

INTERPRETATION OF VIRAL ANTIBODY TITERS

IgM specific testing is available to determine a current infection with Toxoplasmosis, Herpes, CMV or Varicella. To determine a current infection for all other viruses, acute and convalescent specimens should be sent. An acute specimen should be drawn at the onset of symptoms with a convalescent specimen drawn 2-3 weeks later. A fourfold or greater increase in antibody titer indicates a probable current infection. Use the following guidelines to interpret viral antibody titers when a single serum specimen is tested. The computer code is indicated in parenthesis.

1. CMV IgG (CMVG)

Negative: Negative for CMV IgG Antibodies. A negative result is presumed not yet infected with CMV and susceptible to primary infections.

Equivocal: A new specimen should be sent in 2 weeks.

Positive: Positive for CMV IgG antibodies and indicates past or current infection.

For diagnostic purposes, Anti-CMV IgG results should be used in conjunction with patient history and other CMV markers (e.g. anti-CMV IgM) for diagnosis of past or present infection.

Results are obtained using the Vidas CMV IgG Assay.

2. CMV IgM (CMVM)

Negative: No detectable IgM antibody to CMV.

Equivocal: A new specimen should be sent in two weeks.

Positive: Positive for IgM Antibodies to CMV. Patient is presumed to be experiencing a recent infection (primary, reactivation or reinfection).

Results are obtained using the VIDAS CMV IgM antibody Assay.

Limitations: A diagnosis of an unsuspected primary CMV infection should not be based solely upon a positive result. IgM antibody to CMV can be produced as a result of reactivated infection or reinfection.

3. Herpes IgM (HERME)

Negative: No detectable antibody.

Equivocal: Sample tested equivocal twice.

Positive: A positive result can occur during primary or recurrent infection.

Limitations: The performance of this assay has not been established on individuals less than 1 year of age.

4. HSV 2 IgG Type Specific with RFLX (HSV2G)

Sample results in the Equivocal or Low Positive index range will be reflexed to HSV 2 IgG Supplemental testing per CDC Guidelines.

5. Measles IgG (MEAS)

Negative: Indicates undetectable measles virus IgG antibody. Could be susceptible to measles infection.

Equivocal: Sample tested equivocal twice. Consider potentially susceptible to primary infection.

Positive: Indicates prior exposure to measles virus or a convalescent stage of infection.

ADDENDUM XIV (CONTINUED)

6. Mumps (MUMPS)

- Negative: Indicates undetectable mumps virus IgG antibody. Could be susceptible to mumps infection.
- Equivocal: Sample tested equivocal twice. Consider potentially susceptible to primary infection.
- Positive: Indicates prior exposure to mumps virus or a convalescent stage of infection.

7. Rubella Antibody IgG (RUB)

- Negative: Presumes that immunity to rubella virus has not been acquired
- Equivocal: Sample tested equivocal twice. Consider potentially susceptible to primary infection.
- Positive: Indicates prior exposure to rubella virus or a convalescent stage of infection.

8. Toxo IgG (TOXOG)**

- <4.0 Negative. Negative for IgG antibody to T. gondii.
- 4-7.9: Equivocal. Specimen may contain low levels of IgG. A second specimen should be tested.
- ≥8: Positive. Toxo IgG antibody results of greater than or equal to 8 IU/mL are positive for IgG Antibody to T. gondii and indicate acute or past infection.

This result was obtained using the VIDAS Toxo-IgG Assay. IgG values obtained with different manufacturers assay methods may not be used interchangeably. The magnitude of the reported IgG levels cannot be correlated to an endpoint titer.

Limitations: Performance has not been established for cord blood, neonatal samples, body fluid or cerebrospinal fluid. Results from immunosuppressed patients must be evaluated with caution.

9. Toxo IgM (TOXOM)**

- Negative: Non-reactive for anti-Toxoplasma gondii IgM antibodies.
- Equivocal: Samples interpreted as equivocal (gray zone) may contain very low levels of IgM. Suggest testing using an alternate method or a second specimen should be obtained and tested.
- Positive: Presumptively reactive for Anti-Toxoplasma gondii IgM antibodies. A diagnosis of acute or recent toxoplasma gondii should not be based on one IgM serology result. It is suggested that this result be confirmed by an alternate method.

Results are obtained using the VIDAS Toxo-IgM Antibody Assay.

Limitations: Performance has not been established for cord blood, neonatal samples, body fluid or cerebrospinal fluid. Results from immunosuppressed patients must be evaluated with caution.

**See Addendum IX (General Guidelines for interpretation of Toxoplasma gondii Serology Results)

10. Varicella IgG (VZG)

- Negative: Indicates no detectable VZV IgG antibody but does not rule out acute infection. Could be susceptible to primary VZV infection.
- Equivocal: Sample tested equivocal twice. Consider potentially susceptible to primary infection.
- Positive: Positive indicates presence of detectible VZV IgG antibodies. Generally indicates exposure to the pathogen or administration of specific immune-globulins, but it is not indication of active infection or stage of disease.

11. Varicella IgM (VZME)

- Negative: No detectible antibody.
- Equivocal: Sample tested equivocal twice.
- Positive: A positive result indicates a primary or reactivated infection with VZV. Such individuals are at risk of transmitting VZV infection.

Limitations: The performance of this assay has not been established on neonates.