

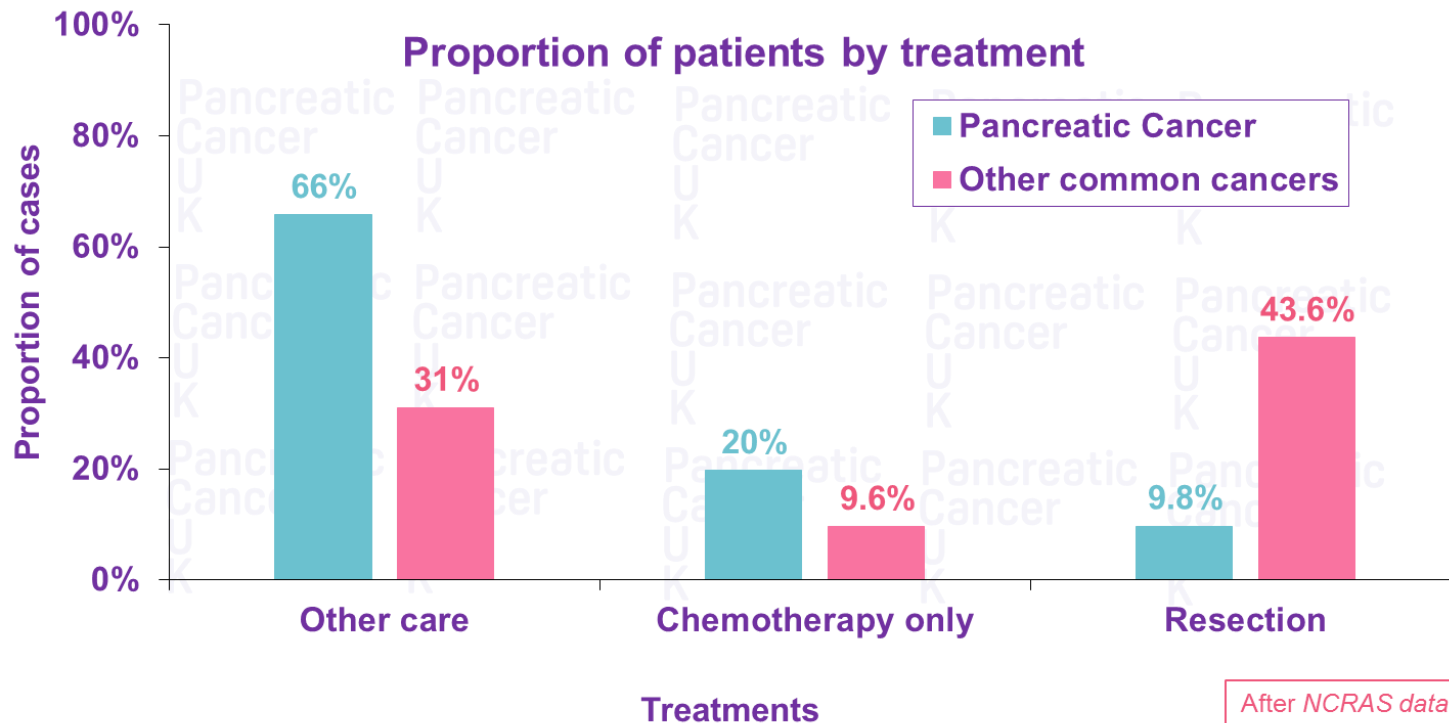
# Treatment for Pancreatic Cancer

## **Learning objectives**

- **Learn more about the challenges of treatment in pancreatic cancer**
- **Explore the different anti-cancer treatments for pancreatic cancer**
  - **Surgery**
  - **Chemotherapy**
  - **Radiotherapy**
  - **Clinical Trials**
- **Treating the symptoms of pancreatic cancer**
- **How might Pancreatic Cancer UK support you in supporting your patients**

# Pancreatic cancer is undertreated

- ✓ **7 in 10** people with pancreatic cancer do not receive any active treatment, including surgery, chemotherapy or radiotherapy
- ✓ **Only 1 in 10** people with pancreatic cancer receive potentially curative surgery
- ✓ **Only 2 in 10** people will receive chemotherapy



## Early diagnosis is essential to increase survival

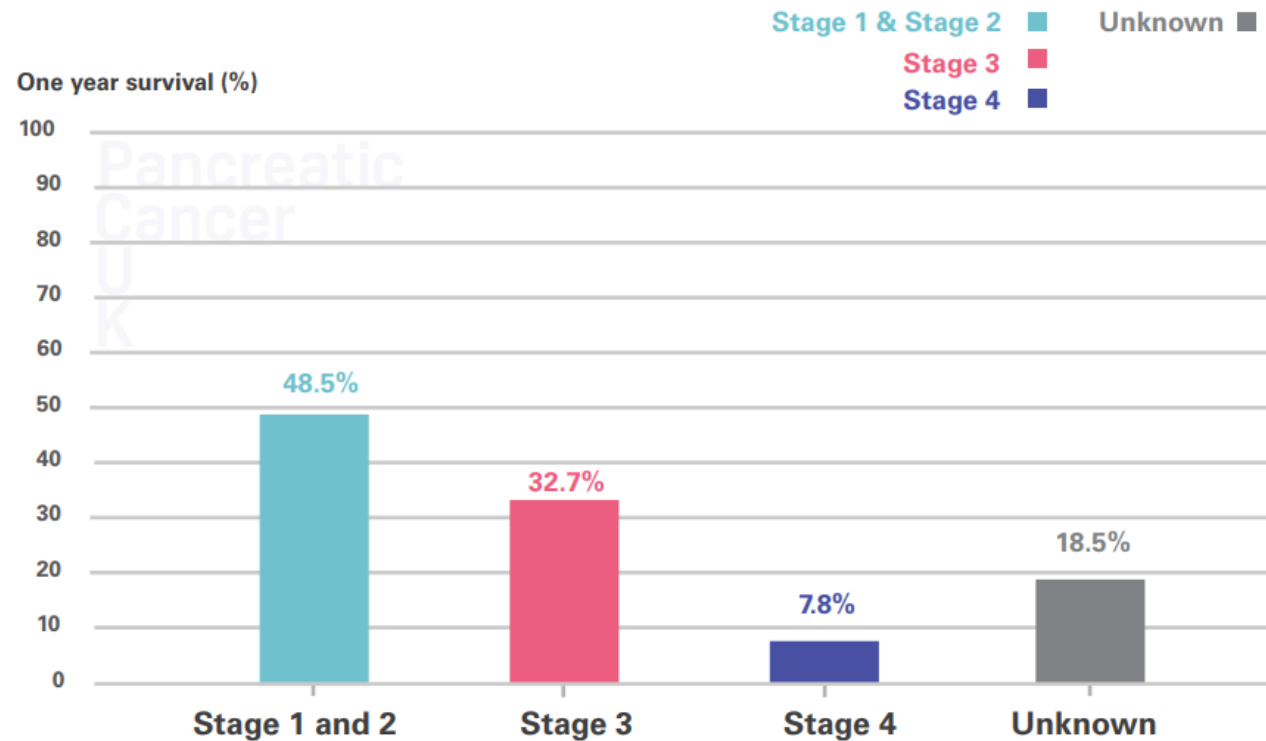
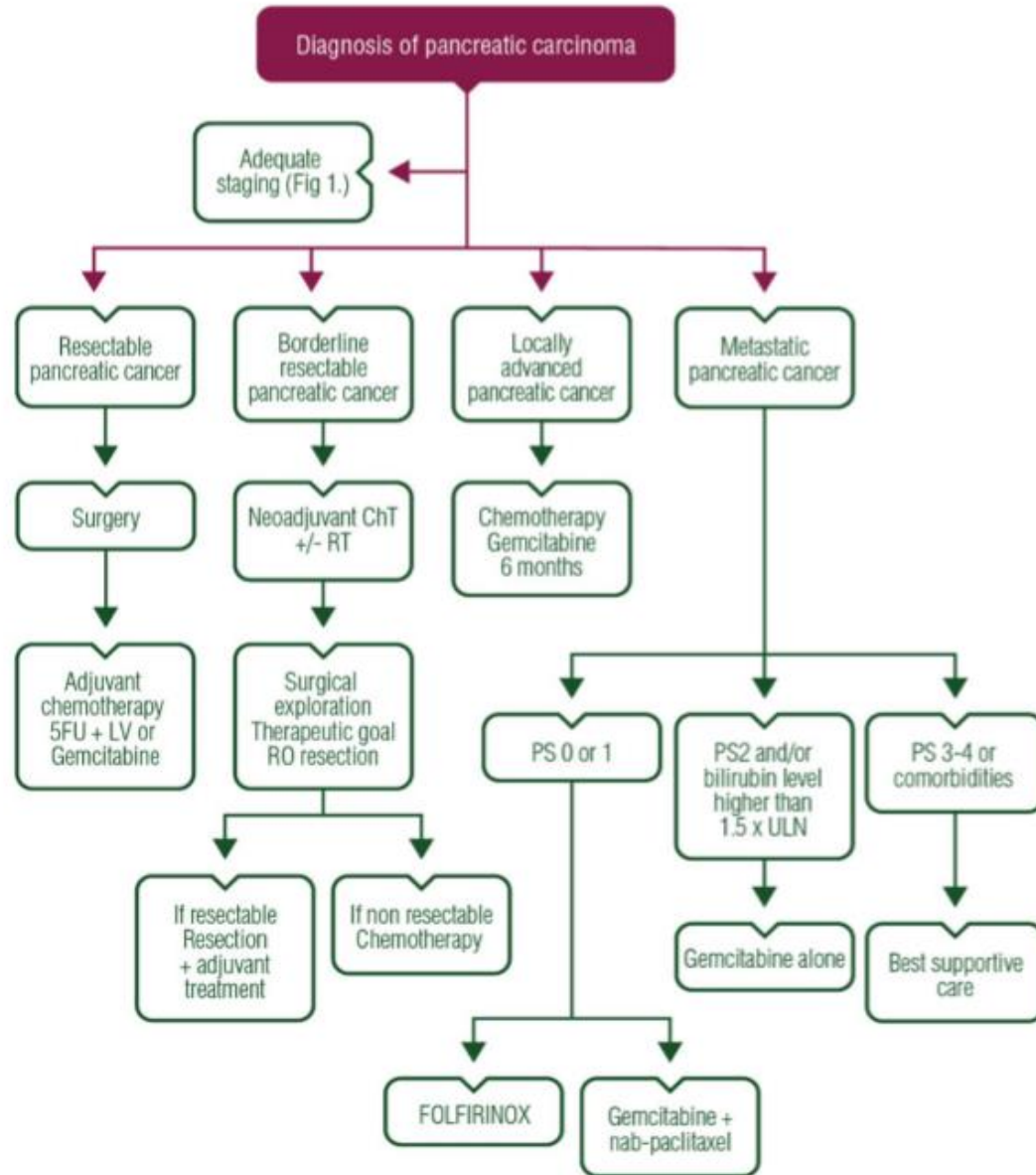
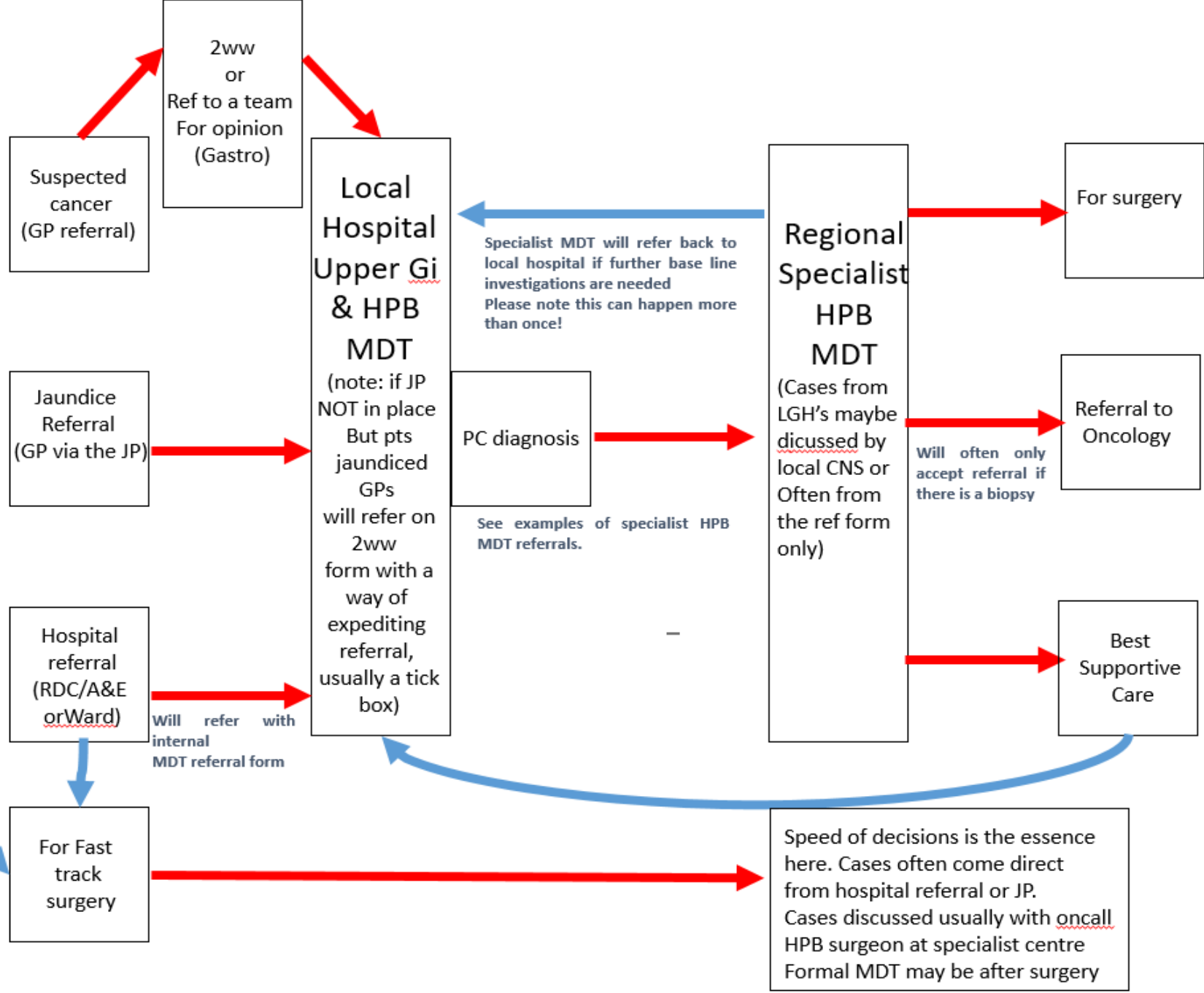


Figure 1: One year survival for people with exocrine pancreatic cancer diagnosed at each stage



Cancer of the pancreas: ESMO Clinical Practice Guidelines for diagnosis, treatment and follow-up†

Annals of Oncology 26 (Supplement 5): v56–v68, 2015  
doi:10.1093/annonc/mdv295



**Notes:**

- Not all areas will have JP or RDC
- Referral into JP can vary across regions
- FTS processes differ from hospital to hospital
- Specialist centres will also refer into MDT from their own catchment area

GP – general practitioner  
 JP – jaundice pathway  
 RDC – Rapid diagnostic centre  
 FTS – fast track surgery  
 2ww – 2 week wait, suspected cancer referral form

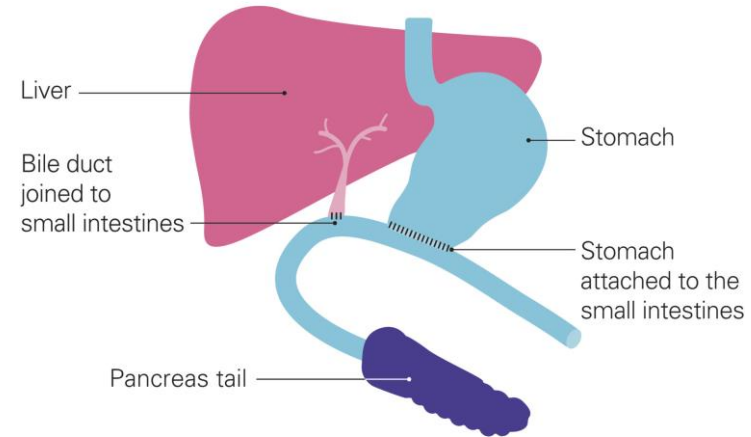
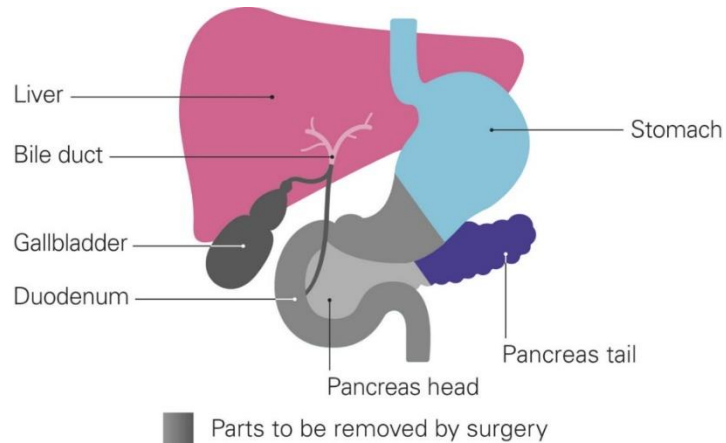
## Treatment Options

- Surgery
- Chemotherapy
- Radiotherapy
- Interventional procedures
- Best supportive care



# **Surgery**



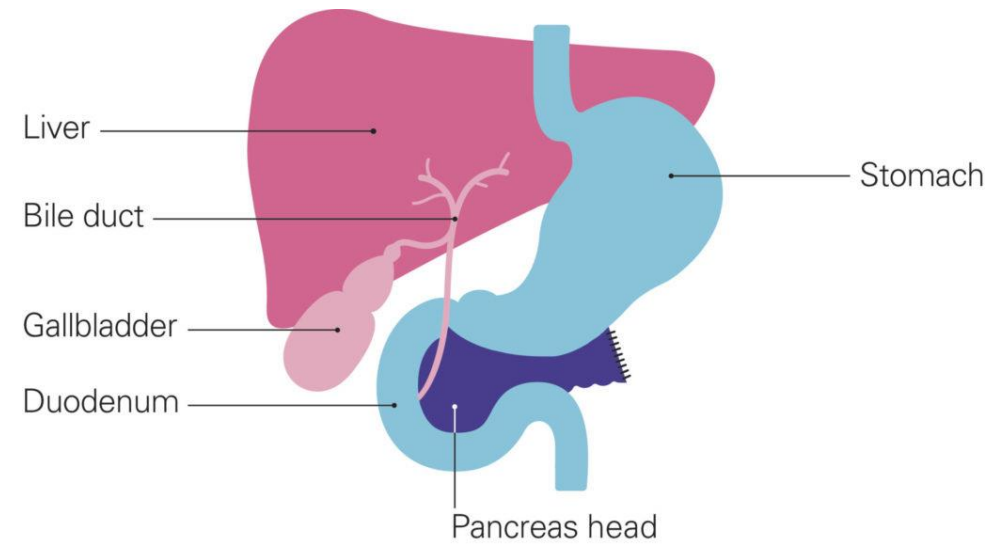
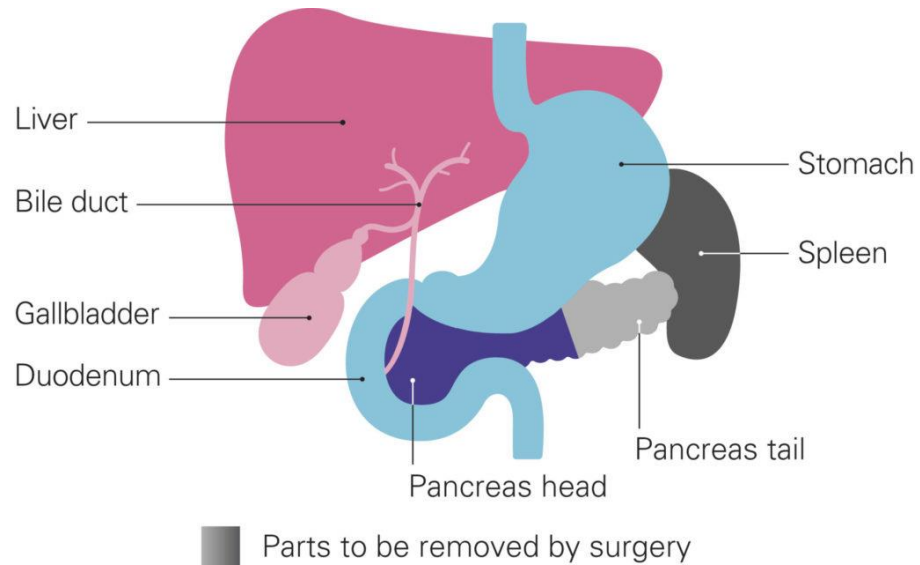


- Whipple's operation
- Most common operation
- Usually used for HOP of BOP
- Think nutritional well being
- Think diabetes

### **Pylorus-preserving pancreaticoduodenectomy (PPPD)**

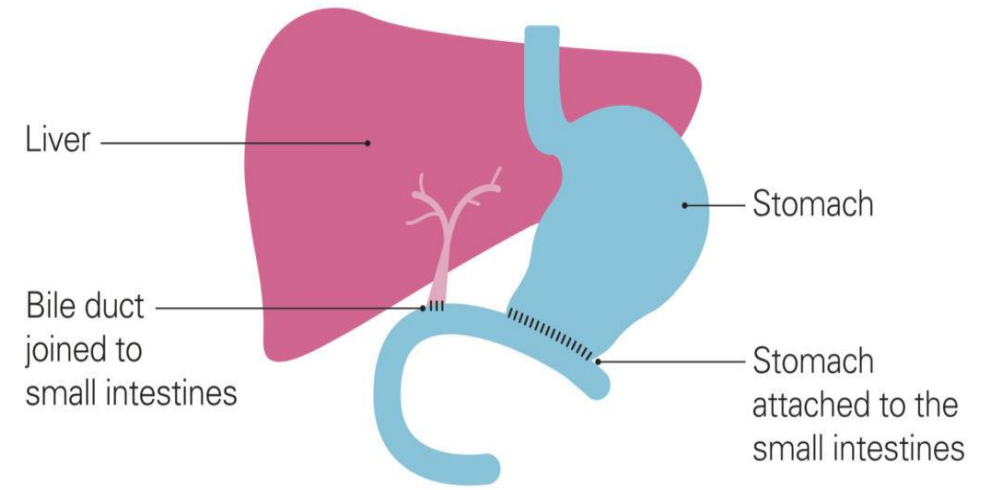
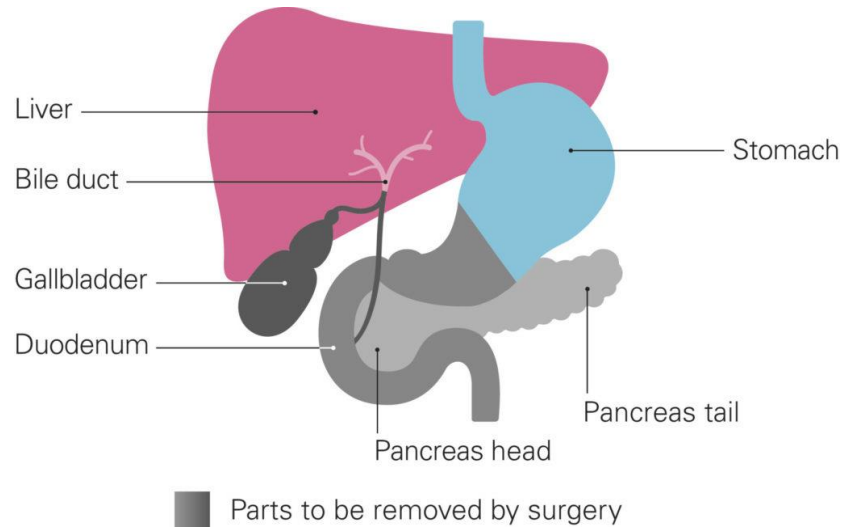
This operation is similar to the Whipple's operation for pancreatic cancer, but none of the stomach is removed. The stomach valve (the pylorus), which controls the flow of food into the duodenum, isn't removed either. The tail of the pancreas is joined to the small intestine or stomach.

# Pancreatic Cancer UK

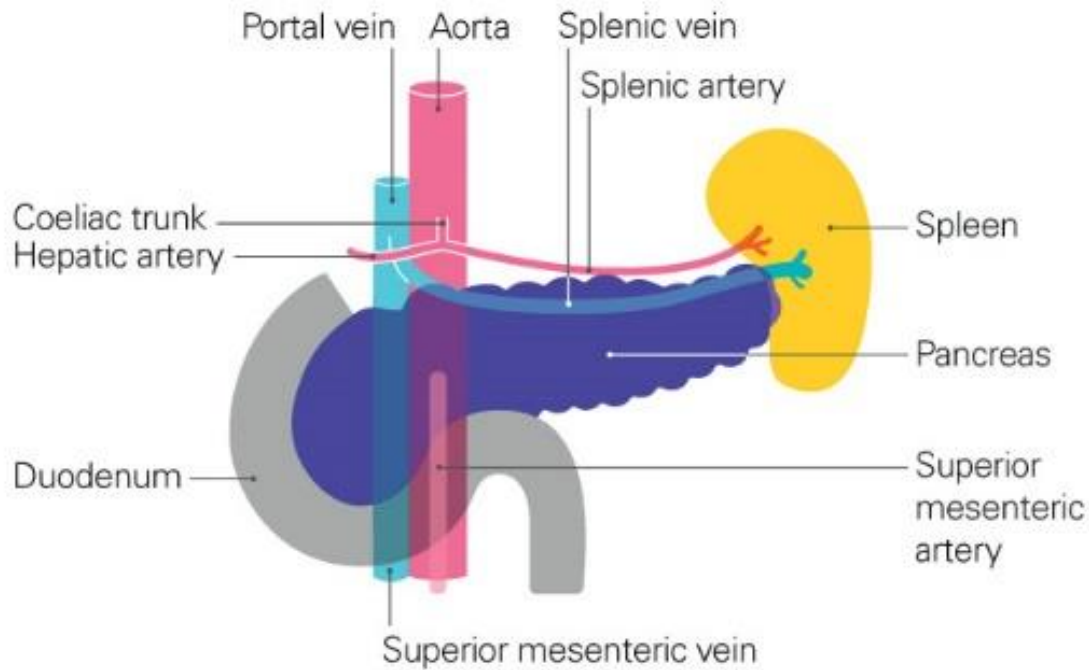


- Distal pancreatectomy
- Used for BOP and TOP
- Think nutritional well being
- Think diabetes
- Spleen removal so will need antibiotics for life

# Pancreatic Cancer UK



- Total pancreatectomy
- Used for BOP and TOP
- Think nutritional well being
- Think diabetes
- Spleen removal so will need antibiotics for life



## Removing part of a vein

Sometimes pancreatic cancer grows into or around the major veins next to the pancreas – the superior mesenteric and portal veins. To remove the cancer completely, the surgeon may need to remove part of the vein. The vein is then joined back together. This is called vein resection and reconstruction.

Vein resection makes the surgery more complicated.

Patients need to be very fit and well to have this type of surgery.

## Things to consider

1 in 10 (9.7%) of people with pancreatic cancer will have surgery

- Prehab/Rehab
  - Diet
  - Fitness
  - Psychological support
- Adjuvant chemotherapy

Only around 63% of people who have surgery will receive adjuvant chemotherapy

The one-year survival and five year survival after resection also depends on if the patient receives adjuvant chemotherapy.

- One-year survival with adjuvant chemotherapy is ~ 80%
- Five year survival with adjuvant chemotherapy is 18.8% in a real world study. Although ESPAC-4 reports slightly higher five-year survival of 20 – 30%.
- One-year survival with surgery alone is ~ 55%
- Five year survival with surgery alone is 12.2%
- Neo-adjuvant chemotherapy
  - Only consider neoadjuvant therapy for people with borderline resectable pancreatic cancer as part of a clinical trial.
  - Only consider neoadjuvant therapy for people with resectable pancreatic cancer as part of a clinical trial.

NICE National Institute for  
Health and Care Excellence



Pancreatic cancer in adults:  
diagnosis and management

NICE guideline  
Published: 7 February 2018  
[www.nice.org.uk/guidance/ng55](http://www.nice.org.uk/guidance/ng55)

## SIDE BY SIDE



A support service for people affected by pancreatic cancer who have had, or are likely to have, surgery to remove their cancer. It gives you the chance to speak to a trained volunteer who has been in a similar situation to your own.

<https://www.pancreaticcancer.org.uk/support-for-you/side-by-side-support-for-before-and-after-surgery/>

## Pancreatic cancer that can be removed by surgery

A guide if you have just been diagnosed



# **Chemotherapy & Radiotherapy**

## Chemotherapy for pancreatic cancer

This fact sheet is for anyone who wants to know more about treating pancreatic cancer with chemotherapy. It explains how chemotherapy is given, and the different drugs that may be used. It also explains the main side effects of chemotherapy and how these can be managed.

### Contents

|  |    |
|--|----|
| Chemotherapy for treating pancreatic cancer  | 2  |
| What are the advantages and disadvantages?   | 6  |
| How is chemotherapy given?                   | 7  |
| Check-ups before and during treatment        | 8  |
| How does chemotherapy affect the blood?      | 9  |
| Other side effects of chemotherapy           | 11 |
| Diet and chemotherapy                        | 15 |
| What happens after my chemotherapy finishes? | 16 |
| Coping with chemotherapy                     | 16 |
| Further information and support              | 18 |

This information is for people with the most common type of pancreatic cancer, pancreatic ductal adenocarcinoma. People with pancreatic neuroendocrine tumours (NETs) may have different chemotherapy. The NET Patient Foundation has more information at – [www.netpatientfoundation.org](http://www.netpatientfoundation.org)

Each hospital may do things slightly differently, and treatment will vary depending on your cancer. Speak to your doctor or nurse about your treatment.



You can also speak to our specialist nurses on our confidential Support Line. Call them free on **0808 801 0707**, or email [nurse@pancreaticcancer.org.uk](mailto:nurse@pancreaticcancer.org.uk)

Chemotherapy can be used:

- Neo-ADJUVANT (before surgery to try to shrink the cancer so that there's a better chance of removing it)
- ADJUVANT (after surgery to try to reduce the chances of the cancer coming back)
- LOCALLY ADVANCED (to slow down the growth of cancer that has spread to nearby structures, such as the blood vessels around the pancreas)
- PALLIATIVE (when the cancer has spread beyond the pancreas to other parts of the body)



### Things to consider

- **Diet**
- **Fitness**
- **Psychological support**

### Common chemotherapy regimes used in Pancreatic Cancer,

- **FOLFIRINOX – a combination of oxaliplatin (Eloxatin®), folinic acid (leucovorin), irinotecan and Fluorouracil (5-FU)**
- **Gemcitabine (Gemzar®)**
- **GemCap – gemcitabine and capecitabine (Xeloda®)**
- **FOLFOX – oxaliplatin, fluorouracil and folinic acid**
- **Nab-paclitaxel (Abraxane®) with gemcitabine**

| GRADE | ECOG PERFORMANCE STATUS   |
|-------|---|
| 0     | Fully active, able to carry on all pre-disease performance without restriction  |
| 1     | Restricted in physically strenuous activity but ambulatory and able to carry out work of a light or sedentary nature, e.g., light house work, office work |
| 2     | Ambulatory and capable of all selfcare but unable to carry out any work activities; up and about more than 50% of waking hours                            |
| 3     | Capable of only limited selfcare; confined to bed or chair more than 50% of waking hours  |
| 4     | Completely disabled; cannot carry on any selfcare; totally confined to bed or chair   |
| 5     | Dead  |



- Radiotherapy is used to kill cells
- Can be given with chemo (chemo/rad)
- Given in neo-adjuvant, LA and advanced disease
- Being used more frequently in PDAC, studies continue

**Stereotactic ablative radiotherapy (SABR)** or stereotactic body radiotherapy (SBRT) is a type of very precise radiotherapy. You may have heard it called Cyberknife®. SABR delivers higher doses of radiation in a shorter time, which reduces the number of treatments. SABR is not routinely available for pancreatic cancer on the NHS, and is only available in a few hospitals in the UK. You can ask your doctor more about SABR.

## **Irreversible electroporation (NanoKnife®) for pancreatic cancer**

Irreversible electroporation (IRE) is a treatment that uses electrical currents to damage and destroy cancer cells. It is known as NanoKnife.

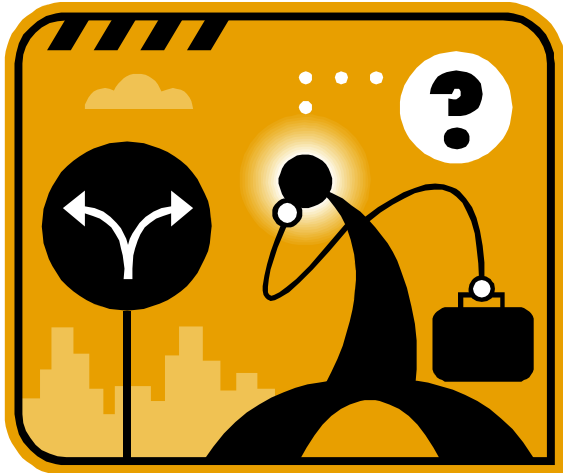
IRE for pancreatic cancer involves inserting thin needles around the cancer. Electrical currents are passed between the needles. These currents damage and destroy the cancer cells.

The aim is to slow the growth of pancreatic cancer by destroying the cancer cells.

It's important to remember that there has not been much research into IRE for people with pancreatic cancer. There have only been a few small studies, which means that we don't know enough about how well it works, who it is most suitable for, and the side effects and complications.

The National Institute for Health and Care Excellence (NICE) has said that at the moment IRE should only be used in research studies looking at how well it controls pancreatic cancer.

# **Clinical Trials**



## Questions

Who should we treat?

With how much drug?

How often?

In combination?

Is the drug working?

**How does the drugs make people feel?**

### Phase I

First in humans – is it safe?

Maximum tolerated dose

Small numbers of patients



### Phase II

Does the drug work?

Specific type of cancer

Involves more patients



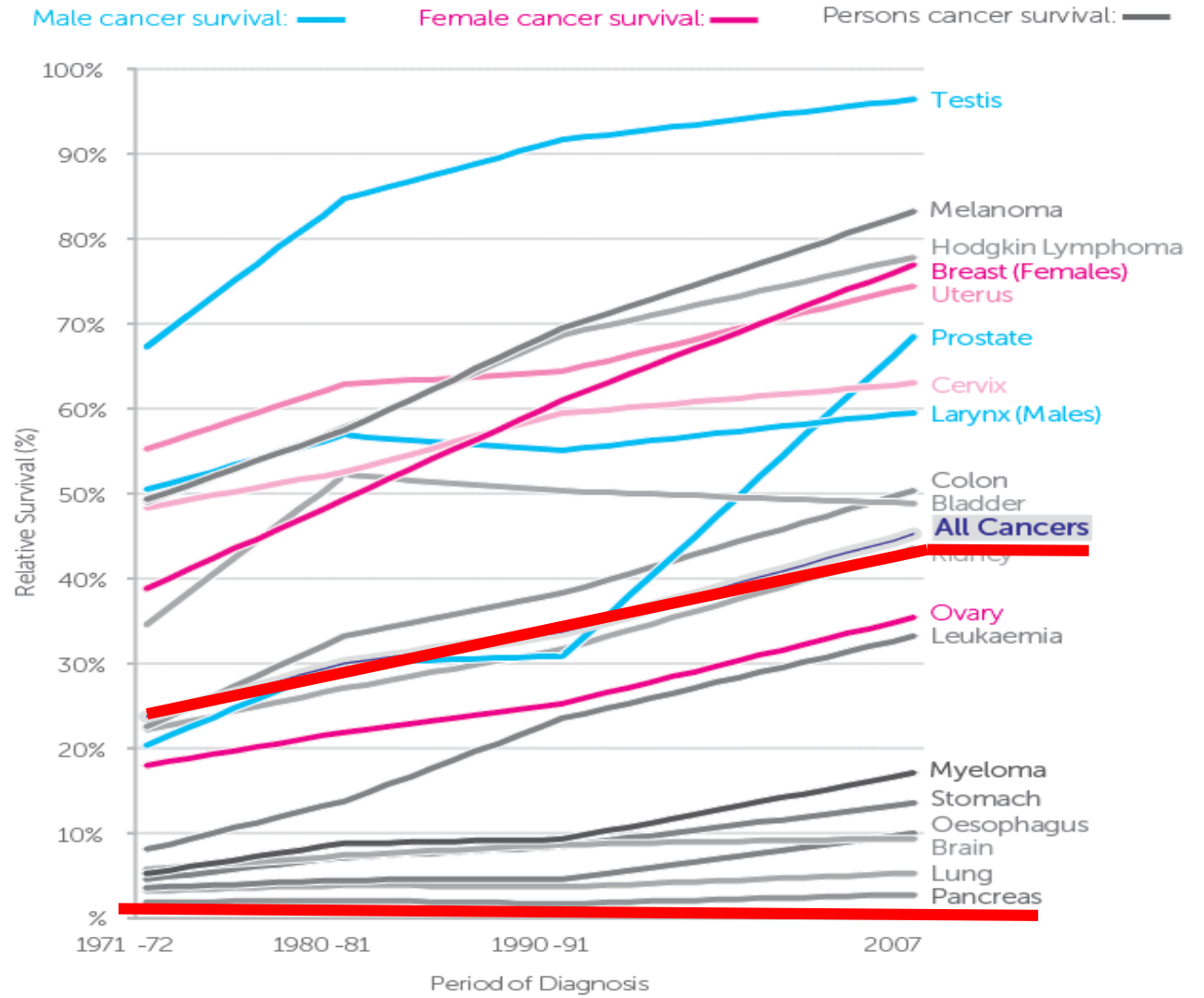
### Phase III

Is the drug better?

Specific type of cancer

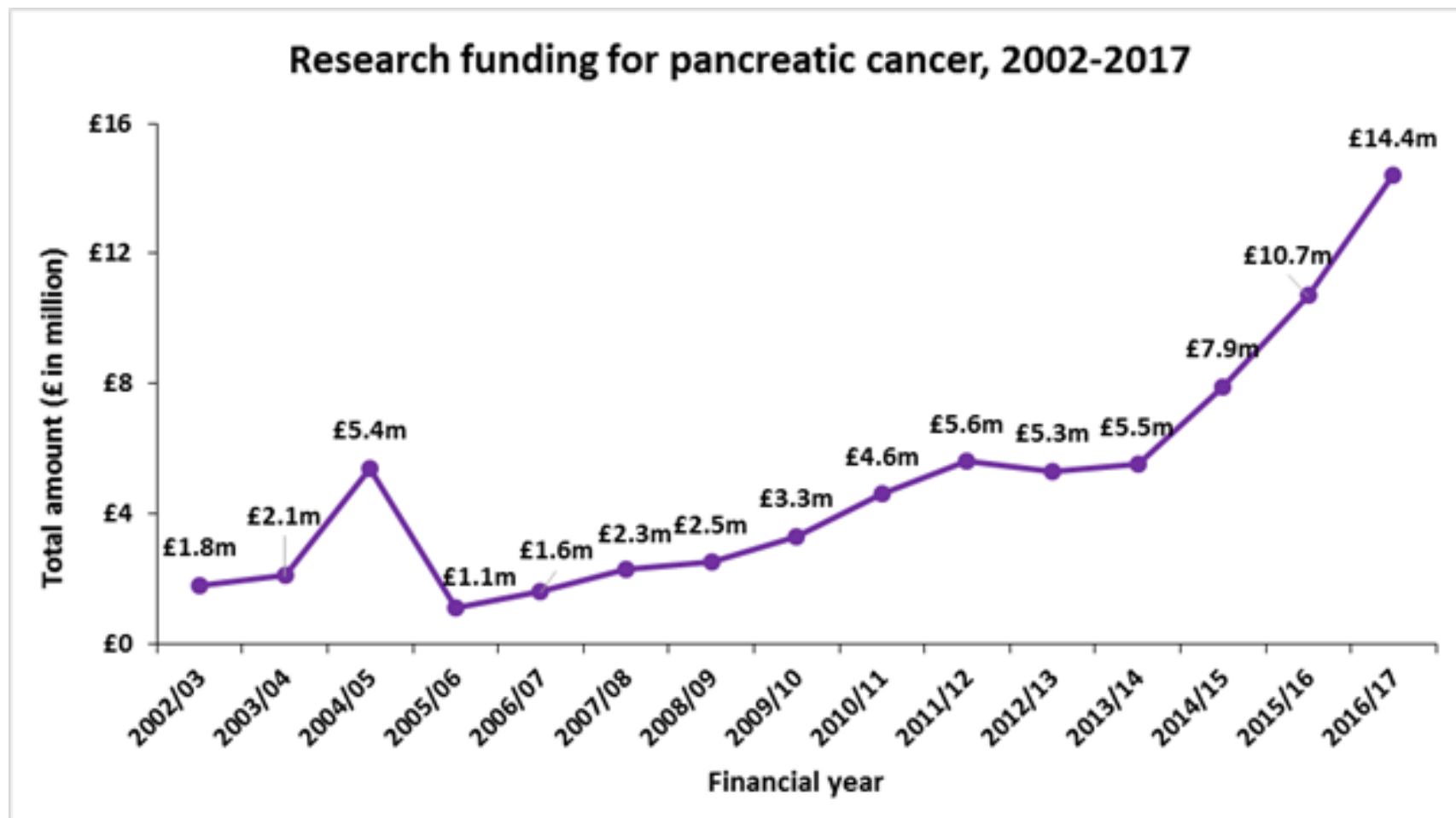
Involves 100s of patients

# 5 year survival rate hasn't improved in last 40 years



[http://www.cancerresearchuk.org/sites/default/files/cstream-node/cs\\_surv\\_common.pdf](http://www.cancerresearchuk.org/sites/default/files/cstream-node/cs_surv_common.pdf)  
(October 2017)

# Pancreatic Cancer UK




| Clinical trials   |
|---|
| A trial looking at olaparib with chemoradiation for pancreatic cancer (PIONEER)   |
| A trial looking at LY3143921 hydrate for advanced cancer  |
| A study of FOLFOX-A chemotherapy for cancer of the pancreas that has spread (PRIMUS 001)  |
| A study of matching new treatments to the individual make up of pancreatic cancer (Precision-Panc)  |
| A trial assessing at the usefulness of electronic tools to assess the risk of cancer (ERICA)  |
| A study to identify early signs of cancer of the pancreas (EUROPAC)   |
| A study looking at breath samples to detect cancer early (PAN Cancer Early Detection Study)   |
| A study of 2 different combinations of chemotherapy before surgery for cancer of the pancreas (PRIMUS 002)  |
| A study looking at blood, urine and tissue samples to help diagnose pancreatic cancer, neuroendocrine tumours of the pancreas and bile duct cancer (ADEPTS) |
| A study to learn more about how the immune system works in pancreatic cancer (PORTICOtrans)   |
| A trial of defactinib and pembrolizumab for people with solid tumours (FAK-PD1)   |



<https://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/trials-by-cancer-type>

44 in breast cancer  
25 in lung cancer  
22 in colorectal cancer  
11 in pancreatic cancer





Find pancreatic cancer clinical trials by entering a keyword, location or by clicking the map. You can also filter your search by choosing from the boxes below.

Search by keyword  Search by location  Select distance

Operable trials  Inoperable trials  Other trials

<https://clinicaltrialfinder.pancreaticcancer.org.uk/>

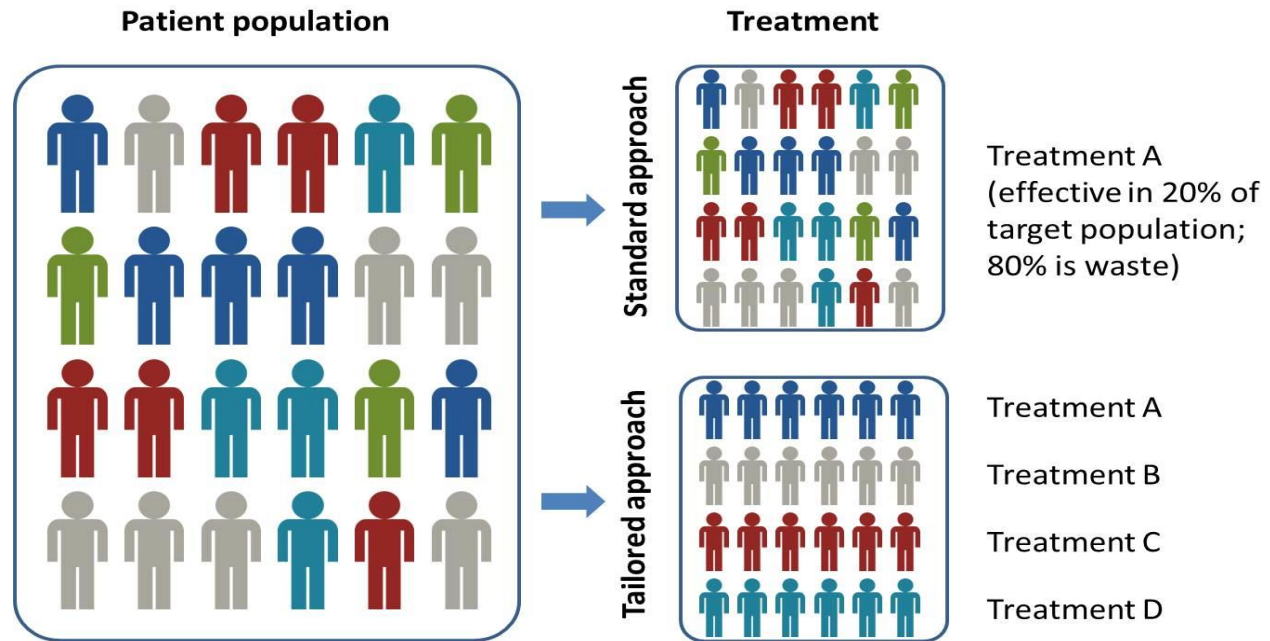
## Clinical Trials for pancreatic cancer

This fact sheet is for anyone who would like to find out more about clinical trials for pancreatic cancer. Clinical trials can be an important treatment option for people with pancreatic cancer. This factsheet explains what clinical trials are, why they are important and what they involve.

You can also speak to our specialist nurses on our confidential Support Line. Call free on 0808 801 0707, or email [nurse@pancreaticcancer.org.uk](mailto:nurse@pancreaticcancer.org.uk)

### Contents

|  |    |
|--|----|
| What are clinical trials for pancreatic cancer?.....                               | 2  |
| Why are clinical trials important for pancreatic cancer?.....                      | 2  |
| What types of clinical trials are there for pancreatic cancer?.....                | 3  |
| Who can take part in a clinical trial for pancreatic cancer?.....                  | 5  |
| What are the advantages and disadvantages of taking part in a clinical trial?..... | 6  |
| How do I decide if I want to take part in a clinical trial?.....                   | 7  |
| What happens if I do decide to take part in a clinical trial?.....                 | 8  |
| What happens with the results of a pancreatic cancer clinical trial?.....          | 9  |
| Further information and support.....   | 10 |

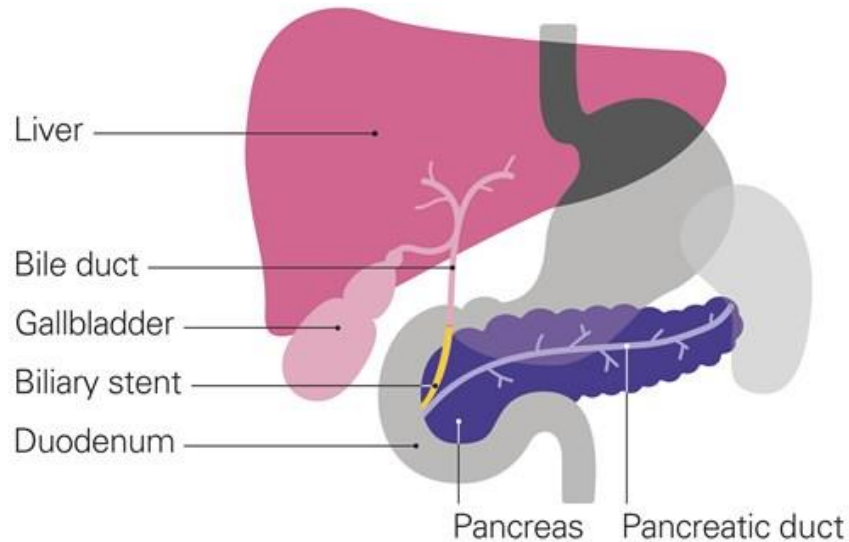
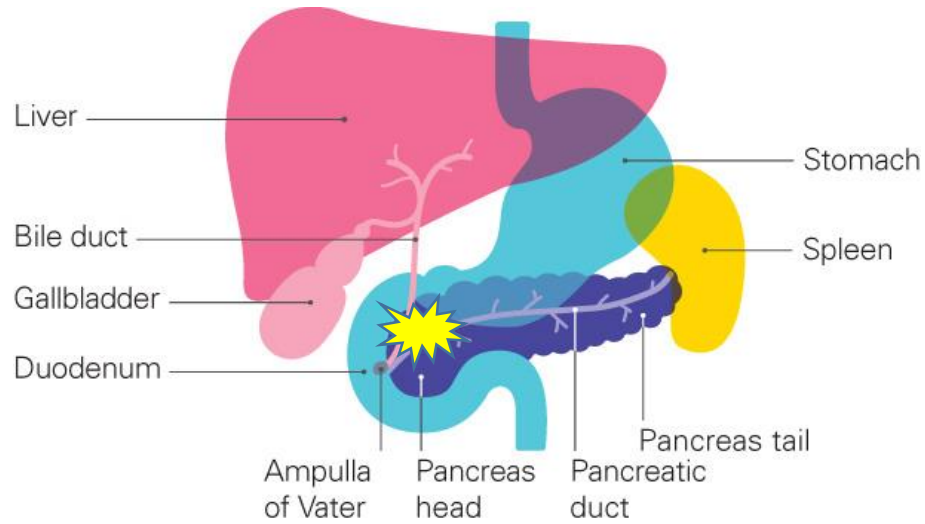


# **Best Supportive Care**

## Ongoing Symptoms

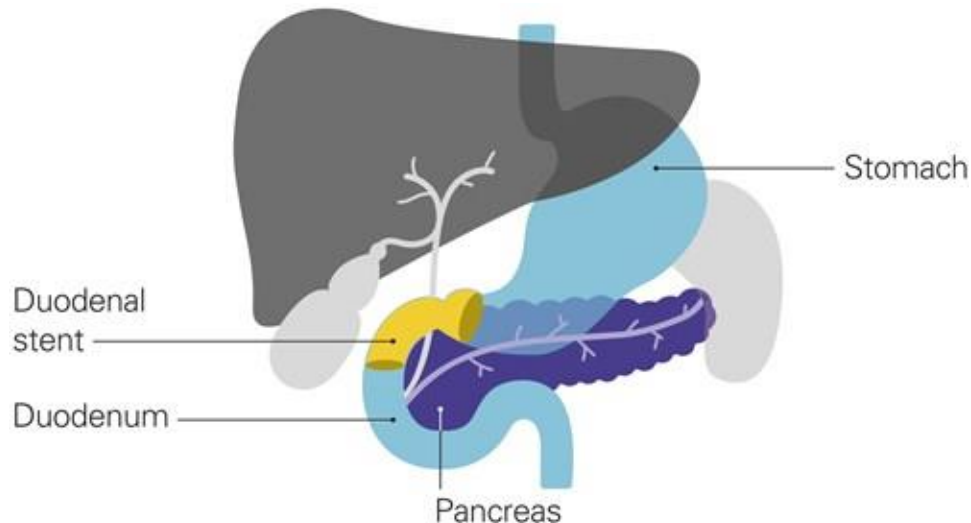
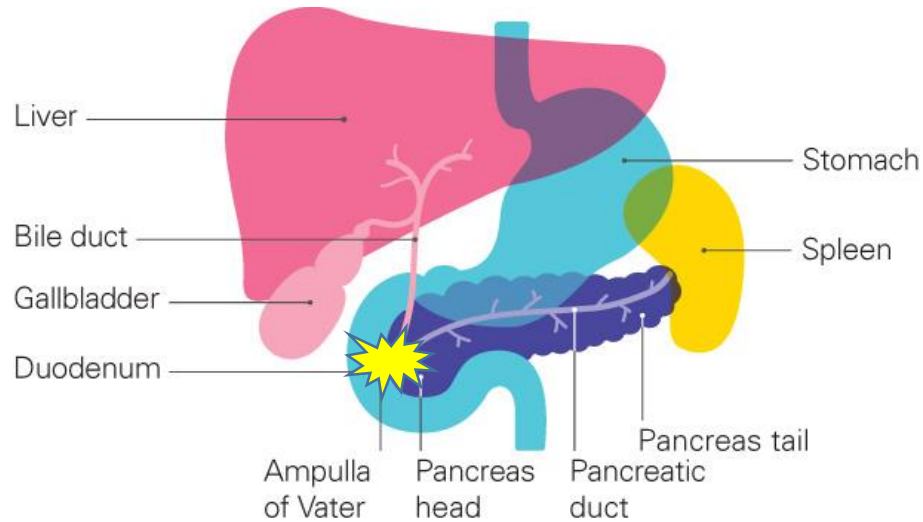
- Jaundice
- Ascites
- Gastric Outlet Obstruction
- Diet & weight loss
- Fatigue
- Financial

# Pancreatic Cancer UK



- 75% of HOP present with jaundice
- Elevated bilirubin, yellow skin & eyes, dark urine, pale stools, itching skin
- Is associated with decreased survival
- Stent to improve symptoms, treatment options & QoL,

# Pancreatic Cancer UK



- 6% of PC patients present with gastric outlet obstruction/duodenal obstruction
- Nausea and vomiting, dehydration, malnutrition and delay in treatments
- Goes on to occur in up to 20% of PC patients
- Stenting improves symptoms, treatment options and QoL

## **Diet after a stent or bypass surgery**

This page has information on managing your diet after a stent or bypass surgery.

<https://www.pancreaticcancer.org.uk/information/treatments-for-pancreatic-cancer/stents-and-bypass-surgery/diet-after-a-stent-or-bypass-surgery/>

## **Stents and bypass surgery for pancreatic cancer**

This fact sheet is for people with pancreatic cancer who are having a stent or bypass surgery. These treatments help symptoms caused by the cancer blocking the bile duct or duodenum. Family members may also find it helpful. It describes what the treatments involve, possible side effects, how they can affect your diet, and recovering afterwards.

### **Contents**

|  |    |
|--|----|
| What are stents and bypass surgery used for? .....   | 2  |
| What are stents and when are they used?.....         | 3  |
| Stent for a blocked bile duct .....                  | 4  |
| Stent for a blocked duodenum .....                   | 6  |
| Are there any problems with stents? .....            | 7  |
| What is bypass surgery and when is it used? .....    | 9  |
| After your bypass surgery .....                      | 13 |
| Are there any side effects from bypass surgery?..... | 14 |
| Diet after a stent or bypass surgery .....           | 15 |
| Coping with pancreatic cancer .....                  | 16 |
| Further information and support .....                | 17 |

Each hospital will do things slightly differently so use this fact sheet as a general guide. Ask your doctor or nurse for more information about your treatment.



You can also speak to our specialist nurses on our confidential Support Line. Call free on **0808 801 0707** or email [nurse@pancreaticcancer.org.uk](mailto:nurse@pancreaticcancer.org.uk)

- Abnormal accumulation of fluid in the abdomen. Its often multifactorial, effects 20% of patients however more common in advanced metastatic disease

#### Symptoms

- Adbo swelling, discomfort and increased waist size
  - SOB
  - Decreased appetite, feeling full
  - Indigestion
  - Increased weight
  - Fatigue
  - Constipation, nausea & vomiting
  - Ankle swelling
- Diuretics, drainage, comfort measures







## Diet and pancreatic cancer booklet

This booklet explains how pancreatic cancer can cause problems with diet, eating and nutrition.

It includes information on how to manage these problems including pancreatic enzyme supplements.

- Discussions on managing energy, breaking up of daily tasks
- Discuss on individual aims and goals and how to achieve them
- Exercise
- Diet
- Signpost to support
- Communications

Think

- Low Hb
- Low deficiency
- Is this reversible?

**Pancreatic Cancer UK**

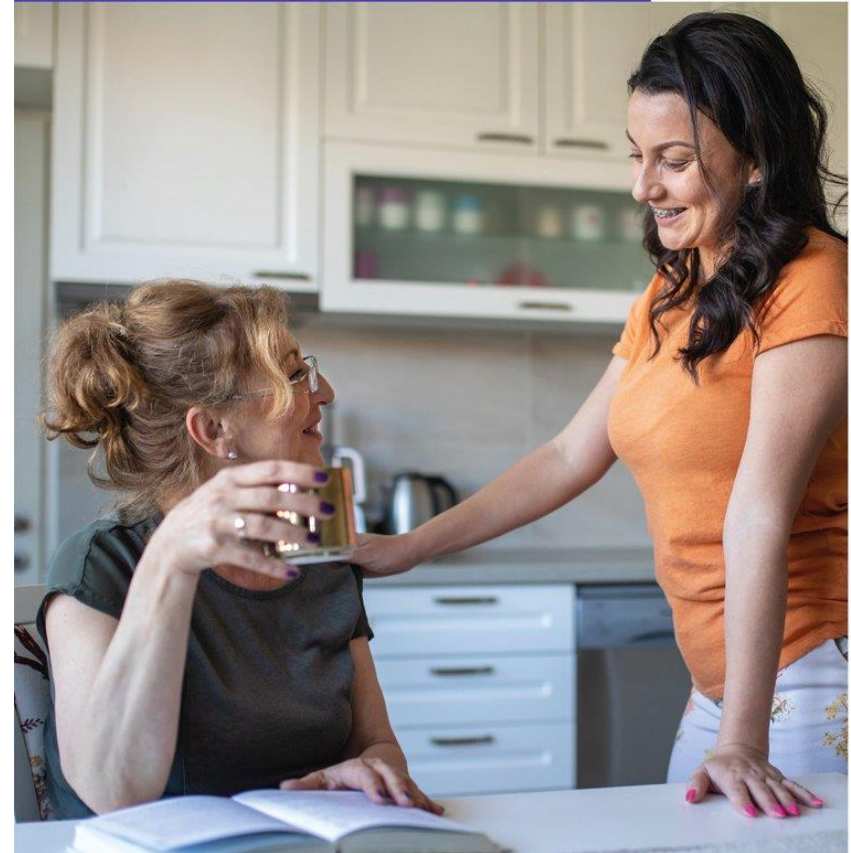
**Diary for managing fatigue**  
(extreme tiredness)

Keeping a diary can help you to monitor your fatigue and what makes it better or worse. This can help you manage it better. Sharing the information with your healthcare team will also help them offer you the most effective treatment for your fatigue.

|   | Monday |    |     | Tuesday |    |     | Wednesday |    |     | Thursday |    |     |
|---|--------|----|-----|---------|----|-----|-----------|----|-----|----------|----|-----|
|   | am     | pm | eve | am      | pm | eve | am        | pm | eve | am       | pm | eve |
| Rate your fatigue from 0 to 10:<br>0 = no fatigue<br>10 = worst fatigue you can imagine                                     |        |    |     |         |    |     |           |    |     |          |    |     |
| How did you feel today (for example, happy, worried)?   |        |    |     |         |    |     |           |    |     |          |    |     |
| What did you do today?  |        |    |     |         |    |     |           |    |     |          |    |     |
| Did you have any treatment? If so, what? Did anything change in your care (such as changes to medication)?                  |        |    |     |         |    |     |           |    |     |          |    |     |
| Did anything make your fatigue better?  |        |    |     |         |    |     |           |    |     |          |    |     |
| Did anything make your fatigue worse?   |        |    |     |         |    |     |           |    |     |          |    |     |
| Note down anything else you think is relevant (for example, what you ate, problems with diet and digestion, other symptoms) |        |    |     |         |    |     |           |    |     |          |    |     |

pancreaticcancer.org.uk   Specialist nurses 0800 801 0707   nurse@pancreaticcancer.org.uk

**Fatigue and pancreatic cancer**  
How to deal with tiredness



## Benefits and Financial Support

- Recognise the 'price' of a cancer diagnosis
- Financial issues can cause worry when someone becomes ill
- Ability to work can be effected, work just doesn't mean employment
- Your patients may be able to claim benefits to help you in their situation.
- Your patients may also be able to get financial assistance from other organisations

## What can you do?

- Open & honest discussions, identify need
- Information & signposting
- Encourage self referral while continuing support those who need it.
- Macmillan information & benefits advice workers
- Maggie's
- Recognise those who are eligible for support as they are in the last year of life (All special rules claims for AA, PIP and DLA are reviewed after three years)

# What am I missing?



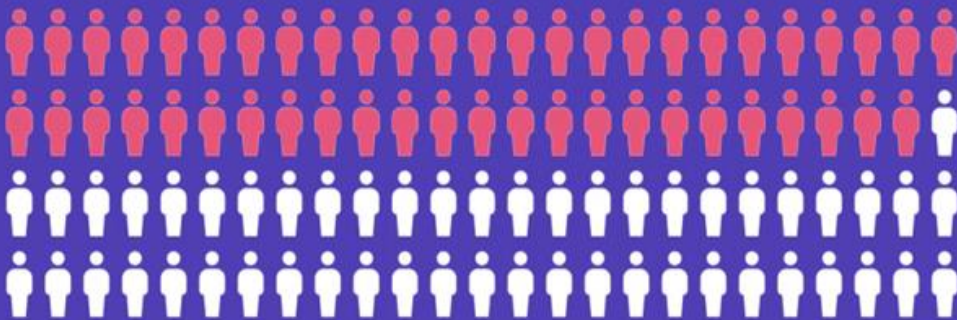
## Ongoing Symptoms

- Jaundice
- Ascites
- Gastric Outlet Obstruction
- PEI, diet & weight loss
- Fatigue
- Financial
- **Supportive care**



87%

of people reported that they have one or more **supportive care needs**



49%

reported one or more **moderate or high unmet needs**

## Psychological Impact of Pancreatic Cancer

- National Cancer Patient Experience survey reports that access to information and support is poorer in pancreatic cancer (PC) than in other cancers
- Studies show that up to 96% of PC patients have unmet needs both physical (54%) and psychological (52%)
- With needs being very similar for both those who have undergone surgery and those who have not
- Distress occurs more frequently in those with PC than in other cancers.  
R 30-70% at different points along the disease trajectory

## Supportive Care

Should start at diagnosis in a lot of cases

Consider -

- Referrals and sign posting
- Financial support
- GP liaison
- Identify when entering last year of life
- Gold standard Framework
- Communications



Pancreatic  
Cancer  
UK



Thank you. Any questions?

**Pancreatic  
Cancer  
UK**

**[lynne.mccallum@pancreaticcancer.org.uk](mailto:lynne.mccallum@pancreaticcancer.org.uk)**