The clonoSEQ Assay is FDA-cleared for use in B-cell acute lymphoblastic leukemia and multiple myeloma patients to detect and monitor measurable residual disease (MRD) in bone marrow samples. clonoSEQ is also available for use in other lymphoid cancers as a CLIA-regulated laboratory test. Available by prescription only. Results may vary. clonoSEQ results should always be used in combination with clinical examination, patient medical history, and other findings. Talk to your doctor to see if clonoSEQ testing is right for you. References to “cancer” in this brochure refer specifically to B-ALL and myeloma.
Gathering as much information as you can about your blood cancer is key to playing an informed role in your treatment decisions. This brochure will help by providing an overview of measurable residual disease (MRD) and how clonoSEQ testing is used to assess and track MRD over time.

Many organizations are working to educate patients and caregivers with information about blood cancers treatments, and diagnostic tools. Take advantage of these additional resources to learn more and connect with other patients.

LEUKEMIA & MYELOMA

Leukemia & Lymphoma Society
www.lls.org

Multiple Myeloma Research Foundation
www.themmrf.org

ONCOLOGY & HEMATOLOGY

American Society of Hematology
www.hematology.org/patients

National Comprehensive Cancer Network
www.nccn.org/patients

Patient Power
www.patientpower.info

ADOLESCENTS & YOUNG ADULTS

Stupid Cancer
www.stupidcancer.org
After receiving a blood cancer diagnosis, you and your loved ones may feel confused, anxious, or overwhelmed about the path forward.

As you undergo treatment, it’s natural to want more information about your body’s response to therapy. How is my treatment affecting my cancer? You want to be sure you and your care team know, at the level of individual cells, what’s happening in your body.

Even if you are responding well to treatment or are in remission, a small number of cancer cells can remain in your body, and may cause your disease to return. This is called measurable (or minimal) residual disease, also known as MRD.

Often these remaining cells are present at such low levels that they do not cause any signs or symptoms, but they may be a sign that cancer is returning.1 When it comes to treating blood cancer, your doctor’s ability to detect these traces of disease may be critical to making timely and informed decisions about your treatment plan.

With advancements in cancer research and technology, highly sensitive measurable residual disease (MRD) tests are now available that may help your doctor more accurately identify and track these cells.
WHAT GETS MEASURED GETS MANAGED

MRD testing is a powerful tool to help you and your doctor better understand your cancer, assess your response to treatment, track your disease over time, and potentially detect early signs of returning disease.
Diagnosis

Together, you and your health care team can keep a watchful eye on MRD. At diagnosis, clonoSEQ looks for, identifies, and counts your cancer’s unique DNA “barcodes” associated with your cancer. This is called the Clonality (ID) Test.

Next, your doctor will take bone marrow samples during treatment and remission to determine if any cancer is detectable, as well as how the amount of cancer may have changed over time. To do this, clonoSEQ compares the unique DNA “barcodes” identified in your initial Clonality (ID) Test to those found in later samples taken during or after treatment. These are called Tracking (MRD) Tests.

How does clonoSEQ work?
First, your doctor will send a bone marrow sample taken at diagnosis to the Adaptive Biotechnologies lab in Seattle, Washington. If you have already started treatment, Adaptive can work with your doctor to retrieve a stored sample. This sample will then be used to identify the unique DNA “barcodes” associated with your cancer. This is called the Clonality (ID) Test.

Next, your doctor will take bone marrow samples during treatment and remission to determine if any cancer is detectable, as well as how the amount of cancer may have changed over time. To do this, clonoSEQ compares the unique DNA “barcodes” identified in your initial Clonality (ID) Test to those found in later samples taken during or after treatment. These are called Tracking (MRD) Tests.

clonoSEQ results should always be used in combination with clinical examination, your medical history, and other test results and findings. Talk with your doctor about the optimal timing for clonoSEQ testing based on your specific treatment plan.

WHAT MRD MEANS FOR YOU

Assessing your response to therapy
With MRD testing, you and your doctor have a personalized way to track—and talk about—your body’s individual response to treatment. In some cases, MRD testing along with other clinical information may even help your doctor to more accurately predict the long-term results of your treatment.

Knowing how much cancer may still be present in your body allows your physician to tailor your treatment plan to better help fight your disease.

What is clonoSEQ?
clonoSEQ (pronounced clo-no-seek) is a test that identifies, measures, and tracks MRD in bone marrow samples from patients with multiple myeloma or B-cell acute lymphoblastic leukemia (ALL). clonoSEQ can be used to track MRD throughout the course of your treatment; clonoSEQ is the first and only FDA-cleared MRD test available for myeloma and B-ALL, representing an exciting new milestone for patients.

Much like a grocery store uses barcodes to identify products in the check-out line, clonoSEQ uses the unique DNA sequences associated with your disease as “barcodes” to identify the cancer cells in your body.

At diagnosis, clonoSEQ looks for, identifies, and counts your cancer’s unique “barcodes.” During treatment and remission, clonoSEQ can help your doctor if and how the number of “barcodes” has changed since your last MRD test. This information will help you and your doctor understand how the amount of disease in your body may be changing over time.

Because clonoSEQ can detect a single cancer cell among a million healthy cells (given enough sample is provided), you and your doctor can be confident you know how much MRD is present after each clonoSEQ test. Together, you and your health care team can keep a watchful eye on MRD trends and use them to inform important treatment decisions.

Tracking your disease over time
While remission is a relief for many patients, it may be accompanied by a feeling of uncertainty as to whether remission will last. During remission, your physician can use MRD testing to see if any cancer cells are returning.

In remission, even if you aren’t experiencing any symptoms, you may still feel anxious or worried that the cancer will return. Tracking MRD can help detect the return of cancer before physical signs and symptoms arise.

Early detection of returning disease may allow you and your physician to respond quickly to fight your disease.

Detecting returning disease

In remission, even if you aren’t experiencing any symptoms, you may still feel anxious or worried that the cancer will return. Tracking MRD can help detect the return of cancer before physical signs and symptoms arise.

Early detection of returning disease may allow you and your physician to respond quickly to fight your disease.

Much like a grocery store uses barcodes to identify products in the check-out line, clonoSEQ uses the unique DNA sequences associated with your disease as “barcodes” to identify the cancer cells in your body.

At diagnosis, clonoSEQ looks for, identifies, and counts your cancer’s unique “barcodes.” During treatment and remission, clonoSEQ can help your doctor if and how the number of “barcodes” has changed since your last MRD test. This information will help you and your doctor understand how the amount of disease in your body may be changing over time.

Because clonoSEQ can detect a single cancer cell among a million healthy ones (given enough sample is provided), you and your doctor can be confident you know how much MRD is present after each clonoSEQ test. Together, you and your health care team can keep a watchful eye on MRD trends and use them to inform important treatment decisions.
THE CLONOSEQ REPORT
Meaningful results for informed decisions

clonoSEQ tests provide straightforward results to inform the next step in your treatment plan. A report summarizing your results will be delivered directly to your physician approximately 7 to 14 days after your sample is received and accepted by the Adaptive Biotechnologies lab.

clonoSEQ reports provide three key types of information: MRD status, MRD level, and MRD trend.

MRD Status
A positive (+) result means residual disease was detected. A negative (-) result means residual disease was not detected. Each report will provide your updated MRD status. False positive or false negative results may occur for reasons including, but not limited to: contamination, technical, and/or biological factors. Talk to your doctor about your MRD status to better understand what a positive or negative result means for you and your treatment plan.

MRD Level
This is the number of cancer-related DNA “barcodes” detected in your sample. This number tells your physician how much disease is present in your sample at that point in time. Your doctor can help put this number into context based on your current phase of treatment and therapeutic goals.

MRD Trend
This simple graph will show any changes detected in your MRD level over time. Watching these changes will help you and your doctor better understand your response to treatment, track changes in your disease over time, and potentially detect early signs of returning disease.

As with any test result, clonoSEQ reports are meant to be interpreted by a qualified healthcare provider.
Below are a few questions that may help start a conversation with your doctor about how MRD testing with clonoSEQ can help inform your treatment plan.

Q: Is clonoSEQ MRD testing right for me?

Q: When during or after treatment should I have an MRD test?

Q: How will clonoSEQ test results affect my treatment plan?

Q: What does a positive or negative MRD status mean for me?

Q: Where can I learn more about MRD and the clonoSEQ test?

THE CLONOSEQ ASSAY

The clonoSEQ® Assay is FDA-cleared for use in B-cell acute lymphoblastic leukemia (ALL) and multiple myeloma patients to detect and monitor measurable residual disease (MRD) in bone marrow samples.

clonoSEQ is also available for use in other lymphoid cancers as a CLIA-regulated laboratory test provided by Adaptive Biotechnologies.

clonoSEQ is available by prescription only.

Results may vary. False positive or false negative results may occur for reasons including, but not limited to: contamination, technical, and/or biological factors.

clonoSEQ results should always be used in combination with clinical examination, patient medical history, and other findings.

Talk to your doctor to see if clonoSEQ testing is right for you.

For important information about the FDA-cleared uses of clonoSEQ, including test limitations, visit clonoSEQ.com/technical-summary.

clonoSEQ.com
The first and only FDA-cleared MRD test for patients with multiple myeloma or B-cell acute lymphoblastic leukemia

Learn more at clonoSEQ.com/patients

2. Faham M, et al. Blood. 2012;120(26):5173-80. (Study author was an Adaptive employee at the time of publication)

Some studies were funded, in part, by Adaptive Biotechnologies.