Together we will beat cancer

Together we’re saving lives

A year of achievements 2019/20
Together we’re celebrating over a decade of incredible progress. Inside front cover

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Together we’re... celebrating a decade of incredible progress

2010

Thanks in part to our campaigning, Parliament pass the Sunbeds (Regulation) Act, to protect under-18s from sunbeds.

2011

Cancers in the UK are preventable

4/10

Our research shows that around 4 in 10 UK cancer cases could be prevented by things like stopping smoking, keeping a healthy weight and being safe in the sun.

2012

2013

Our clinical trial shows that a shorter radiotherapy course is as safe and effective at treating early-stage breast cancer as a longer one, meaning fewer hospital trips for patients.

Stand Up To Cancer launches, raising money for research to translate laboratory findings into new tests and treatments.
Our STAMPEDE clinical trial shows that adding the drug abiraterone to hormone therapy at the start of treatment could greatly improve prostate cancer survival.

Our scientists provide some of the most robust evidence for a new type of bowel screening technique, which could significantly reduce the number of bowel cancer cases and deaths.

We launch Grand Challenge, the most ambitious cancer grants in the world. These £20m grants aim to bring together researchers across the globe to overcome the greatest barriers to beating cancer.

We make progress in developing less invasive ways to diagnose Barrett’s oesophagus, a condition that raises the risk of oesophageal cancer.

We launch our ambitious new research strategy to beat cancer and see 3 in 4 people surviving the disease by 2034.

We launch the National Lung Matrix trial which aims to make treatment for advanced lung cancer more personal, by identifying who is more likely to benefit from certain drugs.

The Francis Crick Institute, the biggest biomedical research institute in Europe which we help fund, opens its doors to scientists for the first time.

We commit to an extra £25m of funding over five years into brain tumour research, in a bid to speed up progress against the disease.

Our campaigning for standardised cigarette packaging becomes law in the UK, a huge step in reducing smoking uptake and helping smokers quit.

We launch our £14m TRACERx study shows we can detect the early signs that indicate if a patient’s lung cancer is likely to spread, which could help doctors better tailor treatments.

Race for Life celebrates 25 years. Since it began, 9.5 million people have taken part, raising £893m to beat cancer.

We lobby the Government to help reduce obesity rates and ultimately prevent more cancers.
Together we’re... driving real change

Last year, 2019/20

1 million people donated regularly to us

425,000 people took part in our events, including Race for Life, Shine Night Walk, Winter Run and Sports, raising a total of £44.6m

+40,350 Campaign Ambassadors and e-campaigners support our political campaigns by using their voice to speak up on important issues to politicians

14,000 volunteers in our shops gave 3.1 million hours of their time and made £98.4m in sales
Together we’re... funding life-saving research

Thanks to amazing supporters like you, we’re able to fund research into every type of cancer, so we can bring forward the day when all cancers are cured.

For more information on our 2019/20 finances, visit cruk.org/our-accounts

Breakdown of annual research activity
These charts show how our £455m annual research activity breaks down into different areas of research.

Revenue shares: £43m
A share of royalties from sales of innovations developed from our research, which we pass on to others involved in that research.

Research administration and support costs: £42m
This includes costs incurred to support our research activity, such as peer review, grant management, IT and other support costs.

Research relevant to all types of cancer: £81m
This includes research infrastructure and, for example, research studies looking at cancer survivorship.

Basic research: £86m
To understand the fundamental biology of cancer.

In 2019/20, we spent £455m on new and ongoing research projects.
We spent £203m on research into specific types of cancer.

Breast: £30m
Lung: £26m
Bowel: £25m
Brain: £12m
Oesophageal: £11m
Non-Hodgkin Lymphoma: £5m
Kidney: £4m
Melanoma: £5m
Myeloma: £3m
Neuroblastoma: £2m
Bladder: £2m
Prostate: £12m
Liver: £4m
Pancreatic: £17m
Leukaemia: £17m
Ovarian: £9m
Pharyngeal: £3m
Neuroblastoma: £2m
£16m on over 100 other types of cancer
HPV vaccine for all children

Human papillomavirus (HPV) is a common infection that the body is usually able to clear by itself. But some types of HPV increase the risk of certain cancers, including cervical cancer.

Research we helped fund laid the foundations for developing a vaccine against HPV, which has been available to girls in the UK since 2008. With mounting evidence that the vaccine also prevents other types of cancer, together with other organisations, we campaigned for all children to receive the vaccine.

Because of this campaigning, the HPV vaccine is now available on the NHS to all children aged 11–13 in the UK. This allows more people to be vaccinated against HPV, meaning more cancers can be prevented in future.

Justine’s story

Justine Harris, 32, a mum of three boys from Birmingham, welcomes this news: “I think the vaccine is an amazing advance. It’s fantastic that it’s now being rolled out to boys, not just girls.”

When Justine was 14, her cousin died of cervical cancer. Then three years ago, aged just 29, she herself was diagnosed with cervical cancer through screening.

“I wish I’d had the opportunity to be vaccinated against HPV when I was a girl”, says Justine. “I would have jumped at the chance, especially after losing my cousin. It might have prevented me getting cancer.”

“Justine’s story

My sons will definitely be vaccinated. I’ll do whatever I can to reduce their risk of developing cancer.

Justine

Did you know?

Overweight and obesity is the second biggest cause of cancer in the UK after smoking.
Campaigning to reduce obesity

The world around us makes it hard to be healthy, in part because unhealthy foods are widely advertised and cheap to buy. That’s why we’re working with the Government and other organisations to promote healthier eating habits and campaigning for restrictions on junk food advertising and promotions.

In 2019, we ran a nationwide campaign to raise awareness of the link between obesity and cancer, which 84% of the public thought was an important message. The campaign called on politicians to support our push for policies that’ll reduce obesity, especially in children, such as restricting junk food advertising before 9pm.

Beating the odds with aspirin

Michael Lightfoot’s mother died of bowel cancer when she was aged just 56. “She was one of nine siblings,” he explains. “And seven of them died of bowel cancer between the ages of 42 and 63.”

Tests revealed that Michael, along with his two daughters, inherited a condition from his mother’s family called Lynch syndrome, which increases their risk of bowel cancer.

The family have been under the care of Professor Sir John Burn and his Cancer Research UK-funded team in Newcastle for 30 years. During that time, Michael took part in our CaPP2 trial, which showed that taking a specific dose of aspirin daily for more than two years can lower the risk of bowel cancer in people with Lynch syndrome.

Thanks to this trial, the National Institute for Health and Clinical Excellence (NICE) now recommends that people with Lynch syndrome take aspirin regularly. This decision will have a huge impact on families like Michael’s because it means they can now actively take measures to avoid a cancer diagnosis.

Michael Lightfoot, 58, Newcastle

“These results are life-changing and show the power and benefit of research. I’m 58 now and under normal circumstances, I might not have made it this far. I probably owe my life to Prof John Burn and his team.”

Find out more at cruk.org/prevent
Together we’re...

**spotting cancer early**

We’re researching ways to diagnose more cancers as early as possible. The earlier cancer is diagnosed, the more treatment options are available, which means a better chance of survival.

**Improving breast screening**

Each year in the UK, NHS cancer screening programmes help diagnose thousands of cases of cancer early. But severe NHS staff shortages, particularly in teams that help diagnose cancer, mean some cases of cancer are being diagnosed at a later stage, which lowers the chance of survival.

To try to ease the pressure on the NHS, and overcome these shortages, we partnered with Google Health to develop artificial intelligence (AI) that could make breast screening more efficient and effective.

**Did you know?**
Around 2.21 million people attend a breast screening appointment every year in the UK.
Improving bowel screening

Bowel screening aims to pick up cancer at an early stage by detecting tiny amounts of blood in poo samples. We’ve campaigned hard for a new type of test – faecal immunochemical test (FIT) – to be used in bowel screening because it’s more accurate and easier to use than previous tests. And thanks to our efforts, FIT is now being rolled out across most of the UK.

Iain’s story

“Last year, I used the new FIT test for the first time and it’s definitely easier to use than the previous test. I think this is a really positive thing because it could mean many more people are able to use and return the test. I know from experience that it’s a life-saving test because if you’re diagnosed early, like I was, your treatment’s much more likely to be successful. That’s why it’s such good news that this new, easier-to-use FIT test is being rolled out across the UK.”

To receive a cancer diagnosis was devastating. But I’m grateful that, thanks to screening, the disease was caught at an early stage.

Iain

4,000

Last year, our Facilitators worked with nearly 4,000 GP practices across the UK to help them become more confident in spotting the early signs of cancer.

Find out more at cruk.org/spotting-cancer
Unlocking lung cancer’s secrets

Only around three in 20 people diagnosed with lung cancer in England survive their disease for five years or more. Researchers believe this may be because lung cancer cells rapidly change, making treatments less likely to work.

This year, the team behind our £14m TRACERx project made a series of important discoveries that could help change this.

By looking at patients’ blood samples, researchers were able to spot the very early signs of lung cancer spreading around the body. This finding could allow doctors to identify people who could safely be given milder treatments (eg just surgery), and those who need additional treatments (eg chemotherapy). Giving each patient the treatment that is best for them could improve lung cancer survival and minimise side effects in the future.

Pancreatic tumour-destroying microbubbles

Our scientists are testing whether specially designed ‘microbubbles’ could dissolve and destroy pancreatic tumours.

In the lab, researchers used a special type of ultrasound to make the ‘microbubbles’ expand and contract really quickly. This puts a strain on the pancreatic cancer cells, causing them to shatter into harmless pieces. The hope is that if this technique can be replicated in people, the microbubbles could shrink and destroy a tumour without the need for invasive, risky surgery.

These ‘microbubbles’ are just one example of the exciting innovation we expect to see within the new Convergence Science Centre.

Professor Paul Workman

This unique approach is possible thanks to the founding of our Convergence Science Centre at The Institute of Cancer Research, London and Imperial College London. Led by Professor Paul Workman and Professor Lord Ara Darzi, it brings together experts in physics, data science, engineering and medicine.

Did you know?

Our research has played a role in developing 8 of the world’s top 10 cancer drugs
Better treatments for brain tumours

Brain tumours in adults and children are one of the hardest types of cancer to treat and survival is poor compared with other cancers. That’s why we’ve joined forces with The Brain Tumour Charity to fund new research to better understand these tumours and help more people survive them in the future.

We’ve awarded £18m to fund three projects, including a group in Cambridge. They aim to completely rethink children’s brain tumour research by studying embryonic brain development and how, when it goes wrong, it can sometimes cause brain tumours to develop. They’re hoping the research will lead to new treatments in the future.

Charlie’s story

Charlie’s treatment, which included surgery, radiotherapy and chemotherapy, lasted two years and was a success. But, because of it, he still needs to take daily medication and wears hearing aids.

“I can imagine it was an extremely tough time for my parents. Not knowing whether I would be okay, or if I was going to have any long-term side effects from the treatment.”

Charlie Williams, 21, Suffolk

Charlie, who was five years old when he was diagnosed with a brain tumour, welcomes the research. “Our brains are so complex”, he says. “The treatments available today can save you, but they can affect you for your whole life.”

That’s why this research is so vital, because it could lead to better treatments with fewer long-term side effects.

Charlie

£66m

In 2019/20, we spent £66m on research into hard-to-treat cancers: pancreatic, oesophageal and lung cancers and brain tumours.

Find out more at cruk.org/our-research
Improving radiotherapy

In 2019, we launched our innovative Radiotherapy Research Network – RadNet – which aims to improve radiotherapy treatment and, in turn, cancer survival.

RadNet supports work using AI to design personalised radiotherapy treatment plans. This could improve the accuracy of radiotherapy and provide new treatment options for people whose tumours were once thought too risky to target with radiation.

It’s also helping researchers explore ‘FLASH’ radiotherapy, where a high dose of radiation is delivered in a fraction of a second. This could result in fewer side effects and fewer trips to hospital.

Did you know?
We were a key player in the development of radiotherapy, which now benefits more than 130,000 patients every year in the UK.

Nita’s story

“RadNet sounds fantastic”, says Nita, who was diagnosed with breast cancer in 2004. “It would help people like me if radiotherapy could be given in fewer hospital trips. Our lives could get back to normal more quickly.”

Nita continues: “My whole world just shattered to pieces when I found out I had cancer. “While I was going through my treatment my son Bhavin, who was only 14, became a young man overnight, supporting his little sister and his dad tremendously. I will always be thankful for that.”

Despite the challenges, Nita says some positives have come about because of her cancer, including joining a local Asian women’s support group and becoming more engaged with her local community.

People in the Asian community don’t talk about cancer – it’s still seen as a taboo subject. It’s important to talk openly about your experiences and hopefully, by sharing my story, I can help others.

Nita

Find out more at cru.k.org/optimise-treatments

Together we’re…

improving existing treatments

From established treatments like chemotherapy and radiotherapy to newer treatments such as immunotherapy, we’re working to make cancer treatments more effective with fewer side effects and better suited to individual patients.
Nita Surani, 60, Harrow

Nita (left) was diagnosed with breast cancer in 2004 and is now all clear of cancer thanks to treatments like radiotherapy. She believes RadNet will help families get their lives back to normal quicker with fewer hospital visits.

Reducing chemotherapy’s side effects

Around 15,800 people are diagnosed with cancer of the stomach or food pipe in the UK every year, half of whom are aged 70 and over. Chemotherapy is an important part of their cancer treatment, but it can cause serious side effects.

Results from our GO2 clinical trial could change this. In the trial, researchers treated older and frail people with advanced cancer of the stomach or food pipe with a high, medium or low-dose of chemotherapy. They found that a lower dose of chemotherapy was equally as good at treating cancer as a high or medium dose, but that it resulted in fewer side effects.

Improving outcomes for advanced breast cancer

When cancer spreads around the body, patients tend to have fewer treatment options and their chances of surviving decreases.

Through our plasmaMATCH clinical trial, we’re working to change this for people with advanced breast cancer. The trial has shown that analysing blood samples from women with the disease can help doctors spot possible weaknesses in their tumours. This could allow patients to be matched to new treatments that are likely to work for them, while avoiding the need for painful biopsies.

£8.2m

In 2019/20, we spent £8.2m supporting 250 clinical trials across the UK
To accelerate progress, research must be global and collaborative. That’s why we’re working with partners around the world to find new ways to prevent, diagnose and treat the disease, and help people with cancer everywhere.

Inspiring young minds at the Grand Challenge Summit

Grand Challenge is our global £20m funding platform supporting scientists to take on the toughest challenges in cancer. This year, for the first time, we invited PhD students and post-doctoral researchers to our Grand Challenge Summit – a meeting where all our Grand Challenge teams come together to discuss problems and share successes. By inviting these young scientists to the global summit, we aimed to inspire them to continue researching for years to come and show them that it’s only by working together that we will beat cancer.
Affordable approaches to cancer

Our ‘Affordable Approaches to Cancer’ initiative is a partnership between us and the Government of India’s Department of Biotechnology. It highlights seven research challenges which aim to develop affordable tests and treatments for people with cancer around the world.

In March, we awarded seed funding grants to seven projects, each of which is co-led by a researcher from India and the UK. By bringing together the scientific strengths of both countries, the initiative will help accelerate progress across many areas of cancer research on a global scale.

These newly-funded projects include work to prevent cervical cancer and raise awareness of the early signs of cancer.

Each project has the potential to develop innovative approaches to diagnosing, treating or preventing cancer, which we believe could save lives in the UK, India and around the world.

Tackling cancer through European partnerships

Our Accelerator Awards are a funding collaboration between Cancer Research UK, AIRC Foundation for Cancer Research in Italy, and Fundación Científica de la Asociación Española Contra el Cáncer in Spain.

The awards build on the longstanding links between researchers in the UK and continental Europe, which are more important than ever as the UK creates a new type of relationship with the European Union (EU).

One of the newly funded teams, led by Professor Kevin Blyth in Glasgow, is studying mesothelioma, a cancer linked to asbestos that usually begins around the lung.

The team are investigating how mesothelioma develops and whether it can be detected and treated at a very early stage. This could offer the hope of much-needed new treatment options for people with the disease.
COVID-19 has left us facing one of the biggest challenges in our history

Over the 2019/20 financial year, we made incredible progress in beating cancer. But the truth is, this year, COVID-19 has slowed us down – we’re now expecting to see a devastating £160m drop in income between now and the end of March 2021. To put this into context, that’s what we would normally spend on clinical trials over 11 years.

Everything we do to beat cancer has had to adapt – from how we fundraise and carry out research, to the way our staff work, to the support we can give people affected by cancer. In the early stage of the pandemic, we had to make immediate and difficult decisions to protect our future, including:

• temporarily closing our 600 retail stores to protect staff and volunteers
• postponing and cancelling events, such as our Race for Life series
• reducing staff salaries to 80% and furloughing 60% of staff

Cuts to our life-saving research sadly had to happen. We’ll need to reduce the amount of research we fund each year. Currently this is about £400m a year. We’ll be gradually reducing this, over four to five years to around £250m a year – around £150m lower than today. This will mean we’ll fund fewer clinical trials and ultimately, make fewer discoveries that will lead to new ways to diagnose and treat cancer.

But this would be worst-case scenario. We’re doing absolutely everything in our power to find more financial support, and are working with other research charities to urge the Government to support vital research.

We can’t do it alone. Because of you – our dedicated supporters, helping us in any way you can – our life-saving research is possible.

* Information provided is accurate as of July 2020. If you’d like the most up-to-date information, sign up to hear from us via cruk.org/preferences, or visit our science blog at scienceblog.cancerresearchuk.org
Keeping our ties with Europe

On the 31 January 2020 the UK officially left the EU. The UK Government is now negotiating on what the future relationship between the UK and EU will look like.

Whatever the Brexit outcome, we need to continue to work together with partners in the EU and around the world to beat cancer.

Our increased understanding of cancer and all its complexities means we understand that no one organisation – or country – can beat the disease on their own.

Our researchers work with hundreds of different organisations based in the EU, and nearly a third of our clinical trials take place in the UK and at least one EU country. It’s in all our interests that this doesn’t stop because of Brexit.

Collaborating across borders allows researchers to share vital expertise and drive progress faster. It also means that more patients can be recruited to clinical trials. This is especially important for rare cancers and children’s and young people’s cancers, where the number of people with these diseases in any one country is too low to carry out a clinical trial.

That’s why we’re working to make sure that the future UK–EU relationship makes international research collaboration as simple as possible. We’ve been working with policymakers in the UK and throughout the EU to outline the need for a deal which recognises the importance of research collaboration, protects international access to medicines, and allows researchers to move easily across borders for their vital work.

And we’re not doing it alone.

We want to amplify the voices of people affected by cancer in the UK–EU negotiations, which is why we’ve worked with them to understand what they and others need from the future UK–EU relationship.

This helped shape and form the backbone of our Brexit work with politicians, outlining clear and simple steps for how negotiators can build a relationship that works for people affected by cancer in the UK and across the EU. Because it’s only by truly working together that we will beat cancer.
Together we’re saving lives.

Our life-saving research wouldn’t be possible without you – thank you.

Together we will beat cancer