



## Pancreatic Cancer Facts 2014

### **Pancreatic cancer is one of the DEADLIEST CANCERS.**

- Pancreatic cancer is the 11<sup>th</sup> most commonly diagnosed cancer in men and the 9<sup>th</sup> in women, but the 4<sup>th</sup> leading cause of cancer death for both men and women in the United States.<sup>1</sup>
- Pancreatic cancer is the only major cancer with a five-year relative survival rate in the single digits.<sup>1, 2</sup>
- Unlike many other cancers, the survival rate for the disease has not improved substantially since passage of the *National Cancer Act* over 40 years ago. Since 1975, the five-year relative survival rate for pancreatic cancer has moved from 2 percent to only 6 percent, while the overall five-year relative survival rate has moved from 49 percent to 68 percent.<sup>1</sup>
- It is estimated that in 2014, 46,420 Americans will be diagnosed with pancreatic cancer, and 39,590 will die from the disease.<sup>1</sup> Seventy-three percent of patients will die within the first year of diagnosis.<sup>1</sup>
- Of all the racial/ethnic groups in the United States, African-Americans have the highest incidence rate of pancreatic cancer, between 31 percent and 65 percent higher than the other groups.<sup>3</sup>
- While overall cancer incidence and death rates are declining, the incidence and death rates for pancreatic cancer have been increasing.<sup>1</sup> The number of new pancreatic cancer cases in the United States has been projected to increase by 55 percent between 2010 and 2030.<sup>4</sup>
- Pancreatic cancer is projected to surpass breast and colorectal cancer to become the second leading cause of cancer death in the United States by 2020.<sup>5</sup>

### **Little is known about risk factors, and there are NO EARLY DETECTION METHODS.**

Today, only a few risk factors for pancreatic cancer are known. More research is needed to understand their direct relationship to the disease. Further complicating matters, there are no effective early detection methods available, and most symptoms are vague and could be attributed to many different conditions.

- Symptoms include pain (usually abdominal or back pain), weight loss, jaundice (yellowing of the skin and eyes), loss of appetite, nausea, changes in stool, and diabetes.
- The disease is often diagnosed late because of the location of the pancreas deep in the body, the absence of definitive symptoms, and the lack of good early detection methods. More than half of patients are diagnosed when they have advanced (metastatic) disease that has spread to other organs.<sup>1</sup>

### **Treatment options are EXTREMELY LIMITED.**

The treatment options for pancreatic cancer are only minimally effective. Research in the area of pancreatic cancer treatment is desperately needed.

- Surgery offers the best chance for survival, yet only about 15 percent of pancreatic adenocarcinoma cases are diagnosed early enough for surgery.<sup>6</sup> Furthermore, the disease will recur in approximately 80 percent of patients who undergo surgery, and they will die within five years of recurrence.<sup>7</sup> The Whipple (pancreaticoduodenectomy) is the most common surgical procedure. Surgery to remove pancreatic tumors may be preceded and/or followed by chemotherapy or chemotherapy with radiation.
- For nonsurgical candidates, chemotherapy, possibly with radiation, is typically offered. While these treatments may be beneficial for some patients, they are not considered curative.
- Only three drugs have been approved since 1974 by the U.S. Food & Drug Administration (FDA) to treat pancreatic adenocarcinoma: gemcitabine (Gemzar<sup>®</sup>) in 1996, erlotinib (Tarceva<sup>®</sup>) in 2005, and albumin-bound paclitaxel (Abraxane<sup>®</sup>) in 2013, the latter two in combination with gemcitabine.
- In 2011, the FDA approved two drugs, sunitinib malate (Sutent<sup>®</sup>) and everolimus (Afinitor<sup>®</sup>), which improve progression-free survival for pancreatic neuroendocrine tumors. Pancreatic neuroendocrine tumors make up less than 5 percent of all pancreatic cancer diagnoses and are typically slower growing and less aggressive than the more common type of pancreatic cancer (adenocarcinoma).



## Unique research challenges require SPECIFIC SOLUTIONS.

Some aspects of pancreatic cancer research present significant challenges. The challenges are not insurmountable, but they require disease-specific solutions focused on improving survival rates. Furthermore, solving the most difficult problems will spur greater scientific advances in the entire field of cancer research.

- Pancreas tissue is very difficult to obtain for research because it is located deep within the abdomen. Because of the aggressive nature of the disease and late diagnoses, patients often die quickly or are too sick to participate in clinical trials.
- Pancreatic tumors include dense fibrotic tissue not found in most other solid tumors that often thwarts treatment.
- Historically, pancreatic cancer research has been underfunded. The relatively high survival rates associated with breast cancer and HIV/AIDS indicate that federal research funding levels are critical to increasing survival.

## There is HOPE.

In February 2014, the NCI released the “Scientific Framework on Pancreatic Adenocarcinoma”, the first report required under the *Recalcitrant Cancer Research Act* of 2012. This critical report, and the others that will hopefully follow on other deadly cancers, defined as those with a five-year relative survival rate below 50 percent, will help provide the strategic direction needed to change patient outcomes in our nation’s deadliest cancers. Indeed, as a result of the pancreatic cancer framework, or strategic plan, new research is being fostered on the role the KRAS gene plays in this devastating disease. The report also holds out promise for new research on the link between diabetes and pancreatic cancer, biomarkers for early detection of pancreatic cancer, and studying new immunotherapy treatments.

## What we are asking from CONGRESS

While we commend Congress and President Obama for enacting the *Recalcitrant Cancer Research Act*, and the NCI for beginning the implementation, our work is far from complete. The pancreatic cancer statistics call for aggressive measures now to develop early detection and treatment tools before it becomes the 2<sup>nd</sup> leading cancer killer in the U.S.

We are encouraged by the increased support that Congress gave to the Department of Defense’s (DoD) Peer-Reviewed Cancer Research (PRCRP) last year and by the inclusion of pancreatic cancer in the program once again, but we are deeply concerned that NCI funding is falling dangerously behind where it needs to be. In fact, over the last decade, NIH has lost approximately 20 percent of its purchasing power because funding has not kept pace with the rate of biomedical inflation. Added to that, the NCI budget was cut by over 5 percent last year, largely as a result of sequestration. The FY 2014 Omnibus added back some of those cuts, but NCI funding is still far behind where it needs to be, and it faces more cuts in FY 2016. We cannot hope to have success in diseases like pancreatic cancer if this situation continues. Further, it will be very difficult to leverage the opportunities that come out of the scientific framework developed as a result of the *Recalcitrant Cancer Research Act* if the funding levels do not improve.

### The Pancreatic Cancer Action Network calls on the 113<sup>th</sup> Congress to give current and future pancreatic cancer patients a fighting chance by:

- Providing \$5.26 billion for the National Cancer Institute for FY 2015.
- Continuing to include pancreatic cancer in the Department of Defense (DoD) Peer-Reviewed Cancer Research Program (PRCRP) and providing continued funding of at least \$25 million for the program.
- Ensuring that the provisions of the *Recalcitrant Cancer Research Act* are fully implemented.
- Joining the Congressional Caucus on the Deadliest Cancers.

<sup>1</sup> American Cancer Society. *Cancer Facts & Figures 2014*. Atlanta: American Cancer Society; 2014.

<sup>2</sup> “Major cancer” is defined as one tracked by both the American Cancer Society and the National Cancer Institute.

<sup>3</sup> Surveillance, Epidemiology, and End Results (SEER) Program, National Cancer Institute. “Age-Adjusted SEER Incidence Rates and Trends for the Top 15 Cancer Sites by Race/Ethnicity, Both Sexes” ([http://seer.cancer.gov/csr/1975\\_2010/results\\_merged/topic\\_race\\_ethnicity.pdf](http://seer.cancer.gov/csr/1975_2010/results_merged/topic_race_ethnicity.pdf)).

<sup>4</sup> Smith BD, Smith GL, Hurria A, Hortobagyi GN, Buchholz TA. Future of Cancer Incidence in the United States: Burdens Upon an Aging, Changing Nation. *J Clin Oncol*. 2009; 27:2758-65.

<sup>5</sup> Rahib L, Smith BD, Aizenberg R, Rosenzweig AB, Fleshman JM, and Matrisian LM: Projecting Cancer Incidence and Deaths to 2030: The Unexpected Burden of Thyroid, Liver, and Pancreas Cancers in the United States. *Cancer Research*, 2014; 74(11): p. 2913-2921.

<sup>6</sup> Li D, Xie K, Wolff R, Abbruzzese JL. Pancreatic Cancer. *Lancet*. 2004; 363:1049-1057.

<sup>7</sup> Oettle H, Post S, Neuhaus P, et al. Adjuvant Chemotherapy With Gemcitabine vs Observation in Patients Undergoing Curative-Intent Resection of Pancreatic Cancer: A Randomized Controlled Trial. *JAMA*. 2007;297:267-277.