

## What is MRD?

Minimal residual disease (MRD) refers to the small number of cancer cells that can remain in the

body during and after treatment. Often, these cells are present at such low levels that they do not cause any physical signs or symptoms. They may be a sign that cancer is returning.<sup>1,2</sup>

## Why does MRD matter?<sup>1-5</sup>

- New treatments are helping patients like you live longer than ever before
- Some patients may have such low levels of remaining cancer cells that not all tests can detect them
- Your doctor needs highly sensitive options, like the clonoSEQ test, to help measure MRD and assess therapy responses

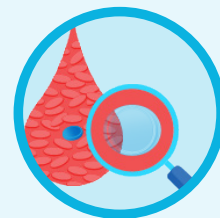
**MRD is one of the strongest predictors of outcomes in blood cancers.<sup>1</sup> When your MRD status shifts, you may find the course of your blood cancer journey changes as well.**

## What is clonoSEQ?

clonoSEQ (pronounced clo-no-seeq) 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).<sup>1</sup>

## DID YOU KNOW?

**clonoSEQ can detect one single cancer cell among a million healthy cells (provided sufficient sample material)**



This way, you and your doctor can be confident you know if residual disease is present after each clonoSEQ test.

clonoSEQ® is an FDA-cleared test used to detect measurable 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. For important information about the FDA-cleared uses of clonoSEQ including test limitations, please visit [clonoSEQ.com/technical-summary](https://clonoSEQ.com/technical-summary).

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

## Why is clonoSEQ so important?

WITH clonoSEQ, YOU AND YOUR DOCTORS CAN:



### Monitor your cancer

by assessing treatment response and detecting changes in disease<sup>1</sup>



### Manage decisions

with an ongoing understanding of your long-term outcomes<sup>1</sup>



### Move forward with confidence

when planning for all of life's moments<sup>1</sup>

## MRD as measured by clonoSEQ can help predict survival time in CLL, multiple myeloma, and B-ALL<sup>1</sup>

## Are there benefits to reaching MRD negativity?

From your clonoSEQ report, your doctor can determine if your MRD status is positive (detectable disease) or negative (undetectable disease). Patients living with CLL, multiple myeloma, or B-ALL who reached undetectable MRD or MRD negativity as measured by clonoSEQ lived longer without their disease worsening after treatment<sup>1,5</sup>

<b>IN CLL</b>	<ul style="list-style-type: none"><li>• clonoSEQ undetectable MRD predicted outcomes in both blood and bone marrow samples<sup>1</sup></li></ul>
<b>IN MULTIPLE MYELOMA</b>	<ul style="list-style-type: none"><li>• clonoSEQ MRD negativity has been used to demonstrate to the FDA that a new treatment for multiple myeloma is effective<sup>6,7</sup></li><li>• Patients who reached clonoSEQ MRD negativity before and after maintenance lived longer without disease worsening<sup>4</sup></li></ul>
<b>IN B-ALL</b>	<ul style="list-style-type: none"><li>• Patients who reached clonoSEQ MRD negativity were more likely to live longer without experiencing a disease event after treatment<sup>3</sup></li><li>• clonoSEQ MRD negativity may be used to predict the return of cancer after transplantation for pediatric patients<sup>2</sup></li></ul>

## Can knowing your MRD status help you manage decisions along your cancer journey?

Monitoring MRD to detect changes in your disease can show how well your treatment is working. Knowing your MRD status, together with other clinical information, can help inform future decisions at key points in your care, such as:

<b>FOR CLL</b>	<ul style="list-style-type: none"><li>• Following first-line therapy<sup>8,9</sup></li><li>• Deciding whether to start maintenance therapy<sup>10</sup></li><li>• During maintenance therapy<sup>11</sup></li><li>• Detecting returning disease<sup>5</sup></li><li>• Throughout the course of relapsed/refractory therapy<sup>12,13</sup></li></ul>
<b>FOR MULTIPLE MYELOMA</b>	<ul style="list-style-type: none"><li>• Following induction and consolidation therapy<sup>4,14</sup></li><li>• After stem cell transplant<sup>15</sup></li><li>• During and after completion of maintenance therapy<sup>16</sup></li><li>• Detecting returning disease with routine MRD testing<sup>17</sup></li><li>• Throughout the course of relapsed/refractory therapy<sup>18</sup></li></ul>
<b>FOR B-ALL</b>	<ul style="list-style-type: none"><li>• Following induction and consolidation therapy<sup>3,19</sup></li><li>• After stem cell transplant<sup>2</sup></li><li>• During maintenance therapy<sup>20</sup></li><li>• Detecting returning disease with routine MRD testing<sup>2</sup></li></ul>

If you have CLL, multiple myeloma, or B-ALL, talk with your doctor to begin pinpointing where you are with clonoSEQ and come up with a plan that works for you.

Please visit [clonoSEQ.com/for-patients](https://clonoSEQ.com/for-patients)

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. Mateos M, et al. *N Engl J Med*. 2018;378:518-28. 7. DARZALEX® Prescribing Information. Horsham, PA: Janssen Biotech, Inc; 2020. 8. Dimier N, et al. *Blood*. 2018;131(9):955-62. 9. Munir T, et al. *Blood*. 2017;130(Suppl 1): 3013. 10. Molica S, et al. *Clin Lymphoma Myeloma Leuk*. 2019;19(7):423-30. 11. Kater A, et al. *Blood Adv*. 2018;2(24):3566-71. 12. Hillmen P, et al. *J Clin Oncol*. 2019;37(30):2722-29. 13. Fraser G, et al. *Leukemia*. 2019;33(4):969-80. 14. Martinez-Lopez J, et al. *Blood Adv*. 2020;4(14):3295-301. 15. O'Dwyer M, et al. *Blood Adv*. 2019;3(12):1815-25. 16. Voorhees P, et al. *Blood*. 2020;136(8):936-45. 17. Mateos M, et al. *Lancet*. 2020;395(10218):132-41. 18. Bahlis N, et al. *Leukemia*. 2020;34:1875-84. 19. Berry DA, et al. *JAMA Oncol*. 2017;3(7):E1-9. 20. Raff T, et al. *Blood*. 2007;109(3):910-5.