

## Avera Laboratory Network - Alphabetical Test Listing

### 1005 - COAGULATION CONSULT STUDY - BLEEDING DIATHESIS

*Initial Testing Components: Prothrombin Time, APTT, dRVVT, Factor 8, Factor 8 Related Antigen, Ristocetin, Interpretation*  
*Reflex Testing Guidelines: Other specialized coagulation testing may be required and billed to allow for complete interpretation.*

**Specimen Required:** 6.0 mL Light Blue (3.2% Sodium Citrate) Platelet Poor Plasma - Frozen (-20 C or colder)

**Methodology:** Standard Coagulation Reference Procedures

**Performed by:** ARUP [30195] - Mon-Fri

**Collection Notes:**

The coagulation interpretation is a specialized service provided by ARUP Hemostasis/Thrombosis Laboratory. A coagulation interpretation is requested when a clinical case presents with a bleeding or clotting disorder of unknown etiology. The coagulation interpretation will include only those analyses that are required for the diagnosis.

Specimen Requirements: Ship a minimum of 6mL of sodium citrate plasma (3 transport tubes filled with 2mL each). Transport frozen.

Information Required: When a physician requests a coagulation interpretation, the client must fill out a Coagulation Consultation Request Form and submit with the specimens. This form is available on the Avera Laboratory Network website under the appropriate service center. The following information is required:

- Patient Name, Age, and Gender
- Patient Medications (please notify the Hemostasis/Thrombosis Laboratory if the patient is receiving heparin or coumadin).
- Patient bleeding or clotting history.
- Physician name and phone number.
- Clinical indications for requesting a coagulation interpretation (i.e. evaluation of an elevated PT or PTT, hypercoagulability evaluation).
- A client contact name and phone number (someone who can be contacted for questions).

Analysis and Reporting: The ARUP Hemostasis/Thrombosis Laboratory will perform a PT and PTT with corrections, if needed. Based on 1) clinical history and presentation, 2) PT and PTT results, 3) algorithms published in the ARUP Guide to Clinical Laboratory Testing, and 4) consultation with George Rogers, MD, Medical Director of the ARUP Hemostasis/Thrombosis Laboratory, a logical sequence of tests is performed until a cause of the bleeding or clotting disorder is determined. Only those tests necessary to determine the cause of the disorder are performed, thus minimizing unnecessary testing and expense. Additional specimen may be requested depending on the tests needed for the diagnosis. The coagulation interpretation report will include an interpretation from the medical director. At the completion of all necessary testing, a representative from the ARUP Hemostasis/Thrombosis Laboratory will contact the appropriate ALN service center for authorization to order the tests performed. An add-on test form will be faxed to the client for completion. When the add-on test form is returned to ARUP, the tests will be ordered and reported.

### 1003 - COAGULATION CONSULT STUDY - LUPUS ANTICOAGULANT

*Initial Testing Components: Prothrombin Time, APTT, and dRVVT. Reflex Testing Guidelines: Other specialized coagulation testing may be required and billed to allow for complete interpretation.*

**Specimen Required:** 5.0 mL Light Blue (3.2% Sodium Citrate) Platelet Poor Plasma - Frozen (-20 C or colder)

**Methodology:** Clotting

**Performed by:** ARUP [30181] - Daily

**Collection Notes:**

- Transport 2 mL platelet-poor plasma, frozen. (Minimum of 1.5 mL).
- Unacceptable Samples: Serum and non-sodium citrate plasma.

### 154 - COLD AGGLUTININ

**Specimen Required:** 1.0 mL Serum (red, gold, or equivalent) - Refrigerate (2 - 8 C)

**Methodology:** Hemagglutination

**Performed by:** Avera/ARUP - Daily

**Collection Notes:**

- DO NOT refrigerate specimen prior to processing the specimen.
- Keep in warm water or incubator [37 C] until specimen has clotted, been centrifuged, and serum separated into transport tube.
- Specimen should be refrigerated after specimen has been processed
- Mycoplasma antibody testing may provide more specific diagnostic information.

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### 900 - FOLATE, RBC

**Specimen Required:** 1.0 mL Lavendar (EDTA) Whole Blood - Frozen (<-20C); Refrigerate LIMITED TIME ONLY - See Notes

**Methodology:** Chemiluminescent Immunoassay

**Performed by:** ARUP [70385] - Daily

**Collection Notes:**

- TEMPERATURE: Freeze specimen if storage/transport time will exceed 24 hours.
- Separate specimens must be submitted when multiple tests are ordered.
- Specimen must be well-mixed and transferred to a plastic transport vial before freezing. Glass vacutainers are not suitable for freezing and transporting specimen.
- Hematocrit must be performed at originating facility, and result must be indicated on test requisition. If originating facility can not complete hematocrit, please have attending physician also order hematocrit so that testing may be performed as required.

### 602 - VANCOMYCIN - TROUGH OR RANDOM

**Specimen Required:** 1.0 mL Serum or Heparinized Plasma - Refrigerate (2 - 8 C)

**Methodology:** Fluorescence Polarization Immunoassay by Roche

**Performed by:** Avera LabNet - Daily

**Collection Notes:**

- Document whether specimen is Trough or Random on the requisition.
- Draw Times: Trough - <10 minutes before next dose
- Random specimens are recommended to only be drawn in cases of suspected toxicity.
- NOTE: Peak Levels are only recommended for patients with selected infections. Please refer to recommendation #3 below.
- There are multiple analytical methods for vancomycin measurement including immunoassay, high performance liquid chromatography, and fluorescence polarization immunoassay. In patients who have renal failure, degradation of the drug results in the accumulation of crystalline material called CDP-1 (crystalline degradation product) occurs naturally. CDP-1 is detectable in some fluorescence polarization methods and will falsely elevate reported vancomycin concentrations by 60%. (Specificity of the Roche assay is dependent upon a mouse monoclonal anti-vancomycin antibody. The test manufacturer (Roche) has data to support NO cross reactivity between CDP-1 and vancomycin in the Roche assay.)
- HPLC methods also can avoid this analytical pitfall.

Recommendations:

1. Monitor vancomycin concentrations during therapy for patients receiving the drug intravenously for 4 days or more.
2. Chose drug dosages based upon a nomogram and individualize both dosing and monitoring. GFR may be calculated using either the Cockcroft-Gault or the MDRD formulae.
3. Measure only trough concentrations, except for patients with selected infections (endocarditis, osteomyelitis, and CNS infections), with a target trough concentration of 10-15 ug/mL for general patients and 15-20 ug/mL for nosocomial and ventilator-assisted pneumonia and in deep-seated staphylococcal infections (endocarditis, prosthetic joint infections, CNS infections). Measure peak concentrations in these later infections, and consider higher peak targets than traditionally used (>40). Use a peak target of 30-45 ug/mL in endocarditis.
4. Measure trough concentrations <10 minutes prior to a dose.
5. For patients with renal failure, confirm with the laboratory that CDP-1 does not interfere with the testing method.