Key Messages:
The primary use of this test is in ruling out the diagnosis of Venous Thromboembolic (VTE) Disease and the test must be used in conjunction with a standardized **D-Dimer Pre-Test Probability Assessment for Deep Vein Thrombosis (DVT) or Pulmonary Embolism (PE)**, risk scores. There are a number of published clinical risk scoring tools, any of which can be applied, but one for each of DVT and PE is described for reference.

Link: [http://internal.dthr.ab.ca/departments/Lab/LaboratoryManual/Information/DVTandPEAssessment.pdf](http://internal.dthr.ab.ca/departments/Lab/LaboratoryManual/Information/DVTandPEAssessment.pdf)

**D-DIMER RESULT COMMENT:**
A negative D-Dimer (a value within the reference range for quantitative assay) may be used with a standardized clinical assessment tool and/or imaging studies to help exclude deep vein thrombosis (DVT) and/or pulmonary embolism (PE). Positive results (values above the reference range) are not diagnostically useful in DVT/PE assessment.

Why this is important:
The established reference range has been validated to rule out DVT/PE in patients with LOW risk scores. Patients with a clinical assessment with a LOW risk score for DVT (<2), or with a LOW risk score of PE (<4) are eligible for quantitative D-Dimer testing; a D-Dimer result, in these patients, within the reference range has a negative predictive value of greater than 99% for VTE.

**Action Required:**
Patients with HIGH RISK clinical assessment scores for DVT/PE should NOT have quantitative D-Dimer testing.

D-Dimer testing should not be requested in unselected patients with no pre-test clinical assessment. High D-Dimer levels are common in hospitalized in-patients, cancer patients, post-operative patients, sepsis/inflammation, myocardial infarction, pregnancy, and patients on oral contraceptives and D-Dimer testing in these patients is of no value. If VTE disease is suspected in these patients, then they should go directly to Diagnostic Imaging (DI).

**The D-Dimer test is designed primarily for Emergency Department use.** Clinic/community patients with LOW RISK scores should be directed to the LAB immediately. Patients with HIGH RISK scores should be directed to DI immediately.
Inquiries and feedback may be directed to:

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This bulletin has been reviewed and approved by:
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