

# Why fund research?

Thanks to you, we are the largest national charitable funder of cancer research in Canada. Investing in the best research across 100+ types of cancer gives us a valuable sightline on all aspects of the cancer landscape and allows us to translate key learnings from one area of focus to another.

In the 1940s, only about 25% of Canadians diagnosed with cancer survived for at least 5 years after their diagnosis. Thanks to research, today more than 60% will survive 5 or more years. We now know so much more about what causes cancer, how it develops and spreads, how to treat it successfully and how we can improve the quality of life of people living with cancer. But there is still more work to do.

We believe research is the best way to accelerate progress so that more cancers can be prevented and more people will not just survive cancer, but live longer and fuller lives.

"We're at the brink of taking cancer and measuring survival not in years, but in decades. We're close. We just have to keep going."

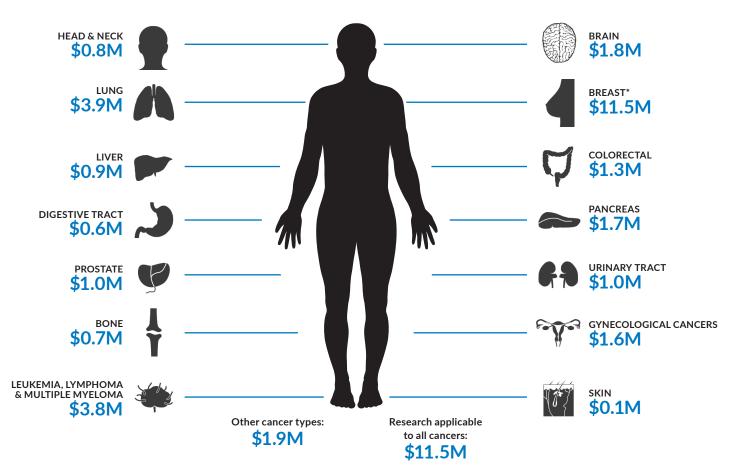
Dr Mick Bhatia, CCS-funded researcher, McMaster University

### Our investment

In 2018, CCS invested \$38.9 million in the best cancer research in Canada. In fact, we invest more than any other national charity in research on breast, childhood, colorectal, lung and pancreatic cancers, plus many other types.

The projects we fund are chosen through a gold-standard, peer-review process that draws on the expertise of nationally and internationally renowned cancer experts.

#### **INVESTMENT BY CANCER TYPE\*\***



### Research innovation

Thanks to our donors, CCS-funded researchers are at the forefront of some of the most exciting areas of cancer research today. Here are a few examples of high-impact research discoveries that would not be possible without your support.

#### Predicting healthy people at risk of leukemia

Dr John Dick, Princess Margaret Cancer Centre



A CCS-funded study has shown that it is possible to predict who will develop acute myelogenous leukemia (AML), the leading cause of adult leukemia deaths in Canada. The international study, which was co-led by Dr John Dick, compared blood samples from healthy people who later developed AML to individuals who did not develop the disease. The researchers found that seemingly healthy people start getting genetic changes in their blood cells as early as 10 years before they are diagnosed with AML. These genetic changes represent the first steps to blood cells becoming cancerous.

These findings highlight the possibility of doing a simple blood test to identify people at high risk of developing AML and intervening early to prevent the disease.

#### Sparing women from chemotherapy

Canadian Cancer Trials Group, Queen's University



A clinical trial funded in part by CCS through the Canadian Cancer Trials Group found that 7 in 10 women diagnosed with a specific and common type of early stage breast cancer do not need chemotherapy in addition to hormone therapy. Until now, it wasn't clear whether chemotherapy offered any added benefit for women at medium risk of cancer relapse. This study showed that women who received both hormone therapy and chemotherapy had very similar rates of survival, cancer recurrence and spread compared to women who received hormone therapy only.

The results of this trial are expected to spare tens of thousands of women each year from chemotherapy's side effects and enable them to live more fully without affecting their chances of staying cancer-free.

#### Uncovering how brain tumours spread

Dr Michael Taylor, Hospital for Sick Children



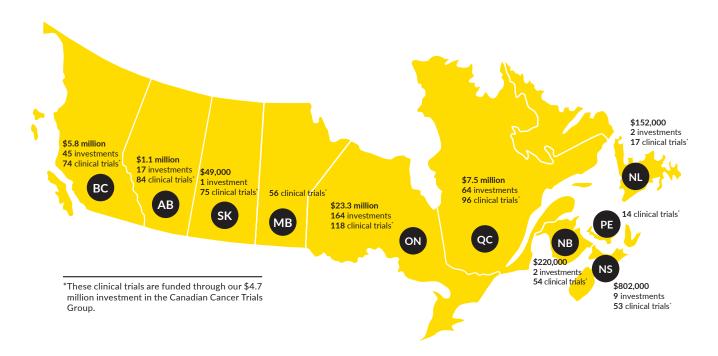
A breakthrough discovery enabled by CCS funding could dramatically change the way we diagnose and treat the most common brain tumour in children.

Dr Michael Taylor and his team showed for the first time that medulloblastoma can spread through the blood. Most medulloblastoma deaths are caused by tumours that have spread so, by understanding how the cancer spreads, researchers can now search

for ways to disrupt the process and prevent secondary tumours. Based on this discovery, doctors in the future could get a tumour biopsy by taking a non-invasive blood sample instead of performing brain surgery. Dr Taylor's research could not only help save lives, but it could also help people with medulloblastoma have a better quality of life.

## Our 2018 nationwide research investment

Our impact is far-reaching and nationwide. Because of your support, we are able to invest in research that holds the most promise for all Canadians, no matter where in the country it takes place.





"Progress in research made possible by the Canadian Cancer Society's generous donors saved my life. I am so grateful to them. When I was diagnosed with acute lymphoblastic leukemia, the survival rate was 75 per cent. Now it is more than 90 per cent."

Emma MacLean, childhood cancer survivor and CCS volunteer



**CANCER.CA** 

# Thank you

Nearly 1 in 2 Canadians is expected to be diagnosed with cancer in their lifetime. With your continued support, we can detect cancer earlier, treat it better and help survivors live long and healthy lives.

To learn more about research or to make a donation, visit cancer, ca or call 1-888-939-3333.