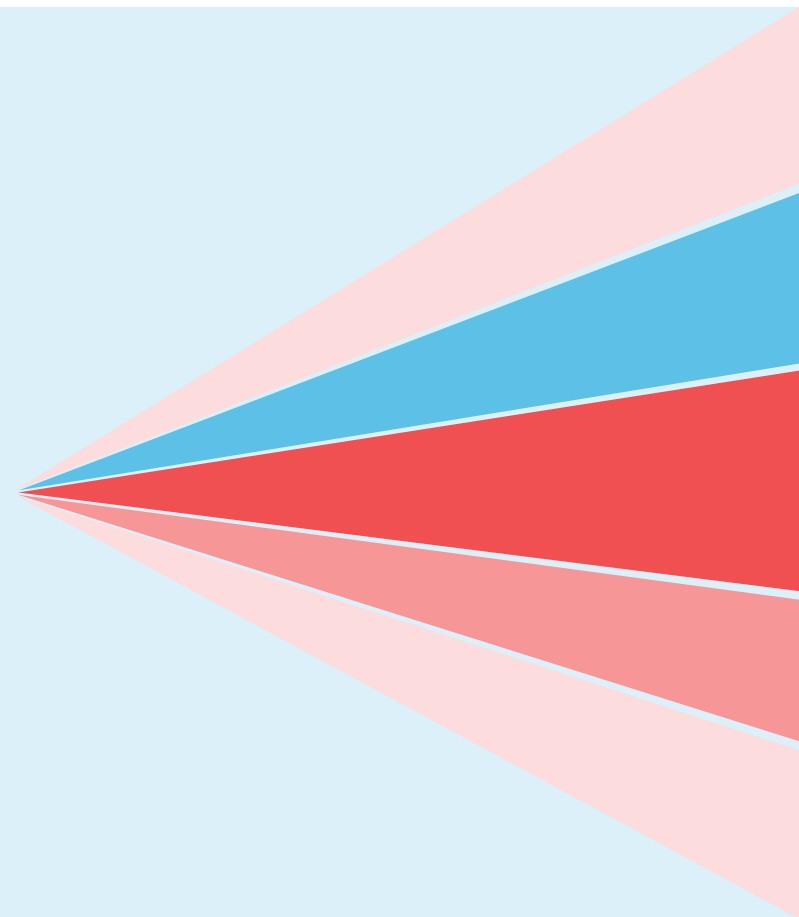


Understanding Minimal Residual Disease (MRD)

For Patients with Multiple Myeloma



Important information

clonoSEQ[®] is an FDA-cleared test used to detect minimal residual disease (MRD) in bone marrow from patients with multiple myeloma or B-cell acute lymphoblastic leukemia (B-ALL) and blood or bone marrow from patients with chronic lymphocytic leukemia (CLL). clonoSEQ is also available for use in other lymphoid cancers as a CLIA-validated laboratory developed test (LDT) service.

clonoSEQ is only available by prescription from a licensed healthcare professional. Results may vary. Talk to your healthcare provider to see if clonoSEQ testing is right for you. For important information about the FDA-cleared uses of clonoSEQ including test limitations, please visit clonoSEQ.com/technical-summary.

References to “cancer” refer specifically to multiple myeloma, ALL, and CLL. References to “sample” refer to bone marrow from multiple myeloma or ALL and blood or bone marrow from patients with CLL.

This presentation was developed by Adaptive Biotechnologies[®].

A cancer diagnosis is never easy, especially because cancer doesn't stand still

After receiving a blood cancer diagnosis, you and your loved ones may feel confused, anxious, or overwhelmed. Faced with uncertainties along your journey, you may be constantly asking these questions:

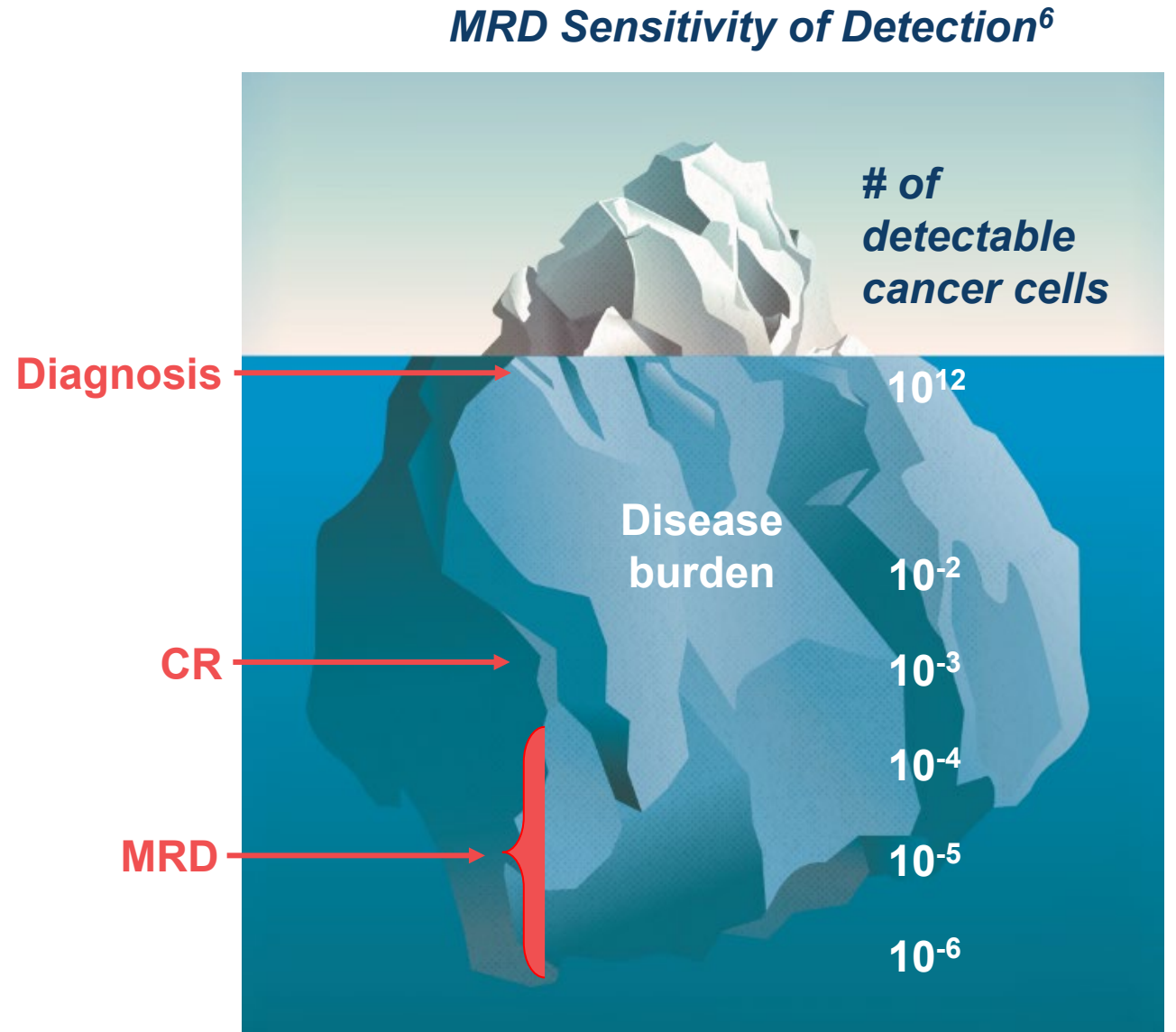
- **How am I doing after my treatment?**
- **How can I track my disease?**
- **What could the changes in my cancer mean for me?**



What is Minimal Residual Disease?

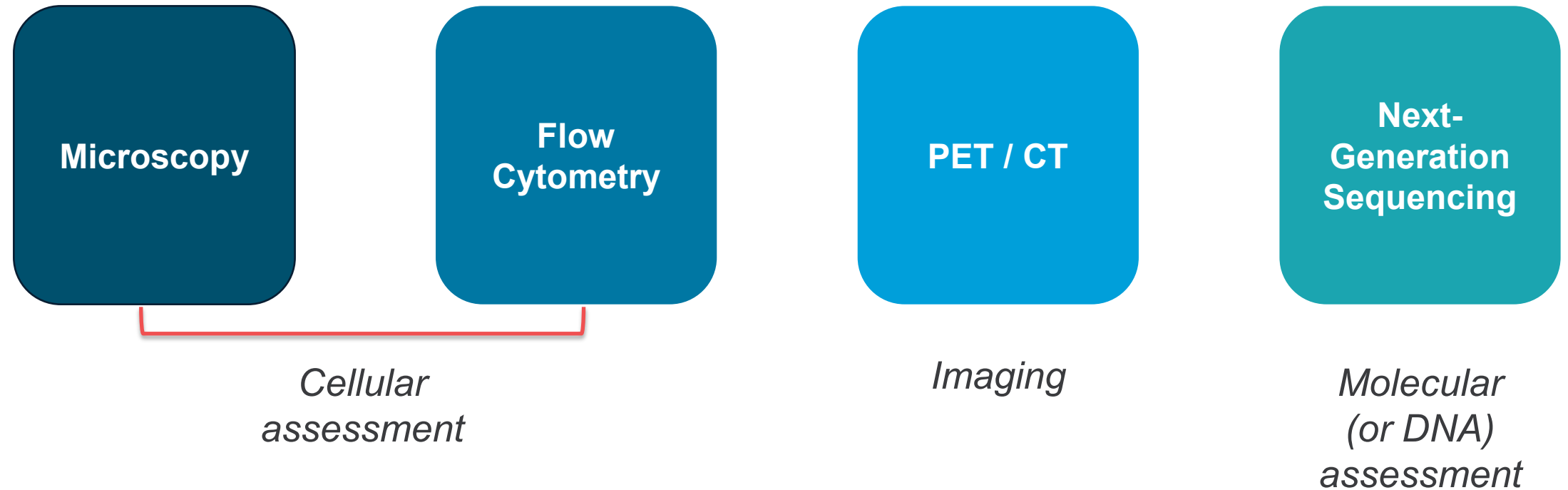
Minimal residual disease (MRD) refers to the small number of cancer cells that can stay in the body during and after treatment.

- These cells may be present at such low levels that they do not cause any physical signs or symptoms, but they may be a sign that cancer is returning.^{1,2}
- Some patients may have such low levels of remaining cancer cells that not all tests can detect them.
- Therefore, your doctor needs highly sensitive tests to measure MRD, assess therapy responses, and detect changes in disease over time.¹⁻⁵



1. clonoSEQ®. [technical summary]. Seattle, WA: Adaptive Biotechnologies; 2020. 2. Pulsipher M, et al. *Blood*. 2015;125(22):3501-8. 3. Wood B, et al. *Blood*. 2018;131(12):1350-59. 4. Perrot A, et al. *Blood*. 2018;132(23):2456-64. 5. Thompson P, et al. *Blood*. 2019;134(22):1951-59. 6. Sherrod AM, et al. *Biol Blood Marrow Transplant*. 2015;51:2-12.

Several common types of MRD tests are available to your doctor



MRD is one of the strongest predictors of outcomes in blood cancers



- Today, new treatments are helping patients like you live longer than ever before.
- 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 cancer to return.
- Some patients may have such low levels of remaining cancer cells that not all tests can detect them.
- Therefore, highly sensitive options, like the clonoSEQ test, are needed to help measure MRD and assess therapy responses over time.¹⁻⁵

Together, you and your healthcare team can keep a watchful eye on your MRD trends and use them to inform important decisions about your care.

1. clonoSEQ®. [technical summary]. Seattle, WA: Adaptive Biotechnologies; 2020. 2. Pulsipher M, et al. *Blood*. 2015;125(22):3501-8. 3. Wood B, et al. *Blood*. 2018;131(12):1350-59. 4. Perrot A, et al. *Blood*. 2018;132(23):2456-64. 5. Thompson P, et al. *Blood*. 2019;134(22):1951-59.

Gain confidence in your future with clonoSEQ

clonoSEQ is the first and only FDA-cleared test that detects, counts, and tracks MRD in blood or bone marrow samples from patients with chronic lymphocytic leukemia (CLL) and bone marrow samples from patients with multiple myeloma or B-cell acute lymphoblastic leukemia (B-ALL).¹

With clonoSEQ, you and your doctor can:



Monitor your cancer
by assessing treatment response and detecting changes in disease



Manage decisions
with an ongoing understanding of your long-term outcomes

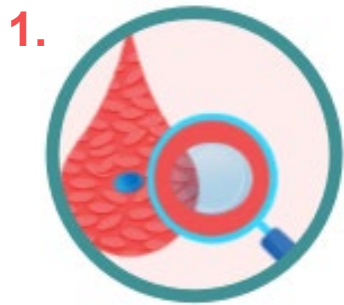


Move forward with confidence
when planning for all of life's moments

1. clonoSEQ®. [technical summary]. Seattle, WA: Adaptive Biotechnologies; 2020.

How does clonoSEQ work?

clonoSEQ identifies the specific DNA sequence(s) associated with your cancer and tracks them over time.¹ Throughout your treatment journey, samples can be collected periodically in order to monitor changes in your disease.



Looks at the bone marrow or blood sample collected at diagnosis



Identifies the specific DNA sequence(s) associated with your cancer



Tracks changes in the amount of cancer cells with the associated DNA sequence(s) over time

Because clonoSEQ can detect one single cancer cell among a million healthy cells (provided sufficient sample material), you and your doctor can be confident you know if residual disease is present in your sample after each clonoSEQ test.¹

1. clonoSEQ®. [technical summary]. Seattle, WA: Adaptive Biotechnologies; 2020.

What can you learn from a clonoSEQ report?

Adaptive Biotechnologies delivers a report summarizing your clonoSEQ MRD results for your doctor to review along with clinical examination, your medical history, and other test results and findings.

Reports include the following information:



MRD Status

- A positive (+) result means residual disease was detected. A negative (-) result means residual disease was not detected*
- **Setting a goal of MRD negativity may be right for some patients. Ask your doctor if it's right for you**



MRD Level

- The amount of cancer-related cells detected in your sample, showing how much disease is present
- **Your doctor can help put this number into context based on your current phase of treatment and therapeutic goals**

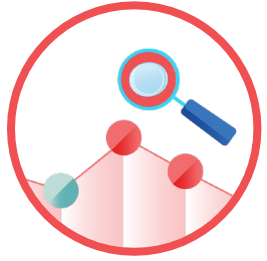


MRD Trend

- A graph to show changes in your MRD level over time
- **Watching these changes will help you and your doctor better understand your response to treatment and track changes in your cancer**

* False positives or false negatives may occur for reasons including, but not limited to: contamination, technical, and/or biological factors.

The clonoSEQ patient journey



MONITOR your cancer by assessing treatment response and detecting changes in disease

- With clonoSEQ, you and your doctor have a personalized way to track—and talk about—your body’s individual response to treatment.
- clonoSEQ MRD results, along with other clinical information, may even help your doctor to more accurately predict your long-term outcomes.¹⁻⁴
- Knowing how much cancer may still be present in your body may allow your doctor to better tailor your care to respond to changes in your disease level.
- Setting a goal of reaching MRD negativity may be right for some patients. Talk with your doctor to find out if it’s right for you.

1. Pulsipher M, et al. *Blood*. 2015;125(22):3501-8. 2. Wood B, et al. *Blood*. 2018;131(12):1350-59. 3. Perrot A, et al. *Blood*. 2018;132(23):2456-64. 4. Thompson P, et al. *Blood*. 2019;134(22):1951-59.

The clonoSEQ patient journey



MANAGE DECISIONS with an ongoing understanding of your long-term outcomes

- While remission is a relief for many patients, it may be accompanied by a feeling of uncertainty.
- Therefore, your doctor can use clonoSEQ to see if any cancer cells are returning.¹
- Regular MRD assessment may help you and your care team feel confident in understanding your cancer and how your disease burden is changing over time.
- This way, you can be prepared when making decisions for both your treatment and personal life.

1. clonoSEQ®. [technical summary]. Seattle, WA: Adaptive Biotechnologies; 2020.

The clonoSEQ patient journey



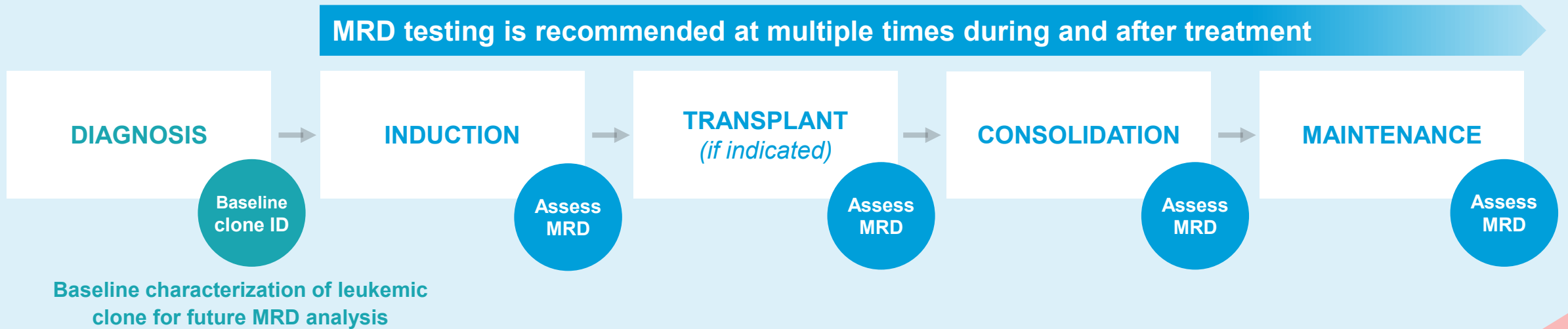
MOVE FORWARD with confidence when planning for all of life's moments

- Even if you aren't experiencing any symptoms, you may still feel anxious or worried that the cancer will return.
- Routine MRD testing may help detect the return of cancer before physical signs and symptoms arise.^{1,2}
- Early detection of returning cancer may allow you and your doctor to respond quickly to fight your disease, so you can confidently plan for what the future has in store for you.

1. Sherrod A, et al. Bone Marrow Transplant. 2015;51:2-12. 2. NCI Dictionary of Cancer Terms: Complete Remission. National Cancer Institute. Accessed November 17, 2017.

Clinical Guidelines for Multiple Myeloma Recommend MRD Testing

NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines[®]) and IMWG Consensus Criteria for Multiple Myeloma



MRD testing is recommended as a shared decision with patient

Kumar Sat al. Lancet Oncol. 2016;17(8):e328-46.

Referenced with permission from the NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines[®]) for Multiple Myeloma V.1.2021. © National Comprehensive Cancer Network, Inc. 2020. All rights reserved. Accessed November 20, 2020. To view the most recent and complete version of the guideline, go online to NCCN.org. NCCN makes no warranties of any kind whatsoever regarding their content, use or application and disclaims any responsibility for their application or use in any way.

clonoSEQ testing is covered by Medicare and private payers for >220 million people in the U.S.

Medicare coverage is available nationally and includes assessment of MRD at multiple time points

Positive coverage policies from the largest national private payers



Adaptive Assist Patient Support Program

Adaptive is committed to providing a comprehensive reimbursement support program to all patients who can benefit from clonoSEQ® testing

Adaptive
assist™



**We're here to answer
your questions**

1-855-236-9230

Monday through Thursday 9AM to 7PM
and Friday 9AM to 5PM EST.

Understanding Your Coverage

Patients can call **1-855-236-9230** to discuss their individual circumstances with one of our dedicated Patient Support Representatives in order to better understand their potential financial responsibility prior to clonoSEQ testing.

Navigating the Insurance Process

If a patient's insurance initially denies payment for clonoSEQ, we will appeal the denied claim on behalf of the patient (with patient and physician support), when appropriate.

Individualized Patient Support

Adaptive offers financial assistance for qualified uninsured and under-insured patients who cannot afford their patient financial responsibility for clonoSEQ.

Learn more at clonoSEQ.com

Downloadable Resources



**CLONOSEQ PATIENT
BROCHURE**

DOWNLOAD 



**CLONOSEQ DOCTOR
DISCUSSION GUIDE**

DOWNLOAD 



**UNDERSTANDING
CLONOSEQ GUIDE**

DOWNLOAD 



MRD FACT SHEET

DOWNLOAD 

Ask Your Doctor About clonoSEQ

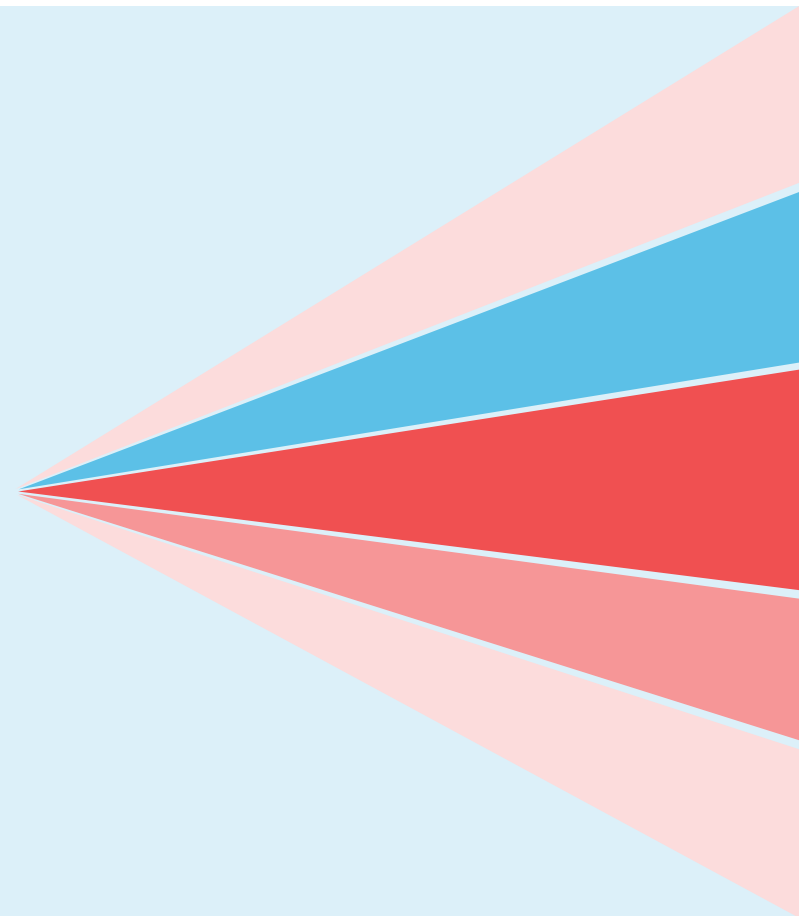
Here is a list of questions to ask your doctor when determining how testing for MRD with clonoSEQ may help inform your treatment plan.

Questions to ask about MRD and clonoSEQ:

- What is MRD?
- Is clonoSEQ MRD testing right for me?
- I heard that clonoSEQ can identify 1 cancer cell out of 1 million cells with sufficient sample. Why does this matter for someone like me?
- What can a clonoSEQ test tell me about my cancer?
- How will clonoSEQ test results affect my treatment plan?
- How often should I get a clonoSEQ test?
- What does a positive or negative clonoSEQ MRD status mean for me?
- Is the goal of clonoSEQ MRD negativity right for me?

Questions?

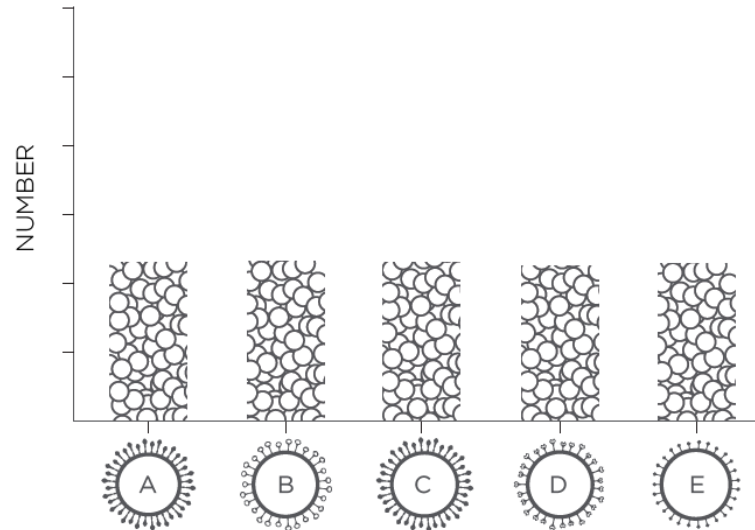
Appendix



How does clonoSEQ know what to track?

**Every person has billions of blood cells in their body.
In each white blood cell, there are a variety of different DNA sequences.**

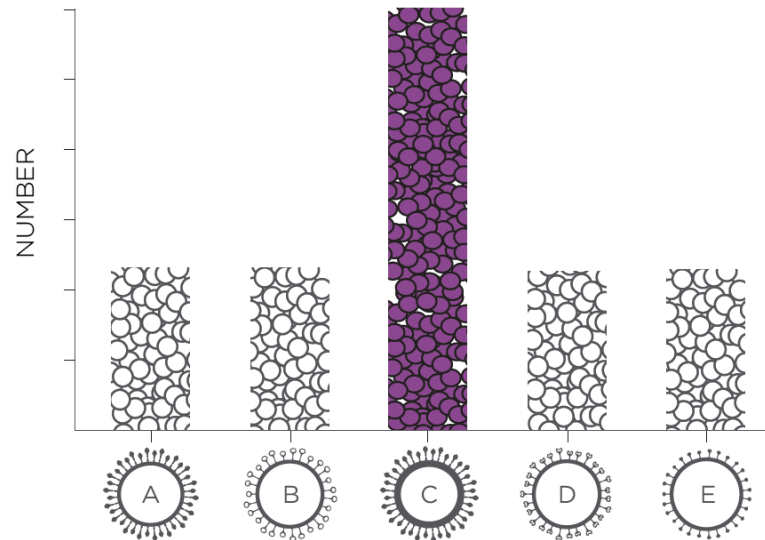
In people who do not have cancer, each white blood cell is present at about the same level.



For example, the number of cells A, B, C, D and E (and their related DNA sequences) would be almost the same.

How does clonoSEQ know what to track?

In people with a lymphoid cancer like myeloma or B-ALL, the cancer cells (abnormal white blood cells) reproduce faster than the healthy white blood cells.



Each cancer cell with the same DNA sequence is called a “clonal cell”.