

Beaumont

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Specimen Processing Laboratory Presumptive and Rainbow Testing

Document Type: Procedure

I. PURPOSE AND OBJECTIVE:

This procedure is intended to provide direction on how to handle specimens received without orders or unclear orders. To preserve the integrity of the patient specimens, Beaumont Laboratories will perform presumptive testing with the most commonly ordered tests by ordering approved presumptive testing on a specific set of specimens submitted to our Laboratory. This procedure denotes the presumptive testing that will occur when specimens arrive into the Laboratory without indication of test. Timely follow up by Customer Service is important so that the specimens and their presumed testing are communicated to our clients and if additional testing is indicated it will be added to the patient specimens at the time of client communication. For tests not approved for presumptive testing the laboratory will add Rainbow orders with a "Follow-Up" task for Customer Services.

II. PROCEDURE:

A. Presumptive Testing

- When the Laboratory receives specimens without matching orders on any of the accompanying Laboratory paperwork, the Processing department will order the approved Presumptive Tests, corresponding to the specimen type, as indicated below:

Blood Specimens

Tube Color (Typical)	Additive	Presumptive Test	Code
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Light Blue	Sodium Citrate 0.109M 3.2%	Protime International Normalized Ration (INR) (aka PT)	LAB5208 or LAB5204
Lavender or Purple	K2EDTA	Complete Blood count with Differential	LAB7909
Grey ¹	Sodium Fluoride Potassium Oxalate	Glucose Level	LAB5062

Urine Specimens

Container Type	Additive	Presumptive Test	Code	Source
Urinalysis Tube	None or with preservative	Urinalysis (aka UA)	LAB5918	Urine ²
Sterile Container	None	Urinalysis (aka UA)	LAB5918	Urine ²
Urine Culture Tube	Boric Acid 2.63 mg/mL Sodium Borate 3.95 mg/mL Sodium Formate 1.65 mg/ mL	Culture, Urine	LAB5507	Urine ²

Swabs & Microbiology Specimens

Container Type	Presumptive Test	Code	Source
Aerobic Swab	Miscellaneous Microbiology Test	LAB7180	Other (Specify) ³
Affirm Swab	Vaginosis Screen (Affirm Test)	LAB5532	Vaginal
Breath Bags	Helicobacter Pylori (H. pylori) Breath Test	LAB7227	

Fluids

Container Type	Presumptive Test	Code	Source
Sterile Container or Green-Top Sodium Heparin tube	Crystals (Synovial)	LAB5143	Synovial Fluid
Sterile Container	Cell Count (CSF)	LAB5243	Cerebrospinal Fluid
Sterile Container	Cell Count (Body fluids)	LAB5244	Body fluid (pleural, peritoneal, synovial, pericardial, etc.)
Sterile Container	Culture,	LAB5486	Pleural, Peritoneal,

Container Type	Presumptive Test	Code	Source
	Fluid		Pericardial, Joint/Synovial, Ascites
Sterile Container	CSF Culture	LAB5482	Cerebrospinal Fluid

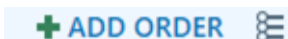
2. **Notes:**

¹Tube type must be changed in Specimen Update.

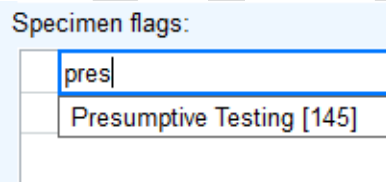
²Source must be changed in Specimen Update.

³When placing order in Order Entry, Specimen Source must be changed to Other (Specify). Then, add a comment below.

3. Add a Presumptive Testing flag.

a. If ordering from Order Entry  do the following:


- i. Collect and receive the specimen with a presumptive test
- ii. Open Specimen Update
- iii. Scan the specimen's bar code
- iv. Add the Presumptive Testing flag (Shortcut 145). Customer service will follow up with the client.




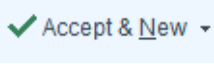
Specimen flags:

pres
Presumptive Testing [145]

b. If ordering from Requisition Entry  do the following:

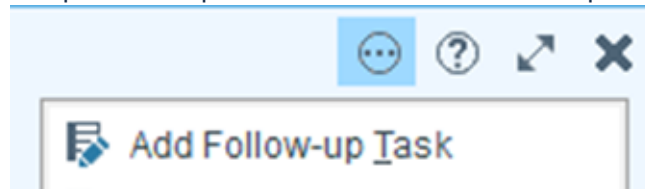
- i. Create Specimen(s) 
- ii. Update the Collection Date, Collection Time, and Collector.

Coll Date [Z]	Coll Time	Collector
5/26/2021	03:02 PM	COLLECTOR,

- iii. Receive the specimen(s) 
- iv. Accept the Requisition 
- v. Open Specimen Update
- vi. Scan the specimen's bar code
- vii. Add the Presumptive Testing flag. Customer service will follow up with the client.

Specimen flags:
pres
Presumptive Testing [145]

4. Add a Follow-up task which will prompt Customer Services to call the account.
 - a. Whenever adding a Follow-up task enter the specimen type received and a complete description of the issue in the Follow-up task.



5. The Customer Service Representative (CSR) will then work on these Follow-Up tasks from their queue and contact the client to discuss next steps.
 - a. For presumptive testing on Blue tubes, Lav tubes, Gray tubes, Urinalysis tubes, and Urine Culture specimen types:

- i. If it is confirmed that the presumptive testing is wanted the CSR will do the following:

- a. Document the confirmation in Beaker by adding a new event "Resolved" and note who they spoke to in the client's office.
 - b. Remove the Presumptive Testing flag from Specimen Update.
 - c. Mark the task as "Complete" in Beaker's Follow-Up Work List.

- ii. If it is confirmed that the presumptive testing is not what the client wanted the CSR will do the following:

- a. Document the confirmation by adding a new event "Test Request Verified" in Beaker's Follow-Up Work List and note who they spoke to in the client's office.
 - b. Cancel the presumptive test.
 - c. Adds any additional test needed.

- b. For presumptive testing on Aerobic Swabs, Affirm swabs, and Breath Bag specimen types:

- i. If it is confirmed that the presumptive testing is wanted the CSR will do the following:

- a. Document the confirmation in Beaker by adding a new event "Resolved" and note who they spoke to in the client's office.
 - b. Remove the Presumptive Testing flag from Specimen Update.

- c. Contact the microbiology department at the performing laboratory and relay the information about the testing.
 - d. Mark the task as "Complete" in Beaker's Follow-Up Work List and note who they spoke to in the microbiology department.
 - ii. If it is confirmed that the presumptive testing is not what the client wanted the CSR will do the following:
 - a. Document the confirmation by adding a new event "Test Request Verified" in Beaker's Follow-Up Work List and note who they spoke to in the client's office.
 - b. Contact the microbiology department in the testing laboratory and inform them of the needed cancellation. Microbiology cancels the tests.
 - c. Mark the task as "Complete" in Beaker's Follow-Up Work List and note who they spoke to in the microbiology department.
- c. For presumptive testing on Fluids:
 - i. If it is confirmed that the presumptive testing is wanted the CSR will do the following:
Document the confirmation in Beaker by adding a new event "Resolved" and note who they spoke to in the client's office.
 - a. Remove the Presumptive Testing flag from Specimen Update.
 - b. For microbiology tests, contact the microbiology department at the performing laboratory and relay the information about the testing.
 - c. Mark the task as "Complete" in Beaker's Follow-Up Work List and note who they spoke to in the microbiology department.
 - ii. If it is confirmed that the presumptive testing is not what the client wanted the CSR will do the following:
 - a. Document the confirmation by adding a new event "Test Request Verified" in Beaker's Follow-Up Work List and note who they spoke to in the client's office.
 - b. For microbiology tests, contact the microbiology department in the testing laboratory and inform them of the needed cancellation. Microbiology cancels the tests.
 - c. Adds any additional test needed if sample is still viable.
 - d. Mark the task as "Complete" in Beaker's Follow-Up Work List and note who they spoke to in the microbiology department.

d. Critical Results


- i. In the event a critical result is reported on any presumptive testing, the ordering physician will be notified of the critical result by customer service.

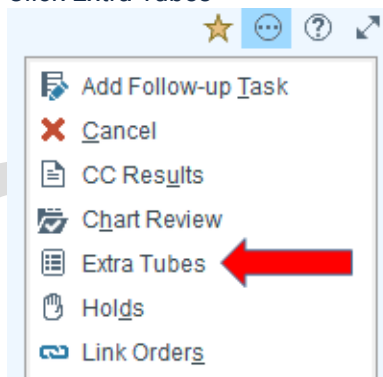
B. Rainbow Procedure

This process is to be used for any containers that are not listed in section A. Presumptive Testing. Additionally, if multiples of the same specimen type are sent with either no tests indicated for that specimen type OR extra specimens are sent of the same type with corresponding tests, use the following procedure. However, if extra specimens are sent and there is sufficient specimen volume to perform indicated testing, do not enter a Follow-Up task.

1. Order the corresponding Rainbow Test(s)

a. For Inpatients:

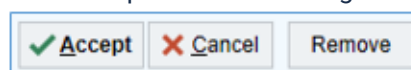
- i. In Receiving, scan a specimen bar code.
- ii. Click the Actions button 
- iii. Click Extra Tubes



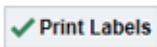
- iv. Select the quantity of labels required to label the extra specimens sent.
- v. Example: You receive two SST tubes and three Purple (Lavender) Tops tubes. One SST is used for the CMP and D250H ordered, the second is extra. Select 1 Label on the Gold Top – SST line below. One Lavender (purple top) is used for the CBCWD and A1c. Select the 2 Labels line on the Purple Top – EDTA line below.

Pink Top - KEDTA	No Labels	1 Label	2 Labels	3 Labels	
Gold Top - SST	No Labels	1 Label	2 Labels	3 Labels	
Lt Blue Top - Citrate	No Labels	1 Label	2 Labels	3 Labels	
Purple Top - EDTA	No Labels	1 Label	2 Labels	3 Labels	
Green Top - LiHep	No Labels	1 Label	2 Labels	3 Labels	
Grey Top - KOx+NaFl	No Labels	1 Label	2 Labels	3 Labels	
Red Top - Plain	No Labels	1 Label	2 Labels	3 Labels	
Green Top - PST	No Labels	1 Label	2 Labels	3 Labels	
Blood Culture Bottle	No Labels	1 Label	2 Labels	3 Labels	

- vi. Click Accept in the bottom right.

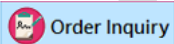


- vii. Click Print Labels in the bottom right.



- viii. Enter the Ordering and Authorizing Provider information. In the Entered by field under Entry Information: If you take the call you can enter your last name, followed by a comma, followed by your first name or your badge ID #, or you can use the nurses name/ID #.

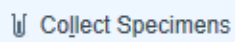
- ix. Click "Order Inquiry"



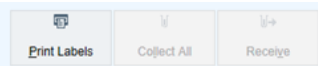
- x. Check the Rainbow Extra Tubes test.



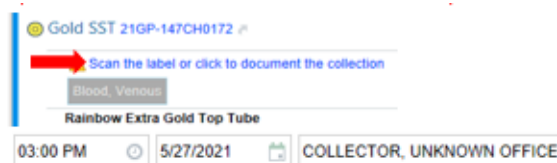
- xi. Click "Collect Specimens"



- xii. Click "Print Labels" in the lower right side.



- xiii. Scan or click where indicated to update the collection date and time information.



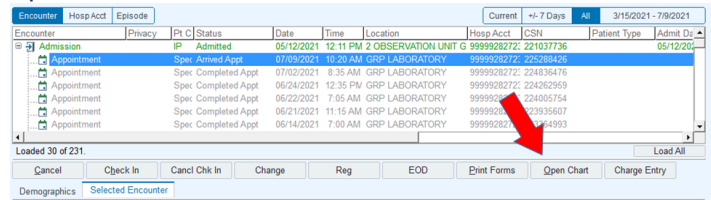
- xiv. Click Receive in the lower right to reprint the updated label.
- xv. When creating a rainbow for an SST or PST, please make sure it is properly spun down before placing in storage or problem racks.

b. For Future Order Outreach Requisitions

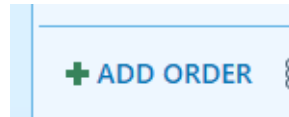
- i. If no orders are placed and there is no corresponding presumptive test for the specimen type:

a. Open Patient Station  Patient Station

b. Open the Chart for the visit



c. Click Add Order in the lower left.



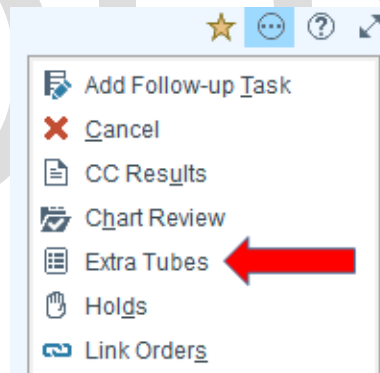
d. Type lab code LAB7204 and press return for rainbow blood specimens or LAB7672 for rainbow urine specimens.

e. Proceed to step ii.c below and continue the procedure from there.

ii. If orders were placed in Order Entry, go to Receiving and scan a specimen bar code.

a. Click the Actions button 

b. Click Extra Tubes

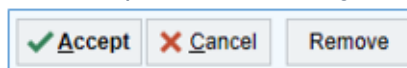


c. Select the quantity of labels required to label the extra specimens sent.

Example: You receive two SST tubes and three Purple (Lavender) Tops tubes. One SST is used for the CMP and D25OH ordered, the second is extra. Select 1 Label on the Gold Top – SST line below. One Lavender (purple top) is used for the CBCWD and A1c. Select the 2 Labels line on the Purple Top – EDTA line below.

Pink Top - KEDTA	No Labels	1 Label	2 Labels	3 Labels	
Gold Top - SST	No Labels	1 Label	2 Labels	3 Labels	
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Green Top - LiHep	No Labels	1 Label	2 Labels	3 Labels	
Grey Top - KOx+NaFl	No Labels	1 Label	2 Labels	3 Labels	
Red Top - Plain	No Labels	1 Label	2 Labels	3 Labels	
Green Top - PST	No Labels	1 Label	2 Labels	3 Labels	
Blood Culture Bottle	No Labels	1 Label	2 Labels	3 Labels	

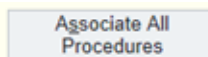
d. Click Accept in the bottom right.



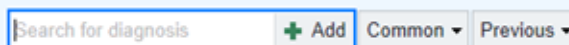
e. Click Print Labels in the bottom right.



f. If you have already entered a diagnosis code, select "Associate All Procedures". Then proceed to the next step.



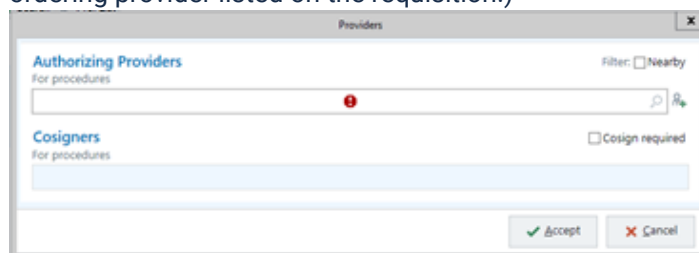
g. If you have NOT already entered a diagnosis code, enter it here. If you have, click "Associate all and Accept".



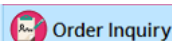
h. Click the text of the diagnosis to apply it to all tests listed.



i. Enter the Authorizing Provider (This is the same as the ordering provider listed on the requisition.)



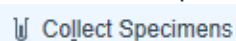
j. Click "Order Inquiry"



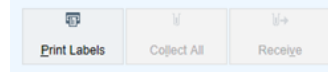
k. Check the Rainbow Extra Tubes test.



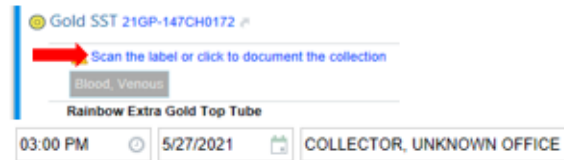
l. Click "Collect Specimens"



m. Click "Print Labels" in the lower right side.



n. Scan or click where indicated to update the collection date and time information.



o. Click Receive in the lower right to reprint the updated label.

c. For Requisition Entry Requisitions:

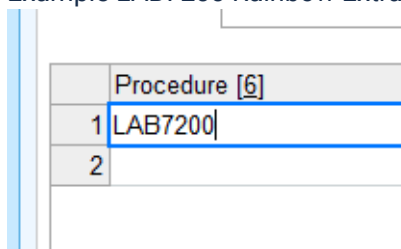
- i. Go to Requisition Entry
- ii. Enter Submitter Information
- iii. Select a patient
- iv. Enter diagnosis codes
- v. Order tests from the requisition
- vi. Click Create Specimens
- vii. Update collection date and time to reflect the requisition
- viii. Click Receive to generate specimen labels
- ix. If extra specimens are sent, order the corresponding test code for the extra specimens.

Code	Name
LAB6726	RAINBOW EXTRA BLUE TOP TUBE
LAB6727	RAINBOW EXTRA GOLD TOP TUBE
LAB7200	RAINBOW EXTRA GREEN TOP TUBE
LAB7201	RAINBOW EXTRA GREEN TOP TUBE PST
LAB7202	RAINBOW EXTRA GREY TOP TUBE
LAB6729	RAINBOW EXTRA LAVENDER TUBE
LAB8490	RAINBOW EXTRA OTHER TUBE
LAB6730	RAINBOW EXTRA PINK TOP TUBE
LAB7575	RAINBOW EXTRA PURPLE TOP TUBE BONE MARROW
LAB7172	RAINBOW EXTRA RED TOP TUBE
LAB8492	RAINBOW EXTRA ROYAL BLUE TOP TUBE - EDTA
LAB8491	RAINBOW EXTRA ROYAL BLUE TOP TUBE - PLAIN
LAB8762	RAINBOW EXTRA URINE COLLECTION

NOTE: Never order LAB7204 "RAINBOW EXTRA TUBES" in Requisition Entry. This will automatically order one of every tube

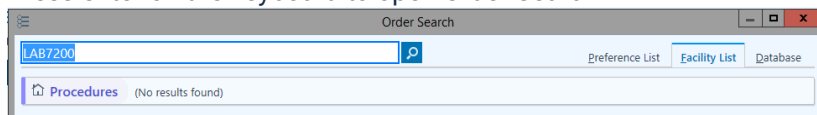
type and it will create extra work to cancel all of the unnecessary specimens.

- x. Type in the code for the tube type you want to make a rainbow for. Example LAB7200 Rainbow Extra Green Top (Non PST)



	Procedure [6]
1	LAB7200
2	

- xi. Press enter on the keyboard to open Order Search



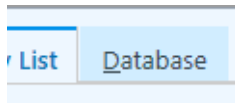
Order Search

LAB7200

Preference List Facility List Database

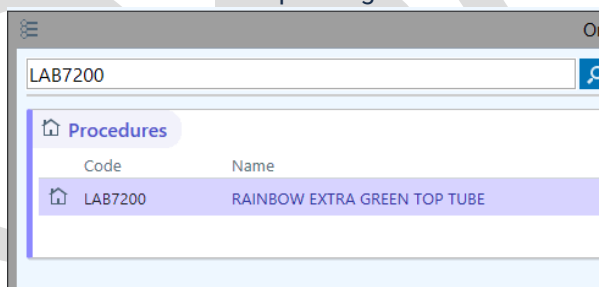
Procedures (No results found)

- xii. In the Order Search window click Database in the top right.



List Database

- xiii. Double click the corresponding rainbow test in the list



Order Search

LAB7200


Procedures

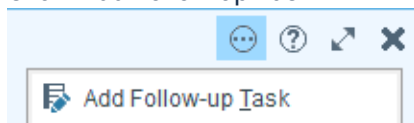
Code	Name
LAB7200	RAINBOW EXTRA GREEN TOP TUBE





- xiv. Click Create Specimens
- xv. Update collection date and time to reflect the requisition
- xvi. Click Receive to generate additional labels for the rainbows ordered

2. Add a "Follow Up" task to the extra specimens.

This only needs to be done to one of the rainbow specimens if there are multiple extra specimens.

- a. Open "Specimen Update"
- b. Scan the rainbow specimen's bar code
- c. Click the actions button  in the top right
- d. Click "Add Follow-up Task"

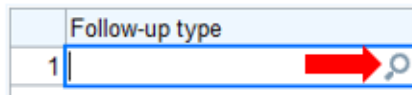


Actions:    

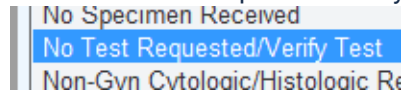
Add Follow-up Task

- e. Click the magnifying glass to open the Follow-up type selection screen
Hint: You can skip to this step and the next by entering shortcut 123 and

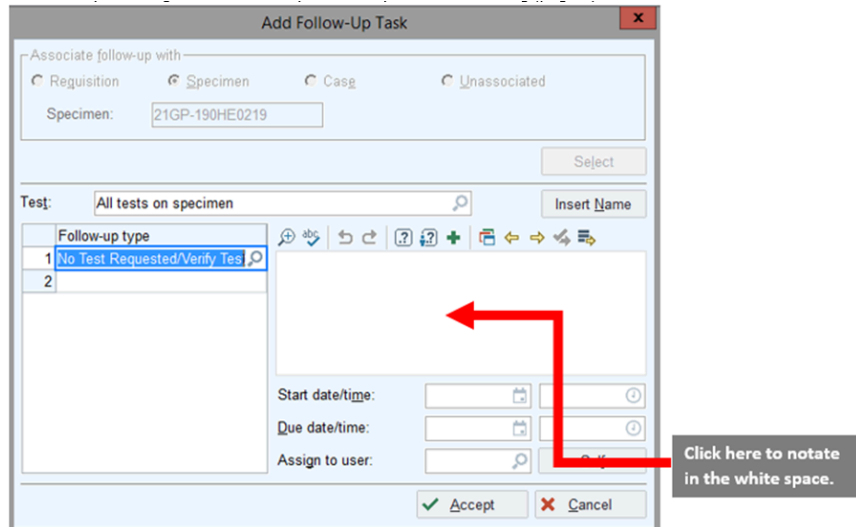
pressing return or enter.



f. Select "No Test Requested/Verify Test"



g. Notate in the white space what specimens were sent without orders.



h. Click Accept

3. The CSR will contact the office to verify what tests are wanted, if any.

a. If testing is wanted the CSR will do the following:

- i. Document the confirmation by adding a New event "Test Request Verified" in Beaker's Follow-up Work List and note who they spoke to in the client's office.
- ii. Order the test requested by the client using the add on procedure.

b. If testing is not wanted the CSR will do the following:

- i. Document the confirmation by adding a New event "Test Request Verified" in Beaker's Follow-up Work List and note who they spoke to in the client's office.
- ii. Mark the task as Complete in Beaker's Follow-up Work List.

C. Unclear Orders Procedure

1. When orders are received that need clarification add a "Verify Test Requested" Follow-up Task.
2. The CSR will contact the office to verify what tests are wanted, if any.
3. If testing is wanted the CSR will do the following:
 - a. Document the confirmation by adding a New event "Test Request Verified" in Beaker's Follow-up Work List and note who they spoke to in the client's office.

- b. Order the test requested by the client using the add on procedure.
4. If testing is not wanted the CSR will do the following:
- a. Document the confirmation by adding a New event "Test Request Verified" in Beaker's Follow-up Work List and note who they spoke to in the client's office.
 - b. Mark the task as Complete in Beaker's Follow-up Work List.

III. REFERENCES:

CAP Inspection Checklist, Laboratory General GEN.40938 Unclear Test Order, College of American Pathologists, Northfield, IL, 06.04.2020

Attachments

[b64_6a0e5ef0-7847-439f-bd73-ca4aa06485b8](#)

Approval Signatures

Step Description	Approver	Date
CLIA Medical Directors	Jeremy Powers: Chief, Pathology	7/5/2022
CLIA Medical Directors	Ann Marie Blenc: System Med Dir, Hematopath	6/28/2022
CLIA Medical Directors	Ryan Johnson: OUWB Clinical Faculty	6/28/2022
CLIA Medical Directors	Vaishali Pansare: Chief, Pathology	6/28/2022
CLIA Medical Directors	John Pui: Chief, Pathology	6/28/2022
Policy and Forms Steering Committee Approval (if needed)	Ilene Hirsch: Project Mgr Policy	6/28/2022
Policy and Forms Steering Committee Approval (if needed)	Kimberly Cole: Lab Quality Coord	6/28/2022
Lab Operations Directors	Joan Wehby: Dir, Lab Operations C	6/28/2022
Lab Operations Directors	Elzbieta Wysteppek: Dir, Lab Operations B	6/21/2022
Lab Operations Directors	Kimberly Geck: Dir, Lab Operations B	6/17/2022

Lab Processing Best Practice
Committee

Michelle Fischer: Mgr, Lab
Support Svcs

6/17/2022

Lab Processing Best Practice
Committee

Kimberly Cole: Lab Quality
Coord

6/15/2022

Kimberly Cole: Lab Quality
Coord

6/15/2022

Applicability

Dearborn, Farmington Hills, Grosse Pointe, Royal Oak, Troy

COPY