TABLE OF CONTENTS

1. Part 1 – Overview of Europe .................................................................................................................. 4
   1. Comparison of incidence and mortality rates of pancreatic cancer across Europe:
      a consistently increasing mortality, but with discrepancies across countries .................................. 4
   2. Pancreatic cancer in cancer plans at national level: an unequal prioritisation .................................... 6
   3. Public health plans addressing the risk factors for pancreatic cancer: a global understanding
      of the impact and the need to act, but differing policies throughout Europe ........................................ 7

2. Part 2 – Diagnosis, healthcare pathways and access to treatment ....................................................... 9
   1. Diagnosis routes, awareness of the signs and symptoms, medical training:
      bridging the awareness gap to trigger earlier diagnosis and patient orientation ............................... 9
   2. Patient journeys, treatment guidelines, excellence centres, availability of surgery:
      the need to increase equity and equality in access to care ................................................................. 10
   3. Access to treatments: a question of ethics ............................................................................................ 10

3. Part 3 – Registries and research on pancreatic cancer ............................................................................ 11
   1. Existence of pancreatic cancer registries: developing data collection in Europe,
      a part of the answer ............................................................................................................................... 11
   2. Status and funding of research on pancreatic cancer: the relationship between
      funding and disease mortality .............................................................................................................. 11

4. Case studies ............................................................................................................................................ 13
   1. France: the Research Integrated Actions Programme (PAIR) ......................................................... 13
   2. Spain – PancreOS .................................................................................................................................. 14
FOREWORD – WHY AN INEQUALITY REPORT?

Today, Europe has large discrepancies in the incidence and prevalence of pancreatic cancer. These discrepancies are the result of genetic differences, as well as unequal exposure to environmental risk factors, itself the result of cultural differences. Levels of smoking, alcohol consumption, and also diabetes and obesity are different across Europe, which contribute to the variation in the incidence of pancreatic cancer.

Moreover, it seems that pancreatic cancer has been neglected for decades at the political level. National cancer plans seldom mention pancreatic cancer, and research funding is incredibly low for such a lethal cancer.

In this context, this inequality report delivers a comprehensive presentation of the different challenges surrounding pancreatic cancer. This report aims to put pancreatic cancer on the European and national agendas, so that the EU and its Member States can seize the opportunity to tackle one of the deadliest of all common cancers. We at Pancreatic Cancer Europe know it is our duty to inform and take action towards pancreatic cancer control, but we are not able to do it alone.

The Pancreatic Cancer Europe Board Members

Prof. Alfredo Carrato
Ali Stunt
Antonella Cardone (European Cancer Patient Coalition)

Dr. Núria Malats
Dr. Sorin Barbu
WHAT ARE THE MAIN CHALLENGES FOR PANCREATIC CANCER IN EUROPE TODAY?

1. PART 1 – OVERVIEW OF EUROPE

1. Comparison of incidence and mortality rates of pancreatic cancer across Europe: a consistently increasing mortality, but with discrepancies across countries

It is important, firstly, to assess the gravity of the situation surrounding pancreatic cancer in Europe. A good way to understand the spread of the disease is to scrutinise mortality rates and incidence of pancreatic cancer throughout Europe1 (estimates were made in 2012).

**Incidence**

Incidence is variable across Europe.2 This data incorporates both sexes, but the numbers are not exactly identical for men and women. At the European level, the average incidence level is about 12.1 cases of pancreatic cancer diagnosed each year, per 100,000 people3.

*Estimated age-standardised rates (ASRs) (European standard) of pancreatic cancer incidence in male, 2012*. 

Lowest 3 annual incidences for pancreatic cancer in Europe4:

- Sweden: 7.4*
- Cyprus: 7.4*
- Iceland: 7.7*

Highest 3 annual incidences for pancreatic cancer in Europe:

- Czech Republic: 17.8*
- Slovakia: 17.1*
- Macedonia: 17.0*
The gaps are substantial, and may be due to differences in both risk factors and diagnosis and reporting processes. Comparing for instance France and Germany, it is noticeable that differences still exist: incidence in France is between 8.7 (female) and 11.7 (male) per 100,000 people while Germany has 10.5 (female) and 13.2 (male) per 100,000 people.

Pancreatic cancer isn’t always reported, because sometimes it is not identified as the reason for death. Differences in methods of data recording and methodology between countries might also explain why figures are so different.

Survival and mortality rates

Pancreatic cancer is one of the deadliest of all common cancers: worldwide, it is the fourth most common cause of death due to cancer. It ranks third, just below lung and liver cancer in the list of deadliest cancers in Europe. Mortality rates are stubbornly low, and again, vary between the different countries in Europe, with little improvement in nearly half a century. One-year survival rates range from 10 to 23% in Europe.

Moreover, survival rates remain highly unequal in different countries. At five years, the survival rate ranges between 0.5% for Slovenia and 9% for Sweden, illustrating the different outcomes for pancreatic cancer across EU nations. It should be noted that both endocrine and exocrine tumors of the pancreas are commonly reported together. While endocrine tumors are rarer (5% of all pancreatic cancers) they present a much better 5-year survival than exocrine tumors (50% vs 3%, respectively). Survival rates are not improving. It is important to mention that extreme discrepancies in survival exist, with values that can vary by more than 100% between European countries.
2. Pancreatic cancer in cancer plans at national level: an unequal prioritisation

One way to assess the unequal prioritisation of pancreatic cancer in Europe is by scrutinising national cancer plans across countries. There are only five countries out of the 28 EU Member States that propose specific pancreatic cancer actions in their national cancer plan. These countries are France, Ireland, Luxembourg, Romania and Spain.\textsuperscript{14}

Pancreatic cancer is mentioned as “frequent and/or serious” in the French 2014-2019 Cancer Plan which promotes research for new screening methods or a better follow-up by a skilled medical team\textsuperscript{15}.

Luxembourg has issued specific guidelines for pancreatic cancer care in its Cancer Plan of 2014-2019\textsuperscript{16}.

Ireland ranks fourth out of 30 European countries in pancreatic cancer treatment and guidelines are being developed by the National Cancer Control Programme\textsuperscript{17}.

There is a specific section in the 2009 Cancer Strategy of the Spanish National Health System that is dedicated to the disease; it also states that reducing exposure to risk factors could help in preventing the disease\textsuperscript{18}.

The Romanian Cancer plan for 2015-2016 includes reimbursed distribution of drugs used against pancreatic cancer\textsuperscript{19}.

- Only five countries in Europe have specific pancreatic cancer actions in their national cancer plan.
- No country in Europe has a specific pancreatic cancer plan. Specific cancer plans have helped for other cancers, such as breast cancer.
- Pancreatic cancer research should be a priority in all Member states
3. Public health plans addressing the risk factors for pancreatic cancer: a global understanding of the impact and the need to act, but differing policies throughout Europe

One way to fight pancreatic cancer is by reducing the exposure of the general public to environmental risk factors. **There are seven risks factors** increasing the incidence of pancreatic cancer:

- Smoking
- Consuming alcohol
- Being obese
- Chronic pancreatitis
- Type 2 diabetes mellitus
- Blood group A and B
- Having first relatives diagnosed of pancreatic cancer

By acting on these levers, it could be possible to reduce the incidence and/or mortality of pancreatic cancer.

Many EU countries have public health plans that aim to reduce these environmental risk factors. It has been accepted widely that smoking, drinking alcohol, and being obese (whether it’s because of genetics or the environment) harm the body and might induce cancers, among which pancreatic cancer. It has been a public priority in most EU countries to reduce the number of people smoking and drinking and promote healthy eating habits.

Nonetheless, figures vary once again between countries. Not all public health plans are equal, and so are statistics about smoking, drinking and obesity in European countries. We’ll take two examples here: **Sweden** and **France**.

**Sweden** has a strict policy on alcohol: it has to be sold in state-owned shops at restricted hours, is heavily taxed, and sale is prohibited under the age of 20.

**France** has implemented plans to reduce obesity (2010-2013; 2011-2015) as well as programmes to reduce smoking rates.

**Alcohol consumption**

**Sweden**'s consumption of alcohol: 9 LITRES per year per person.

**France**'s consumption of alcohol: 12 LITRES per year per person.
This gap between France and Sweden in exposure to risk factors is one of the reasons which could explain a much lower incidence in Sweden (between 6.5 and 7.6 for Sweden, 8.7 and 11.7 in France). Disparities in the incidence of pancreatic cancer between Member states are linked with disparities in the level of environmental risk factors:

**Variations in national health system policies + Variations in prevalence of risk factors = Discrepancies in incidence of pancreatic cancer.**

With a higher prevalence of risk factors, the incidence of pancreatic cancer is also likely to be higher.

**To reduce the incidence of pancreatic cancer, public health plans should aim to decrease consumption rates of tobacco and alcohol as well as improve nutrition.**
2. PART 2 – DIAGNOSIS, HEALTHCARE PATHWAYS AND ACCESS TO TREATMENT

1. Diagnosis routes, awareness of the signs and symptoms, medical training: bridging the awareness gap to trigger earlier diagnosis and patient orientation

One of the most important facts about pancreatic cancer is that for most patients, diagnosis occurs too late. This leads to 40% of patients having an advanced stage of the disease at the time of diagnosis; 80% of patients are diagnosed too late for surgery to be an option. A staggering 50% of patients are diagnosed as an emergency presentation. If one is diagnosed too late, no surgical procedure will be possible, which hinders substantially the survival rate. Diagnosis improvement is a must as most patients (>50%) get their diagnosis after a fine needle aspiration cytology (FNA) in a desmoplastic primary tumor where the proportion of stroma is much higher than that of the tumor cells.

These guidelines are useful for the general public, who also lack knowledge and awareness. According to a survey commissioned by Pancreatic Cancer Action, in the UK: “almost half of patients have never even heard of pancreatic cancer before their diagnosis, even though it’s the fifth most common cause of cancer death in the UK.”

Under-developed awareness both in the medical community and the general public often causes delays in diagnosis, which has a substantial negative impact on health outcomes.
2. Patient journeys, treatment guidelines, excellence centres, availability of surgery: 
the need to increase equity and equality in access to care

Treatment guidelines published by the European Society for Medical Oncology detail the way treatment should be prescribed. The diagnosis will first help in measuring the stage of the disease, determining whether the tumour is resectable, borderline resectable, locally advanced or metastatic. The stage will determine the treatment possibilities as detailed in the box on the side.

**Access to surgery remains highly unequal** throughout Europe. People often have to go to local hospitals to get their diagnosis and their treatment when ideally they should be referred to a specialised excellence centre. Many of pancreatic cancer patients do not have access to such centres, and few participate in clinical trials, although this might help in fighting their disease.

**Access to optimum care.** Access to other forms of treatments such as chemotherapy is also an important component of a patient’s journey. According to the American Cancer Society, “palliative care (or supportive care) is care that focuses on relieving symptoms caused by serious illnesses like cancer. It can be given at any point during a person’s illness to help them feel more comfortable.” Because treatments and medical needs differ in each patient, access to supportive care isn’t always equal in all Member States. National healthcare systems do not always reimburse all treatments and facilities aren’t spread equally throughout the territory. Once again, there are inequalities between patients throughout Europe.

Therefore, it is imperative to raise awareness on the issues affecting access to pancreatic cancer treatments so that the inequalities in access of care between regions/countries can be improved. Patients should be entitled to the same standards of care no matter where they reside, be that between member states or different geographical regions within one country.

3. Access to treatments: a question of ethics

Access to treatment is also not equal for all patients because reimbursements by national healthcare systems in European countries are not identical. In a study on the reimbursement of anti-cancer drugs, academics found that France was more likely to reimburse when Sweden or the UK were less likely to. Because cancer drugs are often expensive and currently are offering less than three months’ survival benefit versus the standard of care, then not all healthcare organisations will see the value in reimbursing these drugs for pancreatic cancer patients.

The direct consequence is that access to treatment is highly unequal across Europe. This raises an ethical question: should it be possible to restrict access to a drug that helps patients affected by such a terrible disease?
3. PART 3 – REGISTRIES AND RESEARCH ON PANCREATIC CANCER

1. Existence of pancreatic cancer registries: developing data collection in Europe, a part of the answer

The main objective of cancer registries is to fill the gap of the lack of organised data collection in pancreatic cancer, which would lead to a better understanding of the disease and development of more effective diagnosis strategies and personalised treatments.

This focus of Pancreatic Cancer Europe is based on the observation that over the last years there has been very limited research into pancreatic cancer that has yielded substantial results. The vital component of oncological research is, and always has been, the availability of data for researchers.

i.e.: See “Case Studies” section - PancreOS p. 13

The Spanish Cooperative Group on Digestive Tract Tumours (TTD – Tratamiento de los Tumores Digestivos) has started to execute a pilot registry called PancreOS. The three objectives of PancreOS are, according to Dr. Alfredo Carrato, to improve information; to develop a permanent and sustainable online standardised data exchange; and that all centres start at the same time with the same methodology to guarantee high-quality data and data standardization. It is important that we have standardised methods of collating data on pancreatic cancer so we are to accurately make comparisons between nations and to provide the basis of sound academic research.

2. Status and funding of research on pancreatic cancer: the relationship between funding and disease mortality

At five years, the survival rate of pancreatic cancer ranges between 0.5% and 9% throughout European countries. These figures, although unequal, are extremely low and have seen little improvement in nearly 50 years. It would seem logical that research funding reflects the burden of the disease. Increasing incidence and lack of improvement in outcomes shows that it doesn’t draw as much attention as it should.

The general lack of prioritisation and the inequalities between countries in targeting pancreatic cancer are especially salient when they’re compared to funding streams for other types of cancer. Research funding for lung cancer and breast cancer has historically been much greater than that of pancreatic cancer: pancreatic cancer research receives £17.2 million when lung cancer research receives £43.4 million and breast cancer receives £32.8 million per year in the UK.

Shortfalls in investment exist both in the public and the private sectors, at the European and national levels. Yet, examples of decent research public funding are not lacking. The U.S. government has allocated $5.26 billion to the National Research Institute, out of which $152m were allocated to pancreatic cancer research, and research has a solid legal ground.
Europe could get inspiration from this initiative to create a positive research funding framework for pancreatic cancer\(^5\); it could also foster collaboration at the international level, similar to the action of Pancreatic Cancer Europe, running roundtable events on research such as the Liquid biopsy workshop at the ESMO GI congress in Barcelona, June 2018. Former Framework Programmes for Research and Technological Development (n°6 and 7, 2002 to 2012) presented opportunities of funding. Of course, European research funding isn’t completely non-existent: the Horizon 2020 Programme, dedicated to research and progress funding, has helped several, even including pancreatic cancer projects\(^5\).

Two options could lead to increased investment in pancreatic cancer. Firstly, encourage national calls for action and **raising awareness** about pancreatic cancer research needs. This would be a good way to receive national public investments. Secondly, **charities** and not-for profit organisations currently play an important role in funding research in some nations. However, they are reliant on donations from the general public and mostly, funds raised for research are modest. Therefore, action is needed now from the EU Parliament, EU Commission and Member States to help increase the investment in pancreatic cancer research.

---

**EU research funding for pancreatic cancer is too scarce in contrast with the severity of the disease and the clear unmet need. There is scope within Programme H2020 and within Member States’ budgets for more pancreatic cancer research projects to be funded.**
4. CASE STUDIES

During the last decade, several public initiatives have given a new impetus to cancer research. The strength of this best practice programme lies in the fact that it’s a fully European initiative. Several best practices in the world could be highlighted – pancreatic cancer was made a priority in the 2012 USA Recalcitrant Cancer Research Act; the Pancreatic Cancer Dream Team comprised of the Lustgarten foundation and Cancer Research UK was founded in 2015.

1. France: the Research Integrated Actions Programme (PAIR)

The French National Cancer Institute (INCa) has launched in 2007 a research programme called Research Integrated Actions Programme (Programme d’actions intégrées de recherche, PAIR). The INCa was supported by two other major players in the French medical research landscape: the National Agency for Research on AIDS and Hepatitis (ANRS) and the ARC Foundation for Cancer Research. It was reorganised in 2009, and the National League against Cancer (LNCC) filled the position left by the ANRS.

The programme aims to bring all the scientific fields together to cooperate on the topic to ensure maximum efficiency. It is designed to foster scientific research by scholars and researchers who think out-of-the-box to provide patients with new solutions and treatments. To lead these projects, the PAIR has sought the commitment of scientific expertise to stay up-to-date with the latest healthcare evolutions.

The plan features four main pillars:

- **Epidemiology**: research to understand more accurately the importance of genetic and environmental risk factors in the incidence of pancreatic cancer.

- **Early diagnosis**: research aims at developing a better knowledge of biomarkers, better techniques for molecular and conventional imaging, better blood tests and better ways of tracking down and monitoring the disease among at-risk populations.

- **Biology**: research should help us learn about the evolution of carcinogenesis, about the relationship between the host and the tumour, and about the various therapeutic targets.

- **Diagnosis and care access**: research should provide an improved access to excellence centres, develop interventional research and enhance our knowledge about the different medical and supportive needs of patients.

Projects are the responsibility of one project manager, supervising three teams from different scientific fields of research. A committee comprised of members of the three sponsoring organisations reviews the project and decides whether they will fund it.

This programme is one of very few initiatives for pancreatic cancer at the European level, but could be a blueprint for other initiatives across member states.
2. Spain – PancreOS

The pilot project in Spain was launched based on several observations and statements:

**Missing data** impedes the development of accurate epidemiology patterns on the long-term. There is a noticeable increase in the incidence and mortality of pancreatic cancer, and a need to **identify high-risk populations**, in order to improve prevention and develop screening programmes. Lastly, there is a need to identify the epidemiological, clinical and biological characteristics of the different types of pancreatic cancer to enable a more targeted **personalized medicine approach**.

PancreOS gathers a **large number of stakeholders**. From pancreatic cancer experts such as **Alfredo Carrato**, Professor of Medical Oncology at Alcala University and Director of the Medical Oncology Department at Ramon y Cajal University Hospital in Madrid, or **Matthias Löhr**, Professor of Gastroenterology & Hepatology at the Karolinski Institutet (former Board member of Pancreatic Cancer Europe) to patient representatives as **Ali Stunt**, Founder and Chief Executive of Pancreatic Cancer Action, Pancreatic Cancer Europe Board members all are committed to collaborate with an impressive number of research centres from around Europe and coordinate their work. The following countries are part of the initiative:

- The Netherlands
- Belgium
- Germany
- UK
- France
- Spain
- Lithuania
- Slovenia
- Hungary
- Romania
- Turkey
- Greece
- Italy

A **more comprehensive knowledge** would also allow having higher surgery rates, and therefore better survival rates among patients: **reaching earlier diagnosis is a must**. The main goal is to improve knowledge of pancreatic cancer in all its aspects to reach better health outcomes for patients.

The pilot PancreOS project gathers researchers from thirteen different countries to develop an extensive cancer registry. The more that is known about pancreatic cancer, the easier it is to defeat the disease. We need the collaboration of all countries to address unmet needs.
THE PANCREATIC CANCER EUROPE DECLARATION

The Pancreatic Cancer Declaration is a list of different measures and strategic actions to address the current inequalities affecting pancreatic cancer patients in Europe.

**Pancreatic Cancer Declaration**

By 2020, pancreatic cancer is set to be the 2nd leading cause of death by cancer, if no action is taken. This Declaration by the European Multi-Stakeholder Platform on Pancreatic Cancer outlines what action is needed to halt this violent and deadly disease.

Philippe De Backer MEP, Françoise Grossetête MEP, Philippe Juvin MEP, Daciana Sârbu MEP

The EU has a central role to play in the fight against pancreatic cancer: it is time for EU institutions and Member States to support European citizens affected by pancreatic cancer, and trigger real change in research, diagnosis and care.

**By 2020: 5 key targets**

1. **Launch education and awareness campaigns in all Member States**
   - Raise awareness in the general population through active promotion of awareness campaigns.
   - Increase political awareness on pancreatic cancer in order to trigger political leadership and action on this disease.

2. **Develop specific plans to tackle pancreatic cancer and integrate pancreatic cancer in the broader Member State cancer control policies**
   - Include pancreatic cancer in cancer control policies at EU and national level, more specifically in rare cancer initiatives.
   - Develop national pancreatic cancer plans with measurable action plans, ensuring comprehensive standards of diagnosis and care across Europe.

3. **Improve early diagnosis by launching national campaigns towards healthcare professionals and patients**
   - Increase awareness of pancreatic cancer towards the scientific and patient communities to enable earlier diagnosis.
   - Develop pancreatic cancer training programs for treating physicians about symptoms and risk factors to improve earlier diagnosis.

4. **Improve data collection and work towards the development of pancreatic cancer registries in Europe**
   - Increasing allocation of funds for the research into pancreatic cancer would help earlier diagnosis.
   - Improving data collection on surgery and treatment of pancreatic cancer patients by supporting programs for treating physicians and researchers' efforts would certainly help in the understanding of the disease better.

5. **Increase the number of pan-European and national pancreatic cancer research projects**
   - Horizon 2020 could be a good platform to create a new funding stream.

**1. Raising awareness on pancreatic cancer**
   - Pancreatic cancer has the lowest survival rate of all cancers and its prevalence is still expected to increase in decades to come.

**2. Pancreatic cancer in cancer control policies: bridging the gaps**
   - Although survival rates in pancreatic cancer are very low, there are variations across Europe. 5-year survival rate in men can rank from 3% to 7% in countries such as Estonia. In women, this median survival rate ranks from 1.3% in Slovenia to 7.5% in Czech Republic.
   - This shows that early diagnosis and improved standards of care can make a difference in reaching higher survival rate for patients.

**3. Improving diagnosis of pancreatic cancer**
   - Pancreatic cancer has the lowest survival rate of all cancers, with a median survival rate of 3 to 6 months for a person diagnosed with metastatic pancreatic cancer. It is the only cancer whose mortality is increasing in both sexes.
1. Implementing efficient data collection and pancreatic cancer registries

- Improve data collection on surgery and treatment of pancreatic cancer patients, supporting physicians and researchers’ efforts to better understand the disease.
- Leverage EU-wide initiatives, such as the European Network of Cancer Registries, to support the development of national registries.

2. Investing in pancreatic cancer research

- Increase allocation of funds for the research into pancreatic cancer in order to improve diagnosis and enable patients to receive treatment at an early stage of their disease.
- Create new funding streams within Horizon 2020 to support research on pancreatic cancer.

A strong need for public policy support: no plans dedicated to pancreatic cancer today in the European Union.

- Countries with no pancreatic cancer dedicated plan
- Countries with a National Cancer Plan or cancer control policies with actions dedicated to pancreatic cancer

Pancreatic cancer research receives less than 2% of all cancer research funding in Europe. In the UK, £42 million are allocated to breast cancer research, while £5.2 million go to pancreatic cancer research.

There is, to date, no Member State with a national strategy dedicated to pancreatic cancer. Almost all EU Member States have implemented a cancer control policy at national level. In these plans, specific actions on pancreatic cancer are included in only 5 countries. In 7 countries, pancreatic cancer is simply mentioned, mostly in descriptions of mortality trends.

1 Pancreatic Cancer Action Network. The alarming rise of pancreatic cancer deaths in the United States: Why we need to stem the tide today, 2012.
5 Pancreatic Cancer Action Network. The alarming rise of pancreatic cancer deaths in The United States: Why we need to stem the tide today, 2012.
ACKNOWLEDGMENTS

Pancreatic Cancer Europe is an association registered in Belgium under the number 656.553.804. Any partial or total reproduction of the content of this report is prohibited. Any use of the content must be submitted to the secretariat of Pancreatic Cancer Europe for prior approval.

This report was drafted independently by the association, thanks to the joint support of the association’s 2018 sponsors, the companies Celgene, Servier, Mylan and Terumo BCT. All decisions regarding Pancreatic Cancer Europe are taken collectively by platform members, each of them having an equal voice in the decisions regarding the platform’s activities and orientations.

The report was developed with the support of RPP Group, the acting secretariat of Pancreatic Cancer Europe, who provided design, content and layout support to Pancreatic Cancer Europe.

Contact

Pancreatic Cancer Europe
actionpancreaticcancereurope@outlook.com
Rue Guimard 10, 1040 Brussels, BELGIUM
Sources


2. It is the number of new cases of a disease among a certain group of people for a certain period of time. It is usually measured in a group of 100,000 people standardized to age structure of European population.


38. “10 things you need to know”, Pancreatic Cancer Europe website, last seen on 30/05/2018: http://www.pancreaticcancerurope.eu/about-us/mission-
and-history/about-pancreatic-cancer/


40 "Symptom awareness", Pancreatic Cancer Action, last seen on 30/05/2018 : https://pancreaticcanceraction.org/about/what-we-do/symptoms-awareness/


42 Ibid.

43 « Palliative or supportive care », American Cancer Society : https://www.cancer.org/treatment/treatments-and-side-effects/palliative-care.html


47 “Facts and figures about our research funding”, Cancer Research UK, last seen on 30/05/2018 : http://www.cancerresearchuk.org/funding-for-researchers/facts-and-figures-about-our-research-funding-0#disease

48 NCI Funded Research Portfolio, National Cancer Institute : https://fundedresearch.cancer.gov/cgiportfolio/search/SearchForm


51 Example of a project funded by the H2020 Programme : https://cordis.europa.eu/project/rcn/194715_en.html


54 PancreOS kick-off meeting minutes, EUPancreas : http://eupancreas.com/wp-content/uploads/2014/04/0_PancreOS-KoM_WELCOME.pdf
