# PANCREATIC CANCER: NEWS & UPDATES September 28, 2008

**FUNDING OPPORTUNITY:** Applications are being accepted until Noon (ET), November 10, 2008 at proposalCentral for 2009 Pancreatic Cancer Action Network – AACR Research Grants. Previous recipients of Pancreatic Cancer Action Network Grants may be eligible to apply. For details: http://www.pancan.org/Research/AACR_grants08.html

### Pancreatic Cancer: Years of Modest or Disappointing Results Point to a Need for a New Direction in Clinical Trials

http://www.hemonctoday.com/article.aspx?rid=31541
*HemOnc Today* spoke with a handful of pancreatic cancer experts, including Drs. Robert Wolff, Eileen O'Reilly, Andrew Ko and several others, about the progress (or lack thereof) in recent years and the potential direction for the future of pancreatic cancer care.

### Armed With Knowledge, Driven to Fight

http://www.nytimes.com/2008/09/23/health/23voic.html?_r=1&adxnnl=1&oref=slogin&ref=science&adxnnlx=1222182270-i2Zl6Fkf9NDAAMNGQ2jM4g
The Health section of the *New York Times* recently featured an article about AMA president and pancreatic cancer survivor Dr. Ron Davis.

### Jefferson Scientists Deliver Toxic Genes to Effectively Kill Pancreatic Cancer Cells

http://www.eurekalert.org/pub_releases/2008-09/tju-jsd092308.php
http://www.sciencedaily.com/releases/2008/09/080923121952.htm
Jefferson University researchers report achieving a substantial "kill" of pancreatic cancer cells by using nanoparticles to successfully deliver a deadly diphtheria toxin gene. The findings, to be published in the October issue of *Cancer Biology & Therapy,* reflect the first time this unique strategy has been tested in pancreatic cancer cells, and the success seen offers promise for future pre-clinical animal studies, and possibly, a new clinical approach.

### Utilization and Determinants of Adjuvant Therapy Among Older Patients Who Receive Curative Surgery for Pancreatic Cancer

http://www.ncbi.nlm.nih.gov/pubmed/18797424?dopt=AbstractPlus
A population-based study using the Surveillance, Epidemiology, and End Results (SEER) data to assess the utilization, determinants, and survival effects of adjuvant therapies after surgery among older patients with pancreatic cancer. Patients over 65 years of age who received surgical resection for their pancreatic cancer between 1992 and 2002 were examined. Approximately 49% of patients received adjuvant therapy after surgery. Patient factors (age, income, location, and disease stage) and hospital factors (size, cooperative group affiliation) were associated with increased receipt of adjuvant therapy. Adjuvant treatments associated with a significant reduction in 2-year mortality (relative to surgery alone) were chemoradiation or radiation alone but not chemotherapy alone.

### Promising Approach in Prevention and Treatment of Pancreatic Cancer

http://www.sciencedaily.com/releases/2008/09/080925094715.htm
This study investigated the growth inhibitory effects of erlotinib (EGFR inhibitor) in pancreatic cancer cells in vitro and in vivo. The overexpression of the epidermal growth factor receptor correlates with rapidly progressive disease, resistance to chemotherapy, and poor prognosis. Inhibition of EGFR may be a promising adjuvant in chemotherapeutic strategy in the treatment of pancreatic cancer. The results demonstrate that EGFR signaling pathway is an important target in pancreatic cancer.

### Medicare HMO Costs May Prevent Cancer Patient Clinical Trial Participation

http://www.eurekalert.org/pub_releases/2008-09/uops-mhc091808.php

According to a study by the University of Pittsburgh Cancer Institute, newly diagnosed cancer patients enrolled in Medicare's Health Maintenance Organization (HMO) plans may be unlikely to participate in clinical trials because of prohibitive costs. Under these HMO plans, which covers people 65 years of age and older, patients are required to pay both a deductible and 20% of the treatment cost. According to the lead author of the study, two-thirds of cancer patients are age 65 or older, with 60% of new cancers—and 70% of cancer-related deaths—occurring in this age group. At the same time, less than one-third of clinical trial participants fall into this age group. Patients often cite cost and insurance coverage as barriers to their participation.

### Mirtazapine and Fluoxetine in Treating Pancreatic Cancer (mouse model)

http://www.eurekalert.org/pub_releases/2008-09/wjog-im092308.php

Dr. Jia Lin of the Guangzhou Medical College in China evaluated the effectiveness of mirtazapine and fluoxetine on body weight, ingestive behavior, locomotor activity and tumor growth in a pancreatic cancer mouse model in a six-week period trial. They found that mirtazapine increased appetite and partly reversed the rate of weight loss. The potential effectiveness of weight gain was associated with an increase in food intake. However, fluoxetine produced a significant suppression of food intake and promoted weight loss. Both mirtazapine and fluoxetine didn't affect the pancreatic tumor growth.

Link to the scientific publication in the *World Journal of Gastgoenterology*: http://www.wjgnet.com/1007-9327/14/4377.pdf

### Research Showing Drug Failure Published Less Often

http://www.bloomberg.com/apps/news?pid=20601124&sid=a3sPE.5wN8NY&refer=science

http://www.eurekalert.org/pub_releases/2008-09/plos-hot091808.php

Over half of all supporting trials for FDA-approved drugs remained unpublished 5 years after approval, according to new research published in this week's *PLoS Medicine*. The most important trials determining efficacy, and those with statistically significant results and larger sample sizes, are more likely to be published

For the complete article click here: http://www.plos.org/press/plme-05-09-sim.pdf

### Clinical Value of Serum CA19-9 Levels in Evaluating Resectability of Pancreatic Carcinoma

http://www.eurekalert.org/pub_releases/2008-09/wjog-ic092408.php

CA19-9 level is useful in diagnosis and prognosis of pancreatic cancer but little is known about the value of serum CA19-9 levels in evaluating the resectability of pancreatic carcinoma. This study examined the CA19-9 levels of both resectable and unresectable pancreatic cancer patients and found that serum CA19-9 is a useful marker in evaluating the respectability of pancreatic cancer, noting that increased serum levels of CA19-9 (> 353.15 U/mL) can be regarded as an ancillary parameter for unresectable pancreatic cancer.

Link to the scientific publication: http://www.wjgnet.com/1007-9327/14/3750.pdf

### Pancreatic Cancer - New Options When an Old Enemy Returns

http://www.eurekalert.org/pub_releases/2008-09/gumc-now091308.php

http://www.sciencedaily.com/releases/2008/09/080921162008.htm

Georgetown researchers reported at the recent annual meeting of the American Society for Therapeutic and Radiology Oncology (ASTRO) that CyberKnife is a safe treatment option with an acceptable safety profile for some recurrent pancreatic cancer patients. Researchers reviewed the records of patients treated for pancreatic cancer at Georgetown from June 2002 through July 2007. Twenty-eight patients were treated for locally recurrent disease, of which two patients experienced serious GI toxicity (one peripancreatic abscess, one bowel obstruction) after being treated with three sessions of radiosurgery. Median survival from the date of radiosurgery treatment was 5.3 months (range 1-27 months). Seven patients lived more than 8 months after treatment. The researchers report that the preliminary survival trends look good with an acceptable safety profile for those receiving radiosurgery, but are not conclusive until more studies evaluate if radiosurgery with CyberKnife can extend survival when compared with usual care.

### Cyberknife Helps Cancer Patients

http://abclocal.go.com/wabc/story?section=news/health&id=6357201 (includes a 2-minute video)
WABCTV channel 7 in New York, NY aired a story about the use of Cyberknife at Riverview Medical Center in Red Bank New Jersey. The video features a patient diagnosed with inoperable pancreatic cancer and said to have four months to live. After Cyberknife treatment he is said to be is doing well three years later. Recall that CyberKnife is not a proven therapy for pancreatic cancer and is not without complications.

### Effective Chemoradiotherapy Method for Pancreatic Cancer

http://www.eurekalert.org/pub_releases/2008-09/wjog-tec091808.php
http://www.medicalnewstoday.com/articles/122265.php
Complete article: http://www.wjgnet.com/1007-9327/14/5311.asp
Japanese researchers performed a retrospective analysis to evaluate chemoradiotherapy for locally advanced pancreatic cancer utilizing low dose gemcitabine as a radiation sensitizer administered twice weekly. The median survival was 15.0 mo and the overall 1-year survival rate was 60%, while the median progression-free survival was 8.0 mo. Chemoradiotherapy with low-dose gemcitabine administered twice weekly could be effective for patients with locally advanced pancreatic cancer; however, patients developing liver metastases had a worse prognosis. Another chemoradiotherapy strategy might be needed for those patients, such as administrating one or two cycles of chemotherapy initially, followed by chemoradiotherapy for the cases with no distant metastases. Although this study was not a controlled study, the results of the median survival time, median disease free survival time and overall 1-year survival rate was found to be preferable compared to previous studies.

### FTC Sweep Stops Peddlers of Bogus Cancer Cures - Public Education Campaign Counsels Consumers, "Talk to Your Doctor"

http://www.ftc.gov/opa/2008/09/boguscures.shtm *(thanks to Megan for forwarding to me)*
Last week, the Federal Trade Commission announced 11 law enforcement actions challenging deceptive advertising of bogus cancer cures. The FTC charged the companies with making unsupported claims that their products cured or treated one or more types of cancer. In each case, the company is charged with violating the FTC Act, which bars deceptive claims. The FTC originally identified 112 websites making non-medical cancer-cure claims. Each was sent a warning letter "telling them they must have adequate substantiation for any health claims they make about their products." Within two months, about 30% of the sites had closed down or removed unsubstantiated claims. Now action is being taken against the rest. The FTC has launched a website http://www.ftc.gov/curious to provide the public with tools to spot and report bogus cancer claims.

### New Drug Extends Survival in Advanced Pancreatic Cancer in Phase 2 Trial

http://www.medscape.com/viewarticle/580571?sssdmh=dm1.385615&src=nldne
Researchers reported at the annual European Society for Medical Oncology meeting that a phase II trial showed that patients with inoperable pancreatic cancer live substantially longer when given MediGene's experimental drug EndoTAG-1 on top of standard chemotherapy. Patients survived up to 13.6 months on EndoTAG-1 plus gemcitabine compared with an average 7.2 months for those on gemcitabine alone. Although a phase III trial is planned, Dr. Margaret Tempero the discussant for this paper and a member of the Pancreatic Cancer Action Network's Scientific Advisory Board, cautioned that while many investigational agents show promising results in phase II pancreatic cancer trials, they fail to show efficacy in subsequent phase III studies. One of Dr. Tempero's criticisms of the trial is that the patient group included both stage III and IV patients which research has shown are vastly different sets of patients who have very different outcomes. She feels that the researchers should carefully review the data (e.g., determine which patients actually responded to the combination therapy) before initiating a phase III trial.

### RAD001 Combined With Sandostatin(R) LAR(R) and as Monotherapy Controls Growth of Pancreatic Neuroendocrine Tumours (NETs)

http://www.medicalnewstoday.com/articles/121888.php
http://www.prnewswire.co.uk/cgi/news/release?id=237152

Researchers reported the results of the RADIANT-1 (RAD001 In Advanced Neuroendocrine Tumours) trial at the annual European Society for Medical Oncology meeting this week. RADIANT-1 was a phase II international study that studied 160 patients with advanced pancreatic NET, who were resistant to prior treatment with cytotoxic chemotherapy. Patients either received monotherapy with RAD001 or combination treatment with Sandostatin + RAD001. 82% of patients experienced clinical benefit when treated with daily RAD001 and monthly Sandostatin. 77% of patients experienced clinical benefit when treated with daily RAD001. Results from this trial show the promise of RAD001, with or without Sandostatin, to provide tumor shrinkage or stability and to extend time without disease progression in patients who have limited treatment options.

### MMWR Surveillance Summary for Cancers Associated With Tobacco Use--United States, 1999-2004

Abstract: http://www.ncbi.nlm.nih.gov/pubmed/18772853?dopt=AbstractPlus
Report: http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5708a1.htm *(provides state-level cancer incidence data and trends for cancers associated with tobacco use)*

According to the MMWR report, there were 176,409 cases (11.2 per 100,000 persons) of pancreatic cancer diagnosed in the U.S. during 1999—2004. Note the following patterns:

- Incidence rates were higher among men than women (12.8 and 9.8, respectively).
- Blacks had the highest rates (14.5), followed by whites (10.9), and Asian Pacific Islanders (8.6).
- Non-Hispanics had higher rates than Hispanics (11.2 and 10.3, respectively).
- Among men in 2004, pancreatic cancer rates were highest in the Northeast (13.8) and lowest in the West (11.7).
- Rates among women were highest in the Northeast (10.9) and lowest in the Midwest (9.2).

Connecticut, DC, Louisiana, New Jersey, and New York had some of the highest rates of pancreatic cancer among men (13.7--14.8) and women (10.9--12.3).

### Edgy University of Arizona Researcher Targets Side Effects of Chemotherapy

http://www.tucsoncitizen.com/ss/local/96793.php

Dr. Laurence Hurley of the University of Arizona has gone off research's beaten path in efforts to develop breakthrough therapies for cancer and other diseases. Hurley received a new type of National Institutes of Health grant designed to develop huge health benefits from "wild and crazy" exciting new ideas. NIH, which funds many “conservative” research efforts, has tended to shy away from backing proposals for groundbreaking, innovative, "edgy" projects until NIH started the Exceptional, Unconventional Research Enabling Knowledge Acceleration (EUREKA) program. Having lost his father to pancreatic cancer, Hurley pledged over thirty years ago to devote his life’s work to fighting cancer.

### Viral 'Magic Bullet' Targets Cancer Cells with Help of New Compound

http://www.eurekalert.org/pub_releases/2008-09/mu-vb091608.php

Canadian researchers report a significant breakthrough in the use of viruses to target and destroy cancer cells, a field known as oncolytic virotherapy. They discovered that a family of compounds called histone deacetylase inhibitors (HDIs) may be the missing link that turns oncolytic viruses into a potent new weapon against cancer. Human trials may begin within a year or two.

**OU Cancer Institute Scientists Identify New Cancer Stem Cell Marker; Developing Drug to Stop Cancer Recurrence**
http://www.ouhsc.edu/article-display.asp?idnum=1302
Current therapies generally do not target stem cells in cancerous tumors, allowing the stem cells to wait until after chemotherapy or radiation treatments to begin dividing. Researchers believe these stem cells are often responsible for the return of cancer after treatment. OU Cancer Institute scientists have found a way to isolate cancer stem cells in tumors so they can target the cells and kill them, keeping cancer from returning after conventional treatments are complete.

**Antiangiogenic Drugs Impede Chemotherapy-Stimulated Tumor Recovery**
http://www.sciencedaily.com/releases/2008/09/080908135900.htm
Clinical trials have indicated that antiangiogenic drugs can sometimes enhance the effectiveness of traditional chemotherapy. The delivery of bevacizumab with paclitaxel improves survival benefits for metastatic breast cancer and small cell lung cancer; in contrast, the combination of bevacizumab with gemcitabine for treatment of pancreatic cancer does not increase the effectiveness of chemotherapy alone. Researchers believe they have determined a mechanism on how antiangiogenic drugs in combination with chemotherapy may amplify the antitumor effects of chemotherapy

**Looking for a Cancer Cure in all the Wrong Places**
http://www.hemonctoday.com/article.aspx?rid=31147
Patients are often willing to try unproven 'cures,' but may not disclose that information to their physician. Patients want to believe there is a cure out there that even their doctor does not understand. The attitude surrounding alternative therapies is more religion than science. Some patients believe that pharmaceutical companies and physicians are conspiring to withhold information about alternative products that could help cure their disease noting that alternative therapies are often promoted as "secret" cures.

**Novel Advances in Pancreatic Cancer Treatment**
http://www.medscape.com/viewarticle/577641?src=mp&spon=7&uac=61043SJ
Drs. Vulfovich and Rocha-Lima of the Sylvester Comprehensive Cancer Center at the University of Miami, review the novel agents that may change the current approach in treating and managing pancreatic cancer.

**Comprehensive Genetic Blueprints Revealed For Lethal Pancreatic, Brain Cancers**
http://www.hopkinskimmelcancercenter.org/news/index.cfm?documentid=993&newstype=News%20Releases&action=showthisitem
Researchers at Johns Hopkins, Howard Hughes Medical Institute and Duke University probed every gene in pancreatic and brain cancer and report that cancer's molecular machinery is much more intricate than anyone imagined. The researchers sequenced the more than 20,000 genes in cells from 24 patients with advanced pancreatic cancer and 22 with brain cancer. The typical pancreatic cancer contained 63 genetic alterations and the average brain tumor 60. Hopkins identified 12 core pathways that were abnormal in most pancreatic tumors noting that each pathway does different thing, meaning that finding drugs that block those pathways will not be easy and that targeted therapies may not work broadly, because they affect only one mutated gene, while dozens of mutations cause cancer. Click on the following link to see the scientific abstract concerning the pancreatic cancer findings, "*Core Signaling Pathways in Human Pancreatic Cancers Revealed by Global Genomic Analyses.*" http://www.sciencemag.org/cgi/content/short/1164368

**Living with Colon, Pancreatic Cancer**
http://www.cbsnews.com/video/watch/?id=4401762n
CBS aired on 8/31 a two-minute video on the status of colon and pancreatic cancer. The video features an interview with Dr. Robert Maher, Director of GI Oncology at the Dana Farber Cancer Institute. One of the topics he discusses is the initial promising results of vaccine therapy in treating pancreatic cancer.

### HIV Therapy Shows Promise Against Pancreatic Cancer

http://www.medicalnewstoday.com/articles/118819.php
http://www.mrc.ac.uk/consumption/groups/public/documents/content/mrc004786.pdf
The first clinical trial to use an HIV drug as cancer therapy has shown that it can help increase chances of recovery from pancreatic cancer. When given in combination with the usual chemotherapy and radiotherapy, Nelfinavir helped shrink previously inoperable tumors so that they could be surgically removed. This is the first publication of a clinical trial using a drug developed to target HIV in cancer therapy. Researchers are currently planning a phase II study in patients with inoperable pancreatic cancer.

### Endoscopic Ultrasound Highly Accurate in Evaluating Ambiguous Radiographic Findings of the Pancreas

http://www.eurekalert.org/pub_releases/2008-08/asfg-euh082708.php
St. Louis University School of Medicine researchers report that EUS and EUS-FNA is 99.1% accurate in diagnosing pancreatic neoplasms in patients who were referred for endoscopic ultrasound (EUS) because of CT and/or MRI reports of two common, though somewhat ambiguous findings - enlargement of head of pancreas or dilation of the pancreatic duct.

### Normal Cells May Predict Cancer Virulence

http://www.healthday.com/Article.asp?AID=618840
Memorial-Sloan Kettering Cancer Center researchers report that characteristics of normal cells, which are present long before any cancerous tumor appears, may determine how virulent a particular cancer is going to be. Such cells may travel early on to distant sites in the body, residing innocently there until certain cancer genes are turned on. The finding implies that treatments that only target malignant cells may not be effective.

### Optimism, Mastery Help Cancer Patients Cope

http://www.nlm.nih.gov/medlineplus/news/fullstory_68541.html
Cancer patients commonly suffer from both pain and fatigue, which have a major impact on their quality of life and their ability to function both mentally and physically. Patients who are optimistic are better able manage the severity of their pain, while those with a strong sense of mastery (control over their environment) can control their fatigue more effectively while also keeping pain severity in check.

### Normalizing Tumor's Blood Vessels May Improve Cancer Therapy

http://www.acor.org/news/whatsnew.html?item_id=7131
Chemotherapy drugs often never reach the tumors they are intended to treat, and radiation therapy is not always effective, because the blood vessels feeding the tumors have abnormal features that impair the delivery of circulating chemotherapeutic drugs to the actual tumor.

### Anti-cancer Flower Power: Researchers Combat Cancer with a Jasmine-based Drug

http://www.sciencedaily.com/releases/2008/08/080825132111.htm
Tel Aviv researchers have developed an anti-cancer drug based on a decade of research into the commercial applications of the compound Jasmonate, a synthetic compound derived from the Jasmine flower. Both blood cancers and solid tumors seem to be responsive to the jasmonate compound.