CANCER of the PANCREAS

WHAT YOU NEED TO KNOW

HIRSCHBERG FOUNDATION
FOR PANCREATIC CANCER RESEARCH
ABOUT THE HIRSHBERG FOUNDATION

Founded in 1997, The Hirshberg Foundation was the first national, nonprofit organization dedicated to advancing pancreatic cancer research, providing financial aid, information, resources and support to pancreatic cancer patients and their families. Our mission statement is:

• To find a cure for pancreatic cancer in honor of Ron Hirshberg and the thousands of people who are diagnosed with this disease each year.

• To create a premier Pancreatic Cancer Center where all needs of pancreatic cancer patients can be met in one location with the most advanced treatment options.

• To be recognized as a patient support reference source for pancreatic cancer patients and their families.

• To fund projects and programs designed to improve patient care, treatment and, ultimately, pancreatic cancer survival rates.

• To integrate and unite generations, young and old, through physical fitness participation, while creating public awareness and raising money to find a cure for pancreatic cancer.

We want you to know that you are not alone in this journey. If there are resources you need or if you would like to talk with someone that has been affected by pancreatic cancer, our office is open Monday through Friday and we are available by email. We offer a Patient and Family Support Coordinator and other resources for you and your family.

In addition, videos of the expert panel presentations at the annual Hirshberg Symposium dealing with this subject matter are available on our website.

For more information on pancreatic cancer, please visit our website at www.pancreatic.org or call (310) 473-5121. You can also email us at info@pancreatic.org. You can either download and print our booklet or contact the office and we would be happy to mail out a hard copy.

The Hirshberg Foundation for Pancreatic Cancer Research
2990 S. Sepulveda Blvd., #300C
Los Angeles, CA 90064

(310) 473-5121 (phone) · (310) 473-5107 (fax)
www.pancreatic.org · info@pancreatic.org
The Hirshberg Foundation for Pancreatic Cancer Research has created this booklet for you, the patients and families that have been affected by pancreatic cancer.

In keeping with our mission, we are offering this booklet to help guide patients and their families through their experience with the disease. We hope that this will help you to actively participate in your own care and to make decisions with your medical team. Please note that the italicized words throughout the text will be found in the Glossary of Terms in the back on page 36.

There are two main types of pancreatic cancer. Most often, pancreatic cancer starts in the ducts that carry pancreatic juices. This type is called exocrine pancreatic cancer or pancreatic ductal adenocarcinoma. This booklet is about this type. Less often, pancreatic cancer begins in the cells that make hormones. This type is called pancreatic endocrine, islet cell cancer, or neuroendocrine tumor. This booklet discusses

**DIAGNOSIS AND STAGING**

**TREATMENT AND SUPPORTIVE CARE**

**TAKING PART IN CLINICAL TRIALS**

This book also contains lists of questions that you may want to discuss at your doctor appointments. In the back of the book is a note section where you can take notes. You may want to have a family member or friend with you at your appointment to help listen or take notes.

This book is meant to be used as a guide and not as a substitute for consulting with a qualified health professional who is familiar with your individual medical needs. The material contained in this book is not intended as advice regarding diagnosis, treatment, or any other medical information.
The pancreas is an organ that is about 6 inches long. It’s located deep in your belly between your stomach and backbone. Your liver, intestine, and other organs surround your pancreas.

THE PANCREAS

PANCREAS AND NEARBY ORGANS

The head, body, and tail of the pancreas are referred to as: head, body, tail.

HEAD, BODY, AND TAIL OF THE PANCREAS

- head
- body
- tail
- pancreatic duct
The widest part of the pancreas is called the head. The head of the pancreas is closest to the *small intestine*. The middle section is called the body, and the thinnest part is called the tail.

The pancreas makes pancreatic juices. These juices contain *enzymes* that help break down and digest food. The juices flow through a system of *ducts* leading to the main *pancreatic duct*. The pancreatic juices flow through the main duct to the *duodenum*, the first part of the small intestine.

The pancreas is also a *gland* that makes *insulin* and other hormones. These hormones enter the bloodstream and travel throughout the body. They help the body use or store the energy that comes from food. For example, insulin helps control the amount of sugar in the blood.

**CANCER CELLS**

Cancer begins in cells, the building blocks that make up *tissues*. Tissues make up the pancreas and the other organs of the body.

Normal cells grow and divide to form new cells as the body needs them. When normal cells grow old or get damaged, they die, and new cells take their place.

Sometimes, this process goes wrong. New cells form when the body doesn’t need them, and old or damaged cells don’t die as they should. The buildup of extra cells often forms a mass of tissue called a growth or *tumor*.

Tumors in the pancreas can be *benign* (not cancer) or *malignant* (cancer). Benign tumors are not as harmful as malignant tumors:

**BENIGN TUMORS**
(such as *adenoma*)
- are usually not a threat to life
- can be removed and usually don’t grow back
- don’t invade the tissues around them
- don’t spread to other parts of the body

**MALIGNANT GROWTHS**
- may be a threat to life
- sometimes can be removed but can grow back
- can invade and damage nearby tissues and organs
- can spread to other parts of the body
When you get a diagnosis of cancer, it’s natural to wonder what may have caused the disease. Doctors can’t always explain why one person gets pancreatic cancer and another doesn’t. However, we do know that people with certain risk factors may be more likely than others to develop cancer of the pancreas. A risk factor is something that may increase the chance of getting a disease.

Studies have found the following risk factors for cancer of the pancreas:

**SMOKING**
Smoking tobacco is the most important risk factor for pancreatic cancer. People who smoke tobacco are more likely than nonsmokers to develop this disease. Heavy smokers are most at risk.

**DIABETES**
People with type II diabetes, also known as adult-onset diabetes, are more likely than other people to develop pancreatic cancer over time.

Pancreatic cancer can invade other tissues, shed cancer cells into the abdomen, or spread to other organs:

**INVADE**
A malignant pancreatic tumor can grow and invade organs next to the pancreas, such as the stomach or small intestine.

**SHED**
Cancer cells can shed (break off) from the main pancreatic tumor. Shedding into the abdomen may lead to new tumors forming on the surface of nearby organs and tissues. The doctor may call these seeds or implants. The seeds can cause an abnormal buildup of fluid in the abdomen (ascites).

**SPREAD**
Cancer cells can spread by breaking away from the original tumor. They can spread through the blood vessels to the liver and lungs. In addition, pancreatic cancer cells can spread through lymph vessels to nearby lymph nodes. After spreading, the cancer cells may attach to other tissues and grow to form new tumors that may damage those tissues. See the Staging section on page 14 for information about cancer of the pancreas that has spread.
**FAMILY HISTORY**
Having a mother, father, sister, or brother with pancreatic cancer increases the risk of developing the disease by 2-3 times.

**INFLAMMATION OF THE PANCREAS**
*Pancreatitis* is a painful *inflammation* of the pancreas. Having pancreatitis for a long time (called chronic pancreatitis) may increase the risk of pancreatic cancer.

**OBESITY**
People who are overweight or obese are slightly more likely than other people to develop pancreatic cancer.

**ETHNICITY**
African-Americans have a higher incidence of pancreatic cancer compared to individuals of Asian, Hispanic or Caucasian descent. There is also a higher incidence of pancreatic cancer among Ashkenazi Jews, possibly due to a *gene* mutation involving the breast cancer BRCA gene.

Many other possible risk factors are under active study. For example, researchers are studying whether a diet high in fat (especially animal fat) or heavy drinking of alcoholic beverages may increase the risk of pancreatic cancer. Another area of active research is whether certain *genes* increase the risk of disease.

Many people who get pancreatic cancer have none of these risk factors, and many people who have known risk factors don’t develop the disease.

**SYMPTOMS**

Early cancer of the pancreas often doesn’t cause symptoms. When the cancer grows larger, you may notice one or more of these common symptoms:

- Dark urine, pale stools, and yellow skin and eyes from *jaundice*
- Pain in the upper part of your belly
- Pain in the middle part of your back that doesn’t go away when you shift your position
- Nausea and vomiting
- Stools that float in the toilet
Also, advanced cancer may cause these general symptoms:

- Weakness or feeling very tired
- Loss of appetite or feelings of fullness
- Weight loss for no known reason

These symptoms may be caused by pancreatic cancer or by other health problems. People with these symptoms should tell their doctor so that problems can be diagnosed and treated as early as possible. If the diagnosis is pancreatic cancer, you should try to find a medical oncologist or a surgeon who specializes in pancreatic cancer.

**DIAGNOSIS**

If you have symptoms that suggest cancer of the pancreas, your doctor will try to find out what's causing the problems.

You may have blood or other lab tests. Also, you may have one or more of the following tests:

**PHYSICAL EXAM**
Your doctor feels your abdomen to check for changes in areas near the pancreas, liver, gallbladder, and spleen. Your doctor also checks for an abnormal buildup of fluid in the abdomen. Also, your skin and eyes may be checked for signs of jaundice.

**COMPUTERIZED TOMOGRAPHY** *(CT scan)*
An x-ray machine linked to a computer takes a series of detailed pictures of your pancreas, nearby organs, and blood vessels in your abdomen. You may receive an injection of contrast material so your pancreas shows up clearly in the pictures. Also, you may be asked to drink water so your stomach and duodenum show up better. On the CT scan, your doctor may see a tumor in the pancreas or elsewhere in the abdomen.

**ULTRASOUND**
Your doctor places the ultrasound device on your abdomen and slowly moves it around. The ultrasound device uses sound waves that can’t be heard by humans. The sound waves make a pattern of echoes as they bounce off internal organs. The echoes create a picture of your pancreas and other organs in the abdomen. The picture may show a tumor or blocked ducts.
ENDOSCOPIC ULTRASOUND (EUS)
Your doctor passes a thin, lighted tube (endoscope) down your throat, through your stomach, and into the first part of the small intestine. An ultrasound probe at the end of the tube sends out sound waves that you can’t hear. The waves bounce off tissues in your pancreas and other organs. As your doctor slowly withdraws the probe from the intestine toward the stomach, the computer creates a picture of the pancreas from the echoes. The picture can show a tumor in the pancreas. It can also show whether the cancer has invaded the blood vessels.

Some doctors also use the following tests:

ENDOSCOPIC RETROGRADe CHOLANGIOPANCREATOGRAPHY (ERCP)
The doctor passes an endoscope through your mouth and stomach, down into the first part of your small intestine. Your doctor slips a smaller tube through the endoscope into the bile ducts and pancreatic ducts. After injecting dye through the smaller tube into the ducts, the doctor takes x-ray pictures. The x-rays can show whether the ducts are narrowed or blocked by a tumor or other condition.

MAGNETIC RESONANCE IMAGING (MRI)
A large machine with a strong magnet linked to a computer is used to make detailed pictures of areas inside your body.

POSITRON EMISSION TOMOGRAPHy (PET scan)
You’ll receive an injection of a small amount of radioactive sugar. The radioactive sugar gives off signals that the PET scanner picks up. The PET scanner makes a picture of the places in your body where the sugar is being taken up. Cancer cells show up brighter in the picture because they take up sugar faster than normal cells do. A PET scan may show a tumor in the pancreas. It can also show cancer that has spread to other parts of the body.

NEEDLE BIOPSY
The doctor uses a thin needle to remove a small sample of tissue from the pancreas. EUS or CT may be used to guide the needle. A pathologist uses a microscope to look for cancer cells in the tissue. Technically, this is called a fine needle aspiration.
You may want to ask the doctor these questions before having a biopsy:

Do you recommend that I have a biopsy? If so, why?

How long will it take? Will I be awake? Will it hurt?

Is there a risk that a needle biopsy procedure will cause the cancer to spread? What are the chances of infection or bleeding after the biopsy? Are there any other risks?

How soon will I know the results? How do I get a copy of the pathology report?

If I do have cancer, who will talk with me about treatment? When?
If cancer of the pancreas is diagnosed, your doctor needs to learn the extent (stage) of the disease to help you choose the best treatment.

Staging is a careful attempt to find out the following:
• The size of the tumor in the pancreas
• Whether the tumor has invaded nearby tissues
• Whether the cancer has spread, and if so, to what parts of the body

When cancer of the pancreas spreads, the cancer cells may be found in nearby lymph nodes or the liver. Cancer cells may also be found in the lungs or in fluid collected from the abdomen.

When cancer spreads from its original place to another part of the body, the new tumor has the same kind of abnormal cells and the same name as the original (primary) tumor. For example, if pancreatic cancer spreads to the liver, the cancer cells in the liver are actually pancreatic cancer cells. The disease is metastatic pancreatic cancer, not liver cancer. It’s treated as pancreatic cancer, not as liver cancer. Doctors sometimes call the new tumor in the liver “distant” disease.

To learn whether pancreatic cancer has spread, your doctor may order CT scans or EUS.

Also, a surgeon may look inside your abdomen with a laparoscope (a thin, tube-like device that has a light and a lens for seeing inside the body). The surgeon inserts the laparoscope through a small incision near your belly button. The surgeon will look for any signs of cancer inside your abdomen. You’ll need general anesthesia for this exam.

These are the stages of cancer of the pancreas:

**Stage I**
The tumor is found only in the pancreas.

**Stage II**
The tumor has invaded nearby tissue but not nearby blood vessels. The cancer may have spread to the lymph nodes.

**Stage III**
The tumor has invaded nearby blood vessels.

**Stage IV**
The cancer has spread to a distant organ, such as the liver or lungs.
T-N-M CLASSIFICATION CHARACTERISTICS

T 1 Limited to the pancreas ≤ 2cm
T 2 Limited to the pancreas > 2cm
T 3 Direct extension outside the pancreas
T 4 Direct extension adjacent large vessels

N 0 Regional lymph nodes not involved
N 1 Regional lymph nodes involved

M 0 No distant metastasis
M 1 Distant metastasis present

STAGING SYSTEM T-N-M

RESECTABLE

Stage IA T1, N0, M0
Stage IB T2, N0, M0
Stage IIA T3, N0, M0
Stage IIB T1-3, N1, M0

Stage III T4, N0-1, M0
Stage IV any T, any N, M1
YOUR HEALTH CARE TEAM

Talking to your doctor can be difficult, no matter what the diagnosis is. Just hearing about it can be overwhelming. Good communication with your doctor or healthcare provider can help improve the quality of care you receive. We would suggest that you try to put a team of medical experts together for an opinion. Some facilities have a team-approach, but some places you need to seek out your specialists. Your list could include, but is not limited to the following:

Gastroenterologist, Integrative Medicine, Medical Oncologist, Nurse Case Manager, Oncology Certified Nurses, Pain Management Specialist, Pathologists, Pharmacist, Psychologist, Radiation Oncologist, Registered Dietitian, Surgical Oncologist, Social Worker

SECOND OPINION

Before starting treatment, you may want a second opinion about your diagnosis, the stage of cancer, and the treatment plan. You may also want to find a medical center that has a lot of experience treating people with pancreatic cancer. Some people worry that the doctor will be offended if they ask for a second opinion. Usually the opposite is true. Most doctors welcome a second opinion. Many health insurance companies will pay for a second opinion if you or your doctor requests it. Some companies require a second opinion.

If you get a second opinion, the second doctor may agree with your first doctor’s diagnosis and treatment plan. Or, the second doctor may suggest another approach. Either way, you have more information and perhaps a greater sense of control. You can feel more confident about the decisions you make, knowing that you’ve looked at all of your options.

It may take some time and effort to gather your medical records and see another doctor. In most cases, it’s not a problem to take several weeks to get a second opinion. The delay in starting treatment usually will not make treatment less effective. To make sure, you should discuss this delay with your doctor.
SOME TIPS THAT CAN HELP YOU TALK WITH YOUR DOCTORS AT YOUR APPOINTMENT:

Bring someone with you
It is always helpful to have a second set of ears, someone to help take notes and someone to bring up other questions.

Write out a list of questions before your appointment
The list will help to remind you of things to ask the doctor.

Write down the answers you get
Writing down the answers in the office will help when you sit down with family and go over information to discuss from your appointment.

If possible, record your appointment
It is okay to ask your doctor if you can record your appointment. Taping is helpful so that you can be sure you heard the correct information at your appointment.

There are many ways to find a doctor for a second opinion. Ask your doctor, a nearby hospital or medical school for the names of specialists. **The Hirshberg Foundation for Pancreatic Cancer Research** offers second opinion referrals for patients. The Hirshberg Foundation can be reached at **(310) 473-5121** or **www.pancreatic.org**

RECORDS NEEDED FOR A SECOND OPINION
- Most recent history and physical
- CT, MRI, and/or PET scan (report and images) most imaging facilities will put the images on a CD
- Last 2 or 3 sets of labs with a “tumor marker” trend. For pancreatic cancer, the most useful tumor marker is called CA19-9.
- Pathology report (usually the tissue samples are not needed – check with the facility where you are getting the 2nd opinion)
- Surgical report – any procedures or surgeries you had related to your diagnosis
- Chemotherapy flow sheet – this sheet gives exact dosages and dates of the treatment you received
- Radiation flow sheet – this sheet gives exact dosages and dates of the radiation you received
You may want to ask your doctor these questions before you begin treatment:

What is the stage of the disease? Has the cancer spread?

Do I need any more tests to find out whether I can have surgery? What is the goal of treatment? What are my treatment choices? Which do you suggest for me? Why?

What are the expected benefits of each treatment?

What can I do to prepare for treatment?

Will I need to stay in the hospital? If so, for how long?

What are the risks and possible side effects of each treatment? How can side effects be managed?

If I have pain, how will you treat it?

What is treatment likely to cost? Will my insurance cover it?

How will treatment affect my normal activities? Am I likely to have eating or other problems?

Would a research study (clinical trial) be a good choice for me?

Can you recommend other doctors who could give me a second opinion about my treatment options?

How often should I have checkups?
TREATMENT

Treatment options for people with cancer of the pancreas are surgery, chemotherapy, targeted therapy, immunotherapy, and radiation therapy. You may receive one or a combination of these types of treatment.

The treatment that’s right for you depends mainly on the following:
• The location of the tumor in your pancreas
• Whether the disease has spread
• Your age and general health

At this time, cancer of the pancreas can be cured only when it’s found at an early stage (before it has spread) and only if surgery can completely remove the tumor. For people who can’t have surgery, other treatments may be able to help them live longer and feel better.

You may want to talk with your doctor about taking part in a clinical trial. Clinical trials are research studies testing new treatments. They are an important option for people with all stages of cancer of the pancreas. See the Taking Part in Cancer Research section on page 30.

You should have a team of specialists to help plan your treatment. Your doctor may refer you to a specialist, or you may ask for a referral. Specialists who treat cancer of the pancreas include surgeons, medical oncologists, radiation oncologists, and gastroenterologists. Your health care team may also include an oncology nurse.

For help relieving or reducing pain, you may work with a specially trained doctor, a nurse, a palliative care team, or another pain control specialist. See the Supportive Care section on page 32.

For help reducing eating problems and maintaining your weight, you may work with a registered dietitian. See the Nutrition section on page 31.

Your health care team can describe your treatment choices, the expected results of each, and the possible side effects. Because cancer treatments often damage healthy cells and tissues, side effects are common. These side effects depend on many factors, including the type and extent of treatment. Side effects may not be the same for each person, and they may even change from one treatment session to the next. Before treatment starts, ask your health care team about possible side effects and how treatment may change your normal activities. You and your health care team can work together to develop a treatment plan that meets your needs.
Surgery may be an option for people with an early stage of pancreatic cancer. The surgeon usually removes only the part of the pancreas that has cancer. But, in some cases, the whole pancreas may be removed.

The type of surgery depends on the location of the tumor in the pancreas. Surgery to remove a tumor in the head of the pancreas is called a Whipple procedure. The Standard Whipple Procedure (or a modification of it called the Pylorus Preserving Whipple Procedure) is the most common type of surgery for pancreatic cancer. You and your surgeon may talk about the types of surgery and which may be right for you.

In addition to part of your pancreas, the surgeon may remove the following nearby tissues:
- Part of the stomach (Standard Whipple only), all of the duodenum (Standard Whipple only), or only part of the duodenum (Pylorus Preserving Whipple only). In the Pylorus Preserving Whipple Procedure, no stomach is removed.
- Gallbladder
- Part of the bile duct

If the cancer is in the body or tail of the pancreas instead of the head, the surgeon may remove your spleen and nearby lymph nodes, along with the part of the pancreas that contains the cancer. This is called a Distal Pancreatectomy.

Surgery for pancreatic cancer is a major operation. You will need to stay in the hospital for 7-10 days afterward. Your health care team will watch for signs of bleeding, infection, or other problems.

It takes time to heal after surgery, and the time needed to recover is different for each person. You may have pain or discomfort for the first few days. Medicine can help control your pain. Before surgery, you should discuss the plan for pain relief with your health care team. After surgery, they can adjust the plan if you need more pain control. See the Supportive Care section on page 32.

It’s common to feel weak or tired for a while. You may need to rest at home for one to three months after leaving the hospital.

After surgery, it may be hard to digest food. For four to six weeks after Whipple surgery, you may feel bloated or full. A dietitian can help you change your diet to reduce your discomfort. Problems with eating usually go away within three months. See the Nutrition section on page 31.
WHIPPLE PROCEDURE

before procedure

after procedure
PYLORUS PRESERVING WHIPPLE PROCEDURE

before procedure

after procedure

DISTAL PANCREATECTOMY PROCEDURE

before procedure

after procedure
Chemotherapy uses drugs to kill cancer cells. Most people with pancreatic cancer get chemotherapy. For early pancreatic cancer, chemotherapy is usually given as adjuvant chemotherapy after surgery, but in some cases, it is given as neoadjuvant chemotherapy, or before surgery. For advanced cancer, chemotherapy is used alone, or with radiation therapy.

Chemotherapy for pancreatic cancer is usually given by vein (intravenous). The drugs enter the bloodstream and travel throughout your body.

Chemotherapy may be given in an outpatient part of the hospital, at the doctor’s office, or at home. Rarely, you may need to stay in the hospital.

The side effects depend mainly on which drugs are given and how much. Chemotherapy kills fast-growing cancer cells, but the drugs can also harm normal cells that divide rapidly:

**BLOOD CELLS**
When drugs lower the levels of healthy blood cells, you’re more likely to get infections, bruise or bleed easily, and feel very weak and tired. Your health care team will check for low levels of blood cells. If your levels are low, your health care team may stop the chemotherapy for a while or reduce the dose of the drug. There are also medicines that can help your body make new blood cells.

**HAIR LOSS**
Chemotherapy may cause hair loss. If you lose your hair, it will grow back after treatment, but the color and texture may be changed.

**OTHER SIDE EFFECTS**
Chemotherapy can cause a poor appetite, nausea and vomiting, diarrhea, or mouth and lip sores. Your health care team can give you medicines and suggest other ways to help with these problems. They usually go away when treatment ends. Some drugs used for pancreatic cancer also may cause tingling or numbness in your hands and feet. Your health care team can suggest ways to control many of these side effects.
You may want to ask your doctor these questions about chemotherapy:

- Why do I need this treatment?
- Which drug or drugs will I have?
- How do the drugs work?
- When will treatment start? When will it end?
- Will I have any long-term side effects?

TARGETED THERAPY

People with cancer of the pancreas who can’t have surgery may receive a type of drug called targeted therapy.

- Targeted cancer therapies are drugs or other substances that interfere with specific molecules involved in cancer cell growth and survival. Traditional chemotherapy drugs, by contrast, act against all actively dividing cells.

- Targeted cancer therapies that have been approved for use against specific cancers include agents that prevent cell growth signaling, interfere with tumor blood vessel development, promote the death of cancer cells, stimulate the immune system to destroy cancer cells and deliver toxic drugs to cancer cells.

Ask your Medical Oncologist whether you are a candidate for such treatment.
Radiation therapy uses high-energy X-rays to kill cancer cells. It can be given along with other treatments, including chemotherapy.

The radiation comes from a large machine. The machine aims beams of radiation at the cancer in the abdomen. You’ll go to a hospital or clinic 5 days a week for several weeks to receive radiation therapy. Each session takes about 30 minutes.

Although radiation therapy is painless, it may cause other side effects. The side effects include nausea, vomiting, or diarrhea. You may also feel very tired. Your health care team can suggest ways to treat or control these side effects.
You may want to ask your doctor these questions about radiation therapy:

Why do I need this treatment?

When will the treatments begin? When will they end?

How will I feel during treatment?

How will we know if the radiation treatment is working?

Will I have any long-term side effects?

OBSTRUCTIONS

If the tumor in the pancreas grows large enough to squeeze the common bile duct or block the duodenum, your health care team can suggest ways to help:

SURGERY
The surgeon can create a bypass through the blocked bile duct or duodenum. A bypass allows fluids to flow through the digestive tract. It can help relieve jaundice and pain resulting from the blockage.

STENT
The doctor uses an endoscope to place a stent in the blocked area. A stent is a tiny plastic or metal mesh tube that helps keep the bile duct or duodenum open.

TRANSHEPATIC STENTS
Percutaneous Transhepatic Cholangiogram (PTC) – on occasion the bile duct cannot be stented with an ERCP/stent/endoscopically and instead, arrangements would be made with interventional radiology where a catheter is placed in through the skin and into the liver to drain the obstructed bile.
Cancer of the pancreas and its treatment may lead to pain. Your doctor or a specialist in pain control can suggest ways to relieve or reduce pain. You may want to ask if your hospital has a palliative care team.

There are many ways to relieve or reduce pain:

**PAIN MEDICINE**
Your health care team can suggest medicines that will relieve pain. If you have constipation or other side effects from the medicine, your health care team will help you manage the problems.

**NERVE BLOCK**
The doctor may inject alcohol into the area around certain nerves in the abdomen to block the pain.

**OTHER METHODS**
You may find that massage or acupuncture helps relieve pain. Also, you may learn other methods, such as hypnosis, relaxation, music therapy, imagery, and biofeedback.
Doctors all over the world are conducting many types of clinical trials (research studies in which people volunteer to take part). Clinical trials are designed to find out whether new treatments are safe and effective.

Doctors are studying new drugs, other treatments, and their combinations, including combinations of surgery, chemotherapy, targeted therapy, and radiation therapy.

Testing of a new cancer drug or treatment is done in phases in order to assure the safety of patients. The different phases in a trial are as follows:

**PHASE 1 TRIALS**
Researchers test a new drug or treatment in a small group of people for the first time to evaluate its safety, determine a safe dosage range and identify side effects.

**PHASE 2 TRIALS**
This phase’s focus is on safety and whether the drug or treatment works in people who have certain diseases or conditions. For example, participants receiving the new drug or treatment may be compared with similar participants receiving a different drug or treatment.

**PHASE 3 TRIALS**
In this phase the drug or treatment is given to a large group of people to confirm effectiveness, monitor side effects, compare to commonly used drugs or treatments and collect information that will allow the drug or treatment to be used safely.

**PHASE 4 TRIALS**
Phase 4 studies are conducted after a drug or treatment has been approved for use in the general public. These studies are used to provide more information about side effects; what the long term risks and benefits are; and how well the drug or treatment works when it’s used more widely.

Even if the people in a trial do not benefit directly, they may still make an important contribution by helping doctors learn more about cancer of the pancreas and how to control it. Although clinical trials may pose some risks, doctors do all they can to protect their patients.

If you’re interested in being part of a clinical trial, talk with your doctor.
NUTRITION

Nutrition is an important part of your care. Getting the right nutrition can help you feel better and have more strength. However, pancreatic cancer and its treatment may make it hard for you to digest food and to maintain your weight. You may not feel like eating for a variety of reasons, such as feeling tired or feeling full soon after eating.

You may find it helpful to work with a dietitian. A dietitian can help you choose foods and nutrition products that will meet your needs and can make you feel more comfortable with eating. Your health care team will check you for weight loss and ask whether you are having problems with nausea, vomiting, or diarrhea. If your nutrition problems do not get better quickly enough, you may be offered another way of getting nutrition, such as a feeding tube.

NUTRITION AFTER SURGERY

After surgery, your health care team will check you for problems with digestion or with your blood sugar level, and they will help you manage such changes. If you have problems with digestion, you may need to take a supplement to replace the digestive enzymes that are normally made by the pancreas. You may also need to take minerals and vitamins. If you have problems with the sugar level in your blood, you may need to take medicine to control blood sugar.

FOLLOW-UP CARE

You’ll need regular checkups (e.g. every 3 months) after treatment for cancer of the pancreas. Checkups help ensure that any changes in your health are noted and treated if needed. If you have any health problems between checkups, you should contact your doctor.

Cancer of the pancreas may come back after treatment. Your doctor will check for return of cancer. Checkups may include a physical exam, blood tests, or CT scans.
Cancer of the pancreas and its treatment can lead to other health problems. You can have supportive care before, during, and after cancer treatment.

Supportive care is treatment to control pain and other symptoms, to relieve the side effects of therapy, and to help you cope with the feelings that a diagnosis of cancer can bring. You may receive supportive care to prevent or control these problems and to improve your comfort and quality of life during treatment. The Hirshberg Foundation for Pancreatic Cancer Research offers resources for emotional support. Please contact the office at (310) 473-5121 or www.pancreatic.org

Sources of Support

Learning that you have cancer of the pancreas can change your life and the lives of those close to you. These changes can be hard to handle. It’s normal for you, your family, and your friends to need help coping with the feelings that a diagnosis of cancer can bring.

Concerns about treatments and managing side effects, hospital stays, and medical bills are common. You may also worry about caring for your family, keeping your job, or continuing daily activities. Here’s where you can go for support:

- Doctors, nurses, and other members of your health care team can answer questions about treatment, working, or other activities.

- Social workers, counselors, or members of the clergy can be helpful if you want to talk about your feelings or concerns. Often, social workers can suggest resources for financial aid, transportation, home care, or emotional support.

- Support groups also can help. In these groups, patients or their family members meet with other patients or their families to share what they have learned about coping with the disease and the effects of treatment. Groups may offer support in person, over the telephone, or on the Internet. You may want to talk with a member of your health care team about finding a support group.
• In 2014, the Hirshberg Foundation unveiled the “Roadmap Program”. Workshops are geared towards patients and caregivers directly impacted by a pancreatic cancer diagnosis. As an extension of our personalized patient & family support services, participants benefit from interactive and informative workshops that will help them navigate through treatment and a new normal. Each workshop features a guest speaker in the comfort of a support group atmosphere in our office.

• The Hirshberg Foundation recognizes that effective patient care often requires team work, clear communication and organization to help you maneuver through your new normal. We are privileged to be able to share The Care Chronicles Symptom Management Workbook with newly diagnosed patients. This Workbook was created with love in the spirit of hope, strength and wellness for patients and caregivers living this journey of a pancreatic cancer diagnosis. The goal in designing this Workbook was to motivate and empower individuals throughout treatment—to improve the quality of their lives and the lives of their loved ones.

Currently, health professionals are recommending that patients keep a diary or journal at home detailing symptoms and side effects they experience throughout treatment, but few options have been available until now.

This Workbook includes the vital components for managing care at home and beyond the doors of your oncologists/surgeons office. Each book provides a thorough health profile, calendar, medication logs (and dry erase pen), daily worksheets for symptom management, side effects, an address book, scan results section and more.

Our Workbook, unique to others, is a compact, well organized, user-friendly learning tool that allows you to communicate with your medical health team more openly from cycle to cycle or appointment to appointment. Patients and caregivers no longer have to shuffle from their homes to appointments with cluttered stacks of notes and frantically scribble down appointment notes. The creation of this Workbook was designed to help maneuver through the “new-normal” and to manage the disease rather than allowing the disease to manage you. For more information or to receive a copy of the Workbook, please email info@pancreatic.org.

The Hirshberg Foundation for Pancreatic Cancer Research offers resources for emotional support, financial assistance and second opinion referrals. For more information, please call our office at (310) 473-5121.
Being a caregiver can be a full time responsibility. We suggest you find time to focus on yourself, as well as the patient, so that you are well enough to care for the patient. Here are some suggestions for the caregiver:

FIND HELP
Learn to ask for and accept offers of help. You may need to ask for help, and that means you care enough about the patient to care for yourself. It is important to be able to ask friends, family, or professionals for some assistance.

FIND SUPPORT
Talk with other caregivers, attend support groups...you are not alone. Talk with others who understand and share how you are coping.

BE THE ADVOCATE
Keep records of side effects or anything to share with the doctor between appointments, create a list of questions for the physician, research treatments and educate yourself on resources for the patient.

UNDERSTAND YOUR RIGHTS
As a caregiver, you have rights. Be aware of the Family and Medical Leave Act and what you are entitled to through your work to take time off and care for a loved one.
GLOSSARY OF TERMS

Acupuncture The technique of inserting thin needles through the skin at specific points on the body to control pain and other symptoms. It is a type of complementary and alternative medicine.

Adenocarcinoma The most common type of pancreatic cancer within the exocrine system.

Adenoma Benign tumor of epithelial tissue with glandular origin, glandular characteristics, or both. Adenomas can grow from many glandular organs, including the adrenal glands, pituitary gland, thyroid, prostate, and others. Although adenomas are benign, over time they may transform to become malignant, at which point they are called adenocarcinomas.

Adjuvant chemotherapy Adjuvant chemotherapy is given after a pancreatic tumor is removed with surgery to prevent the cancer from coming back.

Ascites Abnormal buildup of fluid in the abdomen that may cause swelling. In late-stage cancer, tumor cells may be found in the fluid in the abdomen. Ascites also occurs in patients with liver disease who do not have cancer.

Benign Not cancerous. Benign tumors may grow larger but do not spread to other parts of the body. Also called non-malignant.

Biofeedback A method of learning to control certain body functions voluntarily such as heartbeat, blood pressure, and muscle tension with the help of a special machine. This method can help control pain.

Blood vessel A tube through which the blood circulates in the body. Blood vessels include a network of arteries, arterioles, capillaries, venules, and veins.

BRCA1 and BRCA 2 genes These are human genes that produce tumor suppressor proteins. These proteins help repair damaged DNA. Those who are positive for BRCA2 gene are at a higher risk for getting ovarian, breast, prostate or pancreatic cancer.

Bypass A surgical procedure in which the doctor creates a new pathway for the flow of body fluids.

Cancer A term for diseases in which abnormal cells divide without control and can invade nearby tissues. Cancer cells can also spread to other parts of the body through the blood and lymph systems.
Cancer Antigen (CA 19-9) A protein on the surface of certain types of cells that is shed by tumor cells into the bloodstream. Higher than normal amounts of CA 19-9 in the blood can sometimes be a sign of pancreatic cancer. This test is not used to diagnose pancreatic cancer.

Carcinoembryonic Antigen (CEA) A protein that may sometimes be found in the blood of people that have certain types of cancer.

Cell The individual unit that makes up the tissues of the body. All living things are made up of one or more cells.

Chemotherapy Treatment with drugs that kill cancer cells.

Clinical trial A clinical trial is a research study that finds new ways to prevent, diagnose or treat cancer. These treatments investigate promising new drugs, drug combinations, new approaches to surgery, chemotherapy or radiation therapy, and advances in new areas such as gene therapy. Testing of a new cancer drug or treatment is done in an orderly series of steps called phases. This allows researchers to obtain reliable information about the drug or treatment in order to protect patients in each phase of the study.

Common bile duct The tube in the body that carries bile from the liver and gallbladder into the duodenum (the upper part of the small intestine).

Computed Tomography Scan (CT Scan) A series of detailed pictures of areas inside the body taken from different angles. The pictures are created by a computer linked to an x-ray machine. Also called CAT scan.

Contrast material A dye or other substance that helps show abnormal areas inside the body. It is given by injection into a vein, by enema, or by mouth. Contrast material may be used with x-rays, CT scans, MRI, or other imaging tests.

Cyst A sac or capsule in the body. It is usually filled with fluid or other material.

Diabetes A disease in which there is a high level of glucose (a type of sugar) in the blood because the pancreas does not make enough insulin or the insulin that is made does not work properly.

Distal Pancreatectomy A distal pancreatectomy is usually performed when a patient has a tumor in the body or tail (‘thin end’) of the pancreas. This procedure involves having the tail and body of your pancreas removed, leaving the head of the pancreas intact. Your surgeon will normally remove your spleen at the same time because it is located next to the tail of the pancreas.

Duct In medicine, a tube or vessel of the body through which fluids pass.
**Duodenum** The first part of the small intestine into which the food empties as it passes out of the stomach.

**Endocrine** Refers to tissue that makes and releases hormones that travel in the bloodstream and control the actions of other cells or organs. Some examples of endocrine tissues are the pancreas, pituitary, thyroid, and adrenal glands.

**Endoscope** A thin, tube-like instrument used to look at tissues inside the body. An endoscope has a light and a lens for viewing and may have a tool to remove bits of tissue (biopsy).

**Endoscopic Retrograde Cholangiopancreateography (ERCP)**
A procedure that uses an endoscope to examine and x-ray the pancreatic duct, hepatic duct, common bile duct, duodenal papilla, and gallbladder. An endoscope is a thin, tube-like instrument with a light and a lens for viewing. The endoscope is passed through the mouth and down into the first part of the small intestine (duodenum). A smaller tube (catheter) is then inserted through the endoscope into the bile and pancreatic ducts. A dye is injected through the catheter into the ducts, and an x-ray is taken.

**Endoscopic Ultrasound (EUS)**
A procedure in which an endoscope is inserted into the body. An endoscope is a thin, tube-like instrument that has a light and a lens for viewing. A probe at the end of the endoscope is used to bounce high-energy sound waves (ultrasound) off internal organs to make a picture (sonogram).

**Enzyme** A protein that speeds up chemical reactions in the body.

**Exocrine** Refers to tissue that makes and releases substances into a duct (tube). Some ducts lead to other organs but most lead out of the body. Some examples of exocrine tissues are the tear glands, sweat glands, and the pancreas.

**Gallbladder** The pear-shaped organ found below the liver. Bile is concentrated and stored in the gallbladder.

**Gastroenterologist** A doctor who specializes in diagnosing and treating disorders of the digestive system.

**Gene** The functional and physical unit of heredity passed from parent to offspring. Genes are pieces of DNA, and most genes contain the information for making a specific protein.

**General anesthesia** A temporary loss of feeling and a complete loss of awareness that feels like a very deep sleep. It is caused by special drugs or other substances called anesthetics. General anesthesia keeps patients from feeling pain during surgery or other procedures.
Gland An organ that makes one or more substances, such as hormones, digestive juices, sweat, tears, saliva, or milk. Endocrine glands release the substances directly into the bloodstream. Exocrine glands release the substances into a duct or opening to the inside or outside of the body.

Hormone One of many chemicals made by glands in the body. Hormones circulate in the bloodstream and control the actions of certain cells or organs. Some hormones can also be made in the laboratory.

Hypnosis A trance-like state in which a person becomes more aware and focused and is more open to suggestion.

Imagery Technique in which people focus on positive images in their mind.

Immunotherapy Immunotherapy is treatment that stimulates or enhances your body’s own immune system to help fight cancer.

Incision A cut made in the body to perform surgery.

Inflammation Redness, swelling, pain, and/or a feeling of heat in an area of the body. This is a protective reaction to injury, disease, or irritation of the tissues.

Insulin A hormone made by the islet cells of the pancreas. Insulin controls the amount of sugar in the blood by moving it into the cells, where it can be used by the body for energy.

Integrative Medicine A type of medical care that combines conventional (standard) medical treatment with complementary and alternative (CAM) therapies that have been shown to be safe and to work. CAM therapies treat the mind, body, and spirit.

Intestine The long, tube-shaped organ in the abdomen that completes the process of digestion. The intestine has two parts, the small intestine and the large intestine. Also called bowel.

Intravenous Into or within a vein. Intravenous usually refers to a way of giving a drug or other substance through a needle or tube inserted into a vein. Also called IV.

Islet cell A pancreatic cell that produces hormones (such as insulin and glucagon) that are secreted into the bloodstream. These hormones help control the level of glucose (sugar) in the blood. Also called endocrine pancreas cell and islet of Langerhans cell.

Jaundice A condition in which the skin and the whites of the eyes become yellow, urine darkens, and the color of stool becomes lighter than normal. Jaundice occurs when the liver is not working properly or when a bile duct is blocked.
**Laparoscope** A thin, tube-like instrument used to look at tissues and organs inside the abdomen. A laparoscope has a light and a lens for viewing and may have a tool to remove tissue.

**Liver** A large organ located in the upper abdomen. The liver cleanses the blood and aids in digestion by secreting bile.

**Lymph node** A rounded mass of lymphatic tissue that is surrounded by a capsule of connective tissue. Lymph nodes filter lymph (lymphatic fluid), and they store lymphocytes (white blood cells). They are located along lymphatic vessels. Also called lymph gland.

**Lymph vessel** A thin tube that carries lymph (lymphatic fluid) and white blood cells through the lymphatic system. Also called lymphatic vessel.

**Magnetic Resonance Imaging (MRI)** A procedure in which radio waves and a powerful magnet linked to a computer are used to create detailed pictures of areas inside the body. These pictures can show the difference between normal and diseased tissue. MRI may make better images of some organs and soft tissue than other scanning techniques. MRI is especially useful for imaging the brain, the spine, the soft tissue of joints, and the inside of bones.

**Malignant** Cancerous. Malignant tumors can invade and destroy nearby tissue and spread to other parts of the body.

**Medical oncologist** A doctor who specializes in diagnosing and treating cancer using chemotherapy, hormonal therapy, and biological therapy. A medical oncologist often is the main health care provider for someone who has cancer. A medical oncologist also gives supportive care and may coordinate treatment given by other specialists.

**Metastatic** Having to do with metastasis, which is the spread of cancer from the primary site (place where it started) to other places in the body.

**Modified Whipple procedure** Same as the Whipple procedure, except none of the stomach is removed. Also called Pylorus-preserving Whipple procedure.

**Needle biopsy** The removal of tissue or fluid with a needle for examination under a microscope. When a thick needle is used, the procedure is called a core biopsy. When a thin needle is used, the procedure is called a fine-needle aspiration biopsy.

**Neoadjuvant chemotherapy** Chemotherapy given before surgery is called neoadjuvant treatment and is generally used for patients with borderline resectable disease, when shrinking the tumor may increase the chance of removing it with surgery.
Nurse Case Manager A registered nurse who has special training in how to plan, manage, and evaluate all aspects of patient care, especially for patients who get treatment over a long time. Also called case management nurse.

Obesity A condition marked by an abnormally high, unhealthy amount of body fat.


Oncology Nurse A nurse who specializes in treating and caring for people who have cancer.

Organ A part of the body that performs a specific function. For example, the heart is an organ.

Pain Management Specialist is a branch of medicine employing an interdisciplinary approach for easing the suffering and improving the quality of life of those living with pain.

Palliative care Care given to improve the quality of life of patients who have a life-threatening disease. The goal of palliative care is to prevent or treat as early as possible the symptoms of a disease, side effects caused by treatment of a disease, and psychological, social, and spiritual problems related to a disease or its treatment. Also called comfort care, supportive care, and symptom management.

Pancreas A glandular organ located in the abdomen. It makes pancreatic juices, which contain enzymes that aid in digestion, and it produces several hormones, including insulin. The pancreas is surrounded by the stomach, intestines, and other organs.

Pancreatic Having to do with the pancreas.

Pancreatic duct Part of a system of ducts (hollow tubes) in the pancreas. Pancreatic juices containing enzymes are released into these ducts, which then flow into the small intestine.

Pancreatic juice Fluid made by the pancreas. Pancreatic juices contain proteins called enzymes that aid in digestion.

Pancreatitis Inflammation of the pancreas. Chronic pancreatitis may cause diabetes and problems with digestion. Pain is the primary symptom.

Pathologist A doctor who identifies diseases by studying cells and tissues under a microscope.
**Pharmacist** A person licensed to prepare and dispense (give out) prescription drugs and who has been taught how they work, how to use them, and their side effects.

**Positron Emission Tomography (PET scan)** A procedure in which a small amount of radioactive glucose (sugar) is injected into a vein, and a scanner is used to make detailed, computerized pictures of areas inside the body where the glucose is used. Because cancer cells often use more glucose than normal cells, the pictures can be used to find cancer cells in the body.

**Psychologist** A specialist who can talk with patients and their families about emotional and personal matters, and can help them make decisions.

**Pylorus Preserving Pancreatoduodenectomy** This is a Modified Whipple Procedure. It involves removal of all or part of the pancreas and the duodenum with preservation of the pylorus (the part of the stomach that connects to the duodenum); usually limited to the head and neck of the pancreas and most often performed for pancreatic carcinoma.

**Radiation oncologist** A doctor who specializes in using radiation to treat cancer.

**Radiation therapy** The use of high-energy radiation from x-rays, gamma rays, neutrons, protons, and other sources to kill cancer cells and shrink tumors. Radiation may come from a machine outside the body (external-beam radiation therapy), or it may come from radioactive material placed in the body near cancer cells (internal radiation therapy). Systemic radiation therapy uses a radioactive substance, such as a radiolabeled monoclonal antibody, that travels in the blood to tissues throughout the body. Also called irradiation and radiotherapy.

**Radioactive** Giving off radiation.

**Registered Dietitian** A health professional with special training in the use of diet and nutrition to keep the body healthy. A registered dietitian may help the medical team improve the nutritional health of a patient.

**Risk factor** Something that increases the chance of developing a disease. Some examples of risk factors for cancer are age, a family history of certain cancers, use of tobacco products, being exposed to radiation or certain chemicals, infection with certain viruses or bacteria, and certain genetic changes.

**Side effect** A problem that occurs when treatment affects healthy tissues or organs. Some common side effects of cancer treatment are fatigue, pain, nausea, vomiting, decreased blood cell counts, hair loss, and mouth sores.
Small intestine The part of the digestive tract that is located between the stomach and the large intestine.

Social Worker A professional trained to talk with people and their families about emotional or physical needs, and to find them support services.

Spleen An organ that is part of the lymphatic system. The spleen makes lymphocytes, filters the blood, stores blood cells, and destroys old blood cells. It is located on the left side of the abdomen near the stomach.

Staging Staging describes the extent or severity of a person’s cancer based on the size of the primary tumor, lymph node involvement, and if the tumor has spread to other organs. Stages range from the tumor being localized without anything spreading in stage I to a tumor that has spread outside its primary origin, or stage IV. Knowing the stage of disease helps the doctor plan treatment.

Supportive care Care given to improve the quality of life of patients who have a serious or life-threatening disease. The goal of supportive care is to prevent or treat as early as possible the symptoms of a disease, side effects caused by treatment of a disease, and psychological, social, and spiritual problems related to a disease or its treatment. Also called comfort care, palliative care, and symptom management.

Surgeon A doctor who removes or repairs a part of the body by operating on the patient.

Surgery A procedure to remove or repair a part of the body or to find out whether disease is present. An operation.

Surgical Oncologist A doctor who performs biopsies and other surgical procedures in cancer patients.

Targeted therapy A type of treatment that uses drugs or other substances, such as monoclonal antibodies, to identify and attack specific cancer cells.

Tissue A group or layer of cells that work together to perform a specific function.

Tumor An abnormal mass of tissue that results when cells divide more than they should or do not die when they should. Tumors may be benign (not cancer), or malignant (cancer). Also called neoplasm.

Tumor Marker A substance found in tissue, blood, or other body fluids that may be a sign of cancer or certain benign (noncancerous) conditions. Most tumor markers are made by both normal cells and cancer cells, but they are made in larger amounts by cancer cells.
**Ultrasound** A procedure in which high-energy sound waves are bounced off internal tissues or organs and make echoes. The echo patterns are shown on the screen of an ultrasound machine, forming a picture of body tissues called a sonogram. Also called **ultrasonography**.

**Whipple procedure** A type of surgery used to treat pancreatic cancer. The head of the pancreas, the duodenum, a portion of the stomach, and other nearby tissues are removed.

**X-ray** A type of high-energy radiation. In low doses, x-rays are used to diagnose diseases by making pictures of the inside of the body. In high doses, x-rays are used to treat cancer.
### MY HEALTH PROFILE/CONTACT INFO

Use this page to fill in your contact information and take with you to your appointments.

<table>
<thead>
<tr>
<th>TYPE OF CANCER</th>
<th>STAGE OF CANCER</th>
</tr>
</thead>
<tbody>
<tr>
<td># LYMPH NODES AFFECTED</td>
<td></td>
</tr>
<tr>
<td># TUMOR(S)</td>
<td></td>
</tr>
<tr>
<td>SITE OF TUMOR(S)</td>
<td></td>
</tr>
<tr>
<td>SIZE OF TUMOR(S)</td>
<td></td>
</tr>
</tbody>
</table>

**CURRENT MEDICATIONS**

**INSURANCE CARRIER**

**HOSPITAL**

**contact info**

**PHARMACY NAME**

**contact info**

**PRIMARY PHYSICIAN**

**contact info**

**GASTROENTEROLOGIST**

**contact info**

**SURGICAL ONCOLOGIST**

**contact info**

**MEDICAL ONCOLOGIST**

**contact info**
We believe that your healthcare is not only important to you, but to those around you. In the event of an emergency, we have created a Medical Profile Card that you can cut out and carry in your purse or wallet. We suggest that you update this card periodically as your information changes.
MY MEDICAL PROFILE CARD

PATIENT NAME

WHAT CITY AND STATE DO YOU LIVE IN

PRIMARY CARE PHYSICIAN

contact info

SURGEON/ONCOLOGIST

contact info

OTHER CURRENT SPECIALISTS

CURRENT MEDICATIONS

ALLERGIES TO MEDICATIONS

CURRENT DIAGNOSIS

EMERGENCY CONTACT

CONTACT PHONE

RELATIONSHIP TO CONTACT

PREFERRED HOSPITAL

INSURANCE CARRIER
CREDITS

Resources in this book were provided in part by the National Cancer Institute and the Hirshberg Foundation’s Scientific Advisory Board.

Copyright © 2016 by the Hirshberg Foundation for Pancreatic Cancer Research.

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher. This booklet was published by the Hirshberg Foundation for Pancreatic Cancer Research.

For permission requests, write to the publisher, addressed “Attention: Permissions Coordinator,” at the address below:

Hirshberg Foundation for Pancreatic Cancer Research
2990 S. Sepulveda Blvd., #300C
Los Angeles, CA 90064

Printed in the United States of America
CONTACT US

Please feel free to contact our office via phone, email or mail with any questions or comments.

MAIL: Hirshberg Foundation for Pancreatic Cancer Research
2990 S. Sepulveda Blvd., #300C
Los Angeles, CA 90064

PHONE: (310) 473-5121
(310) 473-5107 (FAX)

WEB: Pancreatic.org
LACancerChallenge.com
HirshbergTrainingTeam.com
TourdePier.com

We invite you to join our mailing list to receive current updates via email blasts. Please go to our website www.Pancreatic.org and sign up.