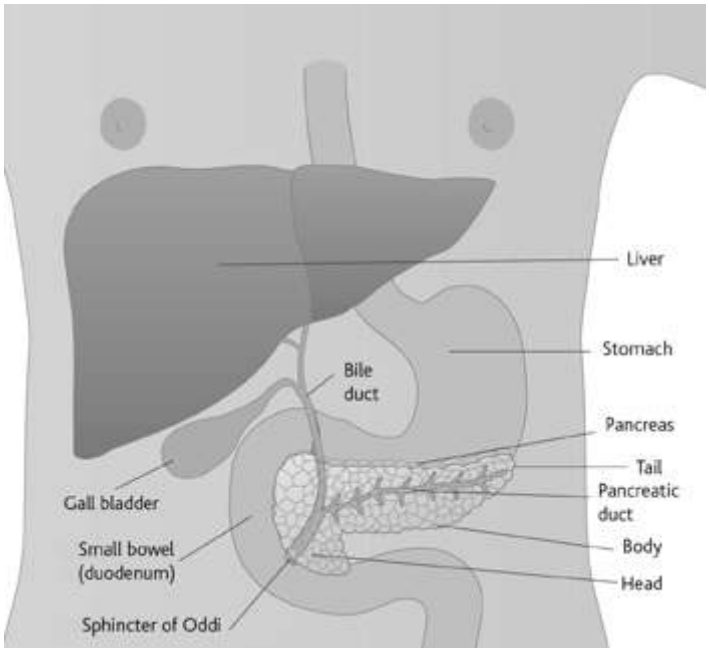
Cambridge Surgical Hepato-Pancreato-Biliary Unit
(Specialist Hepato-Pancreato-Biliary Unit – Eastern Region)

Pancreatic cancer

This leaflet has been written to help your understanding of pancreatic cancer. If you want to discuss any of part of your treatment or the information contained in this leaflet then please contact your Consultant or Specialist nurse involved in your care and they will be happy to answer any questions.

The pancreas

The pancreas is part of the digestive system. It is deep inside the belly, lying just in front of the spine. The large rounded section on the right-hand side of the body is called the head of the pancreas, the mid-section is known as the body of the pancreas and the narrow part on the left-hand side of the body is called the tail of the pancreas. The head of the pancreas lies next to the first part of the small intestine, which is called the duodenum. The head and neck of the pancreas gland are closely related to major blood vessels taking blood to the liver and the intestines.



The pancreas produces a fluid which helps to digest food (pancreatic juice) and a hormone which enables the body to use sugars (insulin). The digestive juices produced by the pancreas flow down a tube (the pancreatic duct) into the duodenum (small intestines). The bile duct drains bile from the liver into the duodenum and joins the pancreatic duct as it enters the duodenum. Thus tumours in this area of pancreas (head of the pancreas) tend to obstruct the bile duct and cause jaundice.

What causes cancer of the pancreas?

Very little is known about the causes of pancreatic cancer. It affects about 12 per 100,000 people in the UK each year, so is not a common type of cancer. It occurs mainly in people between 60 and 80 years of age and is rare in people below the age of 50. The following people are more likely to develop cancer of the pancreas:

- Those that smoke cigarettes are more at risk of developing cancer of the pancreas.
- Those that have a condition called chronic pancreatitis. This is where the pancreas becomes inflamed.
- Some families who have inherited the faulty breast cancer genes BRCA1 or BRCA2, or a bowel condition called familial adenomatous polyposis (FAP).
- Members of families with a tendency to have large numbers of unusual moles, also have an increased risk of cancer of the pancreas. However, the genetic changes which cause these cases of pancreatic cancer have not yet been found and so currently there is no genetic test available for pancreatic cancer.

What are the different types?

Cancers of the pancreas are divided into groups according to their position within the pancreas and the type of cell that the cancer originates from. They occur more often in the head of the pancreas (70-80%) than in the body or the tail. The tumours in the head of the pancreas could come from the pancreas itself, the lower bile duct, the duodenum or the ampulla (a sac-like enlargement of a canal or duct).

Depending on the cell type, the tumours could be either:

- a adenocarcinoma
- a neuroendocrine tumour
- a cystic lesion.

What are the symptoms?

Not all cancers have symptoms and not all patients will have all the symptoms, but the following list contains some of the common symptoms:

- **Pain**
- **Weight loss**
- **Jaundice**

What diagnostic tests are used?

To help make a diagnosis you will probably have some tests. You will require further investigations to stage the disease and plan the most appropriate treatment.

Although tests are useful, one test cannot tell the whole story. In 95% of the time, a definitive pathology, which explains the disease in more detail, is only obtained after an operation.

Blood tests

CA 19-9 is known as a tumour marker. Measuring the level of CA 19-9 in the blood can sometimes help in diagnosing cancer of the pancreas. It also helps in seeing how the pancreas responds to treatment. However, it is often not a very reliable test. Liver and kidney function tests are also done to assess the level of jaundice and to plan treatment.

Ultrasound scan

This is often the first test done after blood tests in patients with jaundice. Ultrasound uses sound waves to look at internal organs, such as the liver, gall bladder and bile ducts. You will usually be asked not to eat or drink anything for at least six hours before the test. The ultrasound scan is not a good test to look at the pancreas, but it often gives a clue as to the cause of jaundice (for example: gall stones).

CT scan

The scan is painless but takes longer than an ordinary x-ray (10-30 minutes). You will be asked not to eat or drink for at least four hours before the scan.

Special liquids are often used to allow particular areas of the body to be seen more clearly on the scan. The liquids may be given as a drink, as an injection, or both. If you are allergic to iodine or have asthma, it is important to tell your doctor and the person doing this test before having the injection or drink. It is usually still possible to have the injection, as long as you receive treatment with a steroid drug such as prednisolone on the day before and the day of the injection.

ERCP

ERCP (endoscopic retrograde cholangio-pancreatography) enables the doctor to take an x-ray picture of the pancreatic duct and the bile duct. The bile duct can be unblocked during this procedure if necessary. It will also sometimes allow cells from the blockage to be taken and looked at under the microscope.

Before the test you will be asked not to eat or drink anything for about six hours so that the stomach and small bowel (duodenum) are empty. You will usually be given an antibiotic before the test to prevent any infection. You will also be given an injection to help you to relax.

The doctor will then pass a thin, flexible tube known as an endoscope into your mouth, through your stomach and into the duodenum and just beyond it. Looking down the endoscope, the doctor can find the opening where the bile duct and the duct of the pancreas drain into the duodenum. A dye which can be seen on x-ray is then injected into these ducts to show up any abnormalities or any blockage of the duct.

EUS (Endoscopic ultrasound scan)

This is a very similar procedure to an ERCP, but involves an ultrasound probe being passed down the endoscope to take an ultrasound scan of the pancreas and surrounding organs. This will help the surgeons in the decision making and planning of the appropriate treatment.

MRI (magnetic resonance imaging) scan

This test is often not required in the treatment of pancreatic cancers except in certain special circumstances.

This test is similar to a CT scan but uses a magnetic field instead of x-rays to build up cross-sectional pictures of your body. Some people are given an injection of dye into a vein in the arm to improve the image.

During the test you will be asked to lie very still on a couch inside a long chamber for up to an hour. This can be unpleasant if you don't like enclosed spaces; if so, it may help to mention this to the radiographer. The MRI scanning process is also very noisy, but you will be given earplugs or headphones to wear. You can usually take someone with you into the room to keep you company.

The chamber is a very powerful magnet, so before entering the room you should remove any metal belongings. People who have heart monitors, pacemakers or some types of surgical clips cannot have an MRI because of the magnetic fields.

Selective Angiography

This investigation is not routinely used in the management of pancreatic cancer. It is a test where a fine tube (catheter) is passed into your blood vessels in the groin under local anaesthesia. A dye is then injected into various blood vessels under X-ray control. This allows certain small abnormalities to be seen better. The radiologist can inject certain substances to stimulate various areas in the pancreas. The radiologist can also take a sample of the venous blood draining these selected areas in the pancreas. This allows the diagnosis and identifying the site of rare neuro-endocrine tumours. Routine use of this method in pancreatic cancer is limited.

Nuclear Medicine Tests

These tests are also not routinely employed in the diagnosis and management of pancreatic cancer. These tests are carried out by injecting a radioactive tracer into the veins and watching its progress using a gamma camera or scanner. Octreotide scan and Positron Emission Tomography (PET scan) are some of the tests that may used in the diagnosis and localization of rare neuroendocrine tumours.

Biopsy

If your doctor strongly suspects that you have cancer of the pancreas, the surest way of making a diagnosis is to remove some cells or a small piece of tissue from the tumour to look at under a microscope. This is called a biopsy.

Biopsies can be taken by means of a needle through the skin under ultrasound or CT guidance or by ERCP or by EUS. However, in the pancreas gland and bile ducts, where the tumour is very difficult to reach, it is not always possible to do this. Similarly, in pancreatic cancer it is often possible to obtain false negative results. This means that biopsies turn out to be negative even in the presence of cancer. Therefore, in about 95% of the patients, the definitive treatment of pancreatic cancer is carried out **without** the aid of a biopsy.

Laparoscopy and Laparoscopic ultra sound

This test involves a small operation done under a general anaesthetic and will mean a short stay in hospital. It allows the doctor to look at the area of the pancreas with a laparoscopic ultrasound scanner. The spread of cancer is assesed and to see whether an operation will be possible.

What is Staging?

The stage of a cancer is a term used to describe the level and size of the cancer.

Stage 1: This is the earliest stage. The cancer can only be found inside the pancreas itself, although it may be quite large. There is no cancer in the lymph nodes close to the pancreas and no sign that it has spread to anywhere else in the body.

Stage 2: The cancer has started to grow into the duodenum or bile duct or other tissues or organs close to the pancreas. There is no cancer in the nearby lymph nodes.

Stage 3: The cancer can be any size and may have spread into the tissues surrounding the pancreas. Cancer is also found in the nearby lymph nodes. In this situation it is likely that the cancer may have spread into other body organs through the lymph system.

Stage 4: These cancers are divided into 4A and 4B.

- **4A** means the cancer has grown into nearby organs such as the stomach, spleen, large bowel or nearby large blood vessels. Cancer may or may not be present in the lymph nodes.
- **4B** means the cancer has spread to other body organs such as the liver or lungs.

What treatments are available?

The type of treatment you will be offered depends on the particular type of cancer of the pancreas you have, the stage of the cancer, its size, and your general health.

Cancer of the pancreas can be very difficult to treat. Presumed early-stage cancer can sometimes be cured with surgery, but many pancreatic cancers are not diagnosed until the cancer is quite advanced and then it may not be possible to cure it.

The most effective treatment for presumed early-stage cancer of the pancreas is surgery to remove part, or all, of the pancreas. This is a major operation and is only suitable for people whose cancers are small and thought not to have spread, and who

are fit. Unfortunately, in many people the cancer is too large or has already spread beyond the pancreas when it is diagnosed, so this kind of surgery is not possible.

Learning that your cancer has spread, and therefore that certain treatments are not suitable for you, is distressing news to cope with. Your doctor will advise you about the treatments that are most likely to help in your situation.

If the cancer has spread and is causing a blockage of the bile duct or the bowel, surgery can be used to relieve the blockage and ease the symptoms. Details of the different types of surgery, and the other treatments mentioned here, are explained later in this document.

Sometimes chemotherapy can be used **after surgery** for pancreatic cancer to try and reduce the chances of the cancer coming back. It can also be used to treat cancers that have spread, but, this would be with the intention of symptom relief and not for cure. For cancers that have not spread beyond the pancreas but cannot be removed by surgery, chemotherapy may be given. Sometimes you may be asked to take part in a clinical trial of a new drug or treatment.

Benefits and disadvantages

Treatment can be given for different reasons and the possible benefits will vary depending upon the individual situation. In people with early-stage pancreatic cancer, surgery is often done with the aim of curing the cancer. However, cure (long term survival) is often dependent on type and extent of the tumour which would be known only after surgery. For example: adeno-carcinoma of the pancreas is cured in only 10% of the patients undergoing surgery. However, cholangiocarcinomas, ampullary carcinomas, cystic neoplasms and neuro-endocrine lesions can have upto 25%, 40%, 70% and 70% long term survival following surgery. Occasionally additional treatments such as chemotherapy are also given to reduce the risks of it coming back.

If the cancer is at a more advanced stage, the treatment may only be able to control it, leading to an improvement in symptoms and a better quality of life. However, for some people the treatment will have no effect upon the cancer and they will get the side effects without any of the benefit.

Making decisions about treatment in these circumstances is always difficult, and you may need to discuss in detail with your doctor whether you wish to have treatment. If you choose not to, you can still be given supportive (palliative) care, with medicines to control any symptoms.

Giving your consent

Before you have any treatment your doctor will explain the aims of the treatment to you and you will usually be asked to sign a form saying that you give your permission (consent) for the hospital staff to give you the treatment. No treatment can be given without your consent, and before you are asked to sign the form you should have been given full information about:

- the type and extent of the treatment you are advised to have
- the advantages and disadvantages of the treatment
- any possible alternative treatments that may be available and their advantages and disadvantages
- any significant risks or side effects of the treatment.

The procedure specific consent forms at Addenbrooke's Hospital, Cambridge http://www.addenbrookes.org.uk/consent/index.html have a covering section which goes into detailed discussions regarding the particular operation which has been recommended to you. If you do not understand what you have been told, let the staff know straight away so that they can explain again. Some cancer treatments are complex, so it is not unusual for people to need another explanation.

It is often a good idea to have a friend or relative with you when the treatment is explained, to help you remember the discussion more fully. You may also find it useful to write down a list of questions before you go for your appointment.

People often feel that the hospital staff are too busy to answer their questions. But it is important for you to be aware of how the treatment is likely to affect you and the staff should be willing to make time for you to ask questions.

You can always ask for more time to decide about the treatment, if you feel that you can't make a decision when it is first explained to you. You are also free to choose not to have the treatment, and the staff can explain what may happen if you do not have it.

It is important to tell a doctor, or the nurse in charge, immediately so that he or she can record your decision in your medical notes. You do not have to give a reason for not wanting to have treatment, but it can be helpful to let the staff know your concerns so that they can give you the best advice.

If you have any questions about your treatment, don't be afraid to ask your doctor or nurse.

Second opinion

At Addenbrooke's Hospital, a number of cancer specialists (including a number of surgeons, radiologists, oncologists, pathologists, gastroenterlogists) work together as a team to decide the most suitable treatment for a patient and they follow national cancer treatment guidelines.

The team meets every Monday to discuss the various options and come to a decision as to the best treatment for all the patients who undergo treatment for Hepatobiliary-Pancreatic conditions. Even so, you may want to have another medical opinion.

Most doctors (your GP or specialist) will be willing to refer you to another specialist for a second opinion, if you feel that it will be helpful. As the second opinion may cause a delay in the start of your treatment, you and your doctor need to be confident that it will provide useful information.

If you do go for a second opinion, again it may be a good idea to take a friend or relative with you, and to have a list of questions ready, so that you can make sure your concerns are covered during the consultation

Treatments

Removal of the cancer (resection)

In 20-25% of patients it is possible to remove all of the cancer with surgery. This is a major operation, only suitable for people with presumed early-stage pancreatic cancer. This type of surgery should be done by specialist surgeons who are trained and experienced in pancreatic surgery. It is important to discuss the benefits and the risks with your surgeon before making the decision to go ahead with any surgery.

Depending on where the cancer is, and how much of the pancreas is involved, all, or part of the pancreas may need to be removed during surgery. A part of the stomach, small bowel (duodenum), the common bile duct, gall bladder and the surrounding lymph nodes may also have to be removed to assess the spread and reduce the risk of the cancer coming back. This type of operation is called a pancreatoduodenectomy or a Whipple's operation. Your specialist may sometimes suggest that you have a laparoscopy to see whether this type of surgery is possible in your case.

Depending on the site of the tumour, other operations may include a total pancreatectomy, or a distal subtotal pancreatectomy with or with out splencectomy. Occasionally, a pancreatic resection may need to combined with a liver resection (for example: cholangiocarcinomas, neuro-endocrine tumours).

All the above operations are specialist operations carried out only in a few selected centres (tertiary Hepatobiliary-Pancreatic centres) across the country. The risks and benefits of these different operations can be found in the consent pages of Addenbrooke's Hospital website:
http://www.addenbrookes.org.uk/consent/index.html

Occasionally a bypass operation instead of a curative resection needs to be performed if the cancer is found to be more advanced than it was originally thought. This decision is obviously disappointing, but would be made by the surgeon at the time of the operation in the best interest of the patient.

Occasionally (in neuro-endocrine tumours), even if the cancer cannot be completely removed, a partial resection (removal of some of the cancer) can be done to reduce symptoms and control the cancer for a while.

Palliative surgery for a blocked bile duct (Bypass operation)

Surgery is sometimes recommended to deal with a blockage of the bile duct especially if it is associated with blockage of the outlet of the stomach which will lead on to severe sickness. During the operation a piece of the small bowel (the jejunum) is connected to the stomach and the bile ducts, to bypass the duodenum. This is called a Hepaticojejunostomy and gastrojejunostomy (double bypass). It is also recommended in very fit and young individuals in order to reduce the chance of the stents getting blocked off where curative surgery is not possible.

Occasionally a bypass operation instead of a curative resection needs to be performed if the cancer is found to be more advanced at the time of the operation than was originally thought. This decision is obviously disappointing, but would be made by the surgeon at the time of the operation in the best interest of the patient.

Sometimes chemotherapy can be used after surgery for early-stage pancreatic cancer to try to reduce the chances of the cancer coming back. It can also be used to treat cancers that have spread. For cancers that have not spread beyond the pancreas but cannot be removed due to the lack of fitness of the patient to undergo complex major surgery, chemotherapy may be given once a firm pathological diagnosis is obtained.

After your operation

After your operation you may stay in a special recovery bed for the first day. You will then be moved to an intermediate dependency area (IDA) and subsequently to a general ward.

As soon as possible you will be encouraged to start moving about. This is an essential part of your recovery, and even if you have to stay in bed it is important to do regular leg movements and deep breathing exercises. A physiotherapist or nurse will explain these to you.

A drip into a vein in your arm (intravenous infusion) will be used to give you fluids until you are able to eat and drink again. You may have a fine tube that passes down your nose into your stomach or small intestine. This is called a nasogastric tube and it allows any fluids in the stomach to be removed so that you don't feel sick. It may be in place for several days.

Often a small tube (catheter) is put into the bladder, and urine is drained into a collecting bag. This will save you having to get up to pass urine and is usually removed after a few days.

You may also have one or more drainage tubes in place from your tummy, to collect any extra fluid or blood, or to drain bile or pancreatic fluid.

A special feeding tube may be placed at the time of the operation into the small bowel to allow feeds to be given after the operation.

After your operation you will probably have some pain and discomfort for a few days which is often relieved with an epidural or morphine injections. It is important to let your doctor or the nurses on the ward know if you are in pain, or if your drugs are not completely relieving your pain, so that the dose can be increased or the painkillers changed as soon as possible.

Pain can usually be controlled very effectively with painkillers

It is common to have minor infective complications following major surgery. However, major complications such as a heart attack, formation of a blood clot in the legs or lungs and bleeding can occur after any operation. In about 10-15% of the patients undergoing these procedures, pancreatic leaks and delayed gastric emptying can occur thereby delaying discharge. More information regarding the various risks can be obtained from the Addenbrooke's Hospital Consent page:
http://www.addenbrookes.org.uk/consent/index.html

Insulin and enzyme replacement

If you have had a part of your pancreas removed, the remaining pancreas is usually enough to provide the body's requirement of insulin and the various digestive enzymes. However, in the rare event of diabetes or malabsorption developing, insulin and oral supplementation of digestive enzymes may be required for the rest of your life.

Radiotherapy

Current evidence suggests that radiotherapy has a very limited role in the management of pancreatic cancer.

Chemotherapy

Chemotherapy is the use of anti-cancer (cytotoxic) drugs to destroy cancer cells.

Chemotherapy is used as an additional measure after the cancer has been cut out. If the cancer has spread and surgery to remove the cancer is not possible, chemotherapy may be used to try and shrink the cancer and relieve symptoms. The chemotherapy drugs used in this situation include gemcitabine, 5-flourouracil, etc. Any decision to use chemotherapy is reached after a discussion between you and your doctor.

Side effects

Chemotherapy can sometimes cause unpleasant side effects, but it can also make you feel better by relieving the symptoms of the cancer. Most people experience some side effects, but these can often be well controlled with medicine. The possible side effects are:

- Reduced resistance to infection
- sore mouth
- diarrhoea
- feeling sick
- tiredness
- hair loss

Some or none of the side effects may affect an individual patient. Although these side effects may be hard to bear at the time, they will gradually disappear a few weeks after your treatment has finished.

Treating jaundice

If the tumour blocks the bile duct, causing jaundice, and it is not possible to remove the tumour, procedures may be performed which relieve the blockage and allow bile to flow into the small bowel again. The jaundice will then clear up. There are three ways of doing this. These are ERCP, PTC (percutaneous transhepatic cholangiography) and bypass surgery.

ERCP and PTC

In ERCP a lining tube called a stent is pushed down the inside of the blocked bile duct to hold it open. This is an endoscopic procedure carried out under sedation. This method is often used initially when ERCP is first carried out as an investigation.

- The physician carrying out the procedure will place a plastic or a metal stent in position within the bile duct across the blockage.
- The PTC method is similar to ERCP in that a dye is used to show up the obstruction on x-ray, but instead of the stent being inserted through an endoscope, a needle is inserted through the skin just below your rib cage and a fine guide wire passed through the liver and across the obstruction in the bile duct.
- The tube is then passed over this wire. The stent may need to be replaced later if the jaundice comes back or if an infection occurs.
- Plastic stents can be removed and replaced with further plastic tubes, but metal stents are permanent. Metal stents are often placed when curative surgery is not an option (the general policy is not to carry out ERCP or PTC if curative surgery is being planned, but this may not always be possible, especially if the jaundice is very deep and delays are expected). Metal stents stay open longer. However, if a metal stent becomes blocked, a plastic stent may require to be placed through the blocked metal stent.

ERCP/PTC stenting are indicated either as a preoperative (before surgery) procedure in order to get the jaundice down before a curative operation or as a definitive procedure for patients who are not suitable for a curative operation (either due to lack of fitness or advanced nature of the disease).

Nerve block (coeliac plexus)

If the pain caused by cancer of the pancreas cannot be properly controlled with painkilling drugs, your doctor may suggest that you have a nerve block. A nerve block stops pain messages from getting to the brain by blocking the nerves themselves.

There are different ways in which this can be done, such as injecting an anaesthetic such as alcohol into the nerve, or, occasionally, cutting the nerve.

In people with cancer of the pancreas, persistent pain in the abdomen and back can be caused by the tumour pressing on the coeliac plexus (a complicated web of nerves at the back of the abdomen). A coeliac plexus nerve block is usually a very effective way of treating this type of pancreatic pain. This is carried out either under X-ray guidance or by EUS technique.

What follow up care is provided?

Follow up after pancreatic surgery will be at Addenbrooke's Hospital, clinic 4:

- Mr Praseedom or Mr Jah on Wednesday afternoons
- Mr Jamieson or Mr Huguet on Thursday afternoons.

This will be co-ordinated with Julie Ingmire and Lena loia (HPB specialist nurses), or Alison Deaves and Shona Rock (HPB secretaries). Patients who do not have surgery will be followed up with oncology/palliative care and at the original referring hospital.

What Research / Clinical Trials are available?

Research into new ways of treating pancreatic cancer is going on all the time. Doctors and researchers are continually looking for new ways of treating cancer and they do this by using clinical trials.

When a new treatment is being developed, it goes through various stages of research. To begin with it will be looked at in the laboratory, and sometimes tested on cancer cells in a test tube.

If the treatment seems as though it might be useful in treating cancer, it is then given to patients in research studies (clinical trials). As a first step, these aim to find a safe dose, see what side effects the therapy may cause, and identify which cancers it might be used to treat. These early studies are known as phase 1 trials. If these early studies suggest that the new treatment may be both safe and effective, further trials

are done to find out whether it is better than existing treatments, or has extra benefit when given together with these treatments. These trials (phases 2 and 3) compare the new treatment with the current best standard treatments.

Clinical trials are very necessary for working out how useful any possible new treatment might be, and seeing whether they are better than existing treatments. Because this must be done carefully and thoroughly, it usually takes some years from the time when a new treatment is first discovered (often with a lot of publicity in the papers and on TV) until the time when its true value is established.

You may be asked if you wished to take part in a trial. There can be many benefits in doing this. You will be helping to improve knowledge about cancer and the development of new treatments and you will be carefully monitored during and after the study. However, there is no pressure to participate in any of the trials. You will receive the standard treatment in accordance with the national guidelines whether you participate or not in the trials.

It is important to bear in mind that some treatments that look promising at first are often later found not to be as good as existing treatments, or to have side effects that outweigh any benefits.

Further Information:

- **Cambridge Cancer Help Centre**
  Drop-in Centre open Tuesday and Wednesday mornings providing relaxation, information, healing, art and newsletter:
  1A Stockwell Street 01223 566151
  off Mill Road http://www.cambridgecancerhelp.org
  Cambridge
  CB1 3ND
- Transplant Unit http://cambridge-transplant.org.uk/
- Addenbrooke's online http://www.addenbrookes.nhs.uk/
- PALS http://www.addenbrookes.org.uk/advice/pals/infocentre1.html
- AUGIS http://www.augis.org/augis/pages/augis.php
- IHPBA http://www.ihpba.org/
- Pancreatic Society http://www.pancsoc.org.uk/
- Pancreatic Cancer UK http://www.pancreaticcancer.org.uk/
- Cancer Help UK http://www.cancerhelp.org.uk
- Cancer Research UK http://www.cancerresearchuk.org/

- cancerBACKUP UK http://www.cancerbackup.org.uk/Home
- Julie Ingmire/Lena Loia HPB specialist nurses 01223 256147
- Raaj Praseedom Consultant Surgeon 01223 256040
- Neville Jamieson Consultant Surgeon 01223 257074
- Emmanuel Huguet Consultant Surgeon 01223 257074
- Asif Jah Consultant Surgeon 01223 257074

Addenbrooke's is smoke-free. You cannot smoke on site. For advice on quitting, contact your GP or the NHS smoking helpline free, 0800 169 0 169

Please ask if you require this information in other languages, large print or audio format: 01223 216032 or patient.information@addenbrookes.nhs.uk

Informacje te można otrzymać w innych językach, w wersji dużym drukiem lub audio. Zamówienia prosimy składać pod numerem: 01223 216032 lub wysyłając e-mail: patient.information@addenbrookes.nhs.uk
Polish

Se precisar desta informação num outro idioma, em impressão de letras grandes ou formato áudio por favor telefone para o 01223 216032 ou envie uma mensagem para: patient.information@addenbrookes.nhs.uk
Portuguese

Если вам требуется эта информация на другом языке, крупным шрифтом или в аудиоформате, пожалуйста, обращайтесь по телефону 01223 216032 или на вебсайт patient.information@addenbrookes.nhs.uk
Russian

若你需要此信息的其他語言版本、大字體版或音頻格式，請致電 01223 216032 或發郵件到：patient.information@addenbrookes.nhs.uk
Cantonese

Bu bilgiyi diger dillerde veya büyük baskılı ya da sesli formatta isterseniz lütfen su numaradan kontak kurun: 01223 216032 veya asagıdaki adrese e-posta gönderin: patient.information@addenbrookes.nhs.uk
Turkish

এই তথ্য বাংলায়, বড় অক্ষরে বা অডিও টেপে পেতে চাইলে দয়া করে 01223 216032 নম্বরে ফোন করুন বা patient.information@addenbrookes.nhs.uk ঠিকানায় ই-মেইল করুন।

Bengali

Document History

Authors	Raaj Praseedom, Julie Ingmire
Department	Cambridge Surgical Hepato-Pancreato-Biliary Unit Addenbrooke's Hospital, Cambridge University Hospitals NHS Foundation Trust, Hills Road, Cambridge, CB2 0QQ www.addenbrookes.org.uk
Contact number	01223 256147
Published	September 2009
Review date	September 2011
Supersedes which documents?	Version 1, July 2007
File name	Pancreatic_cancer.doc
Version number	2
Ref	PIN720