

# Performing Initial Evaluation of Patient Sample

## **SCHEDULE 3:** Hematology Sample Stability

The table below lists the stability limits for each test in plasma or serum in a centrifuged tube unless otherwise stated. For red-top serum samples; serum must be separated from cells immediately after centrifugation and aliquoted.

- Stability data may be based on method sheets, CLSI guidelines, or NH stability studies.
- Stability is measured from collection time to receipt at the examination site.

### **Transportation Guidelines:**

- Samples are to be centrifuged and separated at the collection site if they cannot be transported to the examination site within the defined time limits to protect the stability of the test.
- **Winter Transport:**
  - Do not ship whole blood samples by ground at temperatures below -15 °C.
  - Centrifuge and ship serum/plasma if able
  - Or hold and batch samples until weather warms up.
  - Ship by air if unable to hold samples and stability at risk.
  - Delay collection of whole blood samples on outpatients. Ask patient to return when weather warms up.



## SAMPLE STABILITY

Test	Sample Type	Room Temp	2-8°C	-20°C	Instructions
ANA	SST serum	8 hours	48 hours <sup>(1)</sup>	1 month	Serum required to be aliquoted off of the separator tube.  <sup>(1)</sup> Regional facilities to separate and freeze serum.
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Blood Parasite	EDTA whole blood	1 hour	N/A	N/A	Prepare thick and thin films and fix thick films within 1 hour.  <b>If delayed in preparing the slides, add a comment that it was delay in slide preparation.</b>
	EDTA whole blood for Rapid test	N/A	3 days	N/A	
CBC	EDTA (whole blood)	24 hours	72 hours	N/A	If CBC not processed in 8 hours make 2 peripheral smears, send with sample.
ESR	EDTA whole blood	24 hours	48 hours	N/A	Freeze only once.
	Sodium Citrate (black tube) whole blood	4 hours	72 hours	N/A	



Test	Sample Type	Room Temp	2-8°C	-20°C	Instructions
Mono	SST serum	N/A	72 hours	1 week	
	EDTA	N/A	48 hours	N/A	
Reticulocytes	EDTA whole blood	8 hours	6 days	N/A	CBC must be ordered with reticulocyte count
<b>Body Fluids</b>					
Body fluid cell counts and differentials (except CSF)	EDTA or sterile collection container	1 hour	24 hours	N/A	If analysis delayed or clotted, append appropriate comment.
CSF	Sterile container	1 hour	N/A	N/A	
Synovial fluid crystals	Sterile non additive collection container	1 hour	N/A	N/A	Collected at RT then delivered within 1 hour of collection
Complete Semen Analysis	Sterile collection container	See instructions	N/A	N/A	Collected at RT then delivered within 1 hour of collection. Keep the specimen as close to 37° C as possible.
Post Vasectomy Semen Analysis	Sterile collection container	See instructions	N/A	N/A	Collected at RT then delivered within 1 hour of collection. Keep the specimen as close to 37° C as possible.



Sample Type	Unopened (3.2% Na <sup>+</sup> Citrated Whole Blood)		Platelet-poor plasma <sup>(2)</sup> (plasma not stored in a frost-free freezer)	
	18 to 24°C	2 to 4°C <sup>(1)</sup>	-20°C See foot note <sup>(4)</sup>	-70°C See foot note <sup>(4)</sup>
Coagulation Assay:				
PT/INR	24 hours	N/A	2 weeks	6 months
APTT <i>nonheparinized patient</i>	4 hours	N/A	2 weeks	6 months
APTT <i>suspected to contain unfractionated heparin</i>	1 hour ( <i>whole blood</i> )	N/A	2 weeks	N/A
	4 hours ( <i>plasma</i> ) <sup>(3)</sup>			
Fibrinogen	4 hours ( <i>whole blood</i> )	N/A	2 weeks	6 months
	8 hours ( <i>plasma</i> ) <sup>(3)</sup>			
Thrombin Time	4 hours ( <i>whole blood</i> )	N/A	2 weeks	6 months
	2 hours ( <i>plasma</i> ) <sup>(3)</sup>			
D-Dimer	8 hours	N/A	1 month Separate and freeze plasma. Thaw at 37°C for 15 minutes before testing.	N/A
Other Coagulation Assays (e. g. Protein C, Factor V, and Factor VIII)	4 hour ( <i>whole blood or plasma</i> )	4 hours ( <i>plasma</i> ) <sup>(3)</sup>	2 weeks	6 months

(1) When samples stored at 2 to 4°C may result in cold activation of Factor VII; therefore, altering the PT/INR results.

(2) Samples are double-spun within 4 hours and frozen (platelet poor plasma).

(3) Samples are centrifuged, unopened and plasma stored at room temperature.

(4) Stability adopted from DAP criterion HEM3.1.5