

Pancreatic  
Cancer Action

# UK Pancreatic Cancer Statistics

2011

[www.pancreaticcanceraction.org](http://www.pancreaticcanceraction.org)

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## UK Pancreatic Cancer Statistics 2011: Overview

**Pancreatic cancer has the worst survival rate of all cancers.**

**5-year survival is only 3%.  
This figure has not changed in over 40 years.**

- **Pancreatic cancer is the 5th leading cause of cancer death in the UK**
- **22 people a day die of pancreatic cancer in the UK<sup>1</sup>**
- **Relative survival to 5 years is only 3%**
- **Relative survival to 1 year is less than 20% and one of the worst rates in Europe**
- **82% of people diagnosed with pancreatic cancer in the UK will die within a year**
- **Only 10% of patients are eligible for potentially curative surgery due to late diagnosis<sup>2</sup>**
- **47% of people are diagnosed as an emergency in our A&E system (NCIN, 2010)**
- **It is the 11th most common cancer for men, and the 8th most common cancer for women.**
- **In 2008, 8,085 people were newly diagnosed with pancreatic cancer in the UK**
- **In 2009, 8,047 people died from pancreatic cancer in the UK**
- **40% of patients are under the age of 69 at diagnosis<sup>3</sup>**
- **Deaths from pancreatic cancer increased between 2002 & 2009 while deaths from many other cancers declined**
- **Pancreatic cancer is the 5th commonest cause of cancer death in the UK yet receives less than 1% of overall cancer research funding.**
- **The NCRI (Strategic Analysis 2002) identified that pancreatic cancer is “underfunded given its incidence and mortality rates” yet there has since been no significant increase in funding available.**

<sup>1</sup> based on 2009 UK mortality figures.

<sup>2</sup> White et al., (1999) in Sultana et al., (2007) Systematic review, including meta-analysis, on the management of locally advanced pancreatic cancer using radiation/combined modal therapy. British Journal of Cancer 96, 1183-1190

<sup>3</sup> based on Office for National Statistics Statistical Bulletin: Cancer Survival in England patients diagnosed 2004-2008 followed up to 2009 Published 21 April 2011 <http://www.statistics.gov.uk/pdfdir/can0411.pdf> accessed 30/04/2011

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## Pancreatic cancer incidence and mortality 2008 & 2009

Pancreatic Cancer Incidence 2008	England & Wales	Scotland	Northern Ireland	UK
Males	3542	348	111	4001
Females	3637	336	111	4048
Persons	7179	684	222	8085
Age Standardised (rates per 100,000)	9.4	9.2	10.1	9.3

Table 1 UK pancreatic cancer incidence, 2008

Source: Cancer Research UK CancerStats Incidence 2008 - UK April 2011 available online [info.cancerresearchuk.org/cancerstats](http://info.cancerresearchuk.org/cancerstats)

Pancreatic cancer incidence was 7,684 persons in the UK in 2007. In 2008 it rose to 8,085 persons. However, European age-standardised incidence rates (per 100,000) have remained constant (around 9.0) since 1993 (CRUK)

In 2008, UK mortality from pancreatic cancer was 7,781 persons. In 2009 it had increased to 8,047 persons.

### Pancreatic cancer has one of the highest incident-to-mortality rates of ANY disease

Pancreatic Cancer Mortality 2009	England & Wales <sup>1</sup>	Scotland <sup>2</sup>	Northern Ireland <sup>3</sup>	UK
Males	3471	309	111	3891
Females	3675	382	99	4156
Persons	7146	691	210	8047

Table 2 UK pancreatic cancer mortality, 2009

<sup>1</sup>Office for National Statistics Deaths by age, sex and underlying cause, 2009 registrations <http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14409> accessed April 2011

<sup>2</sup>ISD Scotland <http://www.isdscotland.org/isd/1498.html> accessed April 2011

<sup>3</sup>Northern Ireland Cancer Registry, Queens University, Belfast: Number of deaths and mortality rates by sex: 2005-2009 <http://www.qub.ac.uk/research-centres/nicr/> Accessed April 2011

Average UK pancreatic cancer incidence and mortality between 2005-2007:

	Males	Females	Persons
Newly diagnosed cases 2005-2007 (average per annum)	3808	4030	7838
Age-Standardised incidence rate per 100,000 population*	10.5	8.3	9.4
Deaths 2005-2007 (average per annum)	3609	3830	7439
Age-standardised mortality rate per 100,000 population	9.9	7.7	8.8

Table 3 Average UK pancreatic cancer incidence & mortality between 2005-2007

\*Age-standardised to the European population. All data are from The Office for National Statistics Statistical Bulletin Cancer & Mortality in the United Kingdom 2005-2007 (August, 2010)

## Relative Survival One & Five years (%)

Five-year survival rates have remained the same for over forty years

Relative Survival <sup>†</sup>		1-year (%)	5-year (%)
England <sup>1</sup>	Male	16.7	3.8
	Female	18.5	3.4
Wales <sup>2</sup>	Male	14.3	2.8
	Female	13.4	3.7
Scotland <sup>3</sup>	Male	15.3	3.6
	Female	16.1	2.9
N.Ireland <sup>4</sup>	Male	11.3	< 10 patients
	Female	10.8	< 10 patients
UK Average	Male	14.4	3.4
	Female	14.7	3.3
Persons		14.5	3.4

Table 4 One and Five Year Relative Survival (%) by UK region

<sup>1</sup> Office for National Statistics Statistical Bulletin: Cancer Survival in England patients diagnosed 2004-2008 followed up to 2009 Published 21 April 2011 <http://www.statistics.gov.uk/pdfdir/can0411.pdf> accessed 30/04/2011

<sup>2</sup> Welsh Cancer Intelligence & Surveillance Unit (data extracted March 2010) Cancer Survival Trends in Wales: Period of diagnosis 2000-2004

<sup>3</sup> ISD Scotland - patients diagnosed between 2003 and 2007 <http://www.isdscotland.org/isd/1498.html> accessed April 2011

<sup>4</sup> Northern Ireland Cancer Registry, Queens University, Belfast 1-yr survival data period 2001-2003; 5-yr data period 1997-2000 <http://www.qub.ac.uk/research-centres/nicr/Data/OnlineStatistics/Pancreas/> accessed online April 2011

\* Relative survival is an estimate of the observed survival divided by the expected probability of survival in the general population. This can be thought of as a measure of the net survival expectation after contracting cancer, or the probability of survival from cancer in the absence of other causes of death. Relative survival varies with age, and the age profile of cancer patients can change with time, so the estimates are age-adjusted to facilitate comparison.

While incidence is lower for those under the age of 60, the one-year survival rates for this group is significantly higher:

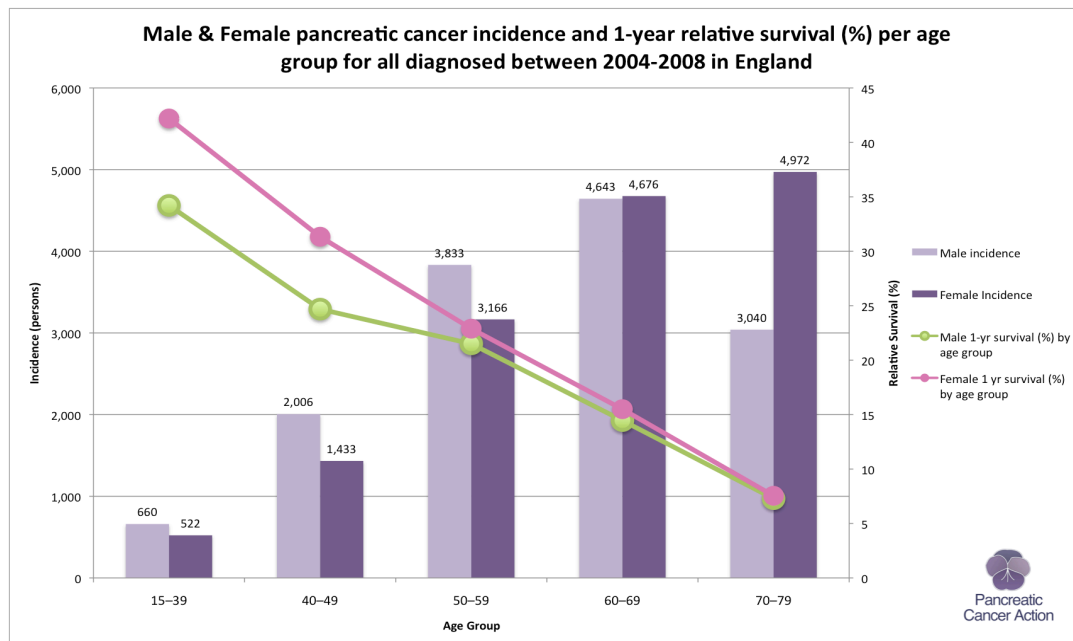


Figure 1 Incidence and one-year relative survival by age group in England 2004-2008

Source: Office for National Statistics Statistical Bulletin: Cancer Survival in England patients diagnosed 2004-2008 followed up to 2009 Published 21 April 2011 <http://www.statistics.gov.uk/pdfdir/can0411.pdf> accessed 30/04/2011

## Incidence and survival per age group:

While incidence is lower for those up to age 59, five-year survival is significantly better than for those over the age of 60 where survival drops off markedly:

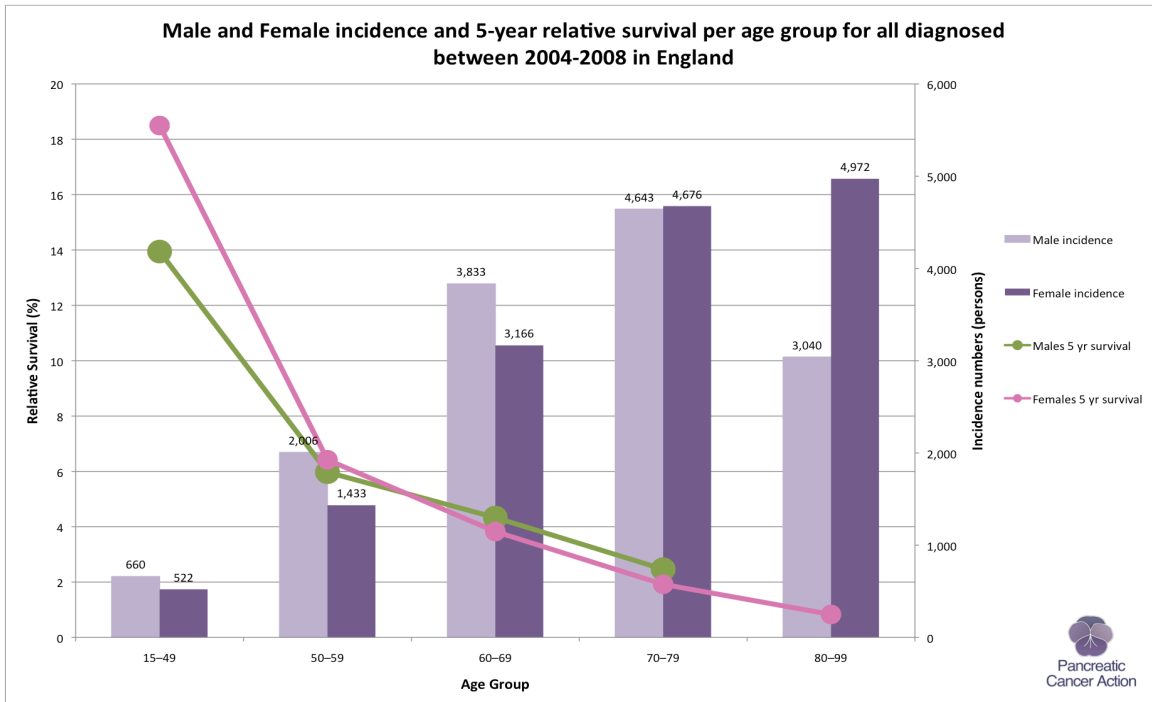


Figure 2 Male & Female incidence & five-year relative survival per age group in England 2004-2008

Source: Office for National Statistics Statistical Bulletin: Cancer Survival in England patients diagnosed 2004-2008 followed up to 2009 Published 21 April 2011 <http://www.statistics.gov.uk/pdffdir/can0411.pdf> accessed 30/04/2011

While age is a significant risk factor for pancreatic cancer, 40% of cases in England between 2004 & 2008 occurred in those under the age of 69:

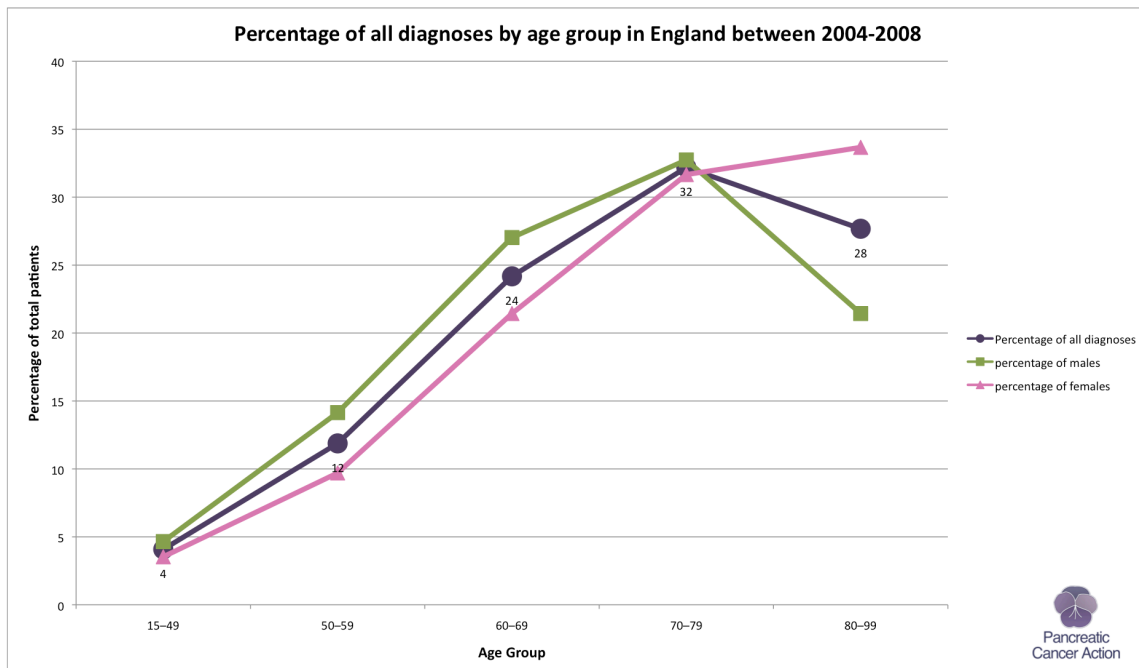


Figure 3 Percentage of all diagnoses by age group in England between 2004-2008

Source: Office for National Statistics Statistical Bulletin: Cancer Survival in England patients diagnosed 2004-2008 followed up to 2009 Published 21 April 2011 <http://www.statistics.gov.uk/pdffdir/can0411.pdf> accessed 30/04/2011

## Comparison of survival rates by cancer site

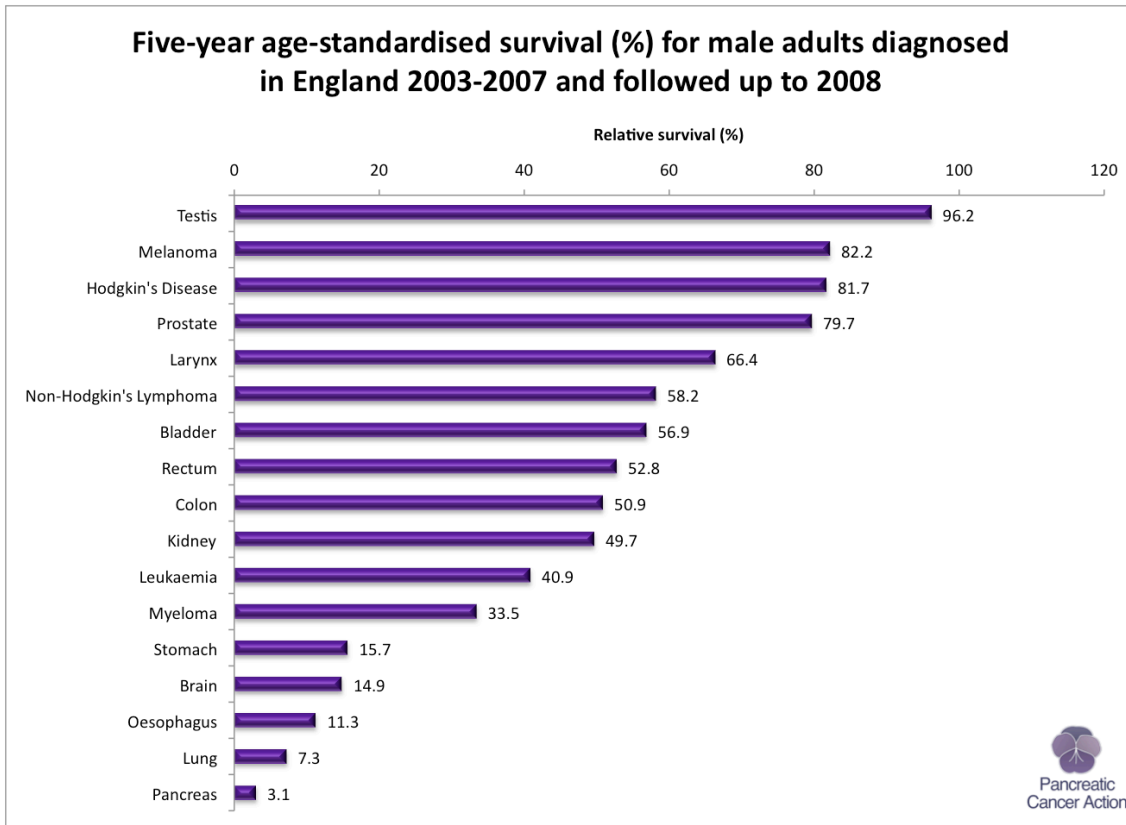


Figure 4 Male 5-year relative survival by cancer site

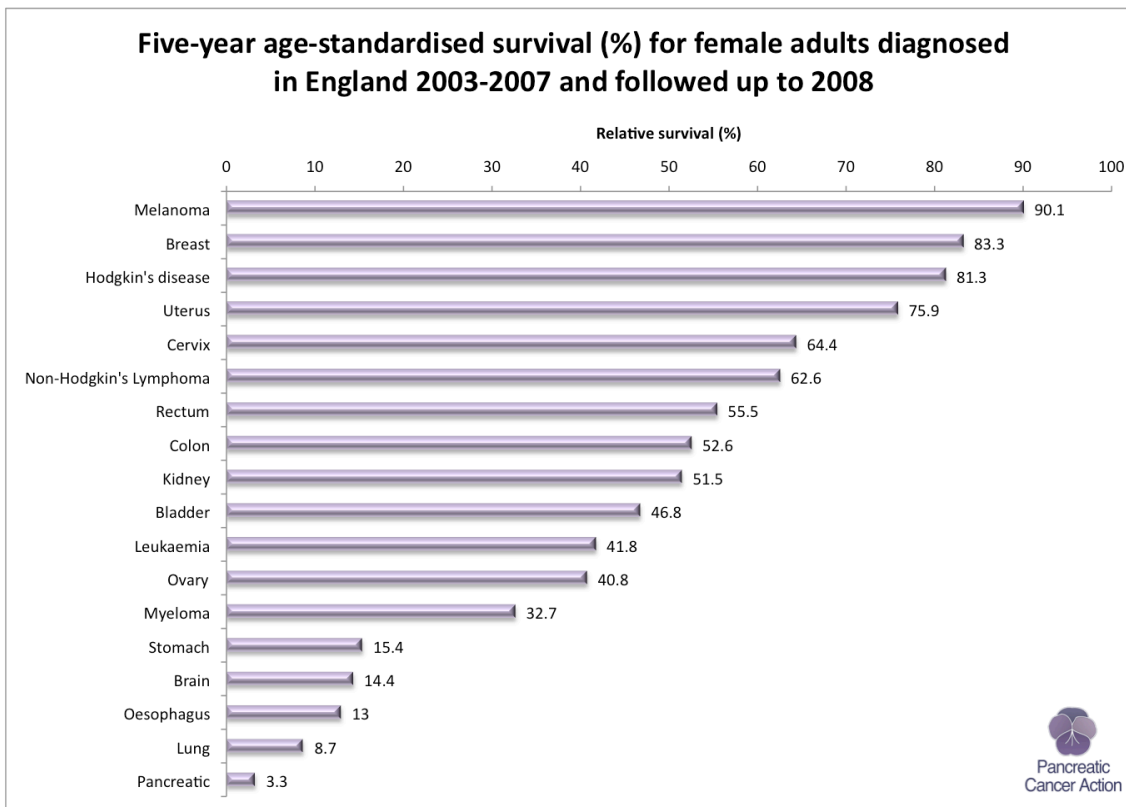


Figure 5 Female 5-year relative survival by cancer site

Source: Office for National Statistics Statistical Bulletin: Cancer Survival in England patients diagnosed 2004-2008 followed up to 2009 Published 21 April 2011 <http://www.statistics.gov.uk/pdfdir/can0411.pdf> accessed 30/04/2011

## Pancreatic Cancer Survival Trends in England

England one-year relative survival	1998-2001	1999-2002	2000-2004	2001-2006	2003-2007	2004-2008
Males	13.0%	13.8%	14.5%	15.3%	16.2%	16.7%
Females	12.8%	14.2%	14.9%	15.9%	17.3%	18.5%
Persons	12.9%	14.0%	14.7%	15.6%	16.8%	17.6%

Table 5 One-year relative survival in England for patients diagnosed between 1998 & 2008

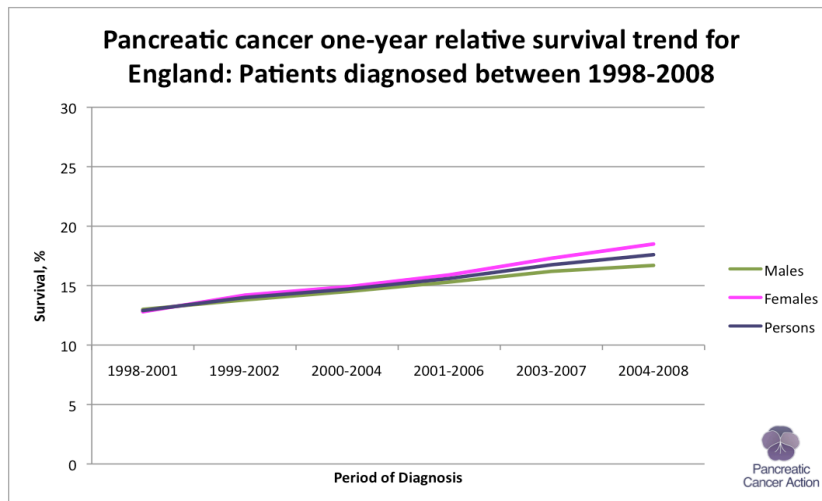


Figure 6 England one-year relative survival trend 1998-2008

England five-year relative survival	1998-2001	1999-2002	2000-2004	2001-2006	2003-2007	2004-2008
Males	2.5%	2.5%	2.7%	2.8%	3.1%	3.8%
Females	2.2%	2.7%	2.4%	3.1%	3.3%	3.4%
Persons	2.4%	2.6%	2.6%	3.0%	3.2%	3.6%

Table 6 England five-year relative survival patients diagnosed between 1998 & 2008

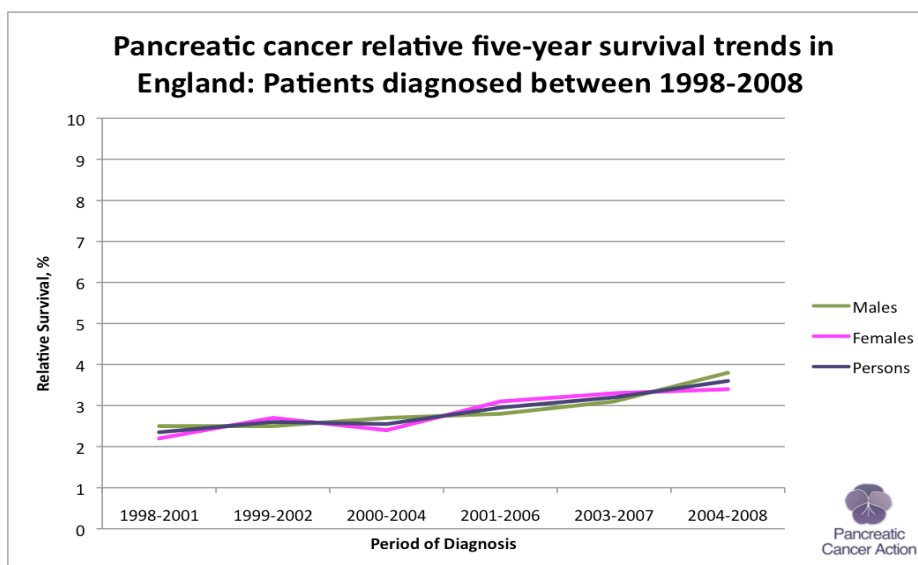


Figure 7 England five-year survival trend 1998-2008

Source: Office for National Statistics, Cancer Survival in England available online <http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=14007> accessed May 2011



## Pancreatic Cancer Survival Trends in Scotland

Scotland one-year relative survival	1983-1987	1988-1992	1993-1997	1998-2002	2003-2007
Males	13.4%	13.1%	13.2%	15.1%	15.3%
Females	14.0%	10.9%	14.1%	16.6%	16.1%
Persons	13.7%	12.0%	13.7%	15.7%	15.7%

Table 7 Scotland one-year relative survival (%) by period of diagnosis

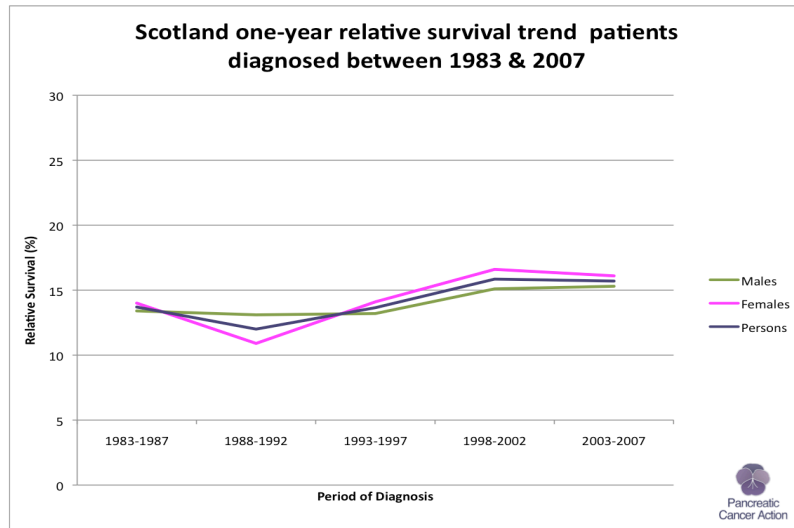


Figure 8 Scotland one-year relative survival (%) trend 1993-2007

Scotland five-year relative survival	1983-1987	1988-1992	1993-1997	1998-2002	2003-2007
Males	4.3%	3.7%	2.8%	3.1%	3.6%
Females	3.8%	3.1%	3.7%	4.0%	2.9%
Persons	4.1%	3.4%	3.3%	3.6%	3.3%

Table 8 Scotland five-year relative survival (%) by period of diagnosis

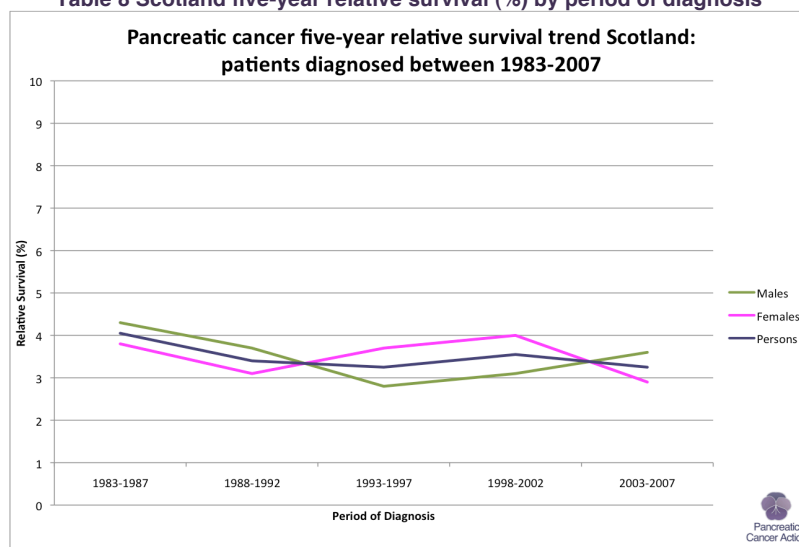


Figure 9 Scotland five-year relative survival (%) trend 1993-2007

Source: Trends in Cancer Survival in Scotland, 1983-2007. ISD National Services Scotland. Published August 2010

## Pancreatic Cancer Survival Trends in Wales

Wales one-year relative survival	1985-1989	1990-1994	1995-1999	2000-2004
Males	13.6%	14.5%	14.2%	14.3%
Females	13.4%	11.1%	11.5%	13.4%
Persons	13.5%	12.8%	12.9%	13.9

Table 9 Wales one-year relative survival by period of diagnosis

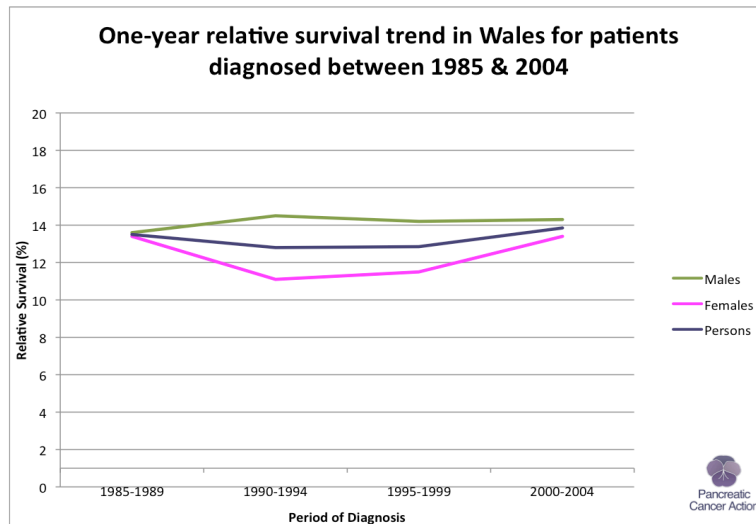


Figure 10 Wales one-year relative survival trend (%) 1985-2004

Wales five-year relative survival	1985-1989	1990-1994	1995-1999	2000-2004
Males	5.7%	4.2%	4.6%	2.8%
Females	4.3%	4.0%	2.2%	3.7%
Persons	5.0%	4.1%	3.4%	3.3%

Table 10 Wales five-year relative survival (%) by period of diagnosis

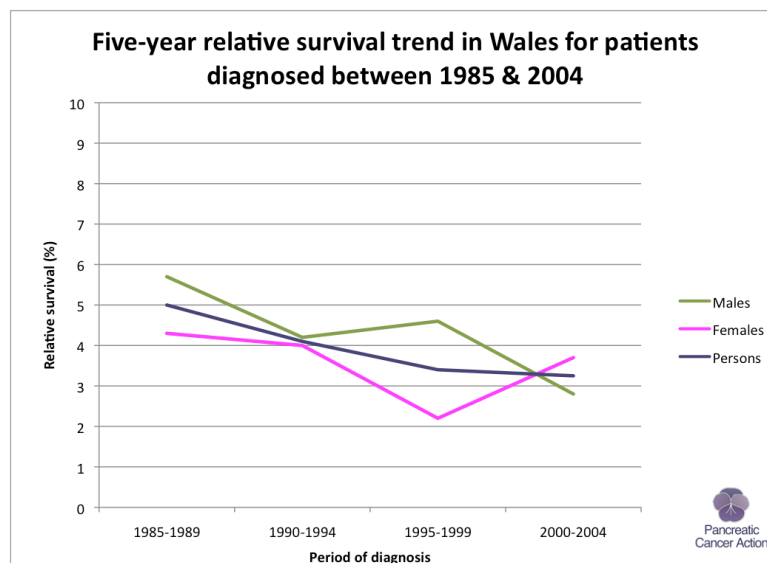


Figure 11 Wales five-year relative survival (%) trend 1985-2004

Source: Welsh Cancer Intelligence and Surveillance Unit. Data extracted March 2010.

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## Pancreatic Cancer Survival Trends in Ireland

### Northern Ireland:

Northern Ireland one-year relative survival	1994-1996	1997-1999	2000-2004
Males	11.3%	8.2%	12.5%
Females	16.9%	15.2%	13.2%
Persons	11.6%	11.1%	12.7%

Table 11 Northern Ireland one-year relative survival (%) by period of diagnosis

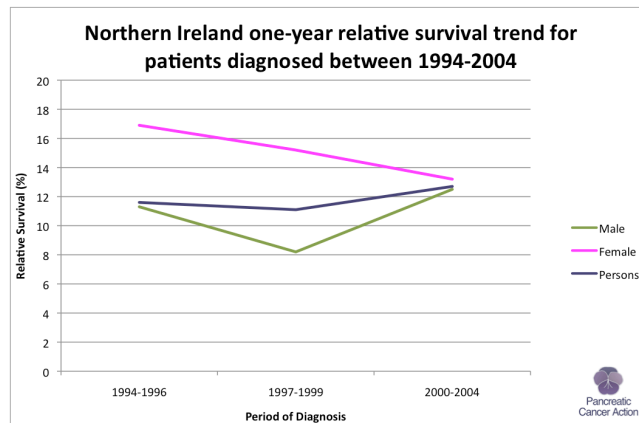


Figure 12 Northern Ireland one-year survival trend 1994-2004

Northern Ireland five-year relative survival	1994-1996	1997-1999	2000-2004
Males	3.3%	1.9%	6.3%
Females	9.6%	2.3%	1.2%
Persons	4%	2.4%	2.7%

Table 12 Northern Ireland five-year relative survival (%) by period of diagnosis

The incidence of pancreatic cancer in 2000-2004 in Northern Ireland was only 160 cases per year. Therefore the five-year survival percentages equate to very small numbers & in many years can include less than 10 patients. Therefore caution is advised when making comparisons with the rest of the UK.

### Republic of Ireland Survival Trends:

Republic of Ireland one-year relative survival	1994-1996	1997-1999	2000-2004
Males	11.5%	13.8%	14.6%
Females	17.3%	17.1%	19.5%
Persons	14.0%	14.9%	16.6%
Republic of Ireland five-year relative survival	1994-1996	1997-1999	2000-2004
Males	4.6%	7.4%	6.0%
Females	6.9%	8.2%	9.2%
Persons	5.3%	7.6%	7.4%

Table 13 Republic of Ireland survival trends 1994-2004

Source: Northern Ireland Cancer Registry, Queens University, Belfast: Cancer in Ireland 1994-2004. Chapter 10: Pancreatic Cancer (C25)

## UK one-year survival rates Vs. European countries.

Poor one-year survival rates are generally taken to be an indicator of more advanced disease at diagnosis and if the UK matched up to the best in Europe, there is the potential for many more lives to be saved.

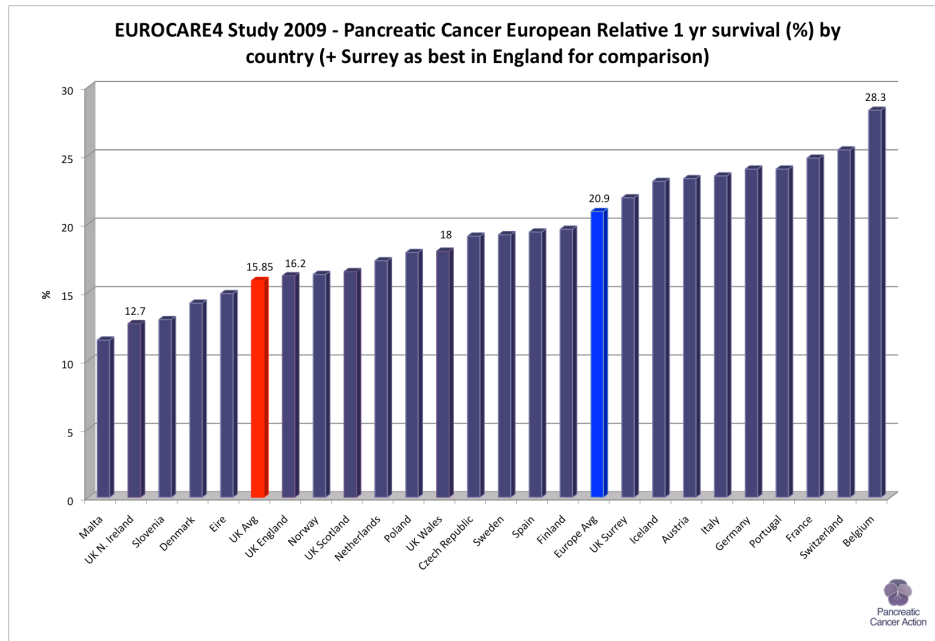


Figure 13 European pancreatic cancer one-year relative survival (%) by country

Richards, M.A (2009) The size of the prize for earlier diagnosis of cancer in England British Journal of Cancer 101 S125-129

## One-year survival (%) by Cancer Network in England

There is a lot of variation in one-year survival rates across Cancer Networks in England, however we are still unsure exactly why this is:

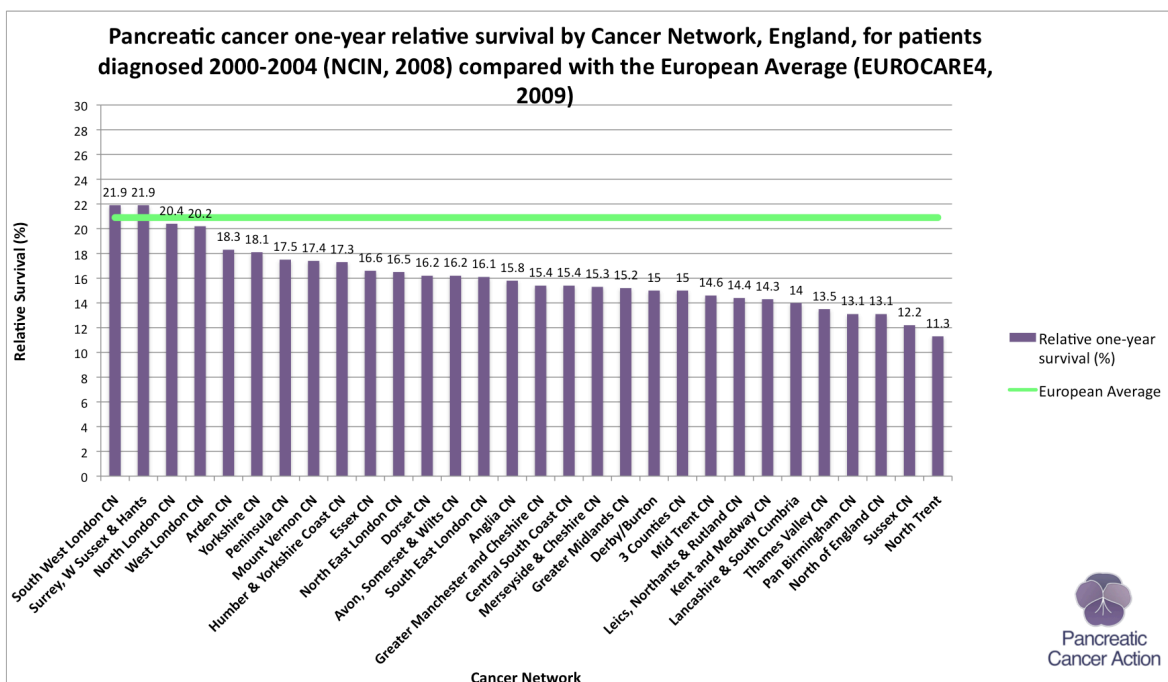


Figure 14 One-year relative survival by Cancer Network England (NCIN,2008) compared with European average (EUROCARE4 data)

## Five-year survival: other tumour sites vs. pancreatic cancer

Five-year survival has been increasing for most other cancers but the same cannot be said for pancreatic cancer where the five-year survival rate (3%) has remained unchanged.

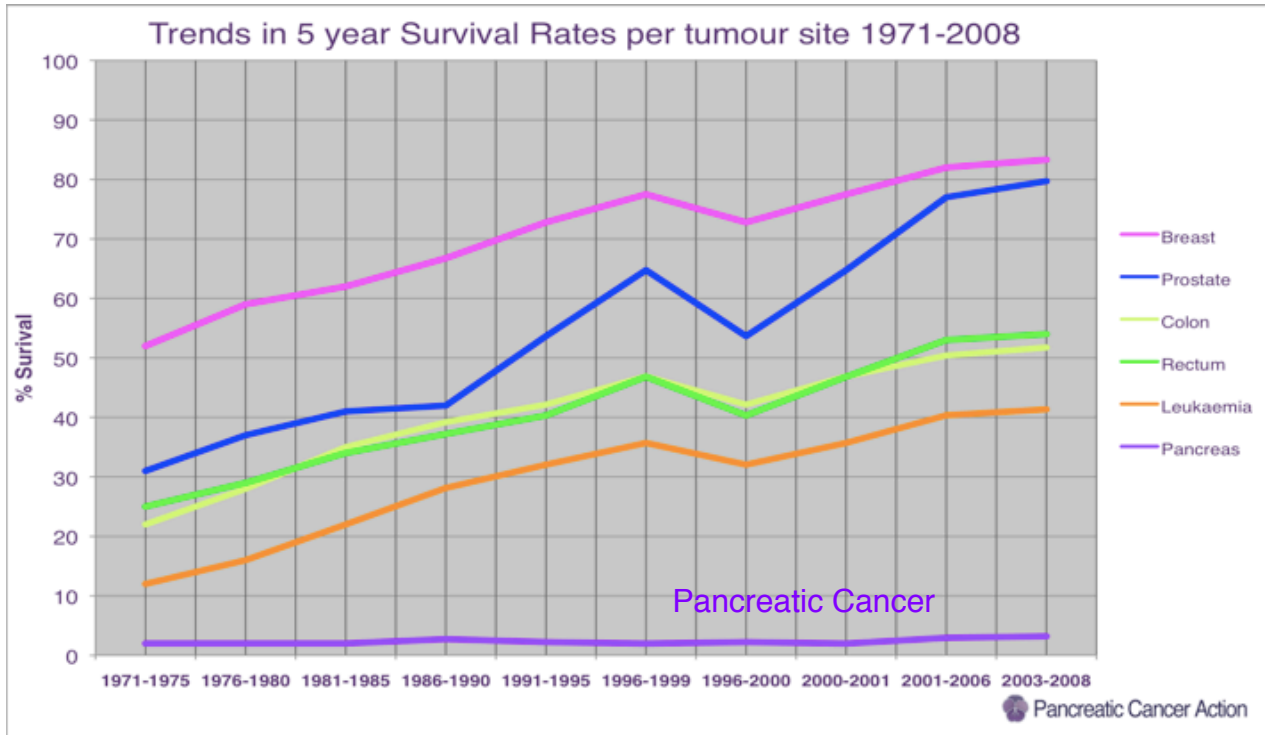


Figure 15 Trends in 5-year survival by tumour site, 1971-2008

**Pancreatic cancer is “significantly underfunded given its incidence and mortality” (NCRI, 2002.) Not much has changed since that NCRI statement in 2002:**

**Of the £504 million spent by the National Cancer Research Institute (NCRI) in 2010, only £4.3 million was spent on pancreatic cancer.**

In 2010, breast cancer received over £42 million, prostate £17 million, and colorectal £22 million. Leukaemia, which affects 1600 fewer people per year than pancreatic cancer and has a five-year survival rate in excess of 40%, received £33 million from NCRI funds in 2010.

Ovarian cancer which affects 6615 women a year (nearly 1500 fewer than pancreatic cancer incidence) received nearly three times as much research funding than pancreatic cancer at £12.2 million. Ovarian cancer has a 70% one-year survival rate (pancreatic cancer has 17%) and a 41% five-year survival rate (pancreatic cancer has only 3%).

All of these tumour sites receive *additional funding* besides the NCRI for research from other funding bodies and charities. **Currently, pancreatic cancer charities do not have the capacity to fund to the same levels.**

There is a strong case for pancreatic cancer to be better funded to reflect the disease burden (5<sup>th</sup> leading cause of cancer death in the UK).

\*Source: Cancer Research UK CancerStats Incidence 2008 - UK April 2011 available online [info.cancerresearchuk.org/cancerstats](http://info.cancerresearchuk.org/cancerstats)

## Pancreatic cancer funding inequalities

We need funding that reflects the disease burden of pancreatic cancer: i.e. the 5<sup>th</sup> leading cause of cancer death in the UK.

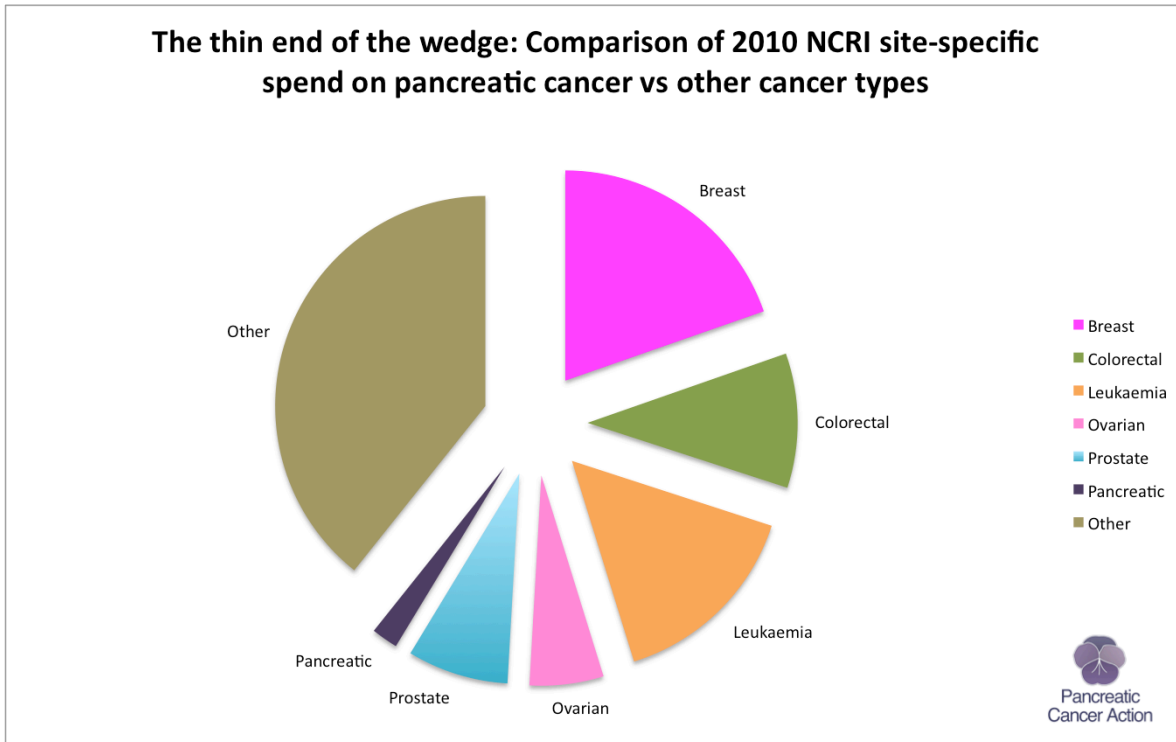


Figure 16 Pie chart comparing NCRI funding for other cancers with that for pancreatic cancer in 2010

While pancreatic cancer continues to be underfunded, the number of lives lost to the disease is increasing:

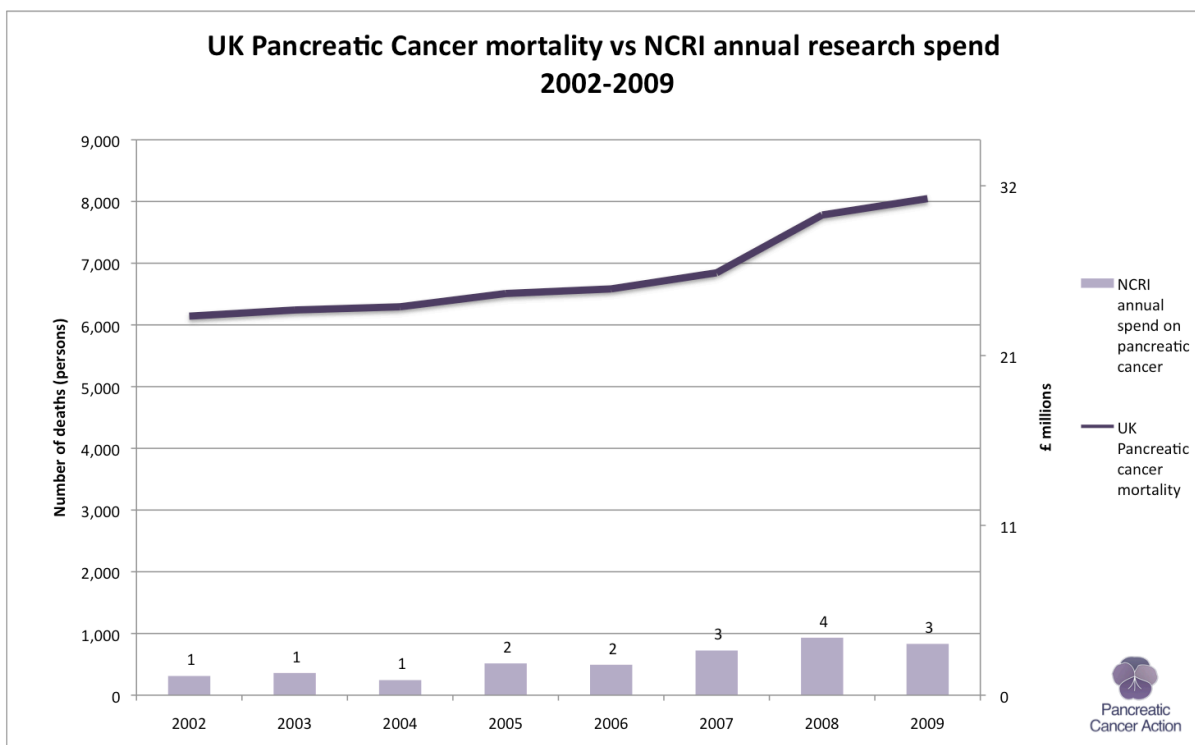


Figure 17 UK pancreatic cancer mortality vs. NCRI annual research spend 2002-2009

## Comparison of improvements in mortality of other cancers and their funding levels.

Increased levels of funding has helped improve age-standardised mortality rates for other cancer sites, but not pancreatic cancer:

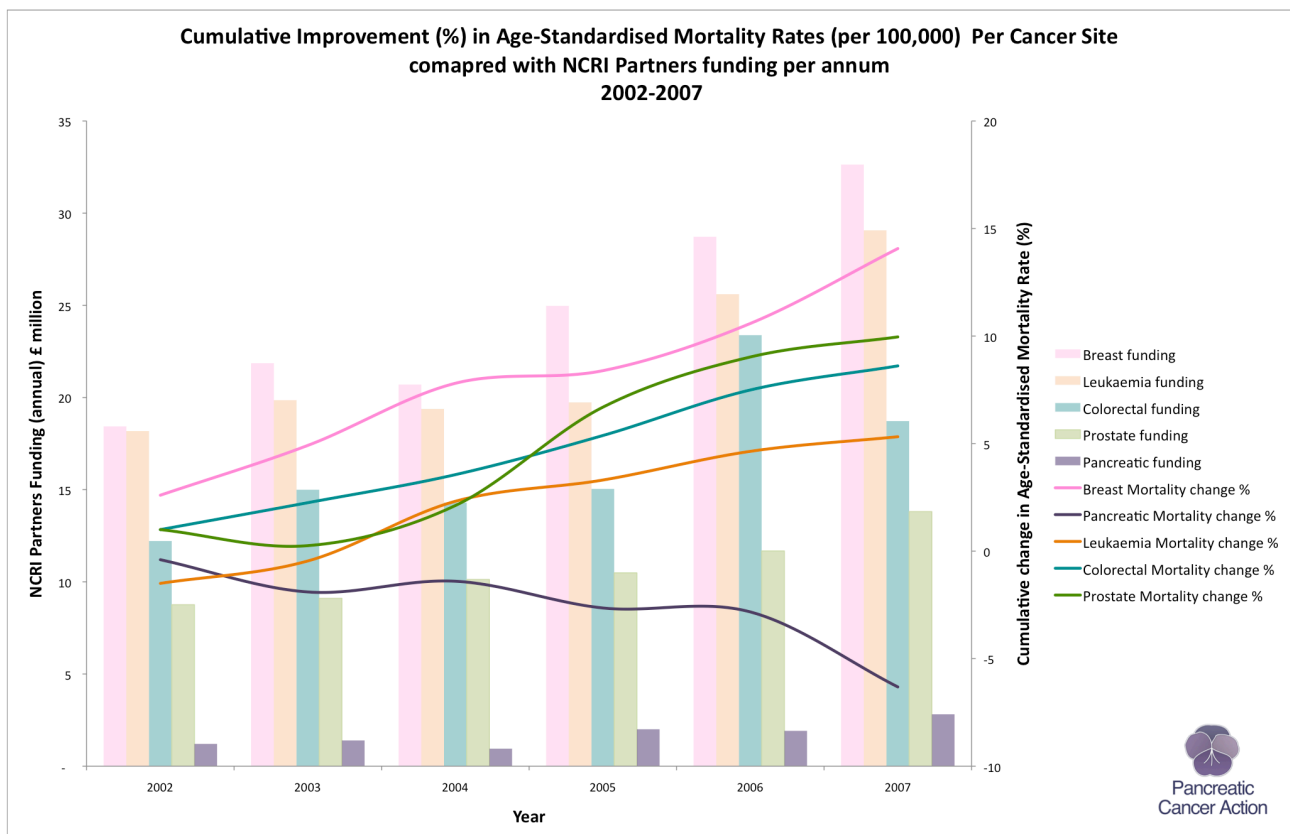


Figure 18 Cumulative improvement in mortality rates per cancer site compared with NCRI partners funding per annum 2002-2007



Pancreatic Cancer Action is a UK charity (Reg. No. 1137689) dedicated to *'changing the numbers'* for pancreatic cancer. As seen by this document, survival rates for pancreatic cancer have not changed in over forty years. With a strong focus on early diagnosis and advocacy, we work to raise awareness of the symptoms and risks of the disease to both the public and medical communities. This, along with our educational and training programmes for medical professionals, including GPs, is to ensure that more people are diagnosed in time for surgery – currently the only potential we have for a cure.

For more information on pancreatic cancer, please see <http://pancreaticcanceraction.org>  
 To speak to a charity representative,  
 Call 01428 654740  
 Email [enquiries@pancreaticcanceraction.org](mailto:enquiries@pancreaticcanceraction.org)