



## 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 of pancreatic cancer and death rate 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>
- A recent report issued by the Pancreatic Cancer Action Network found that in 2020, pancreatic cancer is expected to become the second leading cause of cancer death in the United States.<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 pancreas' location 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.

There are currently no curative treatments for pancreatic cancer. Research in the area of pancreatic cancer treatment is desperately needed.

- Surgery offers the best opportunity for survival, though 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 most common surgical procedure is called the Whipple (pancreaticoduodenectomy). Surgery to remove pancreatic tumors may be preceded and/or followed by chemotherapy or chemotherapy with radiation.
- For the patients who are not surgical 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 (Sutent<sup>®</sup> and Afinitor<sup>®</sup>) that 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 unique and significant challenges. The challenges are not insurmountable, but disease-specific solutions focused on improving survival rates are required. Furthermore, solving the most difficult and challenging problems will spur greater scientific advances in the entire field of cancer research.

- Historically, pancreatic cancer research has been underfunded. Only approximately 2 percent of the National Cancer Institute's (NCI) budget is allocated to this leading killer. We know from the relatively high survival rates associated with breast cancer and HIV/AIDS that federal research funding levels matter in the fight to find new cures and directly relate to improved survival rates.
- Pancreas tissue is very difficult to obtain for research. The pancreas is located deep within the abdomen and is not easy to reach for tissue samples. Also, patients often die quickly because of the aggressive nature of the disease and late diagnoses.
- Pancreatic tumors include dense fibrotic tissue not found in most other cancer types that may contribute to their remarkable resistance to chemotherapy.
- Because patients are often extremely sick and die quickly, few are able to participate in clinical trials.

## What we are asking from **CONGRESS**

The Pancreatic Cancer Action Network has long advocated for ensuring that there is a national strategic plan and accountability for making progress on pancreatic and other recalcitrant cancers and therefore applauds Congress for passing the *Recalcitrant Cancer Research Act* in December 2012. This legislation, which was signed into law on January 2, 2013, calls on the NCI to develop scientific frameworks for pancreatic and lung cancer, which will help provide the strategic direction needed to make true progress in these deadly cancers. These reports are due in July 2014. Under the statute, the director may also develop scientific frameworks for other deadly or recalcitrant cancers, defined as those with a five-year relative survival rate below 50%. We look forward to updating Congress on the implementation of this important first step in improving pancreatic cancer survival.

While we commend Congress and President Obama for enacting this legislation, our work is far from complete. The pancreatic cancer statistics call for aggressive measures now to develop early detection and treatment tools before incidence dramatically increases, but NCI funding is falling dangerously behind. 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. 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:

- Ensuring that the provisions of the *Recalcitrant Cancer Research Act* are fully implemented.
- Providing sustained adequate funding for the National Cancer Institute.

<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.

<sup>5</sup> Matrisian LM, Aizenberg R, Rosenzweig A: The alarming rise of pancreatic cancer deaths in the United States: why we need to stem the tide today, Manhattan Beach, CA, Pancreatic Cancer Action Network, 2012, [www.pancan.org/section\\_research/reports/pdf/incidence\\_report\\_2012.pdf](http://www.pancan.org/section_research/reports/pdf/incidence_report_2012.pdf).

<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.