

Precision Medicine FAQ Sheet: My Cancer and Molecular Sequencing

Why can you benefit from Next Generation Sequencing (NGS)?

Tumors grow because of random mistakes that occur in the DNA of our body's cells. We call these random mistakes, alterations. Sometimes these alterations are passed down from parents, and are called germline alterations. In many cancers alterations develop over time, and they are called somatic alterations. Sequencing allows physicians to make guided treatment decision for our patient's unique cancer. These tests help validate diagnoses as well as permit access to clinical trials that are targeted for specific molecular alterations. We use NGS to identify treatment options that are unique to your tumor.

Who performs NGS testing and what type of sequencing will I have?

There are several sequencing companies that Sylvester University of Miami works with to provide NGS for our patients. These companies conduct thousands of tests per year for health centers across the world. Testing can be performed on solid tumor tissue, blood samples, or bone marrow samples. The specimen type selected is dependent on your unique type of cancer and if a biopsy is possible.

Is NGS the same as 23andMe®?

NGS and common commercial genetics tests are somewhat similar. Both tests can identify mutations, the difference between the two tests is that they use slightly different methods. Other non-clinical genetic tests use a technique known as genotyping, 23andMe®, and Ancestry this method compares an available library of genes to the genes that a patient expresses. This is useful when we know what we are looking for, but it does not help us find uncommon mutations that are medically significant for cancer therapy. Sequencing on the other hand looks at all the available information, it reads through sets of genes and identifies any abnormal changes in the tumor DNA.

Do I have to pay for my NGS testing?

Please note that NGS testing may be associated with out-of-pocket expenses for which the patient will be financially responsible.

NGS lab companies will bill your insurance for reimbursement for the NGS tests. Coverage for the tests is dependent on your insurance provider. NGS Companies may send a bill to you for the testing if your insurance company does not provide coverage for the test. Before taking any action, you should ensure that you have received an actual bill from the external lab and not a statement from your insurance company. NGS companies often appeal denials before asking a patient for direct payment.

If you have received a bill from a NGS company, there are steps you can take to reduce payment or have payment forgiven completely. Sylvester can assist with applications for financial assistance programs offered by each lab. We encourage you to communicate any charges back to your Sylvester care team to facilitate reducing the amount the lab is seeking to recover from you. We find that many tests require very minimal payment, but it is important to weigh the potential for payment when making a decision to have NGS testing.

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