



Date: February 8, 2021
To: Edmonton Zone Ordering Practitioners, Physician Offices and Clinics
From: Alberta Precision Laboratories and DynaLIFE Medical Labs
Re: Rapid Identification and Susceptibility Results for Positive Blood Cultures

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message:

- Beginning February 8, 2021, Dynalife Microbiology department will be introducing a new method for the rapid identification and susceptibility testing directly from positive blood culture bottles. Using this methodology, most common aerobic bacteria found in positive blood cultures will be reported within 2 hours of the blood cultures becoming positive. Currently, this takes 20 hours.
- Susceptibility results for the most common aerobic Gram negative pathogens such as *E.coli*, will be reported within 12 hours. Currently, this takes 30 hours.
- It will be possible to differentiate methicillin-sensitive (MSSA) from methicillin-resistant (MRSA) *S.aureus* within 6hours. Currently, this takes 18 hours.
- Rapid turnaround times will not be possible for anaerobic or polymicrobial bacteremias

Why is this important?

- Appropriate (targeted) antimicrobial therapy can be started sooner, resulting in significant improvement in patient morbidity and mortality, antimicrobial stewardship and healthcare resource utilization.

Action required:

- Specimen quality determines the accuracy of the result. Collect the specimen according to established protocols which may be found on our website at www.dynalife.ca
- Complete the relevant clinical information (reason for request) in the space provided on the requisition. This is a CPSA accreditation standard.
- It is the ordering practitioner's responsibility to ensure that the requisition is completed and that the specimen is collected properly.

Inquiries and feedback may be directed to:

- DynaLIFE Microbiologist On-Call, Tel: (780) 451-3702 or
- Dr. Bob Verity, Interim Microbiology Director, DynaLIFE, Tel: (780) 451-3702 Ext. 8157

This bulletin has been reviewed and approved by:

- Dr. Raymond Lai, Medical Director, DynaLIFE Medical Labs
- Dr Carolyn O'Hara, Chief Medical Laboratory Officer (Interim)