PANCREATIC CANCER: NEWS & UPDATES

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CytRx Announces Plan to Initiate a Phase 2 Clinical Trial with INNO-206
http://www.medicalnewstoday.com/articles/175381.php
CytRx Corporation plans to initiate a phase II clinical trial with their doxorubicin prodrug INNO-206 as a treatment for patients with advanced pancreatic cancer.

Stored Fats May Make Cancer Cells More Aggressive - Finding Could Explain Link Between Obesity and Cancer
http://www.nlm.nih.gov/medlineplus/news/fullstory_93832.html
An enzyme that normally helps break down stored fats becomes highly active in some cancer cells and makes them more likely to spread, researchers at Scripps Research Institute report. When the enzyme, called monoacylglycerol lipase (MAGL), goes into overdrive in cancer cells, it breaks down stored fats to produce large amounts of free fatty acids, which are the building blocks of cell membranes and of fatty molecules that serve as signals between cells. These free fatty acids then produce other smaller molecules that promote cancer growth and progression. Researchers said MAGL might offer a new target for treating aggressive forms of cancer or for preventing cancer progression.

Obesity and Cancer: Effects on Risk, Screening and Mortality
http://www.hemonctoday.com/article.aspx?rid=59866
The link between obesity, cancer incidence and mortality has come under increased investigation. Over time, the list of specific malignancies associated with obesity has grown. Malignancies of the colon, endometrium, kidney, esophagus and postmenopausal breast cancer were linked to excess weight. Now, the list has expanded, and experts are starting to learn more about how many cancer cases can be attributed to obesity. Dr. James Abbruzzese of the MD Anderson Cancer Center studied the links between pancreatic cancer and obesity and feels any gains in decreasing cancer mortality will be lost with the overall aging population and obesity epidemic.

Octreotide Slows Neuroendocrine Tumor Growth
http://www.medscape.com/viewarticle/714064?src=mp&spon=7&uac=61043SJ
Dr. John Marshall of Georgetown University discusses neuroendocrine tumors in the above video link. Key points that are presented include: neuroendocrine tumors are on the rise; it's important to distinguish where the tumors come from because not all drugs work the same across all neuroendocrine tumors (e.g., pancreatic different from small bowel neuroendocrine tumors); and octreotide + sandostatin LAR have been shown in randomized trial to impact survival.

Having a Family Member Diagnosed Under Age 50 with Pancreatic Cancer Increases Risk
http://www.hemonctoday.com/article.aspx?rid=59976
http://www.sciencedaily.com/releases/2010/01/100112165244.htm
A person who has multiple family members with pancreatic cancer (familial pancreatic cancer) is six times as likely to develop that cancer. This risk is even higher, nine times that of the general population, if one of their relatives developed their cancer under the age of 50.

Plastic Preop Biliary Stents in Pancreatic Cancer Are Not Problem Free
http://www.medpagetoday.com/HematologyOncology/OtherCancers/17941
A study published in the *New England Journal of Medicine* reports that routine preoperative biliary drainage using a plastic stent increased the rate of serious complications in patients undergoing surgery for cancer in the head of the pancreas. The randomized multicenter trial of 196 patients showed that nearly three-quarters (74%) of those in the drainage group had had a serious complication compared with 39% of those who went directly into surgery.

Florida Insurers Covering Cancer Patients in Trials
http://www.miamiherald.com/news/politics/florida/story/1424009.html
Health insurers covering 90 percent of Florida's group market have agreed to pay for routine care of patients who participate in trials of new cancer drugs and treatments. Florida is the fifth state with such an agreement.

Targeting Barriers, Including Insurance Coverage, to Improve Clinical Trial Participation
http://www.cancer.gov/ncicancerbulletin/011210/page4
Lack of health insurance coverage for the routine cost of care for patients taking part in clinical trials, including doctor visits, hospital stays and blood work, is a major barrier to participation. Recognizing the threat that this burden poses to the clinical trial participation, a number of state legislatures have worked with their regional insurance federations to draft laws or agreements that ensure standard care coverage will not be denied even when provided in a clinical trial. Over half of states have added a routine health insurance provision for patients who enroll in clinical trials. There is currently no federal legislation mandating such coverage, but that could soon change. A clinical trials amendment was included in the health care reform bill passed late last month in the Senate. Senators Sherrod Brown (D-OH) and Kay Bailey Hutchison (R-TX) negotiated an agreement to include their amendment requiring insurers to cover routine care costs associated with clinical trials in the Senate health reform legislation (H.R. 3590). The provision covers cancer and other life-threatening diseases and applies to clinical trials funded or approved by the federal government, which includes NCI-funded and NCI-approved trials.

Access to Expensive Cancer Drugs Limited in Both the US and UK
http://www.medscape.com/viewarticle/715110?sssdmh=dm1.580916&src=nldne&uac=61043SJ
Common belief is that patients in the United States have easy access to very expensive cancer therapies, whereas those residing in countries with socialized or national healthcare systems, such as the United Kingdom, have restricted access. However, this is not quite the case, reports a team of bioethicists and health policy experts in the December issue of the *Milbank Quarterly.*

New Cancer Drugs Bring New Side Effects and Nurses Respond
http://www.cancer.gov/ncicancerbulletin/011210/page7
It's a consistent finding among patients who take cancer drugs known as EGFR inhibitors: Those who develop a severe rash, often on the face, tend to have better outcomes than those who don't. Along with other dermatologic side effects associated with these drugs, the rashes can produce such significant discomfort, distress, and even life-threatening infections that either the physician or the patient often decides to delay or stop treatment. Because many of the targeted therapies are oral and taken at home, it has to some extent given health professionals a loss of control over side effects. There is a need to educate patients about how to understand and cope with these potential side effects.

Stress Triggers Tumor Formation, Yale Researchers Find
http://www.acor.org/news/display.html?id=9175
Yale researchers report that stress induces signals that cause cells to develop into tumors. The research describes a novel way cancer takes hold in the body and suggests new ways to attack the deadly disease. Until now, most researchers believed that more than one cancer-causing mutation needed to take place in a single cell in order for tumors to grow. The Yale team illustrated that cancer-causing mutations can cooperate to promote tumor development even when they are located in different cells within a tissue.

Most Physicians Delay End-of-Life Talks
http://www.medpagetoday.com/HematologyOncology/OtherCancers/17871
Boston researchers report that most physicians prefer to wait until terminal patients develop symptoms or run out of therapeutic options before discussing end-of-life care. In a large survey presenting a hypothetical terminal-cancer case, fewer than half of physicians said they would broach such topics as do-not-resuscitate orders, hospice care, or preferred site of death while a patient was still feeling well. Moreover, only 65% of physicians would tell patients their prognosis immediately without being asked.

Progression-Free Survival Advantage with Sutent® in Patients with Pancreatic Neuroendocrine Tumors
http://www.pfizer.com/news/press_releases/pfizer_press_releases.jsp
http://www.medpagetoday.com/MeetingCoverage/ASCOGI/18116
Pfizer announced final results from their randomized phase 3 trial of Sutent (sunitinib malate) in patients with advanced pancreatic neuroendocrine tumors (NETs). Sunitinib more than doubled the time patients with pancreatic NETs lived without disease progression compared with patients treated with placebo. An independent Data Monitoring Committee recommended halting the trial in February 2009 because sunitinib showed significant benefit and the primary endpoint was met. The Phase 3 study findings served as the basis for the recent filing of supplemental applications for sunitinib in the treatment of pancreatic neuroendocrine tumors with the regulatory authorities in the US, Europe and Canada.

Study Shows Test for PAM4 Protein Can Reveal Early-Stage Pancreatic Cancer
http://www.medpagetoday.com/MeetingCoverage/ASCOGI/18090
http://www.webmd.com/cancer/pancreatic-cancer/news/20100120/pancreatic-cancer-detected-by-blood-test
Researchers report the development of a blood test that can spot pancreatic cancer earlier. The test uses an antibody that works like a heat-seeking missile, homing in and attaching to cells that carry a protein called PAM4 that appears to be very specific to pancreatic cancer. PAM4 is expressed by 90% of pancreatic cancers, but not by normal tissue, other types of cancer, or in patients who have pancreatitis. As a result, PAM4 constitutes a unique biomarker useful for early diagnosis of pancreatic cancer. The blood test identified a majority of stage I tumors in a preliminary evaluation involving tumor specimens. The assay had an overall sensitivity of 81%, ranging from 62% for stage I cancers to 91% for stage III/IV cancers.

New Test Can Spot Early Signs of Pancreatic Cancer 'Within Two Hours'
http://www.dailymail.co.uk/health/article-1244267/New-fast-track-test-spot-early-signs-pancreatic-cancer-hours.html
http://www.mediplacements.com/article-19573641-biomedical_scientists_develop.html
UK researchers report they have developed a urine test that can tell within a few hours if the patient has pancreatic cancer. The test works by detecting raised levels of a tumor marker in the urine of patients with pancreatic adenocarcinoma. The new testing process, which can reliably detect presence of the cancer in urine for the first time, has been praised as a promising step forward in treating people with the condition. Dr. David Tuveson, a recipient of a 2003 Pancreatic Cancer Action Network Career Development Award, current member of the Pancreatic Cancer Acton Network Scientific Advisory Board, and group leader in tumor modeling and experimental medicine at Cancer Research UK's Cambridge Research Institute, said that the test could overtake current methods for detection.

Agent Targets IGF Receptor in Pancreatic Cancer
http://www.medpagetoday.com/MeetingCoverage/ASCOGI/18124
A majority of patients with advanced pancreatic cancer had objective responses or stable disease when treated with an inhibitor of the insulin-like growth factor (IGF) receptor. A fourth of patients had partial responses that lasted beyond 11 months in some cases. Another third had disease stabilization during treatment with the monoclonal antibody MK-0646, plus chemotherapy and erlotinib.

Adjuvant Therapy Improves Survival in Pancreatic Cancer
http://www.medpagetoday.com/Oncology/OtherCancers/18039
Researchers reported, in the January issue of *Archives of Surgery,* that *a*djuvant chemoradiotherapy significantly improves survival of patients with resectable pancreatic cancer. In a review of nearly 3,000 medical records, chemoradiotherapy extended median survival by more than 30% compared with surgical resection only. Adjuvant chemoradiotherapy proved to be one of only three predictors of improved survival, the other two being treatment at high-volume and academic centers. However, the study had several prominent weaknesses: missing information on cancer stage in more than 50% of patients, unknown margin status, and no information on the type or duration of adjuvant therapy. The study authors state that this study will do "… little to quell the debate over the relative benefits of adjuvant chemoradiotherapy compared with chemotherapy alone after surgical resection of pancreatic cancer."

Scientists Show How Molecular Switch Helps Pancreatic Cancer Beat Drugs
http://www.acor.org/news/display.html?id=9237
http://www.sciencedaily.com/releases/2010/01/100128171818.htm
Dr. Andrew Lowy and colleagues at the Moores Cancer Center at the University of California, San Diego, have found a reason why pancreatic cancer tumors are so difficult to treat with drugs. They have shown how a molecular switch steps up pancreatic cancer cell survival as well as resistance to a standard chemotherapy drug, and have identified alternate routes cancer cells take to avoid the effects of the therapy. Their study provides new insights into pancreatic cancer development and new potential drug targets and treatment strategies against the disease.

Novel Induction Chemotherapy Regimen, Radiation Effective for Locally Advanced Pancreatic Adenocarcinoma
http://www.hemonctoday.com/article.aspx?rid=60468
Patients with locally advanced pancreatic adenocarcinoma participating in a multicenter phase-2 trial had a one-year OS greater than 66% when assigned a novel chemotherapy regimen followed by chemoradiotherapy. Sixty-nine patients with treatment-naive pancreatic adenocarcinoma were assigned two cycles of cetuximab, gemcitabine and oxaliplatin. Those patients who had not progressed at restaging were given concurrent cetuximab, capecitabine and radiation. In unresected patients, one-year OS was 68.7%, and median OS was 18.8 months. An unexpected finding was that a small number of patients were alive with no evidence of progression without surgery at three years (10.2%).

Three Newly Identified Genetic Variants May Help Explain Pancreatic Cancer Risk
http://www.webmd.com/cancer/pancreatic-cancer/news/20100125/new-genetic-links-for-pancreatic-cancer
At least three newly discovered genetic variants may contribute to pancreatic cancer risk. Researchers say it's the largest study to date to identify potential genetic risk factors for this disease noting that the findings merit further follow-up studies to confirm the role of these genetic variants in family-related pancreatic cancer.

Proteomics Study Reveals a Protein When Suppressed Makes Cancers more Susceptible to Chemotherapy
http://www.acor.org/news/display.html?id=9230
Taxanes, a group of cancer drugs that includes paclitaxel (Taxol®) and docetaxel (Taxotere®), have become front-line therapy for a variety of metastatic cancers. But as with many chemotherapy agents, resistance can develop, a frequent problem in a number of cancers. Now, cancer researchers at Children's Hospital Boston report a protein previously unknown to be involved in taxane resistance that could potentially be targeted with drugs, making a cancer more susceptible to chemotherapy.

Researchers Correct the Record about Behavior of Important Human Protein tied to Cancer
http://www.acor.org/news/display.html?id=9227
A University of New Mexico research team is challenging a prevailing belief about the behavior of a human protein linked to the formation of cancer, possibly breathing new life into the search for therapies that will inhibit that protein from "turning on" genes involved in abnormal cell proliferation.

Notable Abstracts

Dissecting Racial Disparities in the Treatment of Patients with Locoregional Pancreatic Cancer: a 2-Step Process
Previous studies show that black pancreatic cancer patients are less likely to undergo resection and have worse overall survival compared with white patients. This study determined whether these disparities occur at the point of surgical evaluation or after evaluation and report that 29% of black patients with potentially resectable pancreatic cancers never received surgical evaluation. Without surgical evaluation, patients cannot make an informed decision. Attaining higher rates of surgical evaluation in black patients is the first step to eliminating the observed disparity in the resection rate.

Pancreatic Cysts: Preoperative Diagnosis and Clinical Management
As patient management increasingly moves to nonsurgical options, accuracy in distinguishing mucinous from nonmucinous and benign from malignant mucinous pancreatic cysts is important. This review focuses on pseudocysts, serous cystadenomas, intraductal papillary mucinous neoplasms (IPMNs), and

mucinous cystic neoplasms. Of note, patients with pseudocysts almost always present with pancreatitis. Serous cystadenomas are benign and do not require resection. Neoplastic mucinous cysts are highly variable in their presentation and most are resected. Mucinous cystic neoplasms typically arise in the body or tail of the pancreas of middle-aged women. Branch duct IPMNs are more common in the pancreatic head of elderly men.

Biweekly Gemcitabine (GEM) in Combination with Erlotinib (ERL): An Active and Convenient Regimen for Advanced Pancreatic Cancer
The biweekly regimen of gemcitabine plus daily erlotinib regimen in patients with advanced (stage III-IV) pancreatic cancer has similar toxicity and efficacy to weekly administration.

Very High Serum CA 19-9 Levels: A Contraindication to Pancreaticoduodenectomy?
Patients who normalized their CA19-9 levels postoperatively had equivalent survival to patients with normal preoperative CA 19-9 levels. Preoperative serum CA 19-9 level by itself should not preclude surgery in patients who have undergone careful preoperative staging.

Family History of Cancer and Risk of Pancreatic Cancer: A Pooled Analysis From the Pancreatic Cancer Cohort Consortium (PANSCAN)
The study results confirm a moderate sized association between a family history of pancreatic cancer and risk of pancreatic cancer and also provide evidence for an association with a family history of prostate cancer worth further study.

Daily Oral Everolimus Activity in Patients with Metastatic Pancreatic Neuroendocrine Tumors After Failure of Cytotoxic Chemotherapy: A Phase II Trial
Daily everolimus, with or without concomitant octreotide LAR, demonstrates antitumor activity as measured by objective response rate and progression free survival and is well tolerated in patients with advanced pancreatic neuroendocrine tumors after failure of prior systemic chemotherapy.

Cisplatin and Etoposide as First-line Chemotherapy for Poorly Differentiated Neuroendocrine Carcinoma of the Hepatobiliary Tract and Pancreas
Cisplatin and etoposide combination as the first-line chemotherapy for hepatobiliary or pancreatic poorly differentiated neuroendocrine carcinoma had only marginal antitumor activity and relatively severe toxicity compared with previous studies on extrapulmonary poorly differentiated neuroendocrine carcinoma treated with the same regimen.

High Cancer Risk in Peutz-Jeghers Syndrome: A Systematic Review and Surveillance Recommendations
Peutz-Jeghers Syndrome patients are markedly at risk for several malignancies, in particular gastrointestinal cancers and breast cancer. On the basis of these elevated risks, a surveillance recommendation is developed to detect malignancies in an early phase and to remove polyps that may be premalignant and may cause complications.

Feasibility and Safety of Radiofrequency Ablation for Locally Advanced Pancreatic Cancer
Radiofrequency ablation of locally advanced pancreatic cancer is feasible and relatively well tolerated, with a 24% complication rate.

Importance of Age of Onset in Pancreatic Cancer Kindreds
Individuals with a family history of pancreatic cancer are at a statistically significantly increased risk of developing the disease. Having a member of the family with a young-onset pancreatic cancer confers an added risk in familial pancreatic cancer kindreds.

Clinical efficacy of CT-guided iodine-125 seed implantation therapy in patients with advanced pancreatic cancer
This study suggests that CT-guided brachytherapy using 125I seeds implantation appears to be safe, effective, uncomplicated, and could produce adequate pain relief for treating unresectable pancreatic cancer.

Survival Prediction for Pancreatic Cancer Patients Receiving Gemcitabine Treatment
Although gemcitabine monotherapy is the standard treatment for advanced pancreatic cancer, patient outcome varies significantly and a considerable number do not benefit adequately. The study searched for new biomarkers predictive of overall patient survival, and found that an increased level of alpha1-antitrypsin is a biomarker that predicts short overall survival of patients with advanced pancreatic cancer receiving gemcitabine monotherapy.

A Paracrine Pathway Regulates Pancreatic Cancer Cell Invasion
The ability of cancer to infiltrate along nerves is a common clinical observation in pancreas, head and neck, prostate, breast, and gastrointestinal carcinomas. For these tumors, nerves may provide a conduit for local cancer progression into the central nervous system. Neural invasion is associated with poor outcome, but the triggering mechanism is unknown. The researchers found that the migration of tumor cells along nerves was more rapid than that in the absence of nerves.

Five-Year Survival of Metastatic Pancreatic Carcinoma: A Study of Courage and Hope
Dr. Ben Chue of the Seattle Cancer Treatment and Wellness Center wrote a case study about his 35-year old metastatic pancreatic cancer patient. After undergoing two gemcitabine-based treatment regimens the patient showed further disease progression and experienced severe debilitation that hospice was suggested. Even with an ECOG performance status of 4, the patient elected to continue fighting and underwent a salvage regimen of paclitaxel, oxaliplatin, leucovorin, and 5-fluorouracil (POLF). Five years later the patient is doing extremely well with an ECOG score of 0. Because of the patient's unusually long survival, doubts arose as to the original diagnosis of metastatic pancreatic adenocarcinoma; however, diagnosis was reconfirmed on several occasions.

Survival Effects of Adjuvant Chemoradiotherapy After Resection for Pancreatic Carcinoma
Adjuvant chemoradiotherapy was found to provide a significant additional survival benefit to surgical resection for patients with pancreatic adenocarcinoma. Furthermore, this benefit is independent of the additional survival advantage when patients are treated at teaching facilities or high-volume centers. Although selection bias may be contributing to the observed differences, these data nonetheless support the use of adjuvant chemoradiotherapy for pancreatic cancer.

Phase I Study of the Botanical Formulation PHY906 with Capecitabine in Advanced Pancreatic and Other Gastrointestinal Malignancies
The botanical formulation, PHY906, has been used widely in Eastern countries to treat gastrointestinal symptoms including diarrhea, nausea and vomiting. PHY906 may also have anti-tumor properties and may potentiate the action of several chemotherapeutic agents based on pre-clinical studies. Researchers conducted a phase I using PHY906 in combination with capecitabine in patients with advanced pancreatic and gastrointestinal malignancies to determine the maximum tolerated dose of capecitabine in combination with PHY906.The combination was reported to be well tolerated and warrants further study.

Advanced Pancreatic Carcinoma: Current Treatment and Future Challenges
The authors review the current standards of care for patients with locally advanced and metastatic pancreatic carcinoma and outline some future directions for the development of new treatment strategies. Full article: http://www.nature.com/nrclinonc/journal/vaop/ncurrent/pdf/nrclinonc.2009.236.pdf

A Phase II Study of Isoflavones, Erlotinib, and Gemcitabine in Advanced Pancreatic Cancer
This phase II study focused on the effects of adding isoflavone to a regimen of gemcitabine and erlotinib on survival in patients with advanced pancreatic cancer. Researchers found that the addition of soy isoflavones to gemcitabine and erlotinib did not appear to increase survival.

Safety and Efficacy of Single-Day GemOx Regimen in Patients with Pancreatobiliary Cancer: A Single Institution Experience
A retrospective study evaluated the efficacy and safety of single-day modified GemOx (S-GemOx) in patients with pancreatic and biliary cancers. The S-GemOx regimen provides a convenient schedule. Toxicities appear to be comparable with GemOx. The incidence of neuropathy (3 vs 19.1%) and thrombocytopenia (5 vs 14%) are substantially lower compared with GemOx. Prospective studies of S-GemOx in a large patient population are warranted.

Intake of Fatty Acids and Antioxidants and Pancreatic Cancer in a Large Population-Based Case-Control Study in the San Francisco Bay Area

The association is examined between intake of specific fatty acids and antioxidants and risk of pancreatic cancer in a large population-based case-control study in the San Francisco Bay Area. Although similar decreased risks also were observed for high supplemental intake of these two vitamins, no association was observed for intake from food alone. These results support the hypotheses that a high intake of saturated and certain monounsaturated fatty acids may increase the risk of pancreatic cancer, whereas greater intake of omega-3 fatty acids, vitamins C and E may reduce the risk.

Consumption of Food Groups and the Risk of Pancreatic Cancer: A Case-Control Study

The study investigated whether the consumption of specific food groups predicted the risk of pancreatic cancer. This was a case-control study of nutrition and pancreatic cancer among French-Canadians in Montreal, Quebec, Canada. A total of 179 pancreatic cancer patients were enrolled along with 239 population-based controls. Both groups' dietary intake was evaluated via a validated food frequency questionnaire that gathers information on over 200 different food items and beverages. Researchers found a diet rich in vegetables and vegetable products may decrease the risk of pancreatic cancer.

Pancreatic Cancer Risk and ABO Blood Group Alleles: Results from the Pancreatic Cancer Cohort Consortium

A recent genome-wide association study (PanScan) identified significant associations at the ABO gene locus with risk of pancreatic cancer, but the influence of specific ABO genotypes remains unknown. Researchers determined ABO genotypes (OO, AO, AA, AB, BO, and BB) in 1,534 cases and 1,583 controls from 12 prospective cohorts in PanScan, grouping participants by genotype-derived serologic blood type (O, A, AB, and B), and concluded that ABO genotypes were significantly associated with pancreatic cancer risk.