BACKGROUND:

von Willebrand disease (VWD) is a common bleeding disorder characterized by either quantitative or qualitative defects of von Willebrand factor (VWF). Correct diagnosis of variant VWD is essential to providing effective treatment. Screening tests for VWD include Factor VIII Activity, VWF Antigen, VWF GPIbM Activity (an improved measure of VWF platelet binding function), and VWF Collagen Binding (to screen for multimer abnormalities). Discrepancies identified between these tests suggest a variant of VWD.

The selection of further diagnostic testing needed to characterize variant VWD diagnosis can be difficult. With a single order, BloodCenter of Wisconsin’s VWD Diagnostic Evaluation empowers physicians with the actionable diagnostic information needed for effective treatment.

VWD DIAGNOSTIC EVALUATION:

VWD Diagnostic Evaluation reflexive algorithm: developed by BloodCenter of Wisconsin’s clinical and technical experts. The algorithm incorporates BCW experience and expertise with peer reviewed diagnostic and clinical guidelines such as those from the American Society of Hematology and the National Heart, Lung and Blood Institute to characterize the patient’s disease.

ALGORITHM:

The VWD Diagnostic Evaluation includes Factor VIII Activity, VWF Antigen, VWF GPIbM Activity, and VWF Collagen Binding. If initial test results are negative for VWD or suggest a diagnosis of Type 1 VWD, testing is complete. If initial lab results indicate the need for additional testing to distinguish a variant VWD diagnosis, up to two additional tests will be reflexively performed.
REASONS FOR REFERRAL:
- Detect quantitative or qualitative defects of VWF and related deficiency of factor VIII activity
- Differentiate subtypes of variant VWD
- Direct optimal utilization of confirmatory genetic testing for variant VWD

LIMITATIONS:
VWF and Factor VIII are acute phase reactants. Levels will be elevated postoperatively, with inflammation, stress, physical activity, pregnancy, estrogen therapy and hyperthyroidism. VWF levels may be artifactually reduced as a consequence of improper sample handling. For some cases of type 2B VWD, VWF GPIbM Activity will report a higher activity level than VWF Ristocetin Cofactor Activity. Therefore, VWF GPIbM Activity results should be interpreted cautiously when monitoring perioperative therapy in patients with type 2B VWD.

SPECIMEN REQUIREMENTS:
Six 1 ml aliquots of citrated plasma (light blue top)
Minimum volume of six 0.5 ml aliquots

SHIPPING REQUIREMENTS:
Place the frozen specimen and the requisition into plastic bags, seal and place in an insulated container. Surround with at least 5 pounds of dry ice. Seal the insulated container, place into a sturdy cardboard box, and tape securely. Ship the package in compliance with your overnight carrier guidelines. Address package to:

Client Services/Hemostasis Reference Laboratory
BloodCenter of Wisconsin
638 N. 18th Street
Milwaukee, WI 53233
800-245-3117, ext. 6250

TURNAROUND TIME: 14 days

CPT CODES:
Includes:
- Factor VIII Activity 85240
- VWF Antigen 85246
- VWF GPIbM Activity 85397
- VWF Collagen Binding 85246

If Indicated:
- VWD Type 2B Evaluation - Binding 83519
- VWD Type 2N Binding 85240, 85246
- VWF Propeptide Antigen 83520
- VWF Quantitative Multimer 85247

REFERENCES: