

New insights on pancreatic cancer

May 2019

Summary

In February 2019, the **National Cancer Registration and Analysis Service (NCRAS)** at Public Health England (PHE) published a new dataset for pancreatic cancer which has started to reveal new insights into the care, treatment and outcomes for pancreatic cancer in England.

What the data shows?

- **Exocrine pancreatic cancer** (including Pancreatic Ductal Adenocarcinoma (PDAC)) is the **most common and aggressive** subtype of pancreatic cancer while Pancreatic Neuroendocrine Tumour (PNET) is rarer with better prognosis
- **Only 16%** of exocrine pancreatic cancers are **diagnosed** at an early stage (**stage 1 and stage 2**)
- Diagnosis of exocrine pancreatic cancer at an **early stage** has **6x higher survival** than diagnosis at stage 4
- **Less than 50%** of people with exocrine pancreatic cancer will **survive 3 months** from diagnosis with survival halving again to **25%** at **9 months**

Recommendations:

1. Radical improvement in early diagnosis is essential to transform survival for pancreatic cancer. We need to see **more research into early diagnosis** of pancreatic cancer to enhance GP decision making tools and biomarker tests.
2. Pancreatic cancer is undertreated and often this is even for people diagnosed at an early stage, where life saving surgery is still possible. We need **faster and better access to treatment** so that more people have the opportunity to survive longer.

This data is from the National Cancer Registration and Analysis Service (NCRAS) at Public Health England as part of the '**Get Data Out**' project. The standard output tables can be found at: cancerdata.nhs.uk/standardoutput

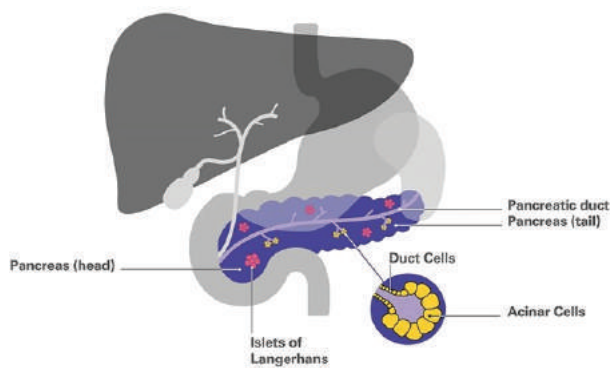
What is the difference between exocrine and endocrine pancreatic cancer?

This new data builds on learnings we published in June 2018 with the London School of Hygiene and Tropical Medicine when for the first time we analysed outcomes by subtype for pancreatic cancer – distinguishing between exocrine pancreatic cancer (including PDAC) and PNET. ¹

Similar to what we showed last year, exocrine pancreatic cancer is the most common and aggressive subtype of pancreatic cancer, while PNET is rarer with better prognosis and survival.

	Exocrine pancreatic cancer (including PDAC)	PNET
Proportion of pancreatic cancer cases	95%	5%
Proportion that receive surgery	8%	40%
One year survival (%)	18.9%	79.8%

Table 1: A table to show the different outcomes for exocrine pancreatic cancer (PDAC) and neuroendocrine pancreatic cancer (PNET)



Exocrine pancreatic cancer originates in the **ductal cells** while PNET originates in the neuroendocrine cells within the pancreas – known as **Islet of Langerhans**

Earlier diagnosis increases survival outcomes for exocrine pancreatic cancer

- **Only 16%** of people with pancreatic cancer are **diagnosed** at an early stage (**stage 1 and stage 2**), while **8%** are diagnosed at **stage 3** and **51%** are diagnosed at **stage 4**.
- **Early stage** diagnosis has **6x higher one year survival** than diagnosis at stage 4
- **One year survival** at an **early stage** is **48.5%** compared to only **7.8%** one year survival at **stage 4**
- **Three month survival** for an **early stage** diagnosis was **82.8%** compared to only **34.7%** at **stage 4**.

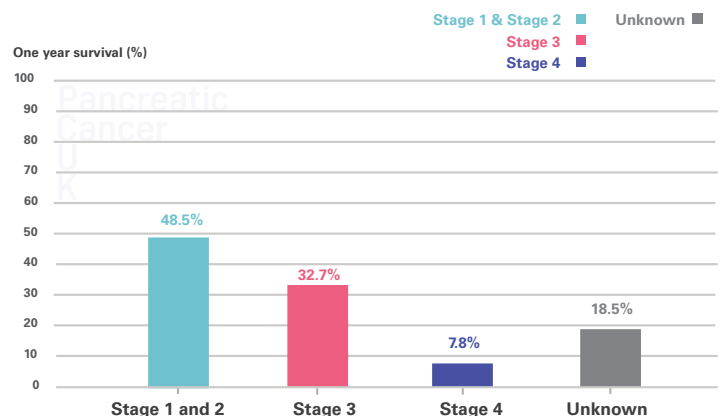


Figure 1: One year survival for people with exocrine pancreatic cancer diagnosed at each stage

1. <https://www.pancreaticcancer.org.uk/policy-and-campaigning/policy/why-is-data-on-pancreatic-cancer-important/>

Quickest killing cancer

As we set out in our **Demand Faster Treatment** campaign, pancreatic cancer is the quickest killing cancer.²

This new data publication provides a better understanding of the rapid deterioration in survival for exocrine pancreatic cancer over the first 12 months after diagnosis for each stage (**Figure 2**). This shows how quickly the disease kills in a matter of months - with **3 month survival** less than **50%**.

Over half of people with pancreatic cancer die within 3 months

Over the next 6 months survival is halved again falling from 49% at 3 months to 25% at 9 months

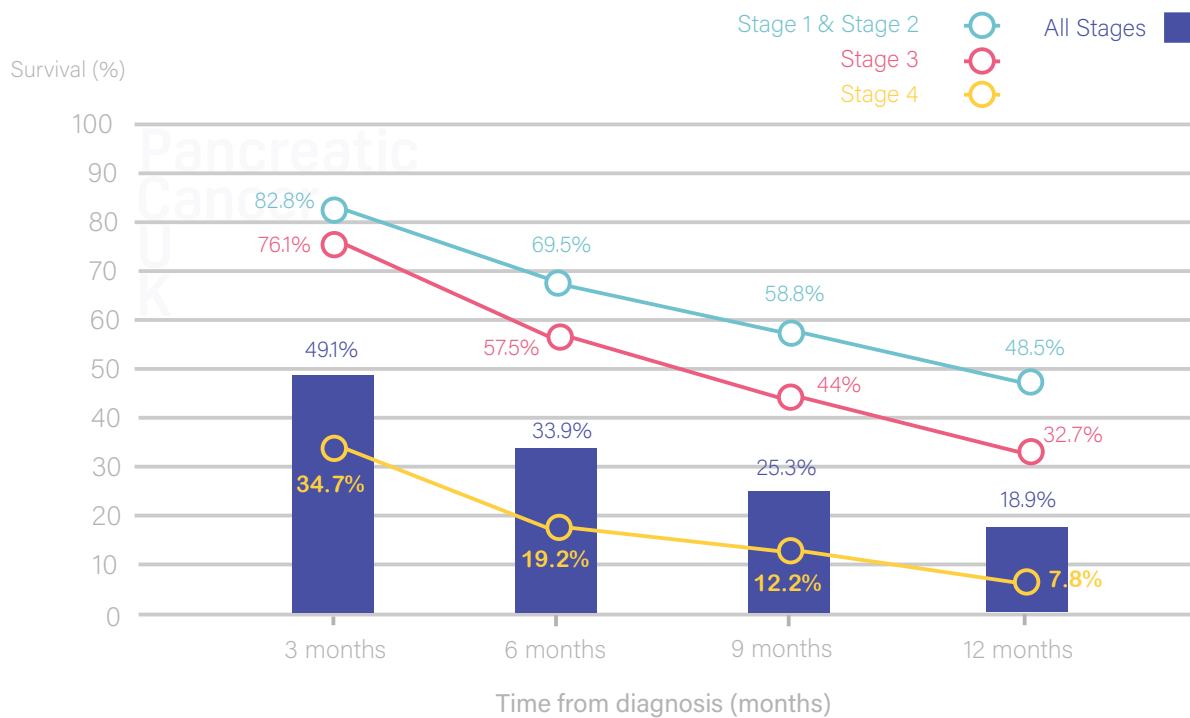


Figure 2: Survival over the first 12 months for people with exocrine pancreatic cancer diagnosed at each stage

Pancreatic cancer population

- Diagnosed at stage 3 (8%)
- Unknown stage at diagnosis (25%)

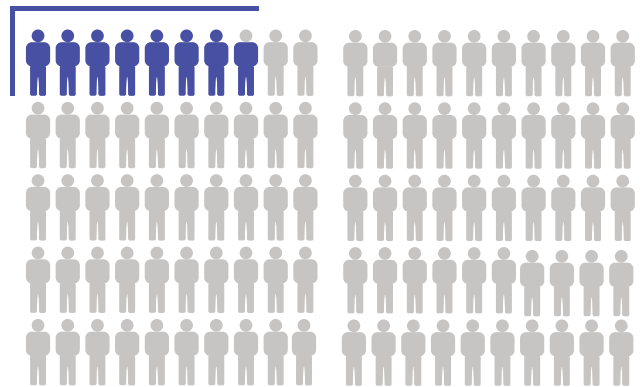


16%
Diagnosed at Stage 1 & Stage 2

51%
Diagnosed at Stage 4



48.5%
One year survival at stage 1 and stage 2



7.8%
One year survival at stage 4

Missed opportunity

We are missing a pivotal opportunity for people who are diagnosed at an early stage, where potentially curative surgery remains possible.

- 60% of people diagnosed at an early stage will **not receive surgery**
- **One year survival** for people diagnosed at an early stage is **less than 50%**

What do we need to do to improve outcomes?

Faster treatment

As we set out in our **Demand Faster Treatment** campaign, pancreatic cancer is the quickest killing cancer. The rapid deterioration in survival for pancreatic cancer over the first 12 months shows that people with pancreatic cancer cannot afford to wait, with only half of people with pancreatic cancer **surviving 3 months** and **survival halving again** over the next 6 months.

1. We need faster access to treatment for people with pancreatic cancer, through an optimal treatment pathway including both the fast track surgery model and faster access to chemotherapy through dedicated oncology clinics.

Early diagnosis of pancreatic cancer

Early diagnosis is essential to increase survival with one year survival **6 times higher** when diagnosed at an early stage compared to diagnosis at stage 4.

Currently, there are no screening or early detection tests for pancreatic cancer and existing routes to diagnosis do not work for pancreatic cancer. The non-specific symptoms means it is often undetected until after it has spread, with 1 in 2 patients diagnosed at stage 4 where one-year survival is less than 10%.

Pancreatic Cancer UK has brought together a team of over 40 leading researchers from across the UK to form the **Pancreatic Cancer UK Early Diagnosis Research Alliance**, with a £750,000 grant to focus on:

- 1. Equipping GPs to make accurate decisions**
- 2. Enhancing the sensitivity and accuracy of biomarker tests**
- 3. Providing evidence for implementation**
- 4. Mapping out a diagnostic pathway**

2. Radical improvement in early diagnosis is essential to transform survival for pancreatic cancer. We need to see more research into early diagnosis of pancreatic cancer to enhance GP decision making tools and biomarker tests.

Split pancreatic cancer data into exocrine (including PDAC) and PNET

Exocrine and endocrine pancreatic cancers are different types of cancers with different outcomes; therefore, we need to see published pancreatic cancer data split by subtype.

This would help the health service, charities and the pancreatic cancer community track progress towards improving outcomes and survival of the disease, understand what needs prioritising and focus research funding to make the most impact.

3. We need all data for pancreatic cancer split into the main types - exocrine cancers (including PDAC) and endocrine PNET. This will enable us to build improved knowledge and understanding about the disease and help us focus our efforts on bringing about change.