People who are considering gene sequencing are asked to make some important decisions about the kind of results they want to receive.

The “right” decisions are the ones that feel most comfortable to you.

Learn more. Get support.

CanSeq@dfci.harvard.edu

The CanSeq study looks at all of your genes, including the ones in your cancer cells. Because of this, sequencing can produce many kinds of results, both about your cancer and about other possible health issues.

The excitement and promise of gene sequencing is being able to target care to a person’s specific cancer.
WHAT MIGHT GENE SEQUENCING MEAN FOR YOU?

THE CanSeq study uses genetic sequencing to improve cancer care.

Ways Sequencing May Help You

We study cancer genes to learn if they can predict response to treatments. That means gene sequencing results could:

- Affect your cancer treatment directly—for example, show how your cancer might respond to specific drugs and dosages
- Show if your cancer can be treated with a new therapy as part of a clinical trial
- Tell you about your prognosis (outlook)

You will also be helping us learn how to improve the future care of patients with cancer.

What To Be Aware Of

Your sequencing results may or may not directly benefit you. Test results may:

- Not offer any helpful information
- Tell you about other health risks that you may or may not be able to change
- Give you information about family health risks that they may or may not be able to change
- Not be completed because of technical issues

Gene sequencing results may provide information about your cancer and/or other health issues.

Gene Sequencing Results

- Related to Cancer
  - Your type of cancer may benefit from a new therapy as part of a clinical trial
  - Your cancer may progress faster or more slowly than average
  - You may be at risk for other kinds of cancer
  - Your body may respond well or poorly to specific cancer drugs

- Not Related to Cancer
  - You might be at increased risk for a health problem that can be treated or prevented, like heart disease, or for one that can’t be, like Alzheimer’s disease
  - Some of your family members may be at risk or develop cancer
  - Some of your family members may be at increased risk for a health problem that can be treated or prevented, or to develop one that can’t be
  - You may pass on a health risk to your child, even if you don’t have the condition yourself
  - Your body may or may not respond well to noncancer drugs

Common Questions

What Do Genes Have To Do With Cancer?

Cancer is a disease of genes. Cancers occur when the molecules that control normal cell growth (genes and proteins) are altered.

Why Are Gene Alterations Important For Cancer?

Identifying alterations in cancers has led to new drugs that “target” those alterations. Finding more alterations will help develop more new drugs.

Will Gene Sequencing Only Look At My Cancer Cells?

Gene sequencing is performed on cancer cells and normal tissues. You can decide which types of results you want to get.

How Might I Feel About Gene Sequencing After I’ve Had It?

Some people may be excited or relieved. The information may help them feel more empowered. Other people may become anxious, disappointed, or worried about their family, and wish they didn’t have the burden of more information.

Making The Right Decisions

Consider how it might affect you or your family to learn:

Genetic Results Related To Cancer

- Your type of cancer may benefit from an available treatment or current research study
- Your cancer may progress faster or more slowly than average
- You may be at risk for other kinds of cancer
- Your family members may be at risk for certain kinds of cancer
- Your body may respond well or poorly to specific cancer drugs

Genetic Results Not Related To Cancer

- You might be at increased risk for a health problem that can be treated or prevented, like heart disease, or for one that can’t be, like Alzheimer’s disease
- Some of your family members may be more likely to develop a health problem that can be treated or prevented, or to develop one that can’t be
- You may pass on a health risk to your child, even if you don’t have the condition yourself
- Your body may or may not respond well to noncancer drugs

Let Your Doctor Know if you have questions about gene sequencing.

Consider talking to one of our genetic counselors for information and support while you consider your options. Your doctor can refer you.

A genetic counselor can help you understand the medical, emotional, and family implications of sequencing results, and help you come to your own “right” decisions.

You can also talk to one of our genetic counselors after you receive sequencing results, whether or not you talked to one before.