

A UHN Research Study

CHARM2

Cell-free DNA in Hereditary And High-Risk Malignancies 2:

Evaluating the Performance of a

Blood Test for Early Cancer Detection

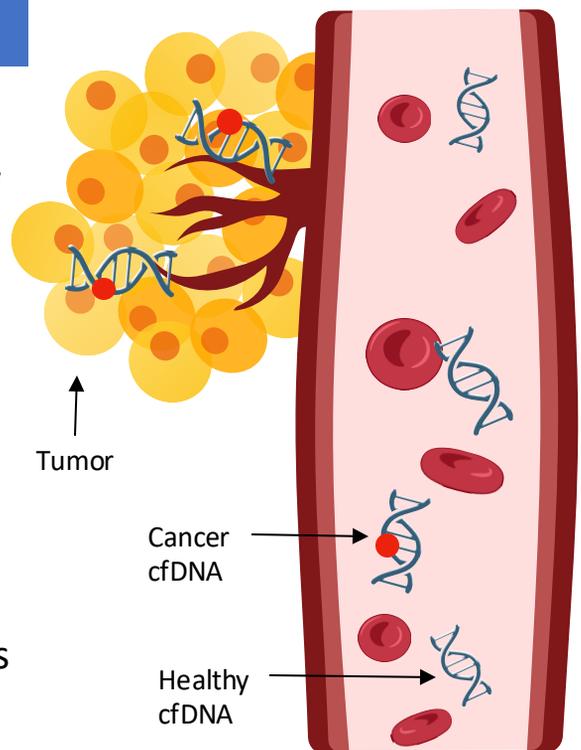
What is cell-free DNA (cfDNA)?

Deoxyribonucleic acids (DNA) is the instruction manual telling our body how to develop and function. Most DNA is found inside of our cells.

cfDNA are short pieces of DNA that circulate freely in your blood. Most of the cfDNA in the blood comes from normal, healthy cells.

Cancer cells can also release cfDNA into the blood. cfDNA from cancer cells looks different than cfDNA from healthy cells.

cfDNA can be detected with a blood test.



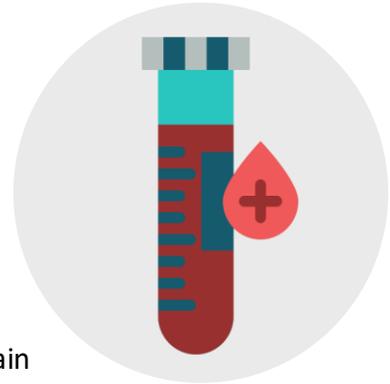
The CHARM team is developing an experimental blood test for early cancer detection. Our goal is to understand the performance of this experimental blood test.

What does the study involve?

CHARM will look at the cfDNA in your blood.

Each study participant will be randomly assigned to the control or test group. If you are in the test group, you will provide a blood sample 3 times a year for 4 years. Samples can be provided at [LifeLabs](#).

Sample collection is not required if you are in the control group. The main purpose of the control group is data collection (for example, results of your routine cancer screening).



CHARM will return the results of the blood test to you.

“Cancer signal not detected.”
or
“Cancer signal detected.”



A CHARM doctor may arrange follow-up tests.

A “cancer signal detected” result is not a cancer diagnosis.

If you receive this result, a study doctor will arrange follow-up tests (for example, additional bloodwork and imaging) to confirm or rule out cancer.

You will be asked to complete surveys.

Multiple surveys over the course of this study to help us learn how this blood test may impact your wellbeing.

Who can participate in CHARM2?

We are recruiting people who are at a **higher risk of developing cancer**.

This includes people who have a pathogenic or likely pathogenic variant (i.e. mutation) in any of the following genes:

- **BRCA1/2, PALB2** (Hereditary Breast and Ovarian Cancer)
- **CDH1** (Hereditary Diffuse Gastric Cancer)
- **MLH1, MSH2, MSH6, PMS2, EPCAM** (Lynch Syndrome)
- **NF1** (Neurofibromatosis Type 1)
- **TP53** (Li-Fraumeni Syndrome)

People with and without a personal history of cancer are eligible. At the time of study enrollment, participants must be cancer free for at least 3 years.



This experimental blood test does not replace cancer screening tests recommended by your health care provider.

Interested in learning more?



Scan the QR code or visit our website at charmconsortium.ca.

You can also email us at charm-research-study@uhn.ca.

CHARM

www.charmconsortium.ca