
Date: November 4, 2019
To: All Physicians, Medical Officers of Health (MOH), Infectious Diseases Physicians, Emergency Physicians and Alberta Health
From: Alberta Precision Laboratories (APL) – ProvLab
Re: Discontinuation of Varicella Zoster Virus (VZV) IgM Antibody Testing

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Key Messages:

- Effective November 19, 2019, IgM antibody testing for varicella zoster virus (VZV) will be discontinued.
- Instead, molecular testing (NAT) for VZV from suspected primary varicella infections (chicken pox) or varicella zoster cases (shingles) is preferable.

Background:

Laboratory confirmation of chickenpox and shingles is best achieved by molecular detection (NAT testing) of the virus from swabs of the vesicular lesions that arise. Testing for VZV IgM antibody is of questionable value in both these scenarios as:

- The development of VZV IgM specific antibody usually follows the appearance of the rash in chicken pox, whereas in shingles this antibody response is highly variable
- Atypical presentations of hand-foot-and-mouth caused by coxsackievirus A16 and enterovirus 71, have been clinically misdiagnosed as primary varicella infections in children and adults. These viruses can be confirmed by NAT testing and not serology
- Infrequently, the live-attenuated VZV vaccine can give rise to a localised rash at the injection site or a generalized rash
- Cases of later reactivation of the vaccine virus, mimicking shingles, have been described

Actions Required:

- Take a swab of one or more vesicular lesions, place it in Universal Transport medium and send to ProvLab
- Request molecular detection (NAT) for VZV on the ProvLab requisition
 - entero/parechovirus NAT can be requested when clinically suspected
- Detailed information about sample collection and testing can be found in the APL Provincial Test Directory:
<https://www.albertahealthservices.ca/webapps/labservices/indexAPL.asp?SearchText=&submit=Submit&upperTest=-1&lowerTest=-1&zoneid=1>
- When indicated, vaccine strain discrimination testing can be discussed with the Microbiologist/Virologist-On Call at ProvLab; (Edmonton 780-407-8822) or Calgary (403-333-4942).

Inquiries and feedback may be directed to:

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This bulletin has been reviewed and approved by:

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