CPAL
Central **P**ennsylvania **A**lliance **L**aboratory

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Varicella-Zoster Virus (VZV) IgG Ab Assay

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Effective Date:
June 1, 2007
Mnemonic:
VZV IGG
Performed:
Tuesday & Friday (day)
Specimen:
Serum, 0.5ml

Summary:
The *DiaSorin VZV IgG Assay* will be implemented at CPAL beginning June 1st. This assay will be performed on the Eti-Max 3000™ automated microtiter plate analyzer.

Varicella (chickenpox) and zoster (shingles) represent different clinical manifestations of infection with the same agent, Varicella-Zoster virus (VZV), a member of the *Herpesviridae*. Varicella occurs most frequently in children and is characterized by a generalized vesicular exanthem often accompanied by fever. Zoster usually occurs in adults or immunocompromised patients and consists of a painful, circumscribed eruption of vesicular lesions with accompanying inflammation of associated dorsal root or cranial nerve sensory ganglia. Varicella is the primary infection with VZV, whereas zoster is a secondary infection due to reactivation of latent VZV in sensory ganglia. Studies indicate that reinfection and reactivation of VZV may occur in the absence of clinical symptoms. Varicella infections occurring in susceptible pregnant women at the time of delivery may cause life-threatening infection in the newborn. An attenuated live VZV vaccine has been licensed in the U.S. for the use in non-immunocompromised individuals.

Result will be reported as Negative, Equivocal or Positive. Equivocal results will include the footnote "*Suggest recollection of specimen in 10 to 14 days, if clinically indicated*".

Validation and pre-implementation procedures have been completed in May 2007 at CPAL.

Notes:

- The performance characteristics with individuals vaccinated with VZV (OKA Strain) have not been established.
- The results obtained with the ETI-VZV IgG Test Kit serve only as an aid to diagnosis and should not be interpreted as diagnostic in themselves.
- A single positive result only indicates previous immunologic exposure; the level of antibody response or class of antibody may not be used to determine active infection or disease stage.
- A negative result does not rule out the diagnosis of VZV infection. The sample may have been collected before appearance of detectable antibodies. Negative results in suspected early VZV infection should be repeated in 2-3 weeks.
- Positive results from cord blood or neonates should be interpreted with caution.
- Results from immunocompromised patient should be interpreted with caution.
- Heterotypic antibody titer rises in response to VZV may occur in certain patients with HSV infection who have experienced a prior infection with VZV.