

# Surgical Management of Pancreatic Cancer

**Lisa Woodrow**  
**Specialist Nurse at Pancreatic Cancer UK**

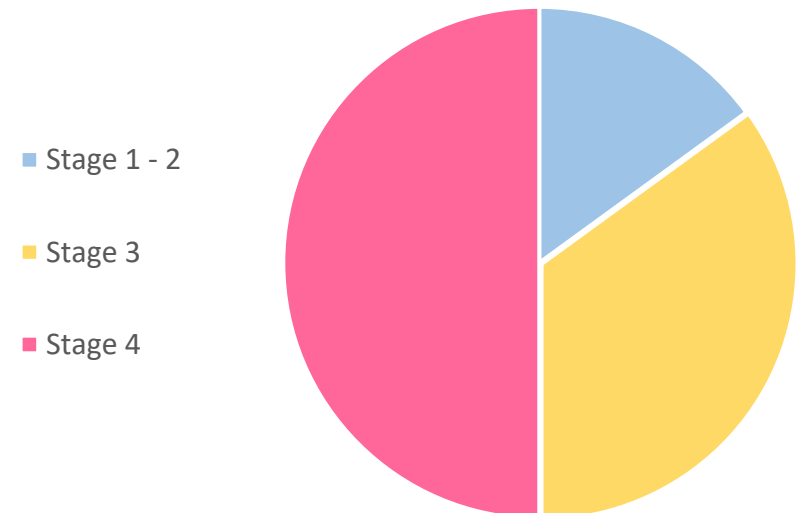
## **Aims:**

- **Understand statistics surrounding pancreatic surgery**
- **Relevance of staging and resectability**
- **Types of surgery performed**
- **Immediate management of patient post-operatively**
- **Complications of surgery**
- **Key factors**

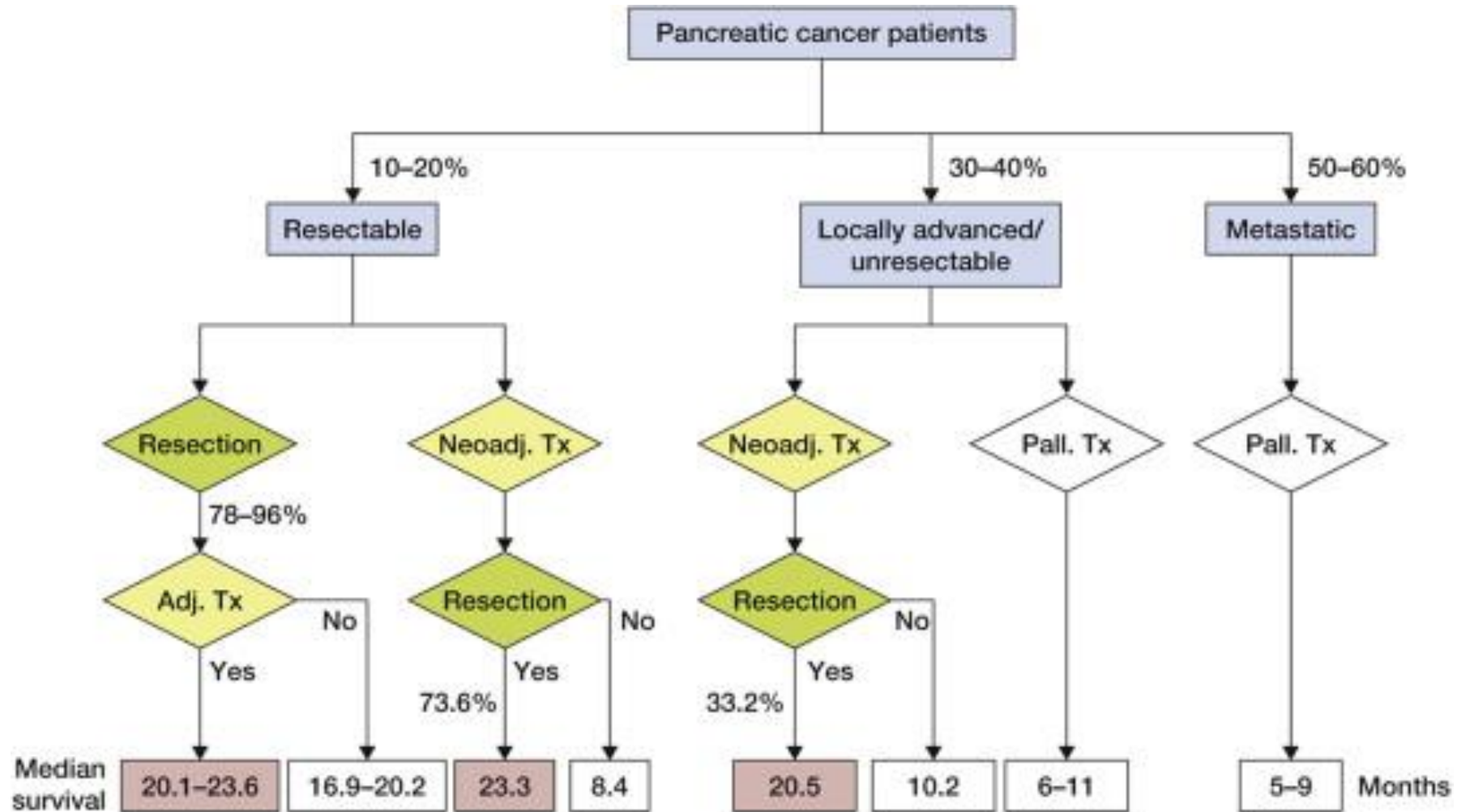
## Statistics around diagnosis

- 10–20% of patients present with resectable tumours
- 30–40% present with borderline resectable pancreatic cancer (BRPC) or locally advanced/unresectable pancreatic cancer (LAPC)
- 50–60% present with metastatic or systemic disease

Stage at Diagnosis



# Diagnosis, Treatment Pathways and Median Survival (months)

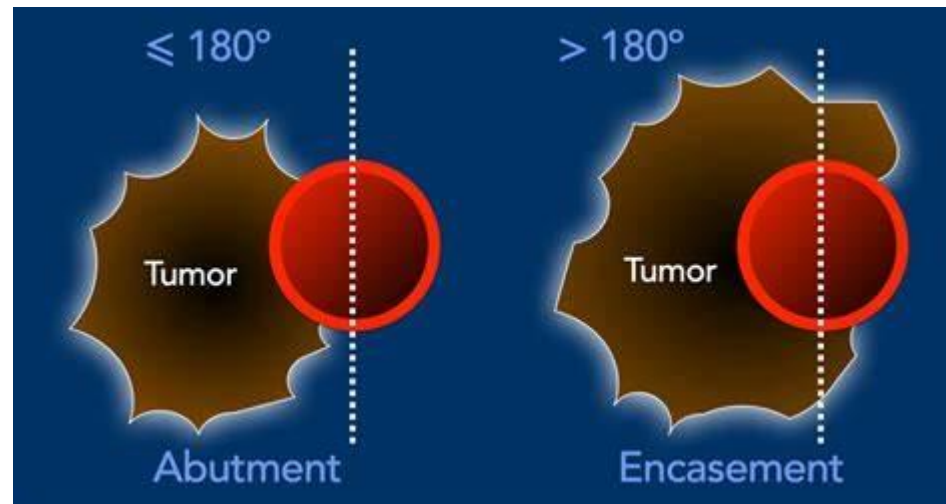


[http://www.pancreatology.net/article/S1424-3903\(14\)00997-1/pdf](http://www.pancreatology.net/article/S1424-3903(14)00997-1/pdf); Hidalgo et al., 2015

**Note:** these statistics are the overall of Europe (incl. UK)

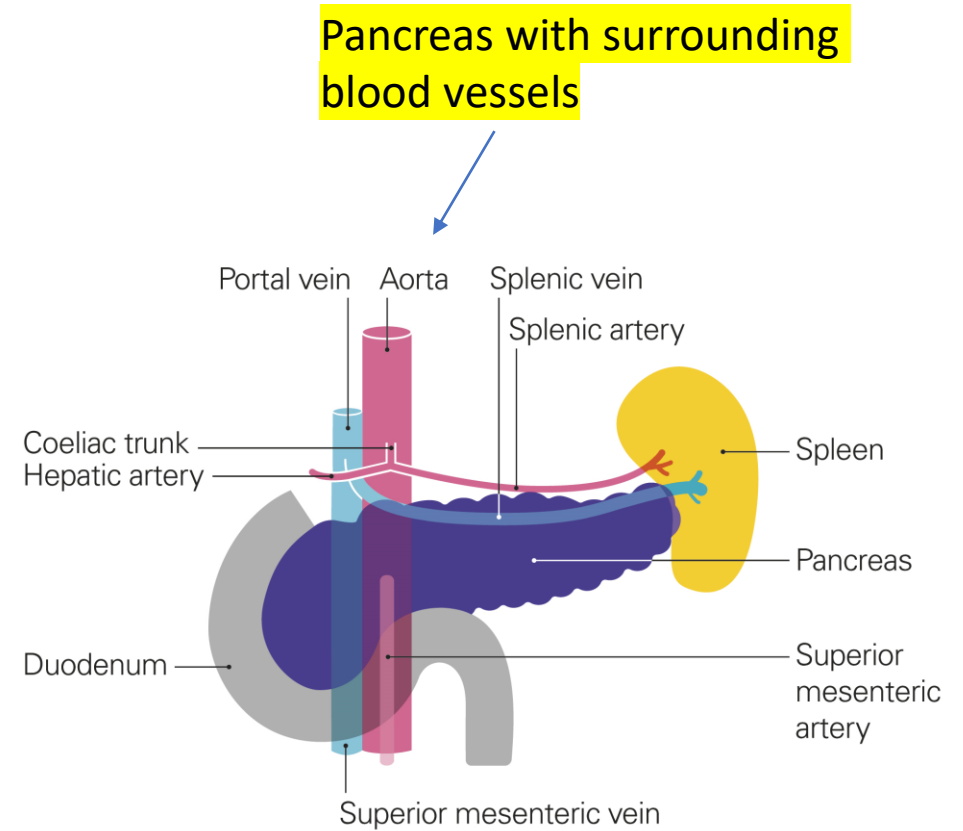
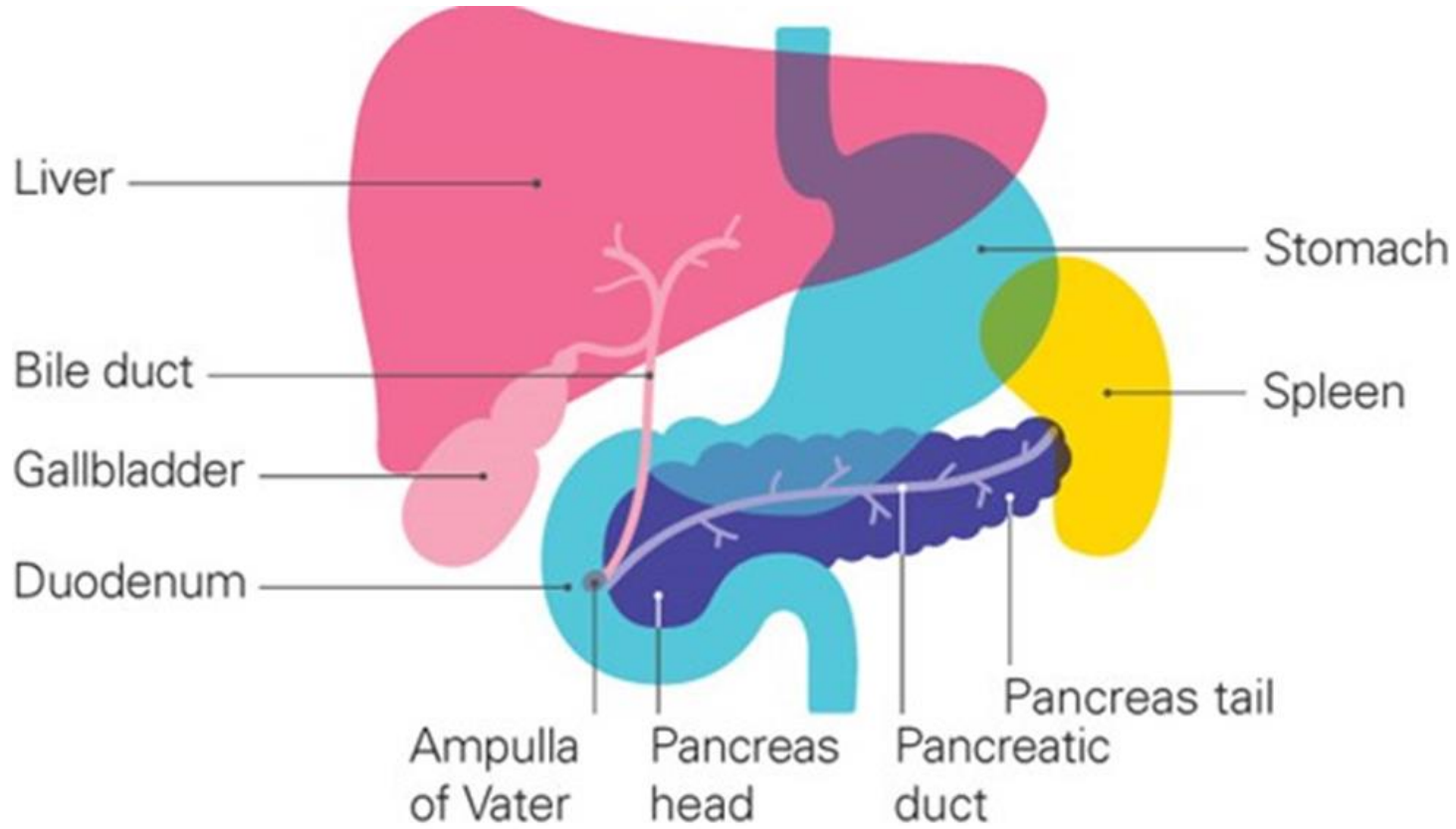
## Locally Advanced Pancreatic Cancer:

- **LAPC** is defined as a pancreatic adenocarcinoma **without distant metastases**, with **>180° involvement** of the hepatic artery, superior mesenteric artery and/or celiac trunk, or unreconstructible involvement of the porto-mesenteric vein
- Small proportion will respond to chemotherapy and then be re:considered for surgery (or other techniques) - *laparoscopy* useful as 20–30% of patients with LAPC have peritoneal metastases





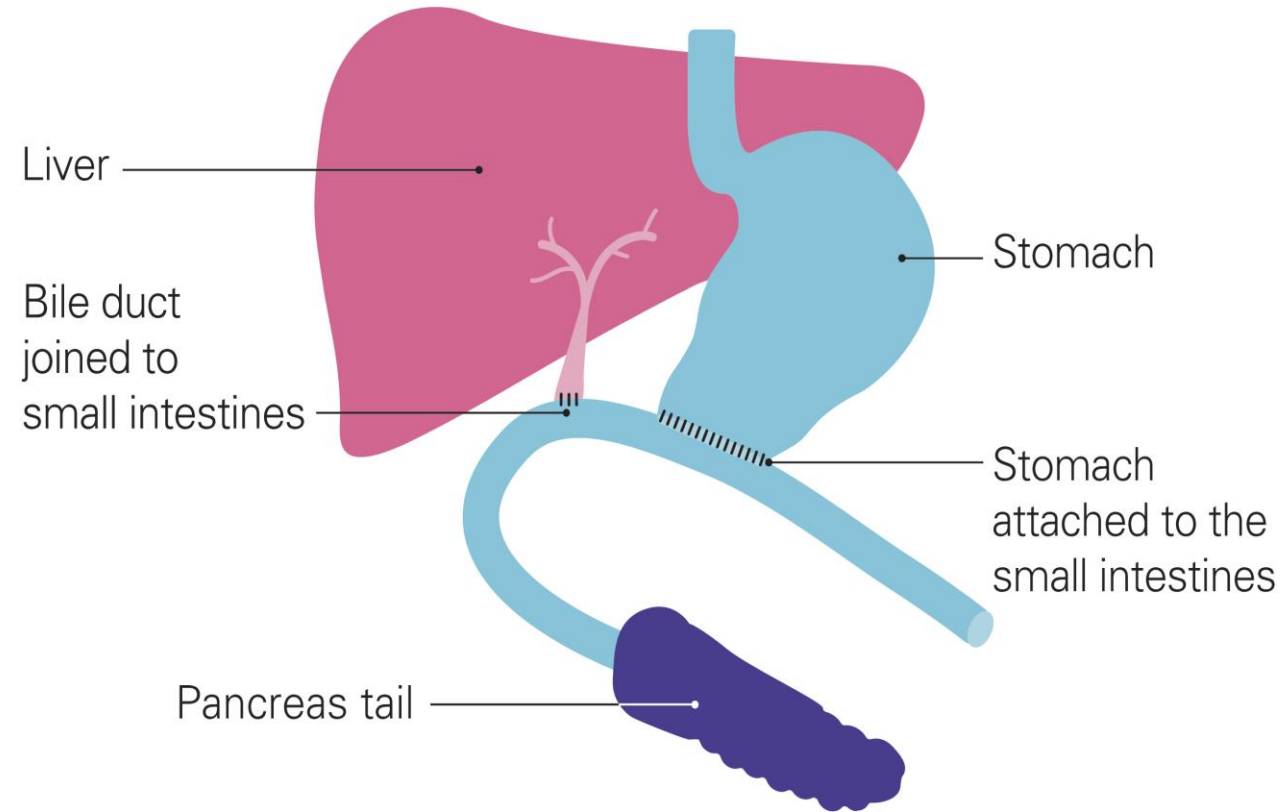
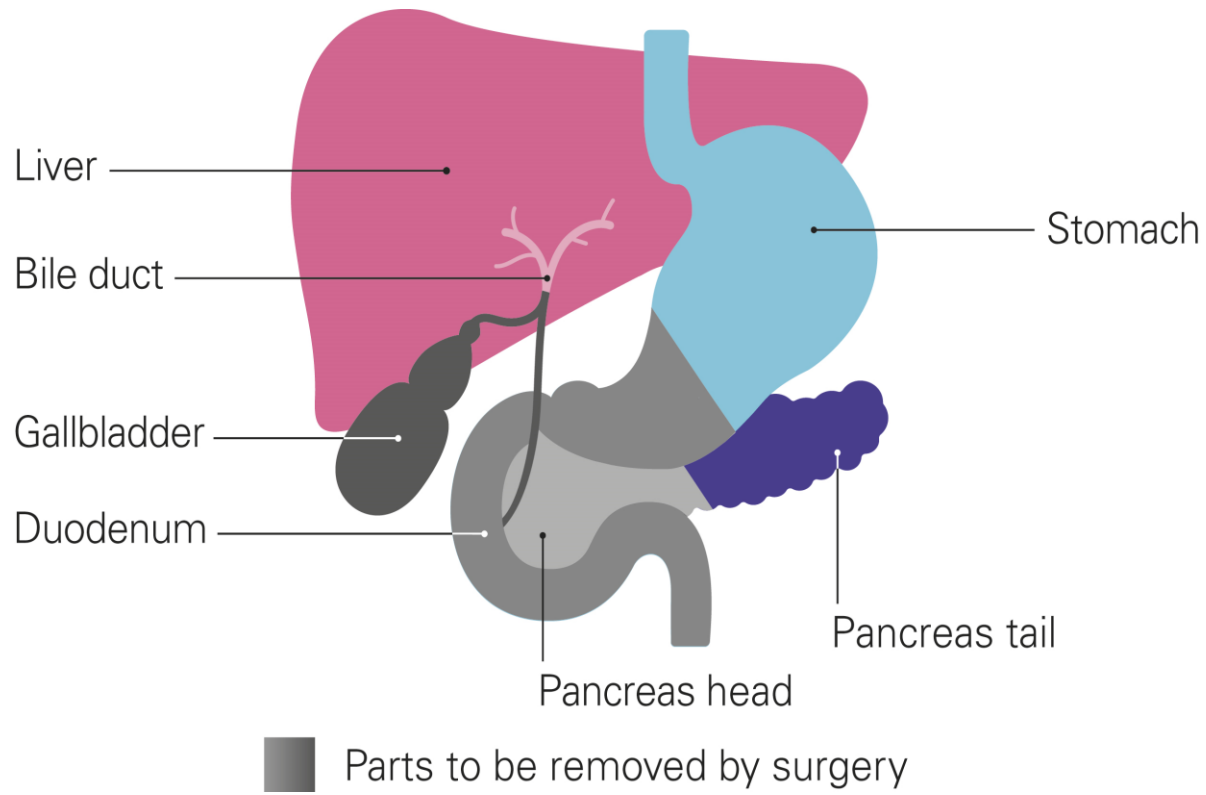
# Anatomy



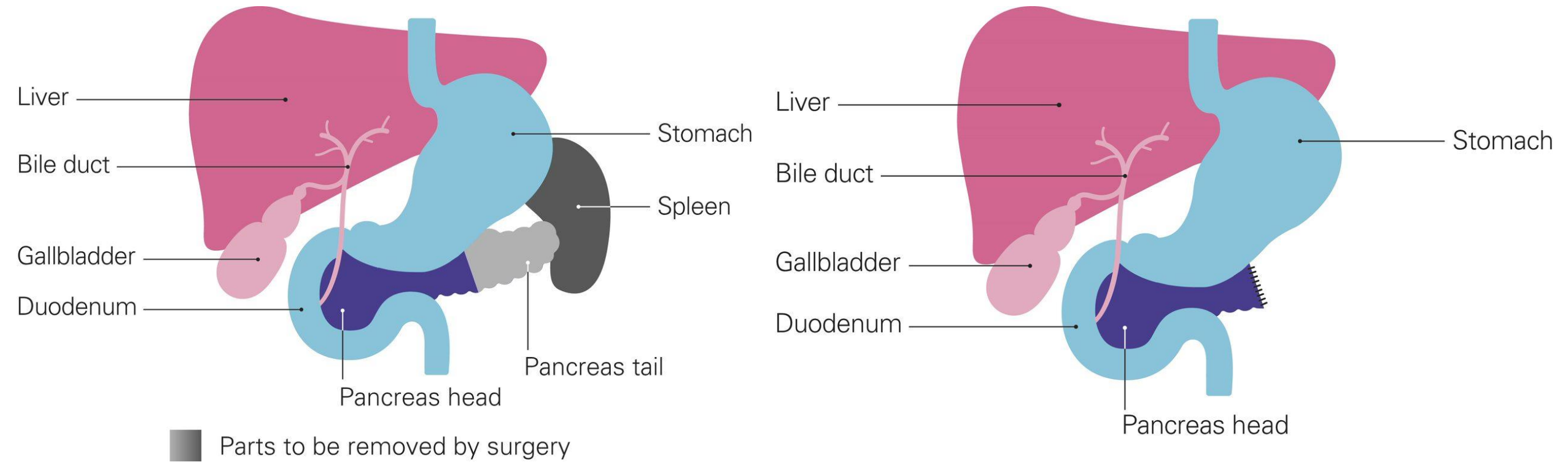
# Pancreatic Surgery



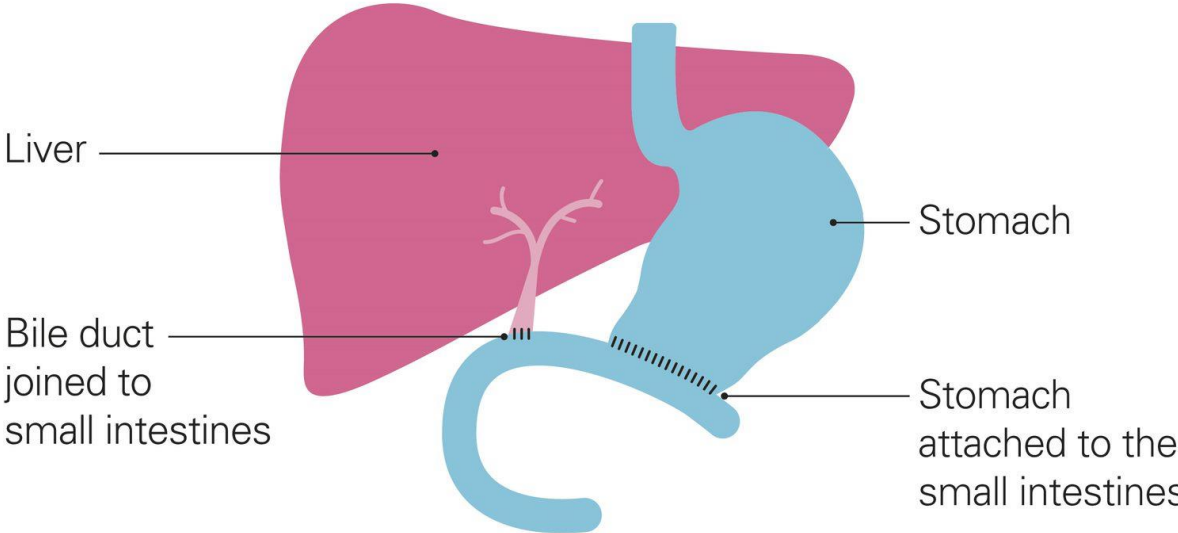
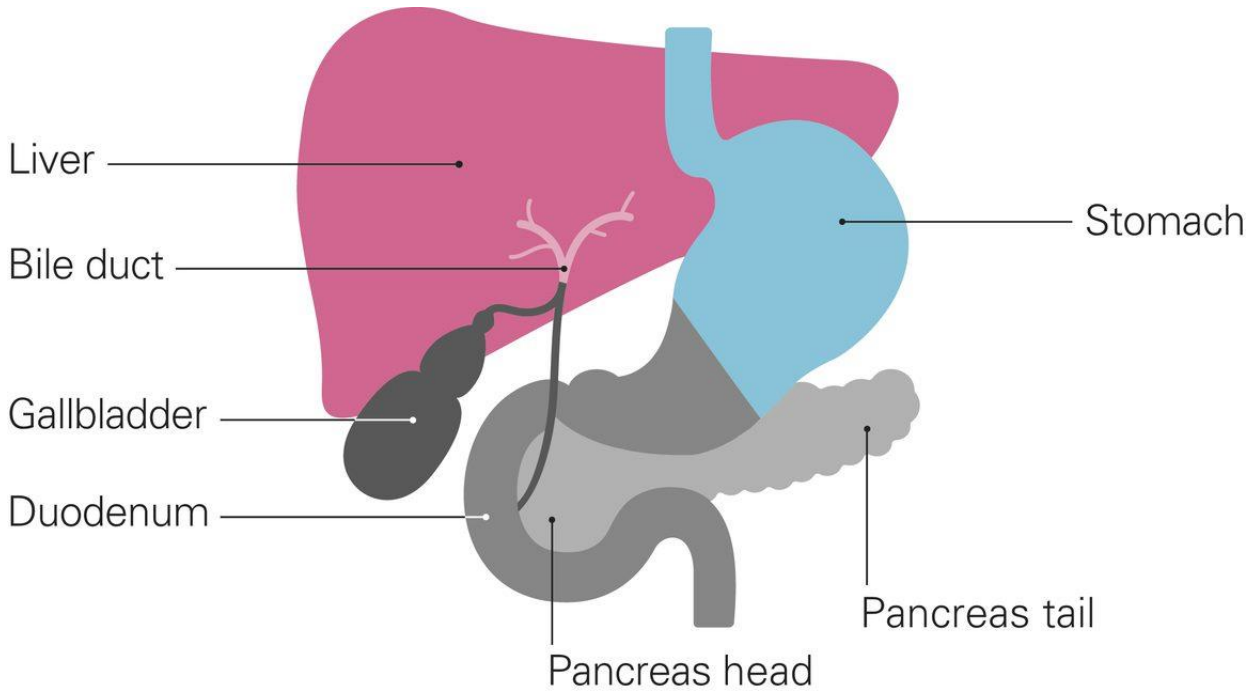
# Whipple



# Distal Pancreatectomy & Splenectomy:



# Total Pancreatectomy



■ Parts to be removed by surgery

## Recovery post pancreatic surgery:

- 4-9hrs operation
- Patient transferred to HDU/ITU post op + then ward on day 1/2
- Octreotide + antibiotics
- CV line, epidural - PCA, catheter, NGT, drains
- Minimal fluid intake allowed (mouth swab, sips 1<sup>st</sup> few days)
- Drain fluid amylase on day 3 + 5 before resuming oral intake
- Mobilization and chest physiotherapy essential – day 1
- TPN if patient not able to resume oral intake by day 8-10
- Median hospital stay approximately 7-10 days
- Complete recovery as long as three months, often more

Think – blood sugars  
& PERT



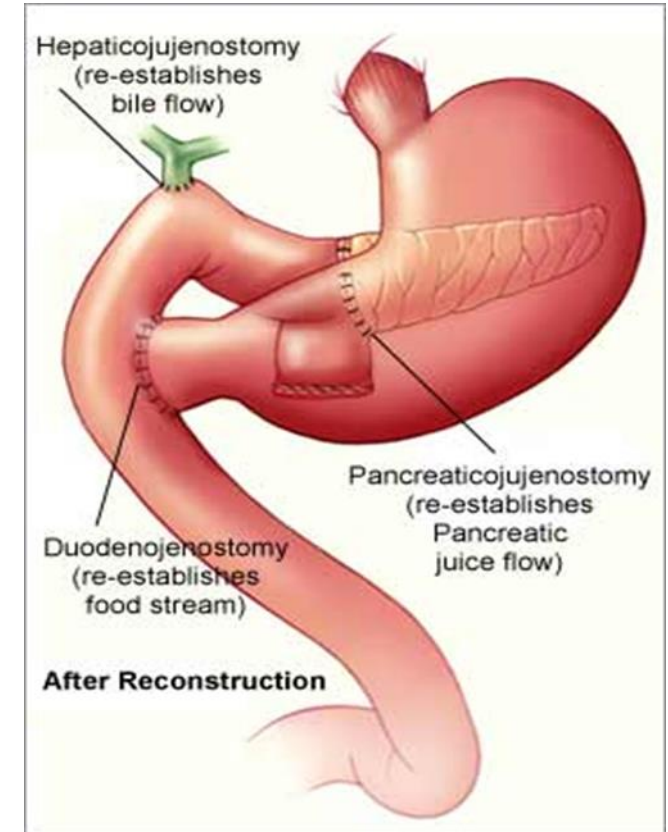
## Complications:

### Generic

- Respiratory
- Cardiovascular
- Bleeding
- Infection

### Specific

- Pancreatic leak
- Biliary leak
- Gastro-enteric leak
- Chyle leak
- Delayed gastric emptying
- Pancreatitis
  
- Diabetes
- Pancreatic Enzyme Insufficiency (PEI)



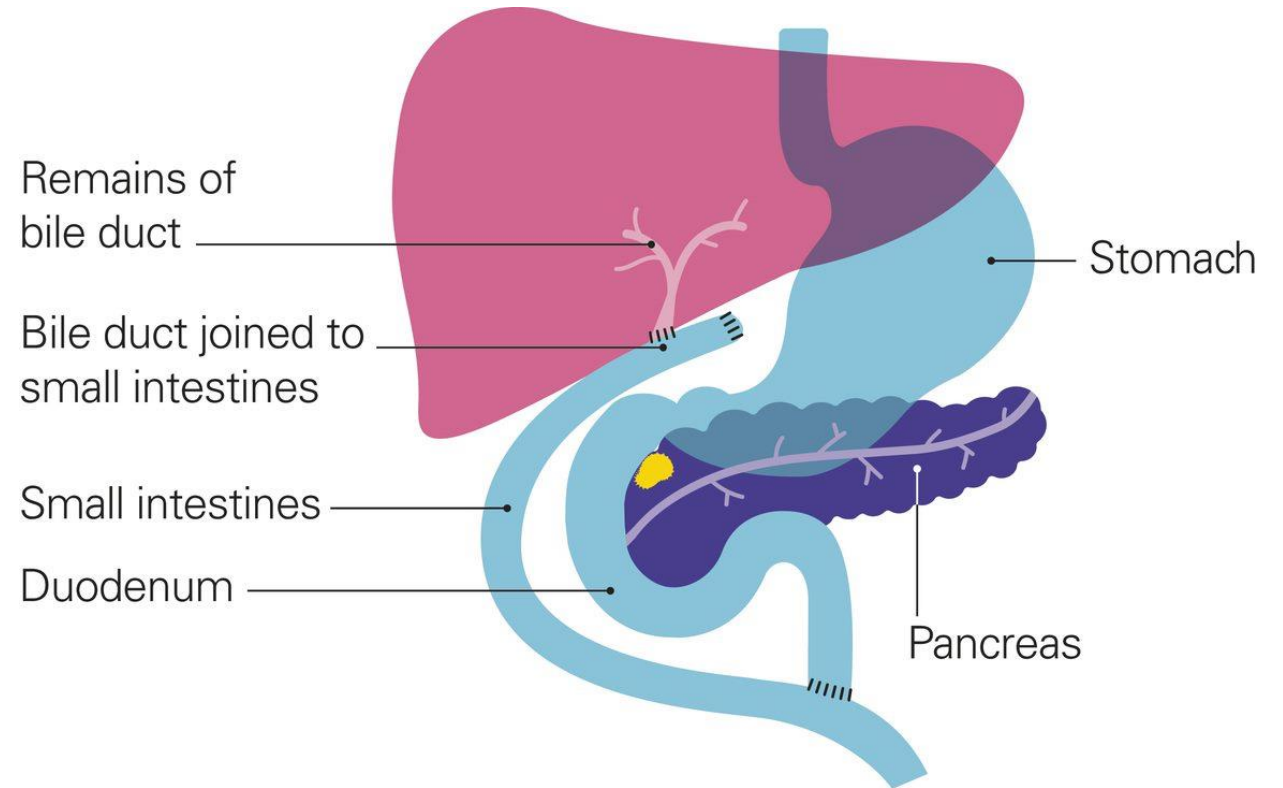
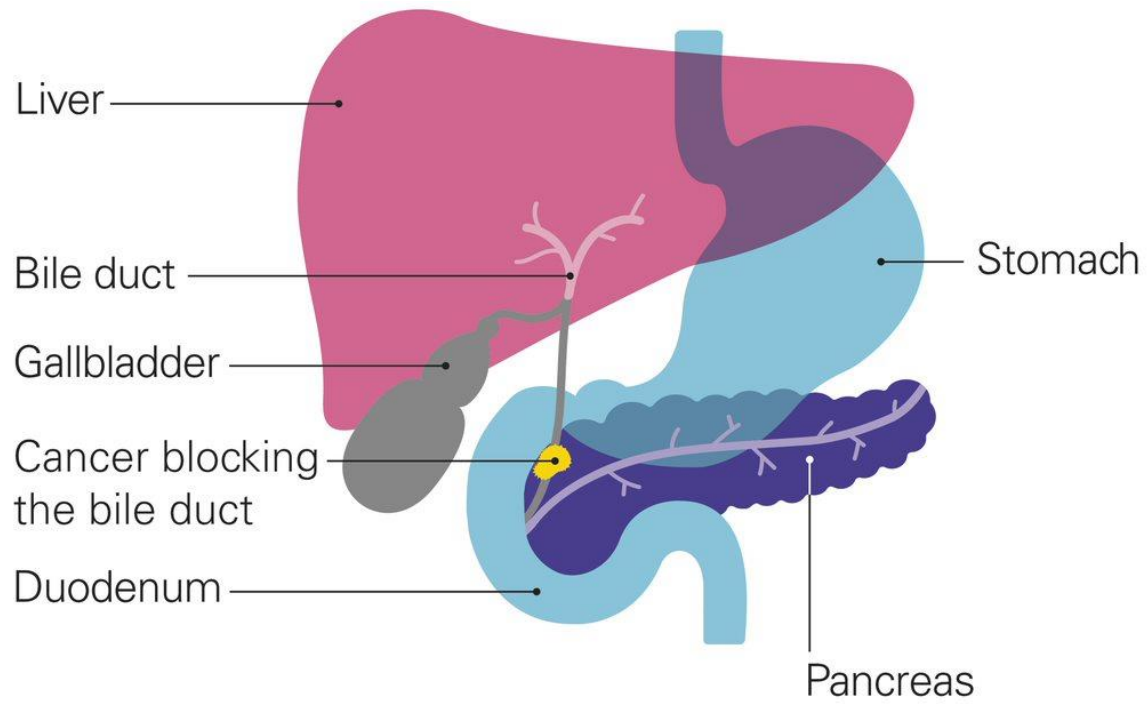
## 1. Ensure patient is stable

- Observation parameters
  - Consciousness
  - Pulse rate
  - Blood pressure
  - Respiratory rate
  - Oxygen saturation
  - Temperature
  - Urine output  
(Drain output)

## 2. Resuscitation

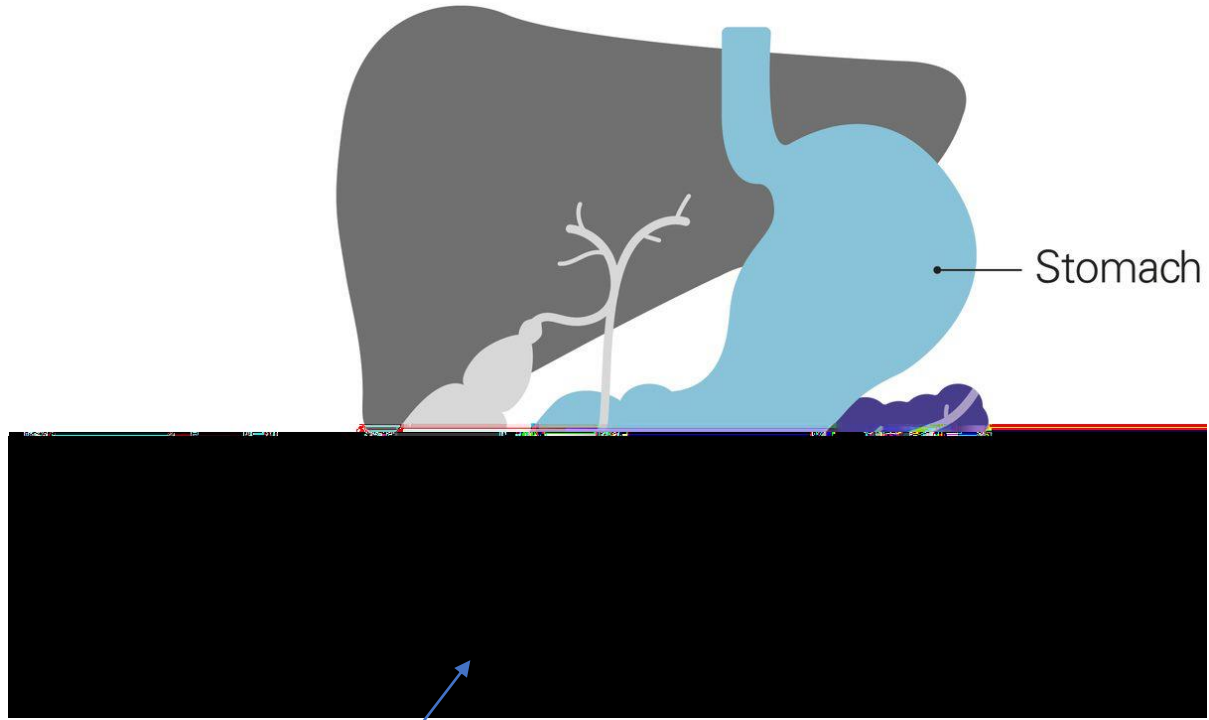
- Establish IV access
- IV fluids
- Urinary catheter
- Antibiotics
- Analgesia
- Imaging
- Intervention

**Biliary Bypass Surgery:**

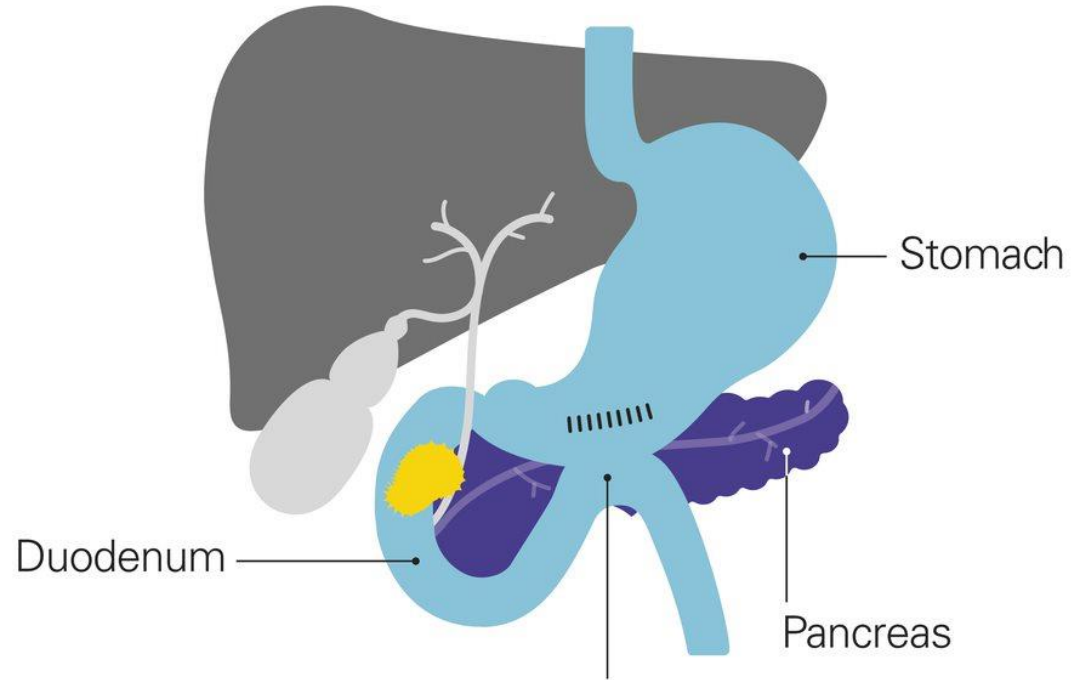


■ Parts to be removed by surgery

Duodenal Bypass:



Duodenal obstruction



The stomach is connected to the small intestines so food can pass through

Duodenum bypassed



## Things to remember...

- Early Diagnosis
- Timely referral
- Right selection of patients (by the right team)
- Optimize pre-operatively
  - Biliary drainage
  - Nutrition
  - PERT
  - Diabetes
  - Psychosocial support
  - Welfare
  - Other symptoms



- Post-operative follow-up/support → fit enough for adjuvant chemo



Thank  
you!