

Sample Collection for CD57 for Lyme Disease no longer Available via UVM Medical Center



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While it has been reported that a decrease in numbers of CD57+ natural killer (NK) cells may be associated with chronic Lyme disease⁽¹⁾, a more recent study has failed to confirm such an association⁽²⁾. CD57 expression is not consistent across all NK-cells, and the standard approach for quantifying NK-cells involves staining for a combination of positivity for CD16 and/or CD56 together with negativity for CD3. The Centers for Disease Control and Prevention (CDC) lists quantitative CD57 lymphocyte assays as an example of an “unvalidated test” on its list of “laboratory tests that are not recommended” for the diagnosis of Lyme disease⁽³⁾.

CDC recommends a two-step testing process for establishing a serologic diagnosis of Lyme disease. If the first test (an FDA-licensed antibody screening test) is positive or equivocal, then the second test (a Western blot) is performed⁽⁴⁾.

The University of Vermont (UVM) Medical Center follows CDC’s recommended approach⁽⁵⁾. While the UVM Medical Center Laboratory has never performed CD57 testing for Lyme disease, patients sometimes present to our phlebotomy sites with requests to have a blood sample drawn for such testing.

Because of the lack of clinical evidence to support CD57 testing for Lyme disease, the UVM Medical Center will no longer collect or process blood samples for such testing.

If you have any questions concerning this change, please contact Dr. Michael Lewis (Michael.Lewis@UVMHealth.org) in the Laboratory.

REFERENCES

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