**Competency for MLS/MLT: Specimen Collection, Processing, and Crediting**

1. A foil-wrapped red top for Vitamin B6 (VITB6) and Vitamin K1 (VITK) is received for processing. The specimen is allowed to clot and spun in the centrifuge. How is the serum aliquoted?
2. Serum for both tests go in one clear ARUP aliquot tube and the aliquot tube is frozen
3. Serum for each test go in separate clear ARUP aliquot tubes and the aliquot tubes are frozen
4. **Serum for each test go in separate brown ARUP aliquot tubes and the aliquot tubes are frozen**
5. The serum for the tests does not need to be aliquoted. The original foil-wrapped red top is okay to send to ARUP
6. According to FV lab guide, which of the following require a 30-60 minute room temperature clotting time before centrifugation?
7. Complement component 1q and complement Factor B
8. **Complement C3 and complement C4**
9. Complement CH50, Total
10. Complement C2
11. All of the above
12. What does the spot—SHAND mean on the label?
13. **Test has special handling/processing requirements**
14. Tube needs to be hand delivered to the lab after drawing
15. Tube needs to be handed directly to the person performing the test
16. Specimen for the test is drawn from the back of the patient’s hand
17. An incorrect collection date is entered in GENLAB and Saved for a Newborn Screening collection. The error is caught and the collection date is corrected in the LIS. What LIS function is used to resend the information so the electronic medical record is updated?
18. GenLab-once the correct collection date is entered and saved, the EMR updates automatically
19. SMART-(Utilities, Redownload)
20. SmarTerm function ER (Error Clear)
21. **SmarTerm function HRSND (HIS Resend Lab)**
22. The MN Dept of Health receives the following specimens for Newborn Screening. Which of the specimens will be rejected?
23. I, III, and V
24. II and IV
25. IV only
26. All can be used for testing
27. **None can be used for testing**
	* 1. 
		2. 
		3. 
		4. 
		5. 
28. According to Lab Guide: What is the preferred tube type for Methotrexate?
29. Green (lithium heparin, gel)
30. Red (no gel)
31. **Purple (no gel)**
32. Green (lithium heparin, no gel)
33. According to Lab Guide: What is the alternate tube type for Methotrexate?
34. Green (lithium heparin, gel)
35. **Red (no gel)**
36. Purple (no gel)
37. Green (lithium heparin, no gel)
38. According to Lab Guide: What is the special “Collection Instructions” for Methotrexate?
	1. No special collection instructions are necessary
	2. Keep specimen at 37oC after collection and let clot for 30 minutes before processing
	3. **Protect from light immediately after collection(wrap tube in foil or paper towel)**
	4. Specimen cannot be sent to the lab using the PTS (pneumatic tube system)
39. According to Lab Guide: What are the instructions for “Specimen Processing” for Methotrexate?
	1. Specimen is centrifuged and using a glass pipette, aliquot the plasma/serum into an amber aliquot tube
	2. **Specimen is centrifuged and using a plastic pipette, aliquot the plasma/serum into an amber aliquot tube**
	3. Specimen is centrifuged and using a glass pipette, aliquot the plasma/serum into a clear aliquot tube
	4. Specimen is centrifuged and using a plastic pipette, aliquot the plasma/serum into a clear aliquot tube
40. According to Lab Guide: How much plasma/serum is placed in the aliquot tube?
	1. **0.1 mL minimum**
	2. 0.2 mL minimum
	3. 0.4 mL minimum
	4. 1 mL minimum
41. According to Lab Guide: What is the test code for Methotraxate?
	1. METH
	2. METX
	3. **MTX**
	4. MTRX
42. When must the phlebotomy charge be credited?
	1. Never
	2. When a specimen with a phlebotomy charge is canceled or credited and none of the tests ordered on that Accession number are to be reported
	3. When a patient is drawn for testing at the same time that includes *2 separate Accession* *numbers* (example: chemistry and blood cultures) AND a phlebotomy is charged to both, one must be credited.
	4. When I remember to do it
	5. **B and C**
43. What is the test code(s) for a phlebotomy charge?
	1. CRVPT
	2. CRCAP
	3. **CRVPT and CRCAP**
	4. None of the above
44. What does CRVPT credit?
	1. A capillary collection
	2. **A venipuncture collection**
	3. Both capillary and venipuncture collection
45. What does CRCAP credit?
	1. **A capillary collection**
	2. A venipuncture collection
	3. Both capillary and venipuncture collection
46. In what LIS function is the crediting done?
	1. Order Entry
	2. MECAN
	3. SMART
	4. **GenLab**
47. How is crediting done?
	1. **Using “Order Receipt/Modify; select the correct Accession #; order the CRVPT or CRCAP as an additional test. Save and Click “OK”**
	2. Using “Order Receipt/Modify”; select the correct Accession #; click on the workload box and remove (delete) the CRVPT or CRCAP from the left side of the screen. Save and Click “OK”
	3. Using “Credit”; select the correct Accession #; order the CRVPT or CRCAP as an additional test. Save and Click “OK”
48. Why is it important to credit the phlebotomy charge?
	1. To not be fraudulent in our billing practices
	2. We cannot charge for a phlebotomy collection when the test(s) have not been performed
	3. **All of the above**
49. When performing a QTB collection by venipuncture:
	* + - 1. Expect the tubes to fill slowly and collect 1.0 mL of blood.
				2. Leave tube on the needle for 2-3 seconds after the flow has stopped.
				3. Shake the tubes firmly 10 times to ensure the inner surface of the tubes is coated with blood.
				4. **All of the above.**
50. What do you do if a QTB tube has a meniscus that falls just barely above the line?
	* + - 1. The test should be cancelled.
				2. **It is acceptable for the tubes to be filled 0.8-1.2 mL.**
				3. Do not incubate, place in refrigerator.
				4. Call the client and have them redraw the specimen.
51. What do you do if one of the QTB tubes is filled only halfway to the line with blood?
	* + - 1. The receiving lab should cancel the test and notify the client that collected the sample.
				2. Place the sample in the incubator for 16-24 hours.
				3. Send a SBAR to Endocrine to cancel the test.
				4. It is OK if the other tubes are filled to the line.
				5. When drawing, be sure to check the volume in each tube. If any tube is not filled appropriately, redraw the patient.
				6. **a and e**
52. Label all three QTB tubes with the same CID.
	* + - 1. **True**
				2. False
53. A QTB sample was collected at 21:00 and stored in the refrigerator until it was shipped to the performing lab the next morning. Is this the correct way to process this specimen?

(a) True

**(b) False. QTB samples must be maintained at 17 – 27oC prior to incubation. This specimen should be cancelled and recollected.**

1. A QTB specimen is received that is underfilled. What is the correct cancellation documentation?
	* + - 1. USFULL-;NOTIFIED DR COOL 5/31/13 @ 1030 BY LP
				2. USSTO-;NOTIFIED JOHN IN ACUTE CARE LAB TO RECOLLECT
				3. **USUNDR-;NOTIFIED JANE DOE, RN ON ST.55 @ 1030 BY LP**
				4. ;SPECIMEN RECEIVED WAS UNDER FILLED. CALLED UNIT TO RECOLLECT
2. Which of the following are on-line resources for information on collection, processing, aliquoting and transport of laboratory tests?
	1. Fairview Reference Lab Test – LSMISC
	2. Fairview Labguide
	3. ARUP website
	4. Mayo website
	5. **All of the above**
3. Whole blood ketones must be tested within how long after collection?
	1. 15 minutes
	2. **30 minutes**
	3. 2 hours
	4. 3 days
4. The specimen for whole blood ketones is spun in the centrifuge before testing.
	1. True
	2. **False**
5. If correct information is not included on a sample, laboratory staff will cancel as unlabeled/mislabeled per the Patient Identification and Laboratory Specimen Labeling policy.
	1. **True**
	2. False
6. What is the correct information to be included on a sample label?
	1. Patient first and last name, DOB, date and time collected, specimen source if appropriate
	2. Patient last name and first initial, DOB, specimen source if appropriate
	3. **Patients first and last name, MRN, date and time collected, initials/tech code of person collecting specimen, specimen source if appropriate**
7. A specimen is received with a paper lab requisition. The date on the demographic label does not match the collection date written on the tube. What should you do first?
	1. Order in Order Entry by selecting New Episode using the date of collection.
	2. **Register the patient for the date of service before ordering in Order Entry.**
8. A transport batch has been received in Batch Receipt. What comes next?
	1. **Check each tube and sort by testing location. Deliver to the appropriate testing locations in the lab. Respin any previously spun or poured off specimens and spin any whole blood specimens that need to be spun.**
	2. Place tubes in a rack and deliver the rack to the Vitros testing area for the tech to sort through.
9. A specimen is ready to be centrifuged. The testing location on the label is SDEC. What should you do?
	1. Centrifuge the specimen. Nothing else needs to be done.
	2. Assume it has been decanted in SMART and put it in the centrifuge.
	3. **Perform decant in SMART and label the specimen with the new label. Place the specimen tube in the appropriate rack or centrifuge the sample if ready. Place the new label in bin.**
10. When aliquoting samples, work with one tube at a time making sure the name and CID on the aliquot tube matches the name and CID on the primary tube.
	1. **True**
	2. False
11. A specimen is grossly hemolyzed. You check Labguide for the test ordered and discover the specimen will be rejected by the performing lab for *any* amount of hemolysis. You should:
	1. Check for another tube of the same or alternate type on the patient from the same collection time.
	2. Send the tube to the performing laboratory and let them cancel it.
	3. Cancel the test if an appropriate tube cannot be located.
	4. Call the collecting location for a new sample if an acceptable specimen is not available.
	5. **a, c, and d**
12. Which of the following are true statements when crediting a test?
	1. For an order with a specimen never collected, nothing resulted and physician does not need to view, cancel by clicking on ‘Remove Results’ in Genlab credit function.
	2. For an order with a specimen that was collected, a result was entered or a comment entered with useful information for the ordering physician, cancel by clicking on ‘Retain Results’ in Genlab credit function.
	3. A test cancelled with ‘Retain Results’ requires two steps: resulting in MECAN and crediting in Genlab.
	4. **All of the above**
13. When all testing are credited on an order the patient cannot be charged for a collection.
	1. **True**
	2. False
14. A test cannot be located using Lab Guide. What are your next steps in trying to find where this test can be done?
	1. Check in the “Miscellaneous Test Catalog”
	2. Check the ARUP/MAYO websites
	3. Call ARUP directly and ask for assistance with this test
	4. **All of the above**
15. You have received an order for a test that is not performed in our lab. The test code is new and/or not listed in Lab Guide. You remember getting an email regarding this test but there is no information in the email about the specimen tube type, volume needed for testing, processing and storage requirements. How do you find this information?
	1. **After checking Lab Guide, the “Miscellaneous Test Catalog” and/or the ARUP/MAYO website, the information you need cannot be found. The best thing to do is call the performing lab and ask them. This includes calling UMMC specialty labs. Remember that Lab Guide and reference lab websites are not all inclusive and that sometimes information is missing, incomplete or not up to date.**
	2. Call the floor and tell them the test cannot be done
	3. Leave it for someone else to figure out
16. Regarding miscellaneous tests: How do you result the pop up boxes when a miscellaneous test is ordered (ARMISC, MMMISC or LSMISC)?
	1. SCPT: 12345

SPRICE: enter 0.00 (or if original order was Epic EMISC enter “;EPIC BILLED”)

SSPTYP: enter UNKNOWN

STSTCD: Mayo’s alphabetical pneumonic proceeded by a semicolon

STSTNM: leave blank

* 1. SCPT: 11111

SPRICE: leave blank

SSPTYP: etc code for specimen type (U, SERUM, PL, WB, CSF, etc.) or free text specimen type with preceding semicolon

STSTCD: Mayo’s alphabetical pneumonic proceeded by a semicolon

STSTNM: Free text the test name as stated in Lab Guide preceded by a semicolon

* 1. **SCPT: 11111**

**SPRICE: enter 0.00 (or if original order was Epic EMISC enter “;EPIC BILLED”)**

**SSPTYP: etc code for specimen type (U, SERUM, PL, WB, CSF, etc.) or free text specimen type with preceding semicolon**

**STSTCD: For MMMISC, use Mayo’s alphabetical pneumonic proceeded by a semicolon,**

 **For ARUP, use ARUP’s numeric code (no semicolon needed),**

**For LSMISC, use the appropriate test code from other reference labs (these codes will vary depending on the lab)**

**STSTNM: Free text the test name as listed by the reference lab preceded by a semicolon**

* 1. None of the above
1. What is the alphabetical pneumonic code for a Mayo Miscellaneous test?
	1. It is Mayo’s test number (ex: 123456)
	2. **It is Mayo’s test ID name that always starts with letters and sometimes numbers will follow (ex: ABCDE or P1433)**
	3. It is the price of the test
	4. None of the above
2. Why is it important to use the alphabetical pneumonic code when ordering a Mayo Miscellaneous test?
	1. I don’t know
	2. We won’t get reimbursed if the correct code isn’t used
	3. **When the alphabetical pneumonic code is used, the test will queue to Mayo Access and is able to be batched. If this code is not used the test will be “unbatchable” in Mayo Access.**
3. The physician in the ED orders a STAT ethylene glycol on a Saturday. According to Lab Guide, this test is done at MedTox and as a STAT is reported in 24 hours. The ED physician insists that the test be sent to HCMC. Can you send the ethylene glycol to HCMC?
	1. No, we must send to MedTox because it says so in Lab Guide.
	2. Yes, HCMC is closer than MedTox.
	3. **Yes, HCMC will report a result quicker than MedTox. Due to the urgent nature of the patient situation and need to treat the patient quickly, it is okay to send this test to HCMC as directed by the ED physician.**