

Tumor genetic testing involves sending samples of your cancer cells to a lab, to look for targets that may help guide your cancer treatment. Talk to your doctor to learn more about this test.

1

## Understanding Your Cancer

- Your body is made up of trillions of cells. Each cell contains genes that tell your body how to work.
- Genes are made of DNA. A strand of DNA is similar to a very long sentence that uses just four chemical letters: A, T, C and G.
- Over time, the order of letters within the DNA can sometimes change, resulting in a *somatic mutation*. Some of these changes can cause cells to multiply nonstop. This is how cancer grows.
- Genetic testing reads DNA letter-by-letter to find these mutations.
- Somatic mutations are specific to your cancer cells. They are not from a parent and cannot be passed down to children.

3

## Limitations of Tumor Genetic Testing

- Having this test does not mean that results will lead to a better outcome.
- It is possible that your cancer was caused by something that cannot be seen by this test, or by other changes we do not yet know about.
- There is a small chance of testing errors, which could limit the accuracy of results.
- This test will not provide data about the risk of cancer for your family members.



2

## Tumor Genetic Testing

- Testing is done on a small sample of your tumor tissue.
- The sample is sent to a lab that performs DNA testing on your cancer cells, to look for somatic mutations.
- Test results may find mutations that can help guide your cancer treatment.
- Treatment options may include drugs only available on research studies.
- Sometimes testing finds mutations that do not yet have a specific treatment. However, we may be able to use this information if new drugs are developed in the future.
- Once your doctor has your test results, you will work together on a personalized treatment plan.

4

## The Testing Process

- If you agree to testing, your doctor will send the lab a sample of tumor tissue from a past or future biopsy.
- A member of your care team can talk with you about any potential costs.
- Results will be sent to your doctor in about 2-3 weeks.
- Your care team will contact you with the results, and explain if the findings will affect your cancer treatment.
- Your doctor may recommend further testing based on your results.

