in over 90% of pancreatic cancer cases. Salirasib is a synthetic small molecule that acts as a potent Ras inhibitor. This study examined salirasib combined with standard doses of gemcitabine. The progression-free survival was 4.7 months. Future studies will determine whether salirasib adds to the anti-tumor activity of drugs approved by the US FDA for pancreatic cancer.

Treatment Trends and Outcomes of Patients with Stage III Pancreatic Adenocarcinoma in the Gemcitabine Era: Is It Time to Change?

<http://www.ncbi.nlm.nih.gov/pubmed/20110805>

A series of 650 patients treated between 1997 and 2007 at 10 Italian centers was analyzed to assess treatment trends and efficacy in stage III pancreatic adenocarcinoma. Most patients (95%) received up-front chemotherapy, which mainly consisted of gemcitabine alone (N=323), gemcitabine-based four-drug combinations (N=107), gemcitabine-platinum compound doublets (N=87), or intra-arterial gemcitabine-free triplets (N=57). The median and 1-year OS were 9.5 months and 35.5% for patients treated with gemcitabine; 8.9 months and 36.8% for those treated with gemcitabine-free intra-arterial triplets; 13.3 months and 55.8% for those treated with gemcitabine-platinating agent doublets; and 16.2 months and 62.6% for those treated with gemcitabine-based four-drug combinations. The use of a strategy consisting

of a gemcitabine-platinating agent containing chemotherapy followed by consolidation chemoradiation has been increasing over time and may represent a suitable choice in the therapeutic management of stage III pancreatic adenocarcinoma.

A Wandering Pancreatic Mass

http://www.jstage.jst.go.jp/article/internalmedicine/49/6/627/_pdf

There have been few reports of a wandering abdominal mass. Most cases concern a wandering spleen with a cyst, ovarian cyst, gastric leiomyoma, but not a pancreatic tumor. This brief article shares the case of a 35-year old woman with a wandering pancreatic mass.

Sociodemographics and Comorbidities Influence Decisions to Undergo Pancreatic Resection for Neoplastic Lesions

<http://www.ncbi.nlm.nih.gov/pubmed/20571928>

The reasons why patients do not undergo surgery for potentially resectable lesions are not well understood. The aim of this study was to determine the factors contributing to the decision not to operate for resectable pancreatic neoplasms. From 2004 to 2008, all patients with resectable pancreatic neoplasms at a single high-volume hepatopancreaticobiliary center were evaluated. Three hundred seventy-five patients with resectable pancreatic lesions were identified. Fifty-five (14.7%) did not undergo resection. Using an univariate analysis, age, non-English speaking background, and tumor type were associated with an increased risk of not undergoing resection. The majority of the 55 patients who did not undergo surgery declined when they were offered this treatment (45.5% of the cases). Resection was not offered in 15 of the 55 cases. Advanced age, tumor type, comorbidities, age, surgical risk, frailty and uncertain diagnosis were cited as reasons for not proceeding with surgery.

Novel Blood Biomarkers of Pancreatic Cancer-Associated Diabetes Mellitus Identified by Peripheral Blood-Based Gene Expression Profiles

<http://www.ncbi.nlm.nih.gov/pubmed/20571492>

The purpose of this study was to explore specific biomarkers that can differentiate pancreatic cancer-associated diabetes from type 2 diabetes, for the early detection of pancreatic cancer. 102 peripheral blood samples were collected from 25 patients diagnosed with pancreatic cancer and diabetes, 27 patients with pancreatic cancer without diabetes, 25 patients with diabetes mellitus >5 years, and 25 healthy controls. Results found 58 genes to be unique in patients with pancreatic cancer-associated diabetes, including 23 upregulated genes and 35 downregulated genes. Results indicate that the combination of VNN1 and MMP9 may be used as a novel blood biomarker panel for the discrimination of pancreatic cancer-associated diabetes from type 2 diabetes.

Combinatorial Drug Conjugation Enables Nanoparticle Dual-Drug Delivery

<http://www.ncbi.nlm.nih.gov/pubmed/20564488>

A new approach to loading multiple drugs onto the same drug-delivery nanocarrier in a precisely controllable manner, by covalently preconjugating multiple therapeutic agents through hydrolyzable linkers to form drug conjugates, is reported. In contrast to loading individual types of drugs separately, this drug-conjugates strategy enables the loading of multiple drugs onto the same carrier with a predefined stoichiometric ratio. The cleavable linkers allow the therapeutic activity of the individual drugs to be resumed after the drug conjugates are delivered into the target cells and unloaded from the delivery vehicle. As a proof of concept, the synthesis and characterization of paclitaxel-gemcitabine conjugates are demonstrated. The time-dependent hydrolysis kinetics and cytotoxicity of the combinatorial drug conjugates against human pancreatic cancer cells are examined. It is shown that the synthesized drug conjugates can be readily encapsulated into a lipid-coated polymeric drug-delivery nanoparticle, which significantly improves the cytotoxicity of the drug conjugates as compared to the free drug conjugates.

Surgical Treatment of Pancreatic Neuroendocrine Tumors

<http://www.ncbi.nlm.nih.gov/pubmed/20571266>

The role of surgery in patients with pancreatic neuroendocrine tumors was studied in 112 patients (aged 21-76 years) who underwent treatment between 1980 and 2003. Patient data related to demographics, diagnostic studies, surgical and tumor characteristics, and survival were retrospectively reviewed. The overall 5-year actual survival rate of patients with well-differentiated neuroendocrine carcinoma (n = 54) was 56%, significantly less than that of patients with well-differentiated neuroendocrine tumor (n = 46, 91%, p = 0.001). All the patients of poorly differentiated neuroendocrine carcinoma (n = 12) group died in 5 years. Pancreatic neuroendocrine tumors can be safely resected. Microscopic vascular invasion and

positive resection margin are helpful for predicting patient survival. Malignant cases should be treated with aggressive radical surgery to achieve complete tumor resection and potential for long-term survival.