MRD in blood cancers

KNOW MRD

What is minimal residual disease (MRD)?

MRD describes the very small number of cancer cells that remain in the body during or after treatment.[1-4] Residual disease can be measured in many types of cancer. MRD is especially relevant in blood cancers, where new therapies can have deeper responses and many patients achieve remission, but eventually experience recurrence.[5-9] Precisely measuring disease burden, even during complete response and in the absence of symptoms, is fundamental to providing optimal care to patients.

Start a conversation with your patients about MRD:

Is treatment achieving your patient's goals?

In many types of blood cancer, undetectable MRD is associated with improved overall survival.[10-13] MRD test results are predictive of patient outcomes because clinical recurrence begins with molecular recurrence.[9,14,15]

Should a treatment change be considered?

As innovative therapies move from the bench to bedside, choosing the most effective treatment for each patient will become a new challenge. Novel therapies go hand in hand with cutting-edge diagnostics to improve patient outcomes. In the future, MRD testing will be used with a wider array of therapies to assess and adapt treatments based on individual patient responses.[16,17]

What is the right balance between ongoing treatment and quality of life?

For some patients in remission, there may be a trade-off between the effectiveness of maintenance therapy and quality of life or preserving fertility. If the decision is made for a patient to discontinue maintenance therapy, serial MRD testing can be used to detect early signs of recurrence.[9,11,18,19] This approach may reduce the side effects of treatment.

Is your patient empowered to make plans?

MRD testing can provide data for shared decision making with your patients. Taken together with other prognostic indicators, consistently undetectable MRD results can give your patients confidence to plan their lives.

Studies have provided evidence for the clinical value of MRD testing in:

Acute lymphoblastic leukemia (ALL)	Undetectable MRD is associated with improved event-free survival and overall survival in both pediatric and adult ALL.[3,11,20,21] MRD testing can inform risk stratification and direct post-induction therapy.[22,23]
Acute myeloid leukemia (AML)	Tracking MRD in AML can be used to detect and monitor remission, as well as design treatments for patients with subclinical recurrence.[5,24]
Chronic lymphocytic leukemia (CLL)	In CLL, MRD is predictive of overall survival and progression-free survival.[12,25-27]
Chronic myeloid leukemia (CML)	Tracking levels of bcr-abl fusion protein in CML is used to define optimal treatment, predict drug resistance, and guide treatment decisions.[9,13]
Multiple myeloma (MM)	In MM, MRD status is predictive of clinical outcomes, including overall survival and progression-free survival.[28] MRD testing can also be used to inform treatment strategies.[29]
Non-Hodgkin's lymphoma (NHL)	Undetectable MRD is correlated with improved progression-free survival, overall survival, and time to disease progression in subtypes of NHL.[17,18,30]

Start the conversation with your patients.
Visit KnowMRD.com to learn more about MRD testing in blood cancer.

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