SPECIMEN COLLECTION MANUAL

Kaiser Permanente Medical Center San Francisco
Clinical Laboratory

2425 Geary Blvd.
Floor 1
San Francisco, CA 94115

Revised November 2017

TABLE OF CONTENTS **PAGE**

Biennial Review of Specimen Collection Manual Contents:

Laboratory CLIA Director

Date: 11/4/17

See Regional Lab Handbook (on-line) for Test Performed at Regional Lab

http://lablink.ca.kp.org/test_directory/

LOCATIONS & HOURS OF OPERATION

LABORATORY

	Hospital Laboratory	Outpatient Lab (Phlebotomy Services)			
Location:	2425 Geary, 1st floor	2238 Geary, 2nd floor	2200, O'Farrell, 1st floor	4131 Geary, 1st Floor	Mission Bay 1600 Owens St 1st Floor
Telephone:	8-493-3875	8-493-3580	8-493-6301	8-493-3283	8-532-6101
Fax:	8-493-3586	8-493-4661	8-493-6331	8-493-4004	8-532-6104
Hours (Outpatient Services):	No Outpatient Phlebotomy Service	Weekdays: 6:15 am – 8 pm Weekends & Holidays: 7 am – 4 pm	Monday – Friday, 8.00 am – 5:30pm	Monday – Friday, 9 am – 5 pm Closed 12:30 pm – 1:30 pm	Monday – Friday 8 am -8 pm Weekends & Holidays Closed
Hours (Inpatient Services):	24 hours, 7 days per week service	N/A	N/A	N/A	N/A

PATHOLOGY

	Pathology
Location:	Offices: 350 St. Joseph's Morgue: 2425 Geary, 1st floor
Telephone: Area Code: 415 Tie-line: 8-493	8-493-3870
Fax:	8-493-3871
Hours:	Monday-Friday, 8:30 am - 5 pm. Closed on weekends and holidays. On-call pathologist available by pager during after hours and on weekends.

CONTACT PHONE NUMBERS

Pathology:

Contact:	Title:	Extension/Tieline: 8-493-xxxx Outside Line: (415) 833-xxxx
James Constant, MD	Assistant Physician-in-Chief Pathology Service Line Leader	x 0075
Junming Fang, MD, PhD	Associate Pathologist, Laboratory Director of Transfusion Service	x 3201
Maria Serrano, MD	Associate Pathologist, Laboratory Director of Transfusion Service	x 4188
Eric Suba, MD	Laboratory (CLIA) Director of KFH Clinical Laboratory, Chief of Pathology, Laboratory (CLIA) Director of Anatomic Pathology	x 3433
Carolyn Li, MD	Associate Pathologist	x 4830
Natalia Isaza, MD	Associate Pathologist	x 6445
Sara Cherny, MD	Associate Pathologist	x 5540
Zoe Tang, MD	Assistant Chief of Regional Immunohistochemistry Consultative Services	x 3332
Robin Baker, MD	Laboratory (CLIA) Director and Chief of Regional Immunohistochemistry Consultative Services	x 3004
Mitchell Adachi, MD	Associate Pathologist – Immunohistochemistry	x 3575
Wen Jing, MD	Associate Pathologist – Immunohistochemistry	x 3801
Maureen R. Fitzgibbons	Assistant Laboratory Administrative Director	x 4785 / x 5569
Bojane D'Cunha	Pathology Services Unit Manager	x 3573
Joy Kuckelmann	Operations Specialist	x 6480
Lucy Giraldo	Certified Pathologist Assistant	x 3525

CONTACT PHONE NUMBERS

Laboratory:

Contact:	Title:	Extension/Tieline: 8-493-xxxx Outside Line: (415) 833-xxxx	Hours:
Laboratory - Hospital		x 3875	
Laboratory - MOB		x 3580	
LaWanda Young	Laboratory Services Coordinator – Hospital	x 3876 / x 3875	Mon – Fri 6:30 am – 3 pm
Melissa Paredes	Laboratory Services Coordinator – MOB	x 3292 / x 3580	Mon – Fri 6:30 am – 3 pm
Hitesh Desai	Service Unit Manager - MOB	x26100/x26101	Mon – Fri 6:30 am – 3 pm
Kim Yee	Chemistry Supervisor	x 3878 / x 3875	Mon – Fri 6:30 am – 3 pm
Bryan Candido	Hematology/Coagulation/ Urinalysis/ Microbiology Supervisor	x 3877 / x 3875	Mon – Fri 6:30 am – 3 pm
Cara Lim	Transfusion Service Supervisor	x 3886 / x 3881	Mon – Fri 6:30 am – 3 pm
Peggy Chan	CLS Staffing Supervisor	x 6668 / x 3875	Tue – Sat 6:30 am – 3 pm
Alison Cheung	Evening Shift Supervisor	x 4889 / x 3875	Mon – Fri 2:30 pm – 11 pm
Pam Fong	Night Shift Supervisor	x 3293 / x 3875	Tue – Sat 11 pm – 7:30 am
Diane Johnson	Area Laboratory Administrative Director	x 3883 / x 4054	Mon – Fri 8:30 am – 5 pm
Richard Chui	Assistant Laboratory Administrative Director	x 8384 / x 4054	Mon – Fri 8:30 am – 5 pm
Antoinette Raval	Assistant Laboratory Administrative Director	x 3341 / x 4054	Mon – Fri 7 am – 3:30 pm
Olga Toler	Assistant Laboratory Administrative Director	x 0024 / x 0025	Mon – Fri 8 am – 4:30 pm
Vaiju Ruikar	Assistant Laboratory Administrative Director	x 3884 / x 4054	Mon – Fri 8:30 am – 5 pm
Maureen R. Fitzgibbons	Assistant Laboratory Administrative Director	x 4785 / x 3344	Mon – Fri 8 am – 4:30 pm

Regional Laboratory Departments:

Client Services (CS) / Central Specimen Processing Area (CSPA): 8-421-5119

Cellular Pathology

- Flow Cytometry: 8-421-4732
- Cytology: 8-421-5426
- Histology: 8-421-4961
- Hematology: 8-414-5457
- Coagulation: 8-414-5457
- Blood Bank: 8-414-5457

Chemistry

- Automated Chemistry: 8-414-5482
- Immunochemistry: 8-414-5179
- Toxicology: 8-414-5176
- Newborn/Prenatal Screening: 8-421-4720
- Special Chemistry: 8-421-5435

Microbiology

- Bacteriology: 8-414-4390
- Mycobacteriology/Mycology: 8-414-4392
- Parasitology: 8-414-4393
- Virology/Immunodiagnostics: 8-414-4394

PRIORITIES/Turn Around Times (TAT)

1. **ME/Life-threatening** emergencies (also known as critical tests):

   a) This priority should be reserved for truly critical situations.
   b) Stroke tests are ordered as ME and have a TAT of 45 minutes from the time of patient arrival to result notification. The stroke tests are CBC including platelet count, Chem7, and PT/INR.

2. **EX/ASAP = STAT**

   a) Results are available on CIPS/KP Health Connect within 60 minutes from the lab receipt time,

3. **TS**

   a) Timed Study (fill in date and time specimen is to be collected on the next line).

4. **OTHER** priorities may be written in the "Instructions to the Lab" section, e.g.:

   a) Discharges (or D/C) will be given priority over routine test requests.
   b) Do in S.F. requests will be available the same day (In KPHC, priority should be chosen as "Today").

5. **ROUTINE**
   If no priority box is checked, specimens will be processed as routines.

   a) Inpatients:
      - Automated chemistry and hematology tests should be available on CIPS/KPHC within 1 hour from the time the specimen is logged into the Lab.
      - Manual tests results will be available within 1.5 to 4 hours.

   b) Outpatients:
      - Most tests are performed at the Regional Lab. These results are also available on CIPS and KP HealthConnect. See the Regional Lab on-line manual for TAT.

6. **Mixed priorities:**

   a) When several tests are ordered, but only one or two are needed as M.E., do not order everything as M.E. Rest should be ordered as STAT and will be run as a STAT.

LABORATORY REPORTS

1. All results are available on CIPS and KP Health Connect.

2. Inpatients/Outpatients:

   a) Results are available in KP HealthConnect. Providers can also review/sign-off on lab reports and generate lab letters to send to members.

   b) If results are not visible in KPHC lab results page, please review under the scanned documents page.

3. Reports Called:

   a) Critical values on inpatients are called to the physician and licensed caregivers in charge of the patient.

   b) Outpatient critical values are called to the office of the ordering provider during business hours, and to designated staff on call, evenings (5 PM - 12 AM) and weekends. At night, critical values on selected tests are called to the designated MDs on call according to location.

   c) Operating Room reports are called to the room number indicated on the requisition.

   d) Stroke panel test results are called to the MD/licensed caregiver of the unit listed on the requisition.

4. In the event that laboratory reports are delayed due to breakdown of instrumentation or RILIS, critical care units will be notified by phone. Non-critical care units and the medical offices will also be notified by phone.

5. Reference Ranges for lab tests can be found along side the results on CIPS and KP HealthConnect.

PHLEBOTOMY SERVICES

1. Routine phlebotomy on most inpatient units is performed by laboratory personnel.

2. The Laboratory does multiple phlebotomy rounds daily. Health Connect orders must be placed 30 minutes prior to the round time for them to flow to RILIS and to appear on the laboratory collection list.

3. All Stat draws are the responsibility of the Nursing staff.

4. The laboratory rounds schedule are listed below:

Rounds Schedule
6:00 a.m. rounds
8:00 a.m. rounds
10:00 a.m. rounds
2:00 p.m. rounds
6:00 p.m. rounds
10:00 p.m. rounds

PHLEBOTOMY POLICIES

1. INPATIENTS MUST HAVE A PERMANENT IDENTIFICATION BAND SECURED ON THE WRIST. Laboratory personnel will not draw a patient without an armband or if they have good reason to believe the armband is incorrect. (Exceptions: Patients with burns or open wounds which prevent attachment of an ID band, and infants. In these special cases, ID may be attached to the bed or crib).

2. Patients receiving IV fluids will have blood drawn from the opposite arm. If opposite arm is not available, will draw from below IV if there is space to place tourniquet below IV. When the only site available for phlebotomy is above a running IV, blood MAY be drawn in collaboration with the patient's RN and/or MD, according to standard operating procedure.

3. To minimize potential risks to patients, laboratory phlebotomists will draw venous blood from arms and hands only. Serial hematocrits will routinely be drawn from fingers.

4. Hematocrits will not be drawn if a patient is receiving blood. It is recommended that transfusions be discontinued one hour before a hematocrit is drawn.

5. Laboratory personnel will not draw the following:
   a) Inpatient STAT requests.

b) Blood cultures during morning phlebotomy rounds.

c) Blood from IV locks, shunts, or other indwelling lines.

d) Arterial specimens.

SPECIMEN TRANSPORT TO THE LABORATORY

1. Specimen container lids must be secured to prevent leaking.

2. Transport in a plastic biohazard zip-lock bag. The requisition should be placed in the pocket on the outside, so it is not contaminated if the specimen leaks/breaks.

3. One specimen per biohazard bag is preferred; in case of breakage or leakage, only one specimen will be rejected.

4. Never pack specimens from different patients in the same bag; it creates an unacceptable risk of error.

5. Keep specimen upright to prevent leakage. Units having access to the dumbwaiter or tubes should take special care to prevent leakage.

6. Never submit a specimen with needle attached.

7. Do not put a specimen carrier in the pneumatic tube system when it is in use (IN USE light is on). This may result in specimens being stranded in the tube, or bumped back to the sending location. Guidelines for tube operation should be strictly adhered to.

8. DO NOT ask outpatients to deliver their bone marrow, CSF, or other specimens collected in syringes to the laboratory. Appropriate staff should deliver these specimens to the laboratory (bone marrows to Pathology) immediately! Needles should be removed from syringes prior to submission.

SPECIMEN ACCEPTANCE & LABELING REQUIREMENTS

The quality of laboratory results is critically dependent on the quality of the specimen collected for analysis. Personnel collecting and handling the specimens should refer to the specimen collection requirements for the test requested. Acceptance of specimens is based on the criteria listed below.

Acceptance Criteria	Comments
Positive Patient Identification and Specimen Identification	Patient identity (patient name and medical record number) and barcoded labels placed on collected specimens must match. Primary specimen containers must be labeled by at least 2 identifiers. When applicable, primary and secondary specimen labels must match.
Patient Instructions	Requested tests may require specific patient preparation and/or specimen collection requirements. Failure to follow patient instructions may compromise testing specimen quality. Refer to the Patient Instructions section.

Specimen Labeling	**Specimen labeling must include:**
	• Patient's full name (initials unacceptable)
	• Medical record number
	• Collection date & time
	• Blood Collector Identification:
	  ○ NUID for lab personnel
	  ○ Signature for non-lab personnel

Test Orders	All test orders are placed electronically through Health Connect, except from the departments not on Health Connect.

Test Requisition	A manual test requisition from the departments not on Health Connect must accompany specimen(s) to the laboratory. **A complete test requisition includes:**
	• Patient's full name
	• Medical record number
	• Requesting provider name & ID number
	• Test(s) requested
	• Specimen collection date & time
	• Blood Collector Identification:
	  ○ NUID fpr lab personnel
	  ○ Signature for non-lab personnel
	
	NOTE: A paper requisition with matching patient's identification, phlebotomist's identification, draw date & time, must accompany each blood bank sample at the time of receipt in the laboratory. Sample without requisition will be rejected without exception.

Specimen Collection	Adherence to sample volumes, collection tube types or containers, additives and/or preservatives is required.

	Refer to the Specimen Collection Requirements section.
Specimen Storage and Transportation	Adherence to special handling, storage and transport requirements is necessary. Refer to the Specimen Transport section in this manual. **NOTE:** Leaking specimens pose a risk of exposure to infectious materials. Lab supervisors reserve the right to reject any leaked specimens.

When the identification, quality and integrity of the specimen are compromised, specimens may be rejected. When an unsatisfactory specimen is received, the laboratory will notify the client to obtain an acceptable specimen. The laboratory will document the problem and corrective action.

In the event the sample does not meet the labeling requirements per protocol, the sample will be rejected and must be recollected.

SPECIMEN COLLECTION & PROCESSING GUIDELINES

Tube Color	Additive	Specimen	Lab Use	Processing Guidelines
Lavender	K_2 EDTA	Whole Blood or Plasma	• CBC, DIFF • fluid cell counts Hgb electrophoresis • HgbA1C	• Gently invert 5-10 times immediately following collection. • May be centrifuged immediately at 1000-1100 g (1) for 10 minutes for plasma specimen.
Pink (6mL)	K_2 EDTA	Whole Blood (full tube)	• Blood Bank	• Gently invert 5-10 times immediately following collection. • Centrifuged immediately at 1000-1100 g (1) for 8 minutes for plasma specimen.
Plain Red	None	Serum	All TDM drug levels	• Allow tube to fill. • Allow to clot at least 30 minutes. • Centrifuge 1000-1100 g (1) for 10 minutes to obtain separation of serum from clot. • Keep tube in upright position. • Transfer serum to another plain red.
Golden or Speckle Red	Silicone with separator gel	Serum	Most chemistry tests (outpatients)	• Allow tube to fill. Gently invert 5 times. • Allow to clot at least 30 minutes. • Centrifuge 1000-1100 g (1) for 10 minutes within 2 hours of collection to obtain complete barrier separation of serum from clot.
Lt. Blue	Na Citrate	Plasma	Coagulation Tests	• Must allow tube to fill to expected fill line. • Gently invert 5-10 times immediately following collection. • Centrifuge 2500 g (1) for 15 minutes at room temperature within 1 hour of collection. • Plasma may be separated above the buffy coat to freeze.(2)

Tube Color	Additive	Specimen	Lab Use	Processing Guidelines
				•
Green	Li Heparin w/ separator Gel	Plasma	Most chemistry tests(inpatients), Ammonia (specimen on ice)	• Gently invert 5-10 times immediately following collection. • May be centrifuged immediately at 1000-1100 g(1) for 10 minutes for plasma specimen.
Dark Green	Li Heparin	Whole Blood	Lactic Acid – specimen on ice	• Gently invert 5-10 times immediately following collection.
Green	Na Heparin	Whole Blood	Genetics, Chromosomes Study	• Gently invert 5-10 times immediately following collection.
Gray	Na Fluoride	Plasma	Pyruvic Acid (put tube in ice)	• Gently invert 5-10 times immediately following collection.
Royal Blue	Na_2 EDTA	Whole Blood	Trace element analysis (zinc, copper) Lead	• Gently invert 5-10 times immediately following collection.
Royal Blue	None	Serum	Chromium, etc.	• Gently invert 5-10 times immediately following collection.
Yellow	ACD	Whole Blood	HLA typing, special cytometry analysis	• Gently invert 5-10 times immediately following collection.
Orange	Thrombin	Serum	Troponin	• Gently invert 5-10 times immediately following collection.

(1) Refer to NCCLS document H18-A3 (Procedures for the Handling and Processing of Blood Specimens) "Relative Centrifugal Force Nomograph" for centrifugal "g" to "rpm" conversion.

(2) Platelet count on platelet-poor plasma should be less than 10,000/ cu mm.

Draw Tubes in this Order for INPATIENT Laboratory Test Order

Blue Top: Aerobic

Aerobic blood culture

Purple Top: Anaerobic

Anaerobic blood culture

Yellow Top: Pedi Blood Culture

Pedi Blood Culture (for both aerobic and anaerobic blood culture)
Only use when aerobic and anaerobic blood culture specimens cannot be collected from patient.

* Blue Top with Sodium Citrate (Blue)

COAGULATION (need a discard tube prior to it)

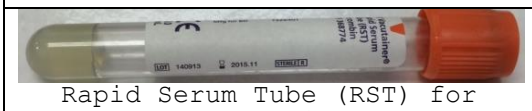
- Protime (PT)
- Activated PTT (PTT)
- Fibrinogen (FIBR)
- Thrombin Time(Regional Lab)
- Factor Assay (Anti-Xa, UFH, LMWH)
- D-Dimer

Gold Top / Red Tiger Top (Red SST)

Micro SST (for infant and difficult draw)

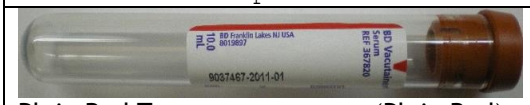
REGIONAL LAB CHEMISTRY (SST tube unless indicated)

- Serum Protein Elect
- Serum Pregnancy
- Quant Beta HCG
- HDL
- B12 (on ice)
- Folate (on ice)
- Hepatitis
- Prealbumin
- Total Protein
- Ferritin
- Iron/TIBC
- TSH
- Free T4 Analog
- CRP High Sensitivity (Regional Lab)
- Lipid Panel
- LDL
- Cholesterol



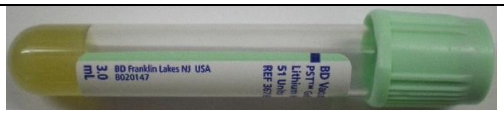
Rapid Serum Tube (RST) for Troponin

- **Troponin I** (**RST** tube)

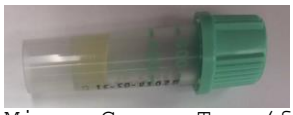


Plain Red Top (Plain Red)

- Lithium (prefer red top)
- Carbamazepine (prefer red top)
- Vancomycin (prefer red top)
- Alcohol
- All TDMs



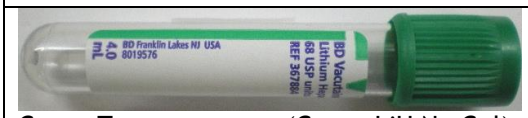
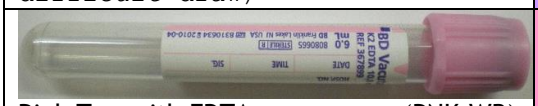
Light Green Top (GRN-PST)



Micro Green Top (for infant and difficult draw)

CHEMISTRY
Most chemistry tests (except TDM) including but not limited to:

- Sodium (Na)
- Potassium (K)
- Creatinine (Creat)
- BUN
- Glucose
- Carbon Dioxide (CO_2)
- Chloride (Cl)
- Calcium (Ca)
- Uric Acid
- Albumin
- CKMB-Cardiac
- Phosphorus (PHOS)
- Magnesium (Mg)
- Total Bilirubin (BILIT)
- Alk Phos (ALKP)
- Amylase (Amyl)
- ALT (SGPT)
- AST (SGOT)
- CK
- LDH

	• Ammonia (on ice or deliver immediately)	• CRP High Sensitivity (Local lab)
 Green Top (Green LiH No Gel)	• Ammonia (on ice or deliver immediately) • Lactic acid (on ice), this tube only! • Ionized Calcium (on ice)	
 Lavender or Purple Top (Lav)	HEMATOLOGY	
	• CBC (H/H) • BNP • ESR (Sed-Rate) • FRBC (Regional Lab, on ice) • Rapid Malaria	• HgbA1C • Retic • Hgb Electrophoresis • Homocysteine (on ice) • PTHiO
 Micro Lavender (for infant and difficult draw)		
 Pink Top with EDTA (PNK-WB)	BLOOD BANK • Type and Screen • Type and Crossmatch	

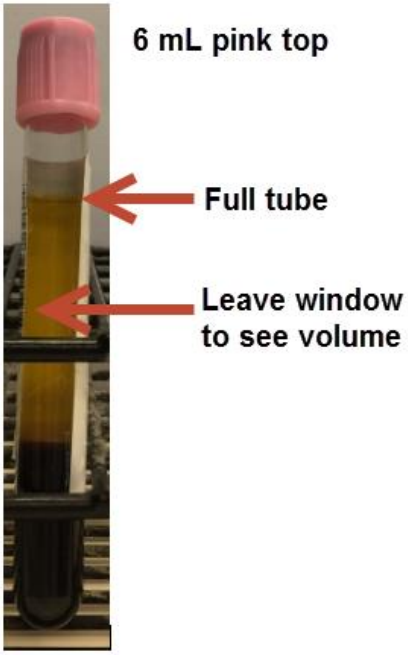
* When using a winged blood collection set for venipuncture and a coagulation (citrate) tube is the first specimen tube to be drawn, a discard tube should be drawn first. The discard tube must be used to fill the blood collection set tubing's "dead space" with blood, but the discard tube does not need to be completely filled. This important step will ensure maintenance of the proper blood-to-additive ratio of the blood specimen. The discard tube should be a non-additive or coagulation tube.

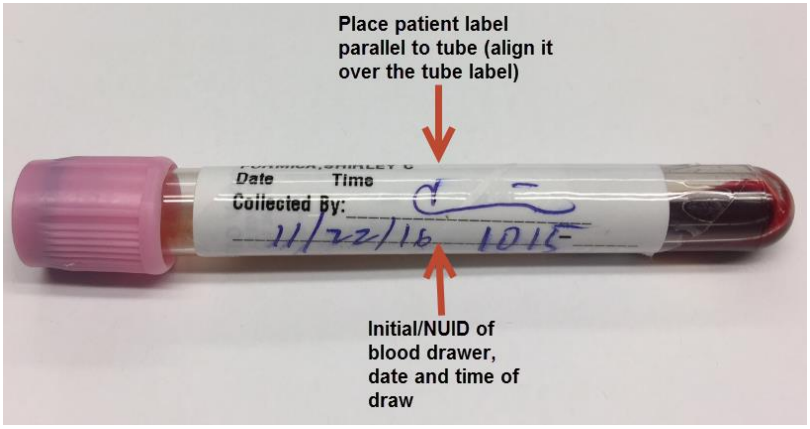
This chart is designed with tube requirements for the most common test requests. It is not intended to be all-inclusive. For tests not listed, including Genetic and Flow Cytometry tests, contact the Laboratory at x33875 or check the Laboratory website for specimen requirements and/or special handling.

Derived from NCCLS recommendation for the Order of Draw - 07/13/2011

Container Abbreviations **Blood Tube and**

BACT-AER (draw before ANA)	Blood cult., aerobic-Blue	**Lavender**	Purple EDTA, Hematology
BACT-ANA	Blood cult. Anaerobic	**PNK-WB**	Pink Top, for Blood Bank
2.7 Blue	Lt. Blue Top, coagulation	**PlainRed**	Solid Red Top, No Gel in tube
CULTURETTE	Swab, for bacteriology	**Red*SST**	Yellow or Tiger Top Serum Separator Tube (SST)
GRN*PST	Lt. Green Top Plasma Separator Tube (PST)	**SM UA CU**	Small Urine Container
GN*LI	Green Top - Lithium Heparin	**STER TUB**	Sterile container or tube





INPATIENT GUIDELINES FOR LABORATORY TESTS IN KPHC

- All Laboratory orders are placed by authorized providers on Kaiser Permanente Health Connect (KPHC). Electronic orders flow from KPHC to RILIS automatically.

  For For informational purposes only, the Reference Guide for Unidentified Patient Registration (ED, Admitting) can be accessed here: https://wiki.kp.org/wiki/display/fooi/Reference+Guide+-+Unidentified+Patient+Registration+%28ED%2C+Admitting%29

- All orders must be placed with appropriate priority. For improved efficiency, review of the current orders before placing a new order can avoid duplicate test orders.

- The labels for the orders would print in the lab, if it is routine draw and on the floor if it is a Stat draw. All Conditional draws must be released before sending the specimen to the lab, in order to obtain a barcoded label.

- In special situations like Blood Gas, Early Draw, Add-On, and a redraw for an unacceptable

specimen, laboratory would need an Order Detail Form from Health Connect along with the reason.

- All Blood Gas specimens must come with the temperature in Fahrenheit and FiO2 in percentage.

- Modified Allen's test is performed by Respiratory Therapist prior to an arterial puncture for blood gas collection. Avoid ambient air contamination. Care should be taken not to draw air into the syringe, and the sample should be capped immediately after collection. Specimens should be transported to the laboratory at ambient temperature and tested within 30 min of collection. If transport time will exceed 30 min, place the specimen on ice and transport to the lab within 1 hour of collection. Do not use the pneumatic tube system to transport blood gases.

- All blood culture specimens must indicate the source on label.

- All labels must have the date and time of collection as well as the blood collector's identification:
    - NUID for lab personnel
    - Signature for non-lab personnel

OUTPATIENT GUIDELINES FOR LABORATORY TESTS IN KPHC

- All Laboratory orders are placed by authorized providers on Kaiser Permanente Health Connect (KPHC).

- All orders must be placed with appropriate priority. For improved efficiency, review of the current orders before placing a new order can avoid duplicate test orders.

- When members present themselves at the outpatient laboratory, appropriate orders will be released from KPHC, collected, and processed.

- All blood culture specimens must indicate the source on label.

GUIDELINES FOR LABORATORY TESTS USING MANUAL REQUISITIONS

- For the departments not on Health Connect (ex. Interventional Radiology, Home Health, or OR), Lab orders must still be sent on paper requisitions.

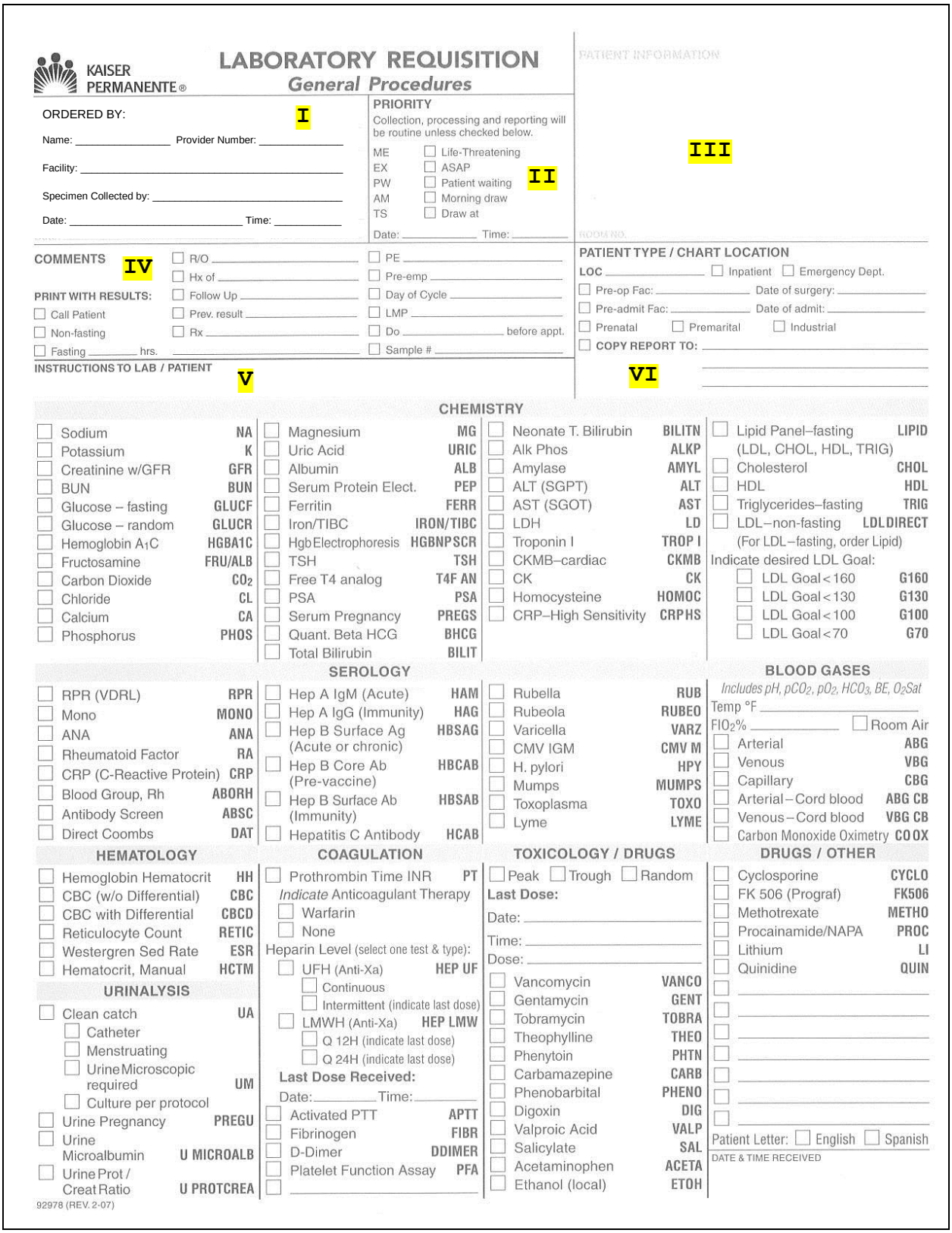
Following are the specific instructions for using the manual / paper requisitions.

Type of Requisition	Requirements
General Procedures	1. Date & time of specimen collection must be on the requisition.

(applies to all requisitions)	2. Ordering provider name and 5-digit ID number. 3. Signature of phlebotomist, date, and time of collection. 4. Tests requested. 5. See Guidelines for Completion of Laboratory Requisitions. 6. For Arterial Blood Gases – indicate the patient's temperature if not normal (temperature affects results)
Microbiology - All sections	1. Separate sources require separate requisitions. 2. Different collection times (e.g. 2 sets of blood cultures) require separate requisitions. 3. KOH preps, darkfield examinations and India ink preps may be written in under "other". 4. Provide relevant clinical information, e.g.: a) Patient on immunosuppressive therapy, or otherwise b) Immunocompromised c) Suspected pathogen/Clinical diagnosis (otherwise only routine will be done; less common pathogens may be missed) d) Vaccination history e) Previous positives f) Specimens collected from shunt v/s peripheral (to assist Infection Control in interpretation of the report) g) Allergies (to assist MD - choose therapy)
Bacteriology	1. Source & site (e.g., oral abscess) 2. Antibiotics prior to and/or subsequent to culture
Parasitology	1. Travel history 2. Whether helminth and/or protozoa suspected. Regional Lab no longer routinely looks for helminths 3. Contacts
Virology	History form may be required; Lab will notify ordering provider
AFB/Mycology	Contacts/exposure (specify if Coccidiosis or Histoplasma suspected)
Direct FA	Source & site (lesion on penis)
Transfusion Service	**Order Placed on KPHC:** 1. Each Blood Bank specimen must be accompanied by a matching Requisition, (ABORh, DAT and Cord Testing require Order Details printout). Phlebotomist signature/initials/NUID, draw date & time must be on both specimen tube and requisition/Order Details. 2. "Transfuse" Pick-up form generated from HealthConnect Transfusion Navigator is the acceptable blood product pick–up form. 3. Double check should only be drawn when notified by Blood Bank. Submit a specimen with a reprinted copy of the original requisition for Type and Screen, Type and Crossmatch, Hold Specimen for Transfusion Services, or

	Transfuse blood product. 4. In case of emergency and requisition cannot be generated, RN/provider should use manual requisition (see instructions below) and seek help from KPHC Site Support Specialist (call 3-KPHC) to resolve the issue. **Order Placed by Manual Requisition (when HealthConnect is unavailable):** 1. Multiple units of blood product may be ordered on a single requisition. 2. Signature/initials/NUID of the phlebotomist and date & time of collection (the matching information must also be on the specimen) 3. Name and 5-digit ID of requesting physician 4. Patient's age, gender, diagnosis 5. Date of surgery/date and time when the product is needed
Special Procedures	1. Use for ordering tests not listed on any of the requisitions. 2. Include relevant clinical data
Newborn Screening Test	Form completion and blood collection instructions are included on the form. Form must be completed prior to receipt in Laboratory.
Expanded AFP Screening	Form completion and blood collection instructions are included on the form.

INFORMATION REQUIRED ON LABORATORY REQUISITIONS



KAISER PERMANENTE®

LABORATORY REQUISITION
General Procedures

PATIENT INFORMATION

I

ORDERED BY:

Name: _____ Provider Number: _____

Facility: _____

Specimen Collected by: _____

Date: _____ Time: _____

II

PRIORITY

Collection, processing and reporting will be routine unless checked below.

ME ☐ Life-Threatening
EX ☐ ASAP
PW ☐ Patient waiting
AM ☐ Morning draw
TS ☐ Draw at

Date: _____ Time: _____

III

ROOM NO.

IV

COMMENTS

PRINT WITH RESULTS:
☐ Call Patient
☐ Non-fasting
☐ Fasting _____ hrs.

☐ R/O _____
☐ Hx of _____
☐ Follow Up _____
☐ Prev. result _____
☐ Rx _____

☐ PE _____
☐ Pre-emp _____
☐ Day of Cycle _____
☐ LMP _____
☐ Do _____ before appt.
☐ Sample # _____

PATIENT TYPE / CHART LOCATION

LOC _____ ☐ Inpatient ☐ Emergency Dept.
☐ Pre-op Fac: _____ Date of surgery: _____
☐ Pre-admit Fac: _____ Date of admit: _____
☐ Prenatal ☐ Premarital ☐ Industrial
☐ COPY REPORT TO: _____

V

INSTRUCTIONS TO LAB / PATIENT

VI

CHEMISTRY

☐ Sodium	NA	☐ Magnesium	MG	☐ Neonate T. Bilirubin	BILITN	☐ Lipid Panel–fasting (LDL, CHOL, HDL, TRIG)	LIPID
☐ Potassium	K	☐ Uric Acid	URIC	☐ Alk Phos	ALKP	☐ Cholesterol	CHOL
☐ Creatinine w/GFR	GFR	☐ Albumin	ALB	☐ Amylase	AMYL	☐ HDL	HDL
☐ BUN	BUN	☐ Serum Protein Elect.	PEP	☐ ALT (SGPT)	ALT	☐ Triglycerides–fasting	TRIG
☐ Glucose – fasting	GLUCF	☐ Ferritin	FERR	☐ AST (SGOT)	AST	☐ LDL–non-fasting	LDLDIRECT
☐ Glucose – random	GLUCR	☐ Iron/TIBC	IRON/TIBC	☐ LDH	LD	(For LDL–fasting, order Lipid)	
☐ Hemoglobin A_1C	HGBA1C	☐ Hgb Electrophoresis	HGBNPSCR	☐ Troponin I	TROP I	Indicate desired LDL Goal:	
☐ Fructosamine	FRU/ALB	☐ TSH	TSH	☐ CKMB–cardiac	CKMB	☐ LDL Goal < 160	G160
☐ Carbon Dioxide	CO_2	☐ Free T4 analog	T4F AN	☐ CK	CK	☐ LDL Goal < 130	G130
☐ Chloride	CL	☐ PSA	PSA	☐ Homocysteine	HOMOC	☐ LDL Goal < 100	G100
☐ Calcium	CA	☐ Serum Pregnancy	PREGS	☐ CRP–High Sensitivity	CRPHS	☐ LDL Goal < 70	G70
☐ Phosphorus	PHOS	☐ Quant. Beta HCG	BHCG				
		☐ Total Bilirubin	BILIT				

SEROLOGY

☐ RPR (VDRL)	RPR	☐ Hep A IgM (Acute)	HAM	☐ Rubella	RUB
☐ Mono	MONO	☐ Hep A IgG (Immunity)	HAG	☐ Rubeola	RUBEO
☐ ANA	ANA	☐ Hep B Surface Ag (Acute or chronic)	HBSAG	☐ Varicella	VARZ
☐ Rheumatoid Factor	RA	☐ Hep B Core Ab (Pre-vaccine)	HBCAB	☐ CMV IGM	CMV M
☐ CRP (C-Reactive Protein)	CRP	☐ Hep B Surface Ab (Immunity)	HBSAB	☐ H. pylori	HPY
☐ Blood Group, Rh	ABORH	☐ Hepatitis C Antibody	HCAB	☐ Mumps	MUMPS
☐ Antibody Screen	ABSC			☐ Toxoplasma	TOXO
☐ Direct Coombs	DAT			☐ Lyme	LYME

BLOOD GASES

Includes pH, pCO_2, pO_2, HCO_3, BE, O_2Sat

Temp °F _____
FIO_2% _____ ☐ Room Air

☐ Arterial	ABG
☐ Venous	VBG
☐ Capillary	CBG
☐ Arterial–Cord blood	ABG CB
☐ Venous–Cord blood	VBG CB
☐ Carbon Monoxide Oximetry	COOX

HEMATOLOGY

☐ Hemoglobin Hematocrit	HH
☐ CBC (w/o Differential)	CBC
☐ CBC with Differential	CBCD
☐ Reticulocyte Count	RETIC
☐ Westergren Sed Rate	ESR
☐ Hematocrit, Manual	HCTM

URINALYSIS

☐ Clean catch	UA
☐ Catheter	
☐ Menstruating	
☐ Urine Microscopic required	UM
☐ Culture per protocol	
☐ Urine Pregnancy	PREGU
☐ Urine Microalbumin	U MICROALB
☐ Urine Prot / Creat Ratio	U PROTCREA

COAGULATION

☐ Prothrombin Time INR PT

Indicate Anticoagulant Therapy
☐ Warfarin
☐ None

Heparin Level (select one test & type):
☐ UFH (Anti-Xa) HEP UF
☐ Continuous
☐ Intermittent (indicate last dose)
☐ LMWH (Anti-Xa) HEP LMW
☐ Q 12H (indicate last dose)
☐ Q 24H (indicate last dose)

Last Dose Received:
Date: _____ Time: _____

☐ Activated PTT APTT
☐ Fibrinogen FIBR
☐ D-Dimer DDIMER
☐ Platelet Function Assay PFA
☐ _____

TOXICOLOGY / DRUGS

☐ Peak ☐ Trough ☐ Random

Last Dose:
Date: _____
Time: _____
Dose: _____

☐ Vancomycin	VANCO
☐ Gentamycin	GENT
☐ Tobramycin	TOBRA
☐ Theophylline	THEO
☐ Phenytoin	PHTN
☐ Carbamazepine	CARB
☐ Phenobarbital	PHENO
☐ Digoxin	DIG
☐ Valproic Acid	VALP
☐ Salicylate	SAL
☐ Acetaminophen	ACETA
☐ Ethanol (local)	ETOH

DRUGS / OTHER

☐ Cyclosporine	CYCLO
☐ FK 506 (Prograf)	FK506
☐ Methotrexate	METHO
☐ Procainamide/NAPA	PROC
☐ Lithium	LI
☐ Quinidine	QUIN
☐ _____	
☐ _____	
☐ _____	
☐ _____	
☐ _____	
☐ _____	
☐ _____	

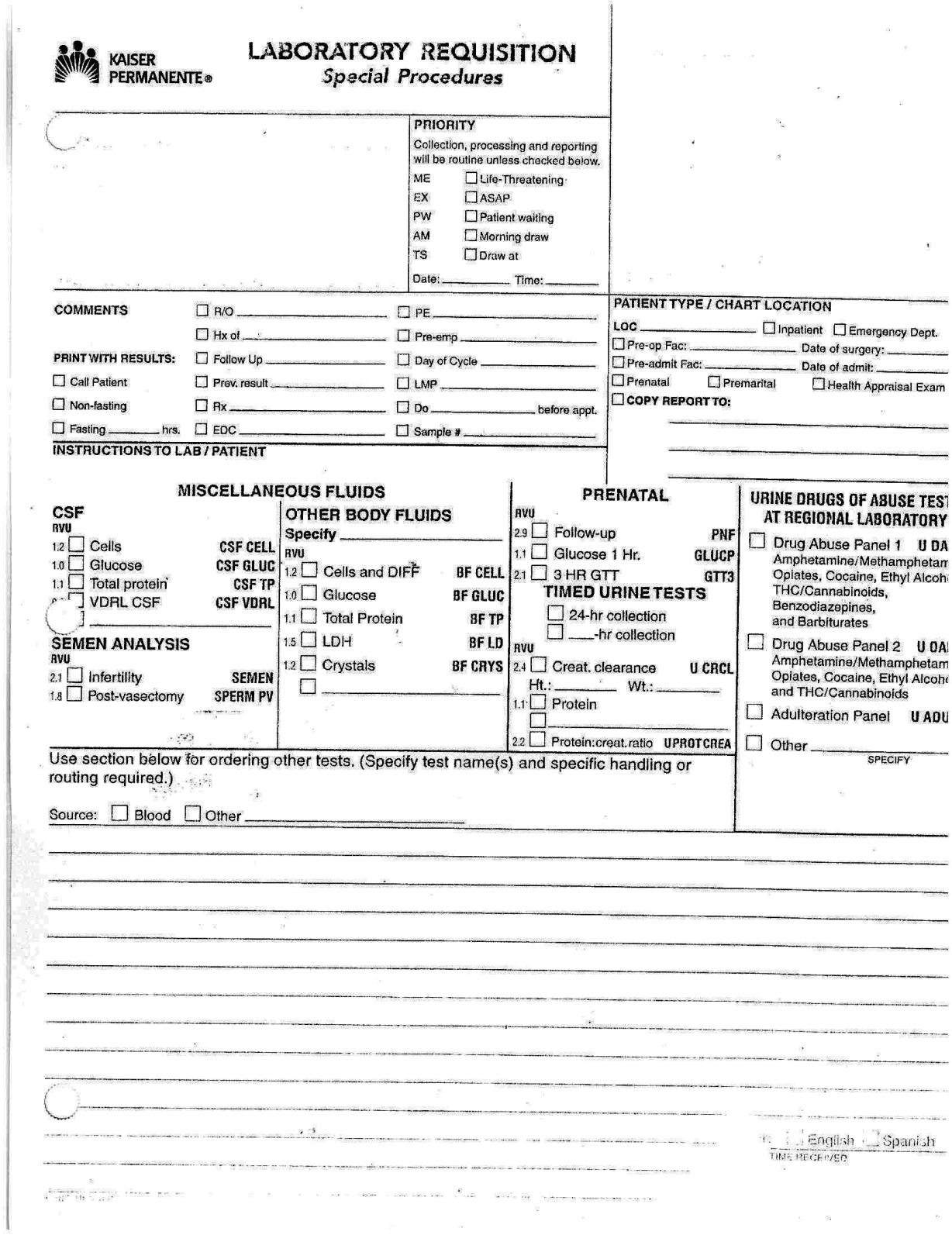
Patient Letter: ☐ English ☐ Spanish

DATE & TIME RECEIVED

92978 (REV. 2-07)

Section	Information Required	Comment
I	MD name and ID#	RILIS will accept only the ID#. The name serves as a quality assurance check.
	Date & time of specimen	Time of collection is necessary part of specimen ID, in case test is ordered more than once within 24 hrs; required by JCAHO.
	ID of specimen collector	For quality assurance follow-up. Required by JCAHO.
II Priority	Indicate priority:	Turn-around times:
	Life-threatening	Usually 10-15 min., from time received in the Lab, for ABG. Within 1 hour after collection for glucose, hematocrit, Na+, and K+.
	ASAP (STAT)	30 to 90 min., from time received in the Lab.
	Routine	Processed as routine if no other priority requested.
III Patient Info	Legible name and MRN	MRN is the primary ID. Name serves as quality assurance check for the MRN. Errors may result if both not legible.
	Room #/Nursing station phone #	Must enter room # in RILIS. In addition, Lab has special protocols for some units; phone # allows Lab to quickly contact nurse regarding problems or to call critical values.
IV Comments	Clinically relevant information	Any comment √'d or written in Section IV will be included in the report.
V Instructions to the Lab	Special handling requests, etc.	Will not be included in the report.
VI Patient Type/ Chart Location	LOC = SF or 31 Check "Outpatient" box	Provide other information in this section if appropriate.
	Check "Inpatient" box	Other information does not apply to inpatient.

Test Requests	Highlight in yellow, or circle the code for each test desired.	Take care orders are clear. Sloppiness may lead to performance of the wrong test.



KAISER PERMANENTE®

LABORATORY REQUISITION
Special Procedures

PRIORITY
Collection, processing and reporting will be routine unless checked below.
ME ☐ Life-Threatening
EX ☐ ASAP
PW ☐ Patient waiting
AM ☐ Morning draw
TS ☐ Draw at
Date: _____ Time: _____

COMMENTS
☐ R/O _____ ☐ PE _____
☐ Hx of _____ ☐ Pre-emp _____
PRINT WITH RESULTS: ☐ Follow Up _____ ☐ Day of Cycle _____
☐ Call Patient ☐ Prev. result _____ ☐ LMP _____
☐ Non-fasting ☐ Rx _____ ☐ Do _____ before appt.
☐ Fasting _____ hrs. ☐ EDC _____ ☐ Sample # _____

INSTRUCTIONS TO LAB / PATIENT

PATIENT TYPE / CHART LOCATION
LOC _____ ☐ Inpatient ☐ Emergency Dept.
☐ Pre-op Fac: _____ Date of surgery: _____
☐ Pre-admit Fac: _____ Date of admit: _____
☐ Prenatal ☐ Premarital ☐ Health Appraisal Exam
☐ **COPY REPORT TO:**

MISCELLANEOUS FLUIDS

CSF
RVU
1.2 ☐ Cells — CSF CELL
1.0 ☐ Glucose — CSF GLUC
1.1 ☐ Total protein — CSF TP
☐ VDRL CSF — CSF VDRL
☐ _____

SEMEN ANALYSIS
RVU
2.1 ☐ Infertility — SEMEN
1.8 ☐ Post-vasectomy — SPERM PV

OTHER BODY FLUIDS
Specify _____
RVU
1.2 ☐ Cells and DIFF — BF CELL
1.0 ☐ Glucose — BF GLUC
1.1 ☐ Total Protein — BF TP
1.5 ☐ LDH — BF LD
1.2 ☐ Crystals — BF CRYS
☐ _____

PRENATAL
RVU
2.9 ☐ Follow-up — PNF
1.1 ☐ Glucose 1 Hr. — GLUCP
2.1 ☐ 3 HR GTT — GTT3

TIMED URINE TESTS
☐ 24-hr collection
☐ ____-hr collection
RVU
2.4 ☐ Creat. clearance — U CRCL
Ht.: _____ Wt.: _____
1.1 ☐ Protein
☐ _____
2.2 ☐ Protein:creat.ratio — UPROTCREA

URINE DRUGS OF ABUSE TEST AT REGIONAL LABORATORY
☐ Drug Abuse Panel 1 — U DA
Amphetamine/Methamphetam
Opiates, Cocaine, Ethyl Alcoh
THC/Cannabinoids,
Benzodiazepines,
and Barbiturates
☐ Drug Abuse Panel 2 — U DA
Amphetamine/Methamphetam
Opiates, Cocaine, Ethyl Alcoh
and THC/Cannabinoids
☐ Adulteration Panel — U ADU
☐ Other _____ SPECIFY

Use section below for ordering other tests. (Specify test name(s) and specific handling or routing required.)

Source: ☐ Blood ☐ Other _____

☐ English ☐ Spanish
TIME RECEIVED

KAISER PERMANENTE®

LABORATORY REQUISITION
Microbiology

USE ONE REQUISITION FOR EACH SPECIMEN

ORDERED BY:
Name _____ Provider Number _____
I'm By: _____

Specimen Collected by: _____
Date: _____ Time: _____

PRIORITY
Collection, processing and reporting will be routine unless checked below.
EX ☐ ASAP
PW ☐ Patient waiting

PATIENT INFORMATION

ROOM NO.:

COMMENTS: Print with result(s)
☐ Call Patient

DRUG ALLERGIES
☐ Penicillin ☐ Other _____
☐ Sulfa ☐ No known allergies

ANTIBIOTIC STARTED: Date _____
☐ Penicillin ☐ TMP-SMX ☐ Amoxicillin
☐ Erythro/Azithro ☐ Doxycycline ☐ None
☐ Other _____

PATIENT TYPE / CHART LOCATION
LOC _____ ☐ Inpatient ☐ Emergency Dept.
☐ Pre-op Fac: _____ Date of surgery: _____
☐ PATIENT IN OR
☐ Prenatal ☐ Health Appraisal Exam
☐ Copy report to:

INSTRUCTIONS TO LAB / PATIENT

BACTERIAL CULTURE / SENSITIVITY

☐ GRAM STAIN **Source:** _____

THROAT
☐ R/O Grp A Strep by DNA probe **SAP**
(Submit dry swab)

URINE **C UR**
☐ Clean Catch
☐ Catheterized
(not recommended if indwelling)

☐ **BLOOD** **C BL**
Number _____
Site _____

☐ **VASCULAR ACCESS** **C CT**
Site _____
Cath Tip Type _____

RESPIRATORY **C RE**
☐ Sputum
(not recommended for outpatients)
☐ Endotracheal
☐ BAL
☐ Nose (Staph aureus only)
☐ Throat R/O _____
☐ Bordetella PCR **BORD P**
☐ Bordetella Culture **C BO**
☐ Legionella Culture **C LE**
☐ Other _____

TISSUE / BIOPSY **C TI**
☐ Wound _____
☐ Abscess _____
☐ Bone _____
☐ Joint _____
☐ Prosthesis _____
☐ Other _____

BODY FLUID
☐ Spinal Fluid **C CSF**
☐ Other Fluid (specify type) **C BF**
☐ Joint ☐ Pleural ☐ Peritoneal
☐ _____
☐ Fluid in culture bottle **C BFB**

MISCELLANEOUS **C MB**
☐ Ear ☐ R ☐ L
☐ Ear ☐ R ☐ L
☐ Vitreous
☐ Skin _____
☐ Other _____

☐ **ANAEROBIC CULTURE** **C AN**
Source: _____

GENITAL / GC

Source:
☐ Cervix
☐ Urethra
☐ Vaginal/rectal
☐ Throat
☐ Other _____

☐ Swab for GC and Chlamydia by Amplification **GCCTS**
☐ R/O GC by Culture **C GC**
☐ Prenatal Grp B Strep Screen **GBS**
(at 35–37 wks gestation)
High Risk Penicillin allergy?
☐ Yes
☐ Human Papillomavirus **HPV**

Urine:
☐ Chlamydia and GC by Amplification **GCCTU**
(screen ♀ under age 26 only)

STOOL

☐ Stool culture **C ST**
Bloody Stools? ☐ Yes
☐ C. difficile Assay **C CD**
☐ Protozoa Screen (includes Giardia EIA) **PR**
☐ Protozoa Smear Only **PRSM**
☐ Giardia EIA Only **GEIA**
☐ Cryptosporidia EIA **CEIA**

PARASITOLOGY

Source: _____
Travel: _____
☐ Pinworm **PINW**
☐ Blood Parasites Malaria thick / thin **MALARIA**
☐ Worm / Arthropod ID **PARA ID**
☐ Helminths **HELM**

DIRECT FA

Source: _____
(Submit specimen air dried on slide)
☐ Herpes simplex **FHSV**
☐ Varicella zoster **FVZ**
☐ Pneumocystitis **PCP STAIN**
☐ Other _____

VIROLOGY

CULTURE
Source: _____
☐ Viral Respiratory **C VIRR**
☐ Herpes **C HSV**
☐ CMV **C CMV**
☐ Misc. _____ **C VIR**
☐ CHLAMYDIA CULTURE **C CH**

PCR
Source: ☐ Throat ☐ NP
☐ RSV
☐ Influenza A **RESP P**
☐ Influenza B

AFB / FUNGAL

Source: _____
☐ AFB Stain/Culture **C AFB**
☐ AFB Blood Culture **C AFBB**
☐ Fungus Culture **C FU**
☐ Fungus Blood Culture **C FUB**
☐ Cryptococcal Ag **CRAG**
☐ _____

OTHER

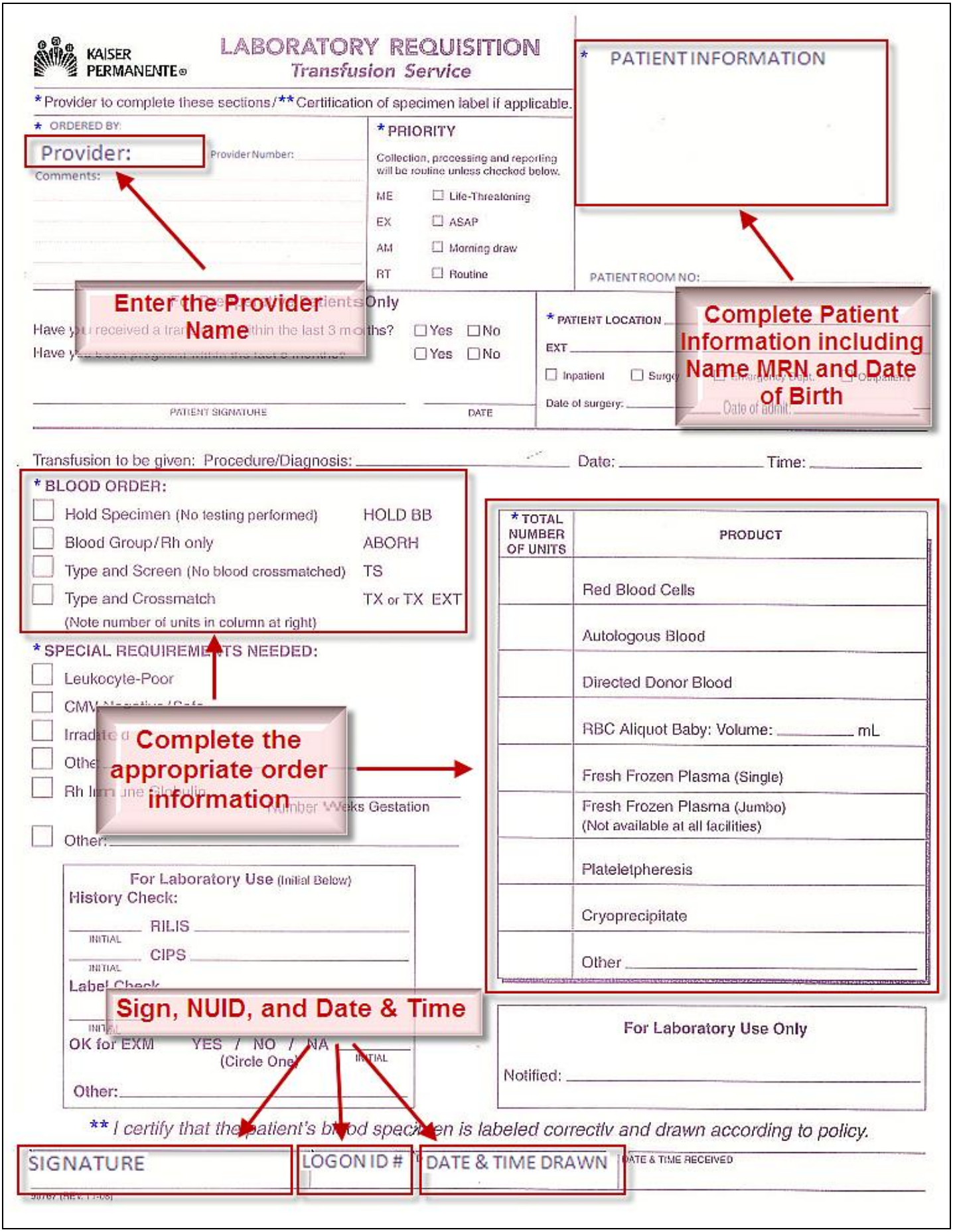
☐ _____
☐ _____
☐ _____
☐ _____

Patient Letter: ☐ English ☐ Spanish

DATE & TIME RECEIVED

94452 (REV. 2-07)

DISTRIBUTION: WHITE = SEND TO REGIONAL LAB WITH CULTURE / SPECIMEN • CANARY = ORIGINATING FACILITY


KAISER PERMANENTE
LABORATORY REQUISITION
Transfusion Service
* PATIENT INFORMATION
* Provider to complete these sections/** Certification of specimen label if applicable.
* ORDERED BY:
Provider:
Provider Number:
Comments:
* PRIORITY
Collection, processing and reporting will be routine unless checked below.
ME Life-Threatening
EX ASAP
AM Morning draw
RT Routine
PATIENT ROOM NO:
Enter the Provider Name
Complete Patient Information including Name MRN and Date of Birth
Only
Have you received a transfusion within the last 3 months? Yes No
Have you been pregnant within the last 3 months? Yes No
* PATIENT LOCATION
EXT
Inpatient Surgery Emergency Dept. Outpatient
Date of surgery:
Date of admit:
PATIENT SIGNATURE
DATE
Transfusion to be given: Procedure/Diagnosis: Date: Time:
* BLOOD ORDER:
Hold Specimen (No testing performed) HOLD BB
Blood Group/Rh only ABORH
Type and Screen (No blood crossmatched) TS
Type and Crossmatch TX or TX EXT
(Note number of units in column at right)
* SPECIAL REQUIREMENTS NEEDED:
Leukocyte-Poor
CMV Negative/Safe
Irradiated
Other
Rh Immune Globulin
Number Weeks Gestation
Other:
Complete the appropriate order information
* TOTAL NUMBER OF UNITS
PRODUCT
Red Blood Cells
Autologous Blood
Directed Donor Blood
RBC Aliquot Baby: Volume: mL
Fresh Frozen Plasma (Single)
Fresh Frozen Plasma (Jumbo) (Not available at all facilities)
Plateletpheresis
Cryoprecipitate
Other
For Laboratory Use (Initial Below)
History Check:
RILIS
INITIAL
CIPS
INITIAL
Label Check
INITIAL
OK for EXM YES / NO / NA
(Circle One)
INITIAL
Other:
Sign, NUID, and Date & Time
For Laboratory Use Only
Notified:
** I certify that the patient's blood specimen is labeled correctly and drawn according to policy.
SIGNATURE
LOGON ID #
DATE & TIME DRAWN
DATE & TIME RECEIVED

Kaiser Permanente Northern California Region

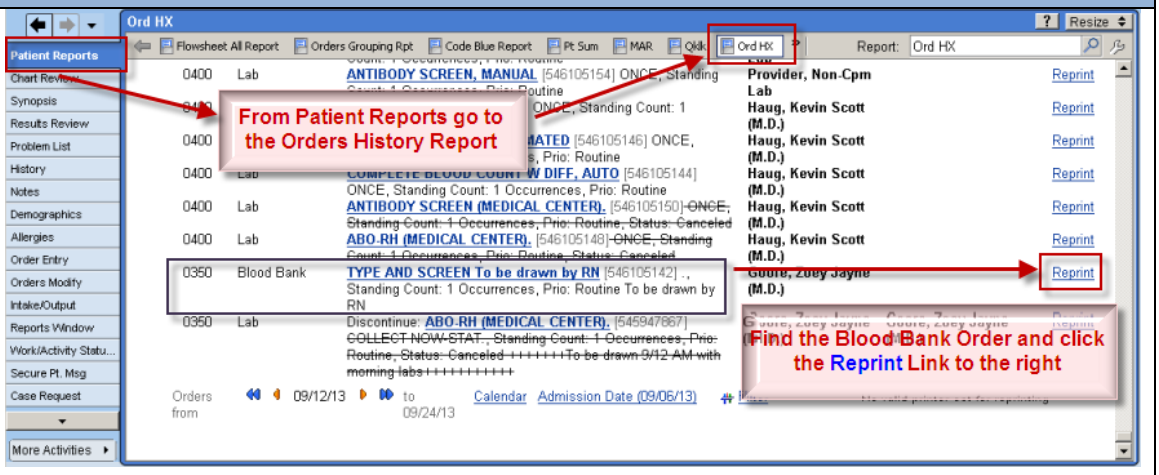
The Permanente Medical Group, Inc. and Kaiser Foundation Hospital Laboratories

Laboratory Director	Facility Code	Facility Mnemonic	Facility	Address
D. Forth, M.D.	55	ANT	TPMG Antioch Laboratory	3400 Delta Fair Blvd., Antioch, CA 94509
D. Cheng, M.D.	57	DRV	KFH Antioch Laboratory	4501 Sand Creek Rd., Antioch, CA 94531
R. Ray, M.D.	40	FLD	TPMG Fairfield Laboratory	1550 Gateway Blvd., Fairfield, CA 94533
J. Metcalf, M.D.	16	FRE	KFH Fremont Laboratory	39400 Paseo Padre Pkwy, Fremont, CA 94538
W. H. Shen, M.D.	16	FRE	TPMG Fremont Andrology Laboratory	39141 Civic Center Drive, Suite 350, Fremont, CA 94538
C. Bui, M.D.	72	FRS	KFH Fresno Laboratory	7300 N. Fresno St., Fresno, CA 93720
E. Loue, PhD	63	GEN	TPMG Regional Genetics Laboratory	5755 Cottle Rd., Bldg #6, San Jose, CA 95123
P. Engleman, M.D.	75	GIL	TPMG Gilroy Laboratory	7520 Arroyo Circle, Gilroy, CA 95020
J. Metcalf, M.D.	14	HAY	KFH Hayward Laboratory	27400 Hesperian Blvd., Hayward, CA 94545
J. Scillian, M.D.	49	MAN	KFH Manteca Laboratory	1777 West Yosemite Ave., Manteca, CA 95337
J. Lambert, M.D.	38	MIL	TPMG Milpitas Laboratory	770 Calaveras Blvd, Milpitas, CA 95035
J. Scillian, M.D.	85	MOD	TPMG Modesto Laboratory	4601 Dale Rd., Modesto, CA 95356
J. Lambert, M.D.	42	MTN	TPMG Mountain View Laboratory	555 Castro St., Mountain View, CA 94041
D. Forth, M.D.	54	MTZ	KFH Martinez Laboratory	200 Muir Rd., Martinez, CA 94553
T. Lorey, M.D.	10	MWS	TPMG Regional Laboratory, MWS	914 Marina Way South, Richmond, CA 94804
R. Ray, M.D.	22	NAP	TPMG Napa Laboratory	3285 Claremont Way, Napa, CA 94558
G. Rumore, M.D.	11	OAK	KFH Oakland Laboratory	280 W. MacArthur Blvd., Oakland, CA 94611
P. Engleman, M.D.	48	ONE	TPMG One North Laboratory	260 International Circle, San Jose, CA 95119
D. Forth, M.D.	47	PLS	TPMG Pleasanton Laboratory	7601 Stoneridge Dr., Pleasanton, CA 94588
G. Rumore, M.D.	12	RCH	KFH Richmond Laboratory	901 Nevin Ave, Richmond, CA 94801
T. Lorey, M.D.	02	REG	TPMG Regional Laboratory, Berkeley	1725 Eastshore Hwy., Berkeley, CA 94710
D. Thornberry, M.D.	59	ROS	KFH Roseville Laboratory	1600 Eureka Rd., Roseville, CA 95661
L. Smyth, M.D.	37	RWC	KFH Redwood City Laboratory	1150 Veterans Blvd., Redwood City, CA 94063
D. Thornberry, M.D.	61	SAC	KFH Sacramento Laboratory	2025 Morse Ave., Sacramento, CA 95825
M. Santamaria-Fries, M.D.	44	SCL	KFH Santa Clara Laboratory	700 Lawrence Expressway, Santa Clara, CA 95051
J. Fang, M.D.	31	SFO	KFH San Francisco Laboratory	2425 Geary Blvd., San Francisco, CA 94115
K. Pietila, M.D.	39	SRF	KFH San Rafael Laboratory	99 Montecillo Rd., San Rafael, CA 94903
J. Kunkel, M.D.	58	SRO	KFH Santa Rosa Laboratory	401 Bicentennial Way, Santa Rosa, CA 95401
R. Yu, M.D.	60	SSC	KFH South Sacramento Laboratory	6600 Bruceville Rd., Sacramento, CA 95823
J. Bainton, M.D.	35	SSF	KFH South San Francisco Laboratory	1200 El Camino Real, South San Francisco, CA 94080
J. Scillian, M.D.	68	STK	TPMG Stockton Laboratory	7373 West Lane, Stockton, CA 95210
P. Engleman, M.D.	63	STR	KFH Santa Teresa Laboratory	250 Hospital Pkwy., San Jose, CA 95119
R. Ray, M.D.	67	VAC	TPMG Vacaville Laboratory	3700 Vaca Valley Pkwy., Vacaville, CA 95688
L. Nathan, D.O.	21	VAL	KFH Vallejo Laboratory	975 Sereno Dr., Vallejo, CA 94589
D. Forth, M.D.	51	WCR	KFH Walnut Creek Laboratory	1425 South Main St., Walnut Creek, CA 94596

90787 (REV. 3-12 SFO) REVERSE

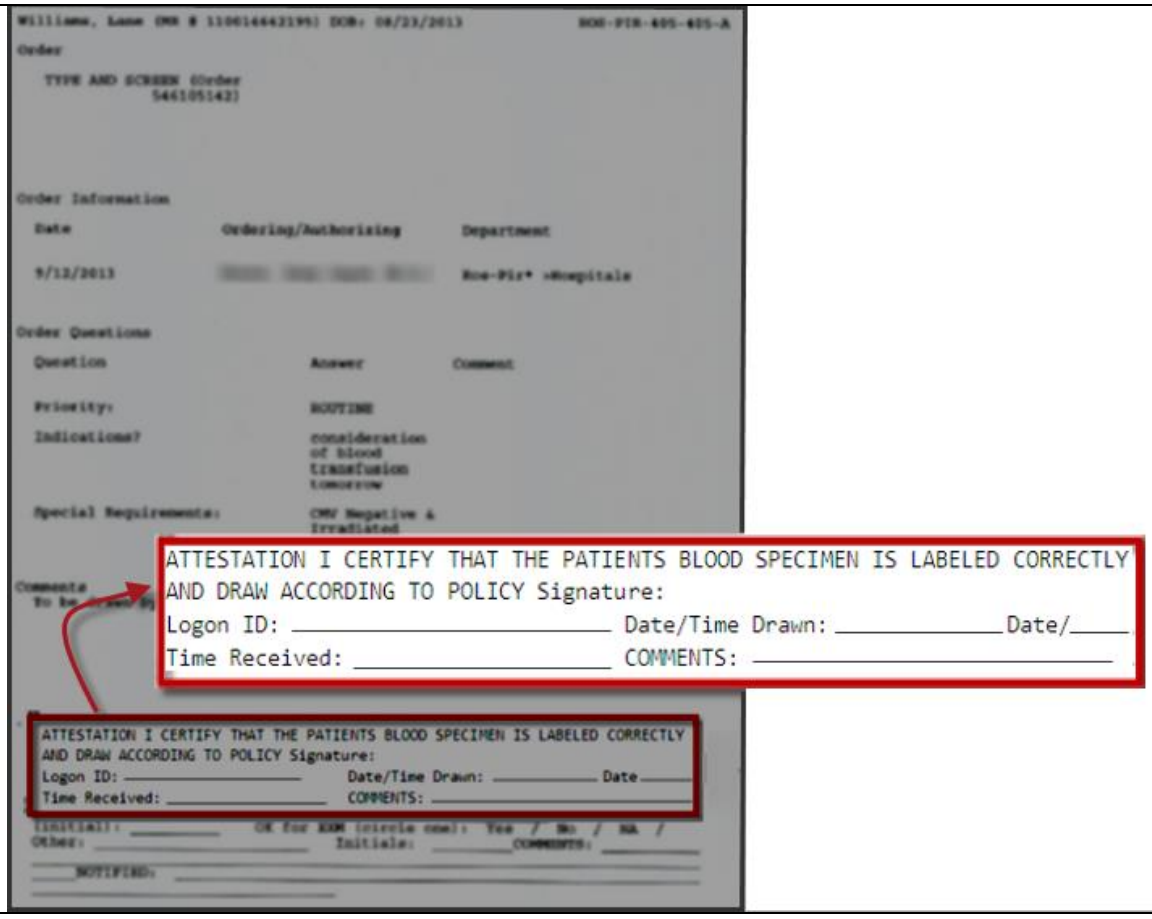
KP HealthConnect
Blood Order Requisition (Attestation)
How to reprint a released order that did not print

1. When a released Blood bank order has not produced an attestation- Go to the ***Orders HX Report*** within Patient Reports. Find the appropriate order and click the Reprint link.



2. A one page order attestation will print. ***Sign***, ***Date*** and include your ***NUID***. Deliver this attestation along with your correctly labeled blood tube to the Blood Bank.

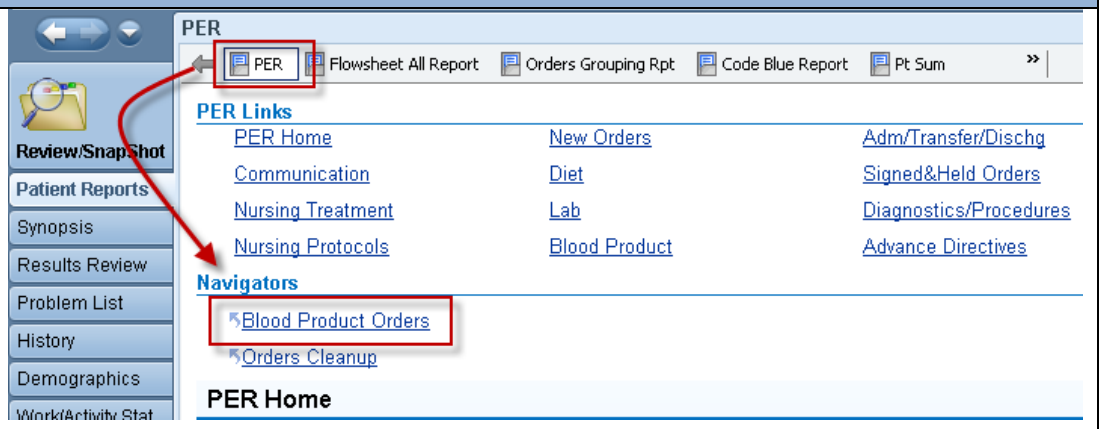
NOTE: This form must be printed ahead of time. It is used to identify patient at time of draw and completed at the patient's bedside after blood draw.



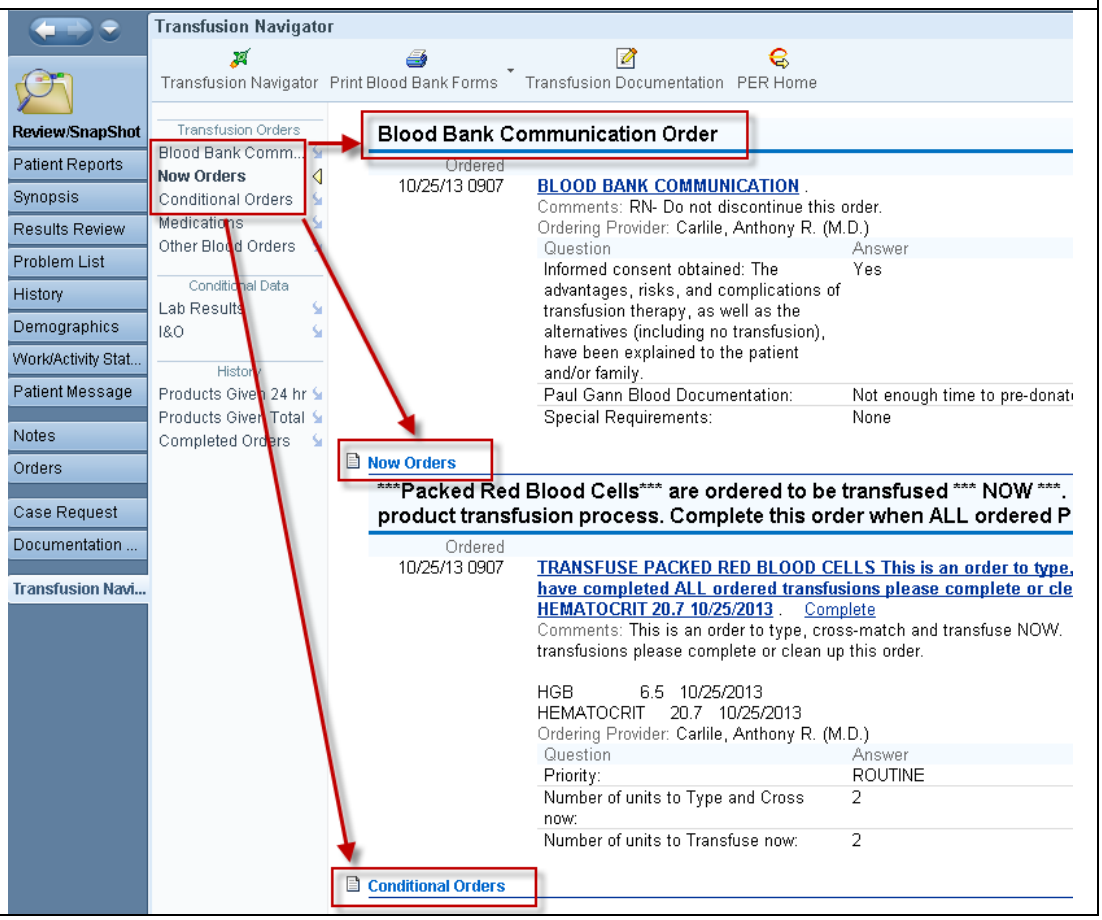
KP HealthConnect
PRINT TRANSFUSE BLOOD PRODUCT REQUISITION
Accessing Blood Transfusion Orders

Transfuse Blood Product Requisition can be printed from the **Transfusion Navigator.** Open the patient's chart and open the **PER**.

1. In the **Navigators** section, click the **Blood Product Orders** link. The Transfusion Navigator displays.

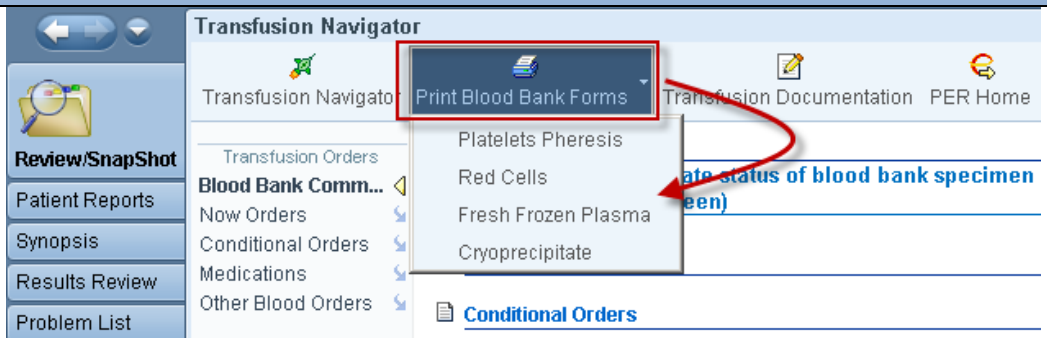


2. In the **Transfusion Navigator, Transfusion Orders** section, click the **Blood Bank Communication** link.
3. Review the specifics of the blood orders as appropriate click the **Now Orders** or **Conditional Orders** link.



KP HealthConnect
PRINT TRANSFUSE BLOOD PRODUCT REQUISITION
Accessing Blood Transfusion Orders

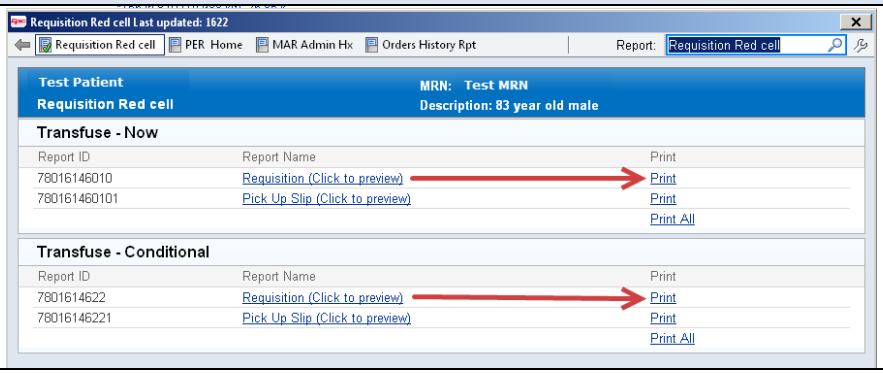
4. On the **Transfusion Navigator** toolbar click the **Print Blood Bank Forms** button. A dropdown list of blood product options display. Select the blood product that corresponds to the ordered blood product.



Important

Carefully read the blood product order and review for type of product and Now or Conditional.

5. The **Requisition (product)** window displays multiple options**.** Select the appropriate **requisition** and click the **Print** button.



6. The nurse reviews the printed Blood Product Requisition. Nurse draws a specimen using requisition to identify patient or fax requisition to Blood Bank if it is an add-on order.

At time of draw: Match patient's full name and MRN on requisition to armband and sample label (preprinted generic label). Ask patient to state his/her name whenever possible. Blood drawer writes on specimen and requisition at bedside before leaving patient: signature/initials/NUID, date and time of collection.

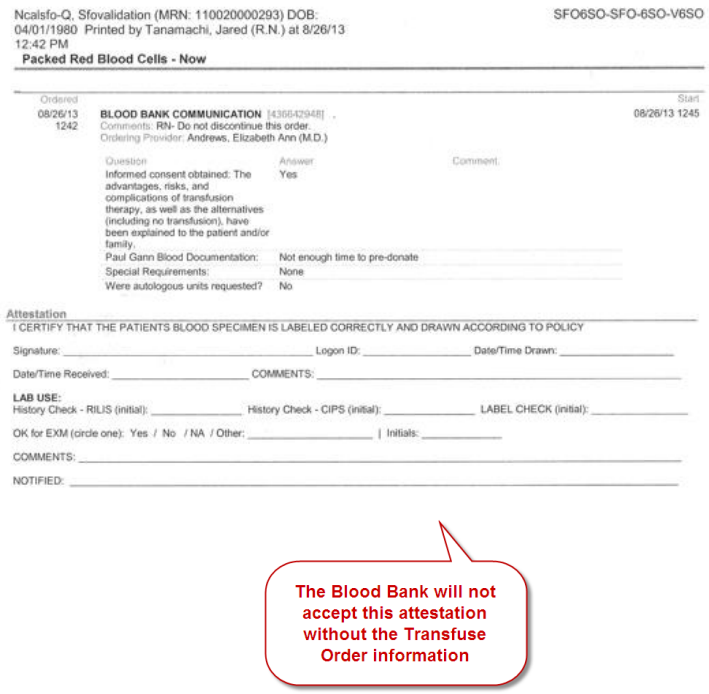
Note: **Specimen and requistion must match and send together to Blood Bank otherwise it will be rejected. Do not draw Double Check unless notified by Blood Bank.**

Important

The order is printed correctly when the order contains both the **Transfuse order** and the **Blood Bank Communication** order together.

KP HealthConnect
PRINT TRANSFUSE BLOOD PRODUCT REQUISITION
Accessing Blood Transfusion Orders

Not Correct



Ncalsfo-Q, Sfovalidation (MRN: 110020000293) DOB: 04/01/1980 Printed by Tanamachi, Jared (R.N.) at 8/26/13 12:42 PM

SFO6SO-SFO-6SO-V6SO

Packed Red Blood Cells - Now

Ordered		Start
08/26/13 1242	**BLOOD BANK COMMUNICATION** [436642948] Comments: RN- Do not discontinue this order. Ordering Provider: Andrews, Elizabeth Ann (M.D.)	08/26/13 1245

Question	Answer	Comment
Informed consent obtained: The advantages, risks, and complications of transfusion therapy, as well as the alternatives (including no transfusion), have been explained to the patient and/or family.	Yes	
Paul Gann Blood Documentation:	Not enough time to pre-donate	
Special Requirements:	None	
Were autologous units requested?	No	

Attestation

I CERTIFY THAT THE PATIENTS BLOOD SPECIMEN IS LABELED CORRECTLY AND DRAWN ACCORDING TO POLICY

Signature: _____ Logon ID: _____ Date/Time Drawn: _____

Date/Time Received: _____ COMMENTS: _____

LAB USE:
History Check - RILIS (initial): _____ History Check - CIPS (initial): _____ LABEL CHECK (initial): _____

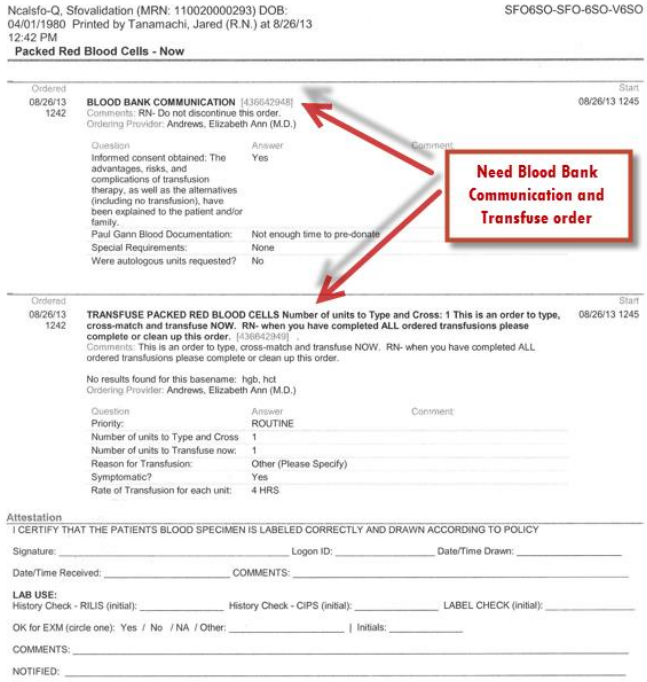
OK for EXM (circle one): Yes / No / NA / Other: _____ | Initials: _____

COMMENTS: _____

NOTIFIED: _____

The Blood Bank will not accept this attestation without the Transfuse Order information

Correct



Ncalsfo-Q, Sfovalidation (MRN: 110020000293) DOB: 04/01/1980 Printed by Tanamachi, Jared (R.N.) at 8/26/13 12:42 PM

SFO6SO-SFO-6SO-V6SO

Packed Red Blood Cells - Now

Ordered		Start
08/26/13 1242	**BLOOD BANK COMMUNICATION** [436642948] Comments: RN- Do not discontinue this order. Ordering Provider: Andrews, Elizabeth Ann (M.D.)	08/26/13 1245

Question	Answer	Comment
Informed consent obtained: The advantages, risks, and complications of transfusion therapy, as well as the alternatives (including no transfusion), have been explained to the patient and/or family.	Yes	
Paul Gann Blood Documentation:	Not enough time to pre-donate	
Special Requirements:	None	
Were autologous units requested?	No	

Need Blood Bank Communication and Transfuse order

Ordered		Start
08/26/13 1242	**TRANSFUSE PACKED RED BLOOD CELLS Number of units to Type and Cross: 1 This is an order to type, cross-match and transfuse NOW. RN- when you have completed ALL ordered transfusions please complete or clean up this order.** [436642949] Comments: This is an order to type, cross-match and transfuse NOW. RN- when you have completed ALL ordered transfusions please complete or clean up this order. No results found for this basename: hgb, hct Ordering Provider: Andrews, Elizabeth Ann (M.D.)	08/26/13 1245

Question	Answer	Comment
Priority:	ROUTINE	
Number of units to Type and Cross	1	
Number of units to Transfuse now:	1	
Reason for Transfusion:	Other (Please Specify)	
Symptomatic?	Yes	
Rate of Transfusion for each unit:	4 HRS	

Attestation

I CERTIFY THAT THE PATIENTS BLOOD SPECIMEN IS LABELED CORRECTLY AND DRAWN ACCORDING TO POLICY

Signature: _____ Logon ID: _____ Date/Time Drawn: _____

Date/Time Received: _____ COMMENTS: _____

LAB USE:
History Check - RILIS (initial): _____ History Check - CIPS (initial): _____ LABEL CHECK (initial): _____

OK for EXM (circle one): Yes / No / NA / Other: _____ | Initials: _____

COMMENTS: _____

NOTIFIED: _____

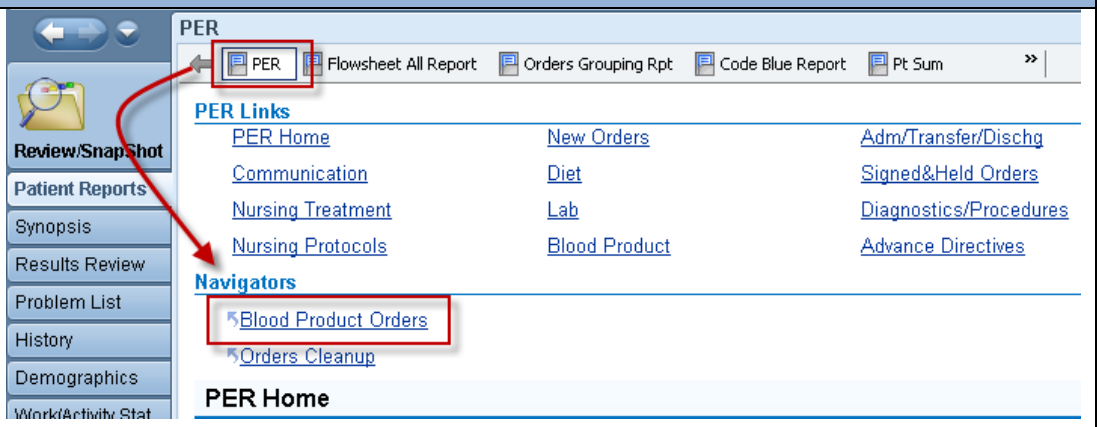
Important

- It is very important to read all information presented by KP HealthConnect and select all appropriate options so the **Blood Product Requisition** accurately reflects the product as ordered for the patient.
- The order is printed correctly when the order contains both the **Transfuse order** and the **Blood Bank Communication** together.
- For **patient safety, positive identification protocol must be followed** at all times e.g. blood draw and blood administration.

KP HealthConnect
BLOOD PICK UP SLIP PROCESS
Accessing Blood Transfusion Orders

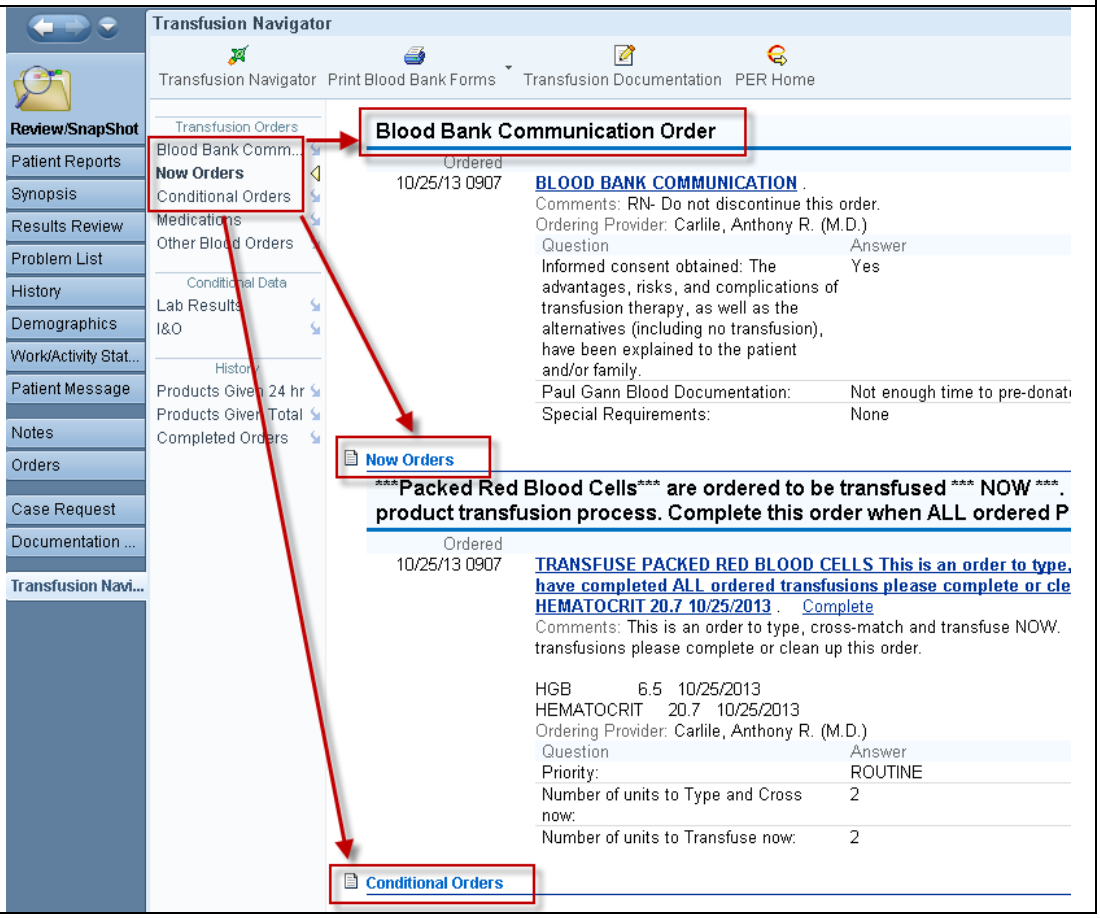
In order to pick up blood from the Blood Bank, the appropriate Blood Pick Up Slip must be printed from the **Transfusion Navigator** and the nurse must sign and date the attestation.

1. Open the patient's chart and open the **PER**.
2. In the **Navigators** section, click the **Blood Product Orders** link. The Transfusion Navigator displays.



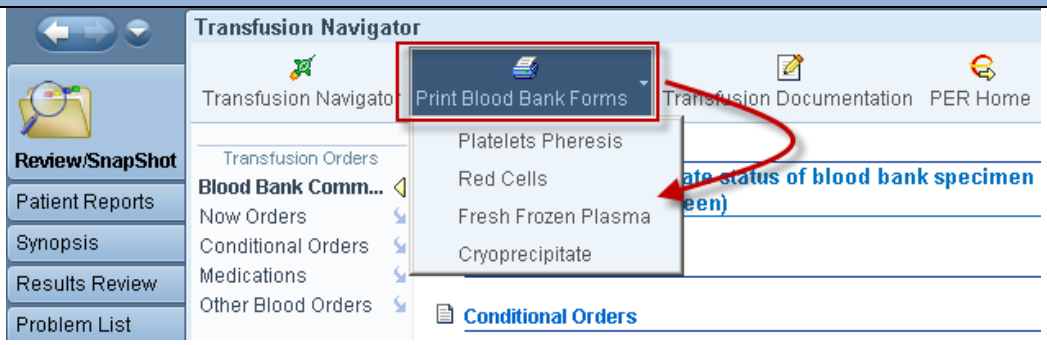
3. In the **Transfusion Navigator, Transfusion Orders** section, click the **Blood Bank Communication** link.

4. Review the specifics of the blood orders as appropriate click the **Now Orders** or **Conditional Orders** link.



KP HealthConnect
BLOOD PICK UP SLIP PROCESS
Printing Blood Pick Up Slip

5. On the **Transfusion Navigator** toolbar click the **Print Blood Bank Forms** button. A dropdown list of blood product options display. Select the blood product that corresponds to the ordered blood product.



Important

Carefully read the blood product order and review for type of product and Now or Conditional.

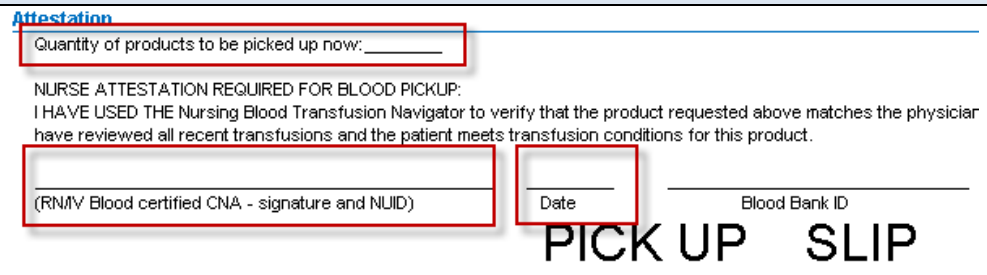
6. The **Requisition (product)** window displays multiple options for **Pick up Slips.** Select the appropriate **Pick up Slip** and click the **Print** button.

7. An alert displays indicating the selected **Pick Up Slip** successfully submitted for printing. Click **OK** the **Pick Up Slip** prints to the local printer.

Important

The order is printed correctly when the order contains both the **Transfuse order** and the **Blood Bank Communication** order together.

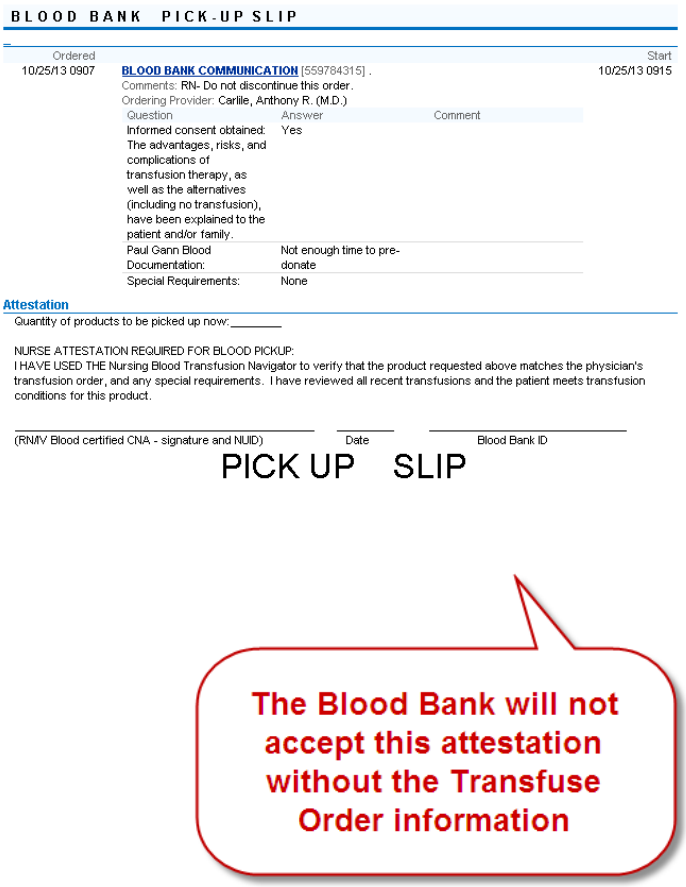
8. The nurse reviews the printed **Blood Product Pick Up Slip** and if all information is correct enters the quantity to be picked up, signs and dates the **Attestation**.



KP HealthConnect
BLOOD PICK UP SLIP PROCESS
Review and sign Blood Pick Up Slip

Not Correct | **Correct**

Not Correct: No Transfuse Order information



BLOOD BANK PICK-UP SLIP

Ordered 10/25/13 0907 — Start 10/25/13 0915

BLOOD BANK COMMUNICATION [559784315] .
Comments: RN- Do not discontinue this order.
Ordering Provider: Carlile, Anthony R. (M.D.)

Question	Answer	Comment
Informed consent obtained: The advantages, risks, and complications of transfusion therapy, as well as the alternatives (including no transfusion), have been explained to the patient and/or family.	Yes	
Paul Gann Blood Documentation:	Not enough time to pre-donate	
Special Requirements:	None	

Attestation

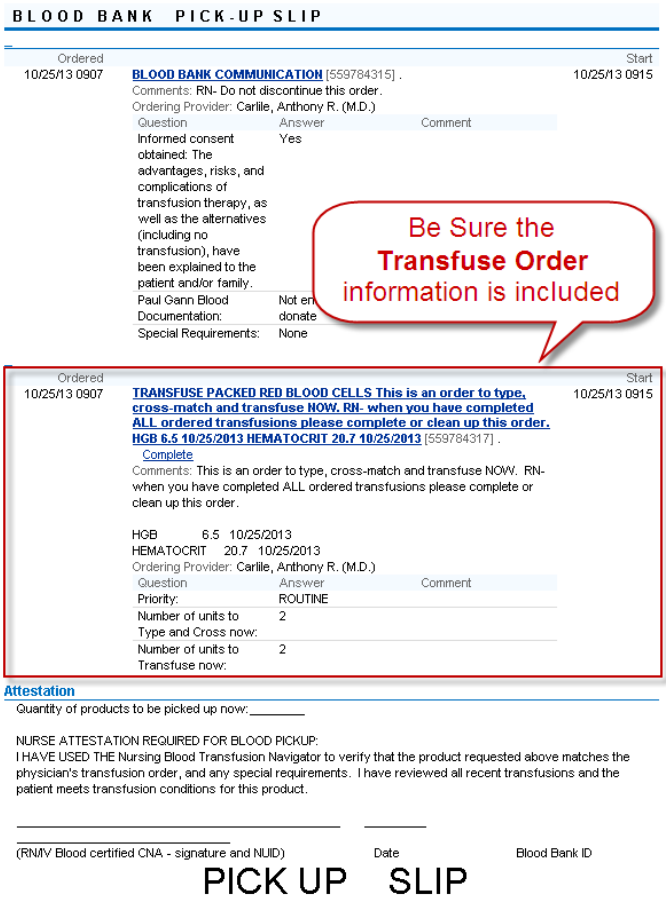
Quantity of products to be picked up now:_____

NURSE ATTESTATION REQUIRED FOR BLOOD PICKUP:
I HAVE USED THE Nursing Blood Transfusion Navigator to verify that the product requested above matches the physician's transfusion order, and any special requirements. I have reviewed all recent transfusions and the patient meets transfusion conditions for this product.

(RN/IV Blood certified CNA - signature and NUID) Date Blood Bank ID

PICK UP SLIP

The Blood Bank will not accept this attestation without the Transfuse Order information



BLOOD BANK PICK-UP SLIP

Ordered 10/25/13 0907 — Start 10/25/13 0915

BLOOD BANK COMMUNICATION [559784315] .
Comments: RN- Do not discontinue this order.
Ordering Provider: Carlile, Anthony R. (M.D.)

Question	Answer	Comment
Informed consent obtained: The advantages, risks, and complications of transfusion therapy, as well as the alternatives (including no transfusion), have been explained to the patient and/or family.	Yes	
Paul Gann Blood Documentation:	Not en donate	
Special Requirements:	None	

Be Sure the **Transfuse Order** information is included

Ordered 10/25/13 0907 — Start 10/25/13 0915

TRANSFUSE PACKED RED BLOOD CELLS This is an order to type, cross-match and transfuse NOW. RN- when you have completed ALL ordered transfusions please complete or clean up this order.
HGB 6.5 10/25/2013 HEMATOCRIT 20.7 10/25/2013 [559784317] .
Complete
Comments: This is an order to type, cross-match and transfuse NOW. RN- when you have completed ALL ordered transfusions please complete or clean up this order.

HGB 6.5 10/25/2013
HEMATOCRIT 20.7 10/25/2013
Ordering Provider: Carlile, Anthony R. (M.D.)

Question	Answer	Comment
Priority:	ROUTINE	
Number of units to Type and Cross now:	2	
Number of units to Transfuse now:	2	

Attestation

Quantity of products to be picked up now:_____

NURSE ATTESTATION REQUIRED FOR BLOOD PICKUP:
I HAVE USED THE Nursing Blood Transfusion Navigator to verify that the product requested above matches the physician's transfusion order, and any special requirements. I have reviewed all recent transfusions and the patient meets transfusion conditions for this product.

(RN/IV Blood certified CNA - signature and NUID) Date Blood Bank ID

PICK UP SLIP

Important

- It is very important to read all information presented by KP HealthConnect and select all appropriate options so the **Blood Product Pick up** slip accurately reflects the product as ordered for the patient.
- The order is printed correctly when the order contains both the **Transfuse order** and the **Blood Bank Communication** order together.
- For patient safety and to ensure product availability, before the nurse signs the **Attestation** section of the **Blood Product Pick Up Slip** review all relevant information.

Example of KP HealthConnect Order Details for ABORh, DAT and Cord ABORh & DAT

Sfovalidation Ncalsfo-Q
33 y.o. / Female (4/1/1980) MRN: **110020000293**

Order **ABO-RH (MEDICAL CENTER). [211282] (Order 436642950)**

Order Details

Frequency	Duration	Priority	Order Class
COLLECT NOW-STAT.	1 occurrence	Routine	Inpatient

Order History Inpatient

Date/Time	Action Taken	User	Additional Information
08/26/13 1243	Sign	Tanamachi, Jared (R.N.)	Ordering Mode: Within Role/Scope (No Cosign)
08/26/13 1243	Release Instance	Tanamachi, Jared (R.N.)	Released Order: 436642951

Released Orders

	Released On	Scheduled For	Released By
1.	Released order #436642951	Mon Aug 26, 2013 12:45 PM	Tanamachi, Jared (R.N.)

Additional Info

Patient Department	Order Source
SFO-6SO* >HOSPITAL	Clinician Orders

Start/End Information

Start Date/Time	End Date/Time
8/26/2013 12:45 PM	8/26/2013 12:45 PM

Standing Order Information

Remaining Occurrences	Interval	Last Released
0/1	COLLECT NOW-	8/26/2013

ANDREWS, ELIZABETH ANN (M.D.) AN

Authorizing Provider ID
11000

Encounter

View Encounter

Status of Other Orders

Recipients of Results in Inbasket

Blood Drawer must sign/initial/NUID and write collection date and time to match specimen

For Cord ABORh and DAT Attach Mother's generic label and write her blood type

Example of KP HealthConnect Requisition (Attestation) for Type and Crossmatch

Ncalsfo-Q, Sfovalidation (MR # 110020000293) DOB: 04/01/1980

SFO-6SO-V6SO-V6SO-01

Order

TYPE AND CROSSMATCH (Order 436642944)

Order Information

Date	Ordering	Authorizing	Department
8/26/2013	Tanamachi, Jared (R.N.)	Andrews, Elizabeth Ann (M.D.)	Sfo-6so* >Hospital

Order Questions

Question	Answer	Comment
Priority:	**ROUTINE**	
Indications?	**bleeding**	
Special Requirements:	**None**	
Were autologous units requested?	**No**	
Number of units to Type and Cross:	**1**	

ATTESTATION

I CERTIFY THAT THE PATIENTS BLOOD SPECIMEN IS LABELED CORRECTLY AND DRAWN ACCORDING TO POLICY

Signature: _____ Logon ID: _____ Date/Time Drawn: _____

Date/Time Received: _____ COMMENTS: _____

LAB USE:

History Check - RILIS (initial): _____ History Check - CIPS (initial): _____ LABEL CHECK (initial): _____

OK for EXM (circle one): Yes / No / NA / Other: _____ Initials: _____

COMMENTS: _____

NOTIFIED: _____

Page 1 of 1

Example of KP HealthConnect Requisition (Attestation) for Type and Screen

Ncalsfo-Q, Sfovalidation (MR # 110020000293) DOB: 04/01/1980 SFO-6SO-V6SO-V6SO-01

Order **TYPE AND SCREEN (Order 436642952)**

Order Information

Date	Ordering	Authorizing	Department
8/26/2013	Tanamachi, Jared (R.N.)	Andrews, Elizabeth Ann (M.D.)	Sfo-6so* >Hospital

Order Questions

Question	Answer	Comment
Priority:	**STAT**	
Indications?	**Blood loss**	
Special Requirements:	**None**	

ATTESTATION

I CERTIFY THAT THE PATIENTS BLOOD SPECIMEN IS LABELED CORRECTLY AND DRAWN ACCORDING TO POLICY

Signature: _____ Logon ID: _____ Date/Time Drawn: _____

Date/Time Received: _____ COMMENTS: _____

LAB USE:

History Check - RILIS (initial): _____ History Check - CIPS (initial): _____ LABEL CHECK (initial): _____

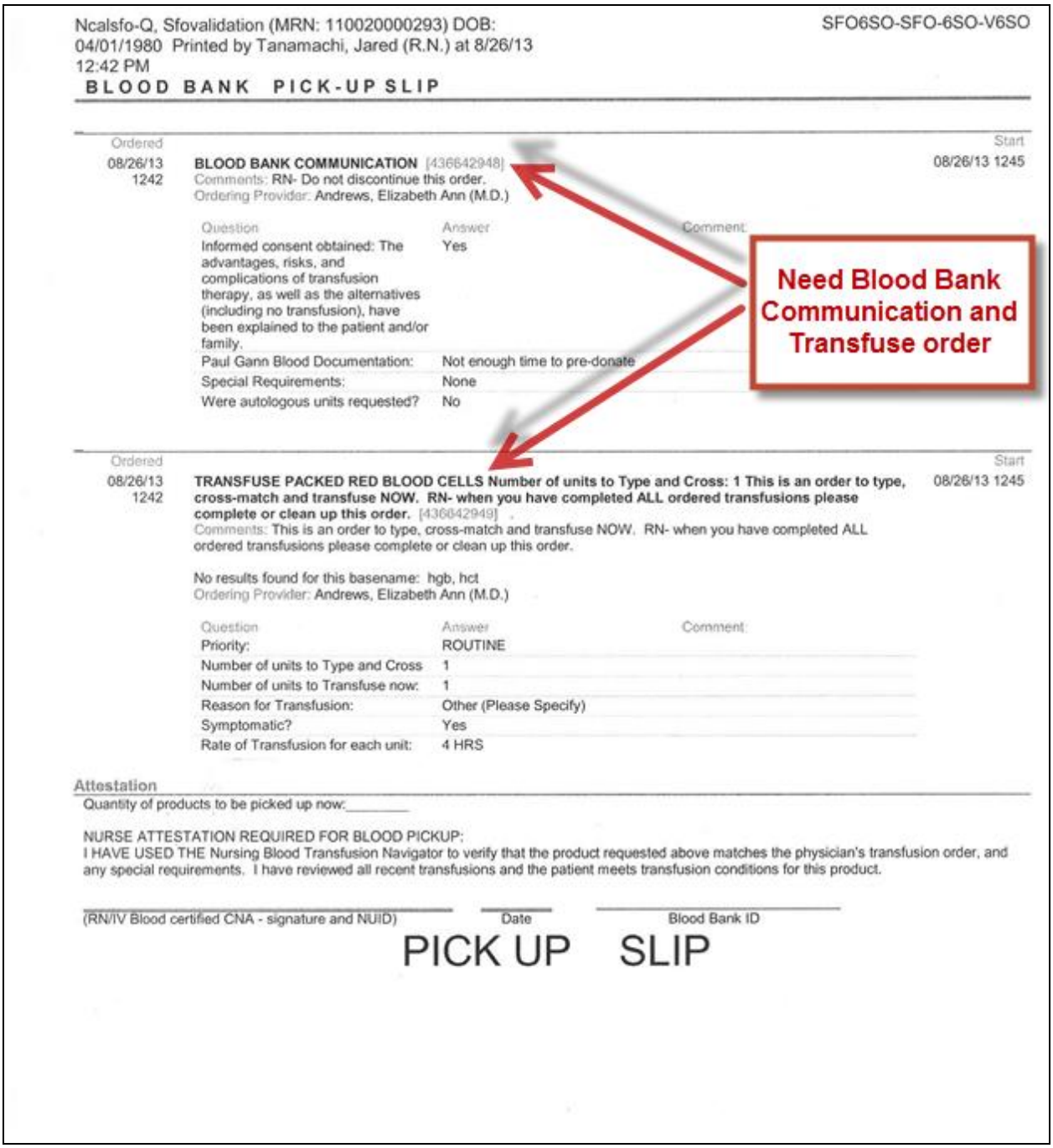
OK for EXM (circle one): Yes / No / NA / Other: _____ Initials: _____

COMMENTS: _____

NOTIFIED: _____

Page 1 of 1

Example of KP HealthConnect Pick-up slip for Transfuse blood product



Ncalsfo-Q, Sfovalidation (MRN: 110020000293) DOB: 04/01/1980 Printed by Tanamachi, Jared (R.N.) at 8/26/13 12:42 PM

SFO6SO-SFO-6SO-V6SO

BLOOD BANK PICK-UP SLIP

Ordered		Start
08/26/13 1242	**BLOOD BANK COMMUNICATION** [436642948] Comments: RN- Do not discontinue this order. Ordering Provider: Andrews, Elizabeth Ann (M.D.)	08/26/13 1245

Question	Answer	Comment
Informed consent obtained: The advantages, risks, and complications of transfusion therapy, as well as the alternatives (including no transfusion), have been explained to the patient and/or family.	Yes	
Paul Gann Blood Documentation:	Not enough time to pre-donate	
Special Requirements:	None	
Were autologous units requested?	No	

Need Blood Bank Communication and Transfuse order

Ordered		Start
08/26/13 1242	**TRANSFUSE PACKED RED BLOOD CELLS Number of units to Type and Cross: 1 This is an order to type, cross-match and transfuse NOW. RN- when you have completed ALL ordered transfusions please complete or clean up this order.** [436642949] Comments: This is an order to type, cross-match and transfuse NOW. RN- when you have completed ALL ordered transfusions please complete or clean up this order. No results found for this basename: hgb, hct Ordering Provider: Andrews, Elizabeth Ann (M.D.)	08/26/13 1245

Question	Answer	Comment
Priority:	ROUTINE	
Number of units to Type and Cross	1	
Number of units to Transfuse now:	1	
Reason for Transfusion:	Other (Please Specify)	
Symptomatic?	Yes	
Rate of Transfusion for each unit:	4 HRS	

Attestation

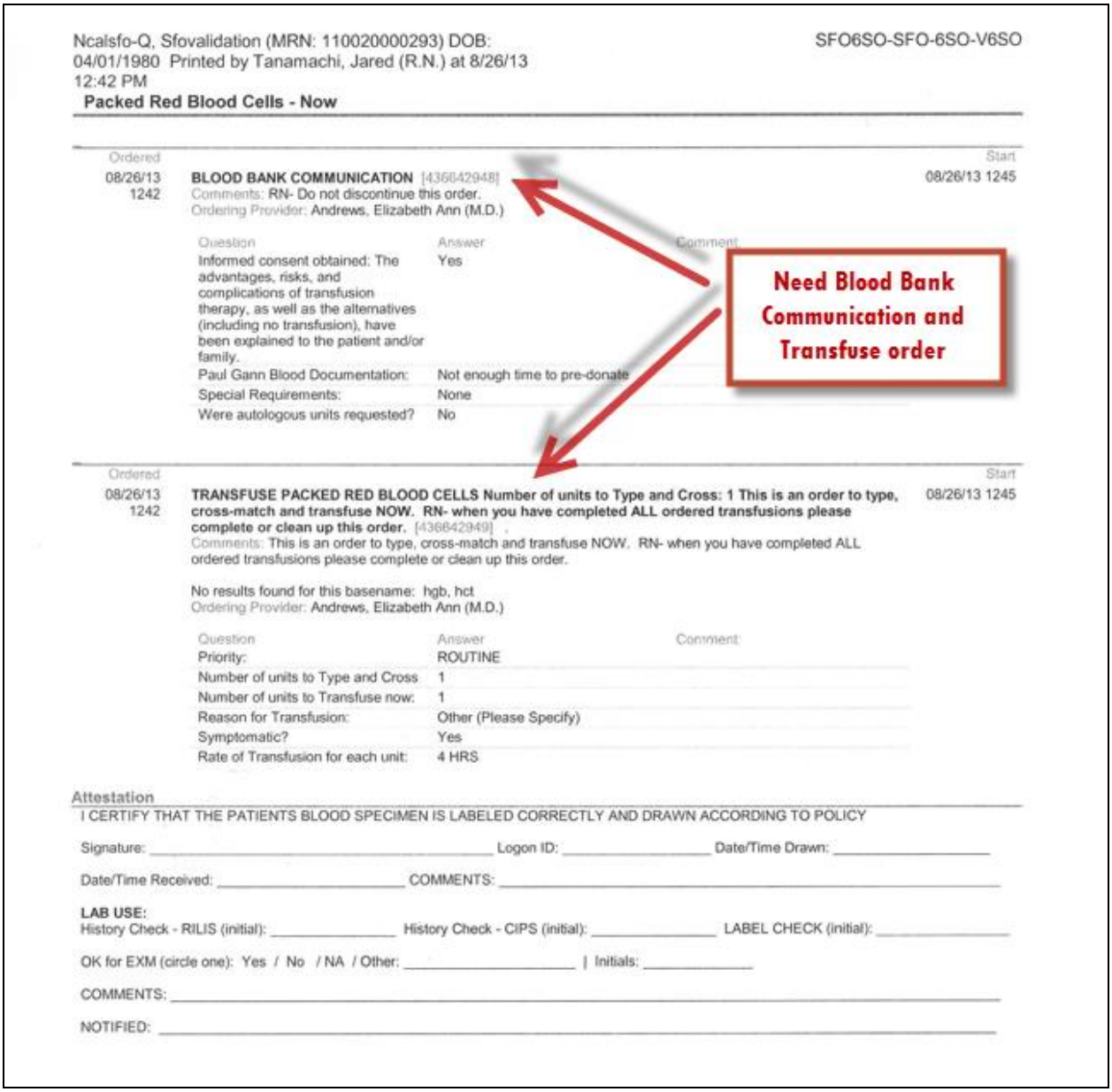
Quantity of products to be picked up now:_____

NURSE ATTESTATION REQUIRED FOR BLOOD PICKUP:
I HAVE USED THE Nursing Blood Transfusion Navigator to verify that the product requested above matches the physician's transfusion order, and any special requirements. I have reviewed all recent transfusions and the patient meets transfusion conditions for this product.

(RN/IV Blood certified CNA - signature and NUID) Date Blood Bank ID

PICK UP SLIP

Example of KP HealthConnect Requisition (Attestation) for Transfuse blood product



Ncalsfo-Q, Sfovalidation (MRN: 110020000293) DOB: 04/01/1980 Printed by Tanamachi, Jared (R.N.) at 8/26/13 12:42 PM

SFO6SO-SFO-6SO-V6SO

Packed Red Blood Cells - Now

Ordered		Start
08/26/13 1242	**BLOOD BANK COMMUNICATION** [436642948] Comments: RN- Do not discontinue this order. Ordering Provider: Andrews, Elizabeth Ann (M.D.)	08/26/13 1245

Question	Answer	Comment
Informed consent obtained: The advantages, risks, and complications of transfusion therapy, as well as the alternatives (including no transfusion), have been explained to the patient and/or family.	Yes	
Paul Gann Blood Documentation:	Not enough time to pre-donate	
Special Requirements:	None	
Were autologous units requested?	No	

Need Blood Bank Communication and Transfuse order

Ordered		Start
08/26/13 1242	**TRANSFUSE PACKED RED BLOOD CELLS Number of units to Type and Cross: 1 This is an order to type, cross-match and transfuse NOW. RN- when you have completed ALL ordered transfusions please complete or clean up this order.** [436642949] Comments: This is an order to type, cross-match and transfuse NOW. RN- when you have completed ALL ordered transfusions please complete or clean up this order. No results found for this basename: hgb, hct Ordering Provider: Andrews, Elizabeth Ann (M.D.)	08/26/13 1245

Question	Answer	Comment
Priority:	ROUTINE	
Number of units to Type and Cross	1	
Number of units to Transfuse now:	1	
Reason for Transfusion:	Other (Please Specify)	
Symptomatic?	Yes	
Rate of Transfusion for each unit:	4 HRS	

Attestation

I CERTIFY THAT THE PATIENTS BLOOD SPECIMEN IS LABELED CORRECTLY AND DRAWN ACCORDING TO POLICY

Signature: _____ Logon ID: _____ Date/Time Drawn: _____

Date/Time Received: _____ COMMENTS: _____

LAB USE:

History Check - RILIS (initial): _____ History Check - CIPS (initial): _____ LABEL CHECK (initial): _____

OK for EXM (circle one): Yes / No / NA / Other: _____ | Initials: _____

COMMENTS: _____

NOTIFIED: _____

TRANSFUSION SERVICE

The AABB standards, College of American Pathologists (CAP) accreditation requirements, Federal and State regulatory requirements, and Kaiser Regional LQC recommendations serve as the basic guidelines for policies and procedures of the Kaiser San Francisco Transfusion Service.

1.0 General Policies

1.1 A severe hemolytic transfusion reaction may result when transfused blood is recognized as "foreign" by the recipient's immune system. The most common cause of this adverse event is clerical error. For this reason, strict compliance with Blood Bank procedure and policies is critical for safe patient care. If patient's blood specimen and the requisition are not legibly labeled or correctly completed as outlined below, they will be rejected by the Transfusion Service. Each specimen must be accompanied by a matching requisition at the time of receipt or it will be rejected. The Transfusion Service has a "zero tolerance" policy in regards to patient identification and sample labeling errors.

1.2 Positive Patient Identification

A requisition must be generated prior to phlebotomy. Patient identity must be positively established at the time of draw by matching the identifying information (full name and medical record number) on the requisition to the patient's armband, specimen label and if possible, patient's verbal statement of his/her full name. Patient's full name and MRN as well as the phlebotomy information (blood drawer's identity, draw date and time) on both specimen and requisition should be identical and completed legibly at the bedside.

1.3 "Double Check"

a) Policy: Every patient who has no previous blood type on file when the initial request/specimen is received, will require a second specimen to be drawn for ABO/Rh confirmation before type specific blood products will be released. Double Check specimen should only be drawn when notified by the Transfusion Service. This specimen must be separately identified and separately drawn at a different time preferably by a different blood drawer from the first sample, signed, with date and time of collection. A reprint of the original requisition can be used to identify the patient, then completed with matching phlebotomy information to accompany the Double Check specimen. In addition, a sample is required for ABORh confirmation if FFP is ordered for patient whose blood type has not been tested within the current hospital admission.

b) Rationale: As stated above, clerical error is the leading cause of potentially fatal hemolytic transfusion reaction. Errors can occur in the identification

of the patient, the labeling of the specimens and requisitions, or in the recording/transcribing of ABO/Rh results in the Laboratory. One of the best way to detect these errors is comparison of the current ABORh to the historical record. The intention of the Double Check policy is to reduce the risk of transfusing the wrong blood type by testing a second specimen.

1.4 Crossmatched PRBCs on a patient will automatically be cancelled when the Type&Screen expires or when patient is discharged before sample expiration. Blood products returned from surgery may be released to inventory per protocol.

1.5 In general, when multiple blood transfusions are given over a period of days, a new specimen is required for compatibility testing every 3 days, except for newborns less than four months of age.

1.6 Blood Product dispense policy:

a) Blood products will not be issued if the patient does not have a DBCK (or two ABORh) except for Emergency Release.

b) As a general rule, only a single unit of blood product will be released at one time for one patient.

c) Blood products will not be issued to hospital nursing units unless transfusion is imminent.

d) Under ***no*** circumstances may blood products be stored in refrigerators on nursing units.

e) Blood and blood products must be returned to the Transfusion Service within thirty minutes of issue if transfusion is delayed.

f) Blood products will not be issued without a HealthConnect 'Transfuse' order or a legibly completed pink manual Blood Bank Product Pickup slip ***except*** in a emergency situation where any piece of paper (with patient's **full** name and **MRN**) can serve as a pickup slip.

g) Exceptions: More than one blood product for a patient can be dispensed under the following circumstances.

i. Patient(s) in CVOR or O.R

ii. An emergency situation which requires infusion of multiple blood products within a short time.

iii. Patients in the Emergency Department, Labor & Delivery, or outpatient settings such as the Infusion Center, Oncology or Dialysis Centers when the following conditions are met:

- Each PRBCs must have attached temperature indicators

and must be transported in validated coolers.

iv. Massive Transfusion Protocol

Note: Blood product for multiple patients can be dispensed to outpatient departments only if they are transported in separate coolers.

1.7 All blood or blood product requests in support of scheduled surgery should be submitted at the latest to Transfusion Service by 2 p.m. the day prior to surgery.

1.8 Exchange Transfusions

a) The recommended product for routine exchange transfusion of infants is fresh (preferably less than 5 days old blood) Irradiated, CMV negative, Hgb S negative, O negative RBCs reconstituted with freshly thawed ABO compatible fresh frozen plasma (FFP). Other ABORh selection can be requested only with the approval of the pathologist or designee. As Transfusion Service ***no*** longer reconstitutes whole blood, one unit of packed RBC and 1-2 units of FFP will be issued when such an order is received.

1.9 **RhoGAM**: Since HealthConnect implementation at SFO in May of 2009, RhoGAM request should be submitted to Pharmacy. Please refer to Nursing protocol regarding RhoGAM workflow.

1.10 **Special Requirements** (CMV Negative and Irradiated blood product) Please refer to the attached Regional policy for ordering guidelines.

TPMG-Transfusion-CMV-neg-and-Irradi

http://lablink.ca.kp.org/quality-and-compliance/Regional-Blood-Management-Program/

2.0 **Products Available**: The following products are available from the Transfusion Service:

2.1 *Non-Commercial*

a) Packed Red Blood Cells (CMV-, Irradiated by special request)
b) Whole Blood (Autologous or Designated Donation only)
c) Tri-Packs of packed Red blood cells for neonates or infants.
d) *Washed Red Blood Cells (Expire within 24 hours)
e) Single Donor Platelet Pheresis, Leukopoor (CMV-, Irradiated by special request)
f) *Dried Platelet Pheresis
g) Fresh Frozen Plasma (Jumbo FFP is not available at SFO)
h) Cryoprecipitate
i) Cryopoor Plasma (by special request)

NOTE: Products designated '*' may required Transfusion Service Medical Director's or pathologist's approval prior to set up.

3.0 Methods of Ordering Blood and Blood Components

All Blood Bank orders require paper requisitions submitted to the Transfusion Service laboratory. HealthConnect Blood Bank orders DO NOT LOAD to the Laboratory computer system or Fax machine.

3.1 'Routine' requests:

a) **Submit the Transfusion Service HealthConnect requisition either via fax, dumbwaiter, pneumatic tube system, or hand delivered.** When HealthConnect or printer is down, complete a manual Transfusion Service Laboratory form (see 'Guidelines for Selection & Completion of Lab requisitions' in this manual). The following information *must* be provided (see 'Criteria for Rejection' in this section).
   i. Patient's full name and MRN
   ii. Name and 5-digit ID of requesting physician
   iii. **Signature, initials or NUID of phlebotomist**
   iv. Date and time the specimen was drawn.

b) Additional information which *should* be provided on manual requisition (failure of which may result in delay of blood products).
   i. Number and type of blood products needed
   ii. Date and time of anticipated transfusion
   iii. *Always* include the date of surgery. For appropriate utilization, the **M**aximum **S**urgical **B**lood **O**rdering **S**chedule (**MSBOS**) is available as a reference guide for ordering blood products.
   iv. Patient location (department or room number)
   v. Extension to be called when order priority is ME (life-threatening) or ASAP (STAT)
   vi. Age / gender
   vii. Diagnosis / any underlying disease / current medications (use comment section on form)

c) The **patient's blood sample label** *should* include the following (see 'Criteria for Rejection' in this section):
   i. Patient's **full name** and **MRN**
   ii. **Date** and **time** of sample collection
   iii. **Signature, initials or NUID of phlebotomist**

   ***IMPORTANT*:** Clerical error is the leading cause of potentially fatal hemolytic transfusion reaction. Therefore, the phlebotomist must ensure that all patient identifying information on the requisition matches the patient ID wristband and sample label before drawing blood. If the patient is able, he/she should be asked to state his/her full name. The phlebotomist must label the tube with patient's identification and sign, write the draw date and time on both sample and requisition at the bedside immediately after drawing the sample.

d) **Cord blood label** must have the mother's last name and the gender of the baby (Male or Female), MRN, time/date and the signature of the person who collected the cord blood. It must also be accompanied by a paper requisition with matching patient identification and collection information. "Zero tolerance" policy applies.

e) It is recommended that samples for compatibility testing be drawn from a fresh venipuncture site, ***not*** from IV tubing or the contiguous vein. However, if sample must be drawn from a tubing, the tubing should be flushed with saline and the first 5 ml of blood discarded. Samples should be carefully drawn to minimize hemolysis (an indicator of donor/recipient incompatibility). If patient is on medication, particularly anticoagulants, antibiotics, or Aldomet, please indicate on the request form.
   i. ADULTS - Submit a **full 6 ml EDTA**. *SST tubes are not acceptable*.
   ii. CHILDREN (4 mos.-8 yr.) - Submit a **2.5 ml EDTA**.
   iii. INFANT (0-4 mos.) -
      - Compatibility Testing (TS or TX - One **6 ml EDTA maternal blood** and **500 ul EDTA microtainer from the infant**. If maternal specimen is not available, **1.5 ml EDTA from the baby** is needed.
      - DAT and ABO/Rh – Minimum of **250 ul EDTA microtainer**.
      - After the age of four months, infants are regarded as children for the purpose of compatibility testing.

f) **Crossmatched RBCs and Reserved blood products.**
   i. In general, crossmatched RBCs will be released when the current Type & Screen expires which is usually 3 days after the specimen draw date.
   ii. Short dated crossmatched blood products may be released to inventory sooner than the 3 days specified above. The blood products will be replaced if transfusion is still needed.
   iii. Reserved platelet pheresis or plasma products may be released to inventory after verifying order cancellation with the RN/MD. Transfusion Service does ***not*** have a specific time frame for holding these blood products unless the transfusion date and time is stated on the requisition.
   iv. Transfusion Service does ***not*** honor 'Hold at all times' request due to compliance requirements and inventory management issues.
   v. Blood products returned from surgery may be released to inventory per protocol.

3.2 **Life-threatening or ME request:**

a) The use of this request priority should be reserved for those instances where the need for transfusion of blood or blood components is immediate

but the emergency release of uncrossmatched blood is not required. Upon receipt of a properly labeled specimen and requisition, compatibility testing can be completed in approximately 45 minutes. A phone call to the Transfusion Service prior to receipt of the specimen will alert the staff to process these requests in a more efficient manner.

b) Urgent requests for certain blood components must take into consideration certain inherent processing delays. Fresh frozen plasma requires thirty minutes to thaw. Cryoprecipitate requires slightly less thawing time. Platelets are supplied by Blood Centers of the Pacific and their availability is sometimes delayed due to transport time (usually 15 minutes to ½ hour) and also subject to seasonal variability in donation frequency.

3.3 **Emergency Release of Uncrossmatched Blood:**

a) Compatibility testing will be completed in approximately 45 minutes, (if the patient's antibody screen is negative) after receipt of a properly labeled specimen and requisition.

b) If the physician cannot accept this delay, he/she must accept responsibility for the release of uncrossmatched blood by signing a release document *prior to or immediately after* the emergency dispense. Compatibility testing will be started immediately upon receipt of a properly labeled specimen and requisition. The physician will be notified of incompatible results within 15 minutes of discovery or the completion of testing.

c) If a properly identified sample and requisition are received and time/circumstance permits, the sample will be typed for ABORh and type specific blood can be released if the patient has two completed ABORh typings. A 'Double Check' specimen is required for all patients who have no previous ABORh history.

d) If the situation does not allow for this delay, or if the patient's identity cannot be established, type O, Rh negative PRBCs will be dispensed to the extent possible without depleting stock inventory, followed by type O, Rh Positive PRBCs.

3.4 **Type and Screen:**

a) Physicians are recommended to request 'Type and Screen' in those cases where transfusion of blood is possible but unlikely.

b) In these cases, the Transfusion Service will perform ABORh and antibody screen testing on the patient's sample. ***No*** compatibility testing (***no*** RBCs will be crossmatched) will be done.

c) If transfusion becomes necessary, crossmatched units may be available at the soonest five minutes after receipt of the appropriate requisition if the patient has no special requirements.

3.5 **Neonatal transfusion**:

a) Units for infants less than 4 months of age are selected based on the mother's negative antibody screen. Two ABORh are required before the dispensing of any blood products. No further testing is practical or required until the child reaches 4 months of age unless the patient was discharged after the initial testing.

4.0 Criteria for Rejection of Transfusion Service Requisition(s) and Patient Specimen(s)

4.1 Order(s) *will not be processed* by the Transfusion Service if there is *any* discrepancy in the required information on the requisition and/or specimen label.

4.2 All specimens must be accompanied with the appropriate requisitions at the time of receipt.

4.3 ***Requisitions:*** The following information *should* be on the requisition(s).

a) The First and Last name of the patient.
b) The patient's medical record number.
c) The name and 5-digit ID of the requesting physician.
d) The signature, initials or NUID of the phlebotomist.
e) The date and time when the sample was drawn.

NOTE: When sending ***HealthConnect requisition***, please make sure it is the form with the ***attestation box***.

4.4 ***Patient's Specimen(s):*** Blood samples must be collected in a stoppered EDTA 6 mL tube affixed with a lengthwise label bearing the following information:

a) The First and Last name of the patient.
b) The patient's medical record number.
c) The signature, initials or NUID of the phlebotomist.
d) The date and time when the sample was drawn.

4.5 Transfusion Service only accepts specimens that are completely, accurately and legibly labeled.

a) Redraw will be requested if there is any conflicting or doubtful information.
b) Specimens which have name and/or MR# error(s) will be discarded.
c) Specimens that accompanied requisitions with MR# or name errors will be discarded.
d) Specimens with draw date errors will be discarded.
e) Specimens that arrive in lab without accompanying requisitions will be discarded.

4.6 Double Check specimen drawn ***prior to notification*** by Transfusion Service may be rejected.

5.0 Pick up of Blood or Blood Products

5.1 General Policy:

a) Nursing personnel must pick up the blood / blood products ordered.

b) Pick-up personnel must bring the appropriately filled out HealthConnect 'Transfuse' pick-up form or the manual pink Blood Product Pickup form to Transfusion Service. The manual pink form must have the patient's full name and MRN, quantity and type of blood product(s), initial of a licensed person (RN/MD) and date. The HealthConnect pick-up form must have the 'Transfuse' order, the Blood Bank Communication and the completed Nurse Attestation. In addition, the information on the pick-up form must be legible or it will be rejected.

c) Pick-up personnel must review the following information: patient's full name, MRN, patient's and unit's ABORh, unit#, component code, expiration date, crossmatch interpretation, and special requirement(s) (when applicable), with the Transfusion Service personnel for each unit, and sign the Product Chart Copy of each unit received.

d) The yellow copy of the Product Chart Copy remains in the Transfusion Service while the white copy accompanies the unit for further nursing documentation (if applicable) at the time of transfusion.

5.2 Inpatient (non- surgery):

a) Blood/blood products should be picked up only when transfusion is imminent.

b) Blood products cannot be dispensed for more than one patient at a time. Only one unit of blood product at a time may be picked up per patient, unless the patient has two IV's lines or the units will be rapidly transfused (within 30 minutes of dispense).

5.3 Surgery:

a) The runner takes the units which have temperature indicators attached, with the Product Chart Copies, directly to the OR. The PRBCs are stored in temperature monitored OR refrigerator until needed or returned to Transfusion Service at end of case if unused.

5.4 Outpatient (clinics and infusion center):

a) PRBCs are dispensed in a validated cooler labeled with the patient's name. Each cooler contains PRBCs for only one patient.

b) Nurse will make sure the attached temperature indicator on the back of the

PRBCs is not red before starting the transfusion.

6.0 Administration of blood or blood products

Please refer to Regional Policy SF-LAB-01-02 for detailed instructions.
NOTE: When HealthConnect is not available, the accompanying Product Chart Copy should be used for documentation of blood administration.

6.1 General Policy

Immediately prior to starting a transfusion,

a) The responsible physician or RN must ensure the identity of the recipient by confirming ***at the patient's bedside***, that the information on the patient ID wristband, donor unit, unit label and Product Chart Copy are in agreement and document in HealthConnect. (Refer to SF-LAB-01-02).

b) A second person must confirm both the recipient and unit identification, and document in HealthConnect.

c) ***Any discrepancy must be resolved prior to transfusion*.** If a clerical error has been made in the dispense of the blood product, immediately notify the Transfusion Service—**A SECOND PATIENT MAY ALSO HAVE BEEN ISSUED THE WRONG UNIT**.

d) The pre-transfusion vital signs' baseline: pulse, temperature, and blood pressure, must be recorded in the patient's chart within 60 minutes prior to the start of the transfusion. Document in HealthConnect.

e) No medications of any kind may be added to a unit of blood or blood product. Blood may not be mixed with intravenous solutions other than normal saline, otherwise significant hemolysis of the transfused red cells may occur as a result.

f) All cellular blood products are leukocyte-reduced. On rare occasion and under special circumstances, Transfusion Service may dispense non-leukocyte reduced product collected by a donor center other than the contracted blood supplier.

6.2 During the transfusion:

a) The responsible transfusor should remain in close proximity and the patient should be monitored for the first 15 minutes of the transfusion.

b) Vital signs must be taken within15 minutes of the start of transfusion.

c) If there is significant change in the vital signs, transfusion must be stopped immediately and a doctor notified. Refer to section for Transfusion Reactions.

d) The vital signs should be recorded in HealthConnect.

6.3 **After the transfusion:**

a) The vitals signs must be taken again within 60 minutes of transfusion completion and document in HealthConnect.

6.4 **Transfusion in OR/CVOR:** Any unused units must be returned to the Transfusion Service immediately after surgery.

7.0 Return of unused Blood/ Blood Products and Paperwork

7.1 RBC units which ***have not*** been stored in a monitored 1-6 °C environment, e.g. most inpatient units:

a) Red cells (whole blood, packed cells, etc.) must be returned within 30 minutes with all the paperwork if there is a delay in the transfusion. Units returned more than 30 minutes after issue will be destroyed.

7.2 RBC units which ***have*** been stored in a monitored 1-6 °C environment (OR / clinics / Infusion Center) should be returned ASAP with all the paperwork.

7.3 Other blood products:

a) FFP and/or cryoprecipitate also must be returned to Transfusion Service within 30 minutes with all paperwork. Products may not be acceptable for re-issue if returned more than 30 minutes.

b) Platelets will be accepted back if returned within 4 hours with all paperwork.

8.0 Transfusion Reactions

Please refer to Regional Policy, Administration of Blood and Blood Products (SF-LAB-01-02) for detailed instructions.

General Policy

8.1 Reactions to the administration of blood or blood products may be either immediate or delayed (up to 14 days), hemolytic or non-hemolytic, severe or mild.

8.2 Evidence of an immediate, possibly hemolytic reaction may include one or more of the following:

- Heat at infusion site
- Lumbar and/or substernal pain
- Fever
- Shock
- Shortness of breath
- Flushing
- Back pain
- Chills
- Diffuse bleeding

See Transfusion reaction work-up request for more information.

8.3 If any symptom of transfusion reaction is present, the following steps must be taken:

a) Stop the transfusion immediately and maintain IV patency.

b) Notify a physician immediately to attend to the patient and the Transfusion Service. The physician will determine whether to initiate a Transfusion Reaction Investigation.

c) Remain with the patient and monitor vital signs.

d) Re-check the patient's **full name** and MRN labeled on the unit bag against patient's identification on the wristband.

e) Fill out the appropriate section of the Transfusion Reaction Investigation form. Instructions are on the back of the form. The form should be completely and legibly filled out.

f) Obtain one 6 cc EDTA tube of blood drawn from the patient at a site in extremity to the transfusion site. Take care to avoid mechanical hemolysis of the specimen.

g) Urine sample is optional unless in suspected hemolytic reaction or instructed by the Transfusion Service.

h) Label all specimens with the patient's **full name** and MRN. Also, label 'POST TXN' on all specimens with date, time of collection and signature/initials/NUID of the phlebotomist.

i) Maintain sterility of the container (blood bag), infusion set and intravenous solutions.

j) Submit to the Transfusion Service **STAT** the following: the post transfusion sample, blood bag with all attached transfusion set and intravenous solutions with the appropriately completed Transfusion Reaction Investigation form.

Transfusion Service HealthConnect Workflow Clarification

All specimens must be accompanied with the appropriate requisitions at the time of receipt or they will be discarded.
All specimens and requisitions should have matching patient's **Full** name, MRN, signature/initials/NUID of phlebotomist, date and time drawn.

All Blood Bank add-on orders must be submitted to the Transfusion Service laboratory using **paper requisition** via fax, runner, or pneumatic tube. Faxed orders must be called (X33881) to the Transfusion Service immediately after faxing.

NOTE: HealthConnect orders **DO NOT LOAD** to the laboratory computer system or Fax machine!!

Order	**Hold BB (Draw and Hold)**	**TS (Type&Screen)**	**TX (Type&Cross)**	**Transfuse**	**Hold Cord Blood**	**ABORH, DAT on Cord blood**	**DBCK**
Where is label printed and by whom?	**RN** to print *generic label* on the nursing unit.	**RN** to print *generic label* on the nursing unit.	**RN** to print *generic label* on the nursing unit.	**RN** to print *generic label* on the nursing unit.	**RN** to print *generic label* on the nursing unit.	**RILIS label** prints on the nursing unit.	**RN** to print *generic label* on the nursing unit.
What paperwork accompanies the specimen?	KPHC **Requisition**	KPHC **Requisition**	KPHC **Requisition**	KPHC **Requisition**	KPHC **Requisition**	KPHC **Order Detai**ls. **Printed by RN.**	KPHC Original TS/TX/Transfuse Requisition **Reprinted by RN.**
What if I can not find the requisition?	**Hold BB/TS/TX/Hold Cord → Order History NCAL → Reprint button on far right of screen** **Transfuse → Transfusion Navigator → Print Blood Bank Forms Icon → Select the appropriate blood product(s)**						
What need to come to blood bank?	Properly labeled specimen, **requisition**. Both should have date/time/collector's ID.	Properly labeled specimen, **requisition**. Both should have date/time/collector's ID.	Properly labeled specimen, **requisition**. Both should have date/time/collector's ID.	Properly labeled specimen, **requisition**. Both should have date/time/collector's ID.	Properly labeled specimen, **requisition**. Both should have date/time/collector's ID.	Properly labeled specimen, **requisition**. Both should have date/time/collector's ID.	Properly labeled specimen and requisition. Both should have date/time/collector's ID.
Special notes	Draw only one specimen.	If this is an add-on to **Hold BB**, just send the requisition to Transfusion Service. Write or stamp 'Add-on' on the requisition.	It this is an add-on to **TS**, just send the requisition to Transfusion Service. Write or stamp 'Add-on' on the requisition.	It this is an add-on to **TS**, just send requisition to Transfusion Service. Write or stamp 'Add-on' on the requisition.	Mom's generic label should be affixed on the requisition.	Mom's generic label should be affixed on the requisition. If it is an add-on to the Hold Cord specimen, write 'Add-on' on the requisition.	Should only be drawn when notified by Blood Bank. Used as ABORh confirmation specimen and for further workup if needed.

Blood Bank in Summary

1. HealthConnect **Requisition**: the form with the attestation box which prints automatically after release **EXCEPT** for ABORH, DAT, Cord ABORH & DAT.

2. HealthConnect Order Details: must be printed and sent as requisition for ABORH, DAT, Cord ABORH & DAT.

3. All specimens and requisitions should have matching patient's **Full** name, **MRN**, **signature/initials/NUID** of phlebotomist, **date** and **time drawn**.

4. All specimens must be received with the appropriate accompanying requisitions. Transfusion Service only accepts specimens that are completely, accurately and legibly labeled.

    a. Redraw will be requested if there is any conflicting or doubtful information.

    b. Specimens which have name and/or MR# error(s) will be discarded.

    c. Specimens that accompanied requisitions with MR# or name errors will be discarded.

    d. Specimens with draw date errors will be discarded.

    e. Specimens that arrive in lab without accompanying requisitions will be discarded.

    NOTE: Continue on next page.

5. **Tests and Blood Products offered:** All Blood Bank add-on orders must be submitted to Transfusion Service laboratory using **paper requisition** via fax, runner, and pneumatic tube.
NOTE: HealthConnect orders **DO NOT LOAD** to the laboratory computer or Fax machine!

TEST	**Definition**	**HealthConnect Mnemonics**		**Sample**
ABORH	Blood group and type.	ABORH		1 6 cc EDTA for adults
Cord ABORH and DAT	Blood group and type, direct coombs on cord blood only.	ABORH and Direct Coombs, Cord blood		1 6 cc EDTA Cord blood
DAT	Direct Coombs/ Direct Antiglobulin Test.	Direct Antihuman Globulin Test – for Hospital	Direct Antiglobulin Test – for Regional Lab	1 6 cc EDTA for adults
DBCK (Double Check)	Second sample for Blood group and type.	ABORH		1 6 cc EDTA for adults
Hold Specimen/BB	No testing.	Draw and Hold Blood Bank Tube		1 6 cc EDTA for adults
Hold Cord	No testing – cord blood only.	Draw and Hold Cord Blood		1 6 cc EDTA Cord blood
Type & Screen (TS)	Blood group and type, Antibody screen.	Type & Screen		1 6 cc EDTA for adults; BB will request DBCK if needed
Type & Crossmatch (TC)	Blood group and type, Antibody screen, RBC crossmatched.	Type & Crossmatch		1 6 cc EDTA for adults; BB will request DBCK if needed
Red Blood Cells	RBC crossmatched; can be added after TS.	Transfuse Packed Red Blood Cells		No sample needed if two previous ABORh on record
Fresh Frozen Plasma (FFP)	Fresh Frozen Plasma thawed – takes about 30 minutes to thaw; No crossmatch.	Transfuse Frozen Plasma		No sample needed if two previous ABORh on record
Platelets Pheresis	Platelets Pheresis set-up/reserved; No crossmatch.	Transfuse Platelets		No sample needed if two previous ABORh on record
Cryoprecipitate	Cryoprecipitate – takes about 30 minutes to thaw; No crossmatch.	Transfuse Cryoprecipitate		No sample needed if two previous ABORh on record

6. **Blood and Blood Products Pick Up – Bring the appropriately filled out HealthConnect 'Transfuse'** Pick up to the Transfusion Service. Use the pink 'Blood Bank Product Pickup' form when HealthConnect or printer is down. The pick–up form must be complete and legible with the patient's full name, MRN, licensed personnel initials, date, type and quantity of product needed. In addition, HealthConnect pick-up form must have Blood Bank Communication.

7. **Autologous and Directed Donation**

   a. **Physician discusses possibility of transfusion and potential related complications with patient.**
      i. Transfusion transmitted diseases e.g. HIV, Hepatitis, HTLV, etc.
      ii. Transfusion reactions
      iii. Paul Gann (autologous donation)
      iv. Directed donation (friends or relatives want to donate for patient's use)

   b. **If there is a possibility of transfusion:**
      i. Physician places order in HealthConnect.
      ii. Patient goes to outpatient laboratory to be drawn.
      iii. Transfusion Service performs test ordered.

   c. **If patient is interested in Autologous and/or Directed donation:**
      i. Autologous - Physician obtain from Blood Bank (x33881) and fill out form BS 365 Special Collection Request.
      ii. Directed – Call Blood Center of the Pacific at 415-749-6655.
      iii. Autologous donation should be scheduled far ahead of time to allow processing time and recovery but not so early that the unit(s) may expire before surgery. Patient need to contact Blood Center of the Pacific at 415-749-6655 to make appointment.
      iv. Autologous and directed units will be shipped to Transfusion Service as soon as the blood center completes processing and testing. Note: The blood center will not release directed units with positive infectious disease markers.
      v. The units will be crossmatched per physician's order.

HEMATOLOGY AND COAGULATION

A. Hematology

1. Inpatients:

   a) All hematology will be done in the SF Laboratory, except automated reticulocyte counts and absolute eosinophil count, which are performed at the Regional Lab.

2. Outpatients:

   a) All routine requests will be sent to the Regional lab. The following exceptions to this procedure are performed at the SF Laboratory:
      i) ASAP (STAT) Requests
      ii) Results needed same day (as indicated by writing "Priority—test results needed by _____" or "do in SF".)
      iii) Micro samples
      iv) Erythrocyte sedimentation rate (ESR or "sed rate")
      v) Requests for hematology on body fluids (including CSF)

3. Requisitions:

   a) Must be properly completed. See section: Information Required on Laboratory Requisitions.

   b) Use the General Procedures requisition for routine tests.

   c) Use the Special Procedures requisitions for tests not included on the General Procedures requisition. Uncommon tests often require special handling. Consultation with a Lab supervisor is requested.

4. CBC menu:

   a) CBC includes WBC count, Hemoglobin, Hematocrit, MCV and platelets. RBC morphology may be added per lab protocol.

5. Differential WBC count: This protocol applies only to testing performed in San Francisco.

   a) A five part automated WBC differential will be routinely reported:

      i) When CBC with Differential (CBCD) is ordered. If CBC only is ordered, and a differential is later needed, the Lab can recover the data for a limited time. Please contact the Lab supervisor ASAP in these cases.

      ii) For outpatients only (includes Emergency Dept.)

- Whenever the WBC count is outside the normal range
- Based on the Lab's internal protocol.

b) Manual differentials will be reported in the following cases:
   i) All differential requests from the nursery.
   ii) When a "Manual Differential" is requested and a specific, appropriate rationale is noted; should be requested only when clinical management will be changed based on the results.
   iii) When required according to the Laboratory's internal protocol.

6. Hematology Specimen Collection
   a) Use of 5 ml draw lavender top (EDTA) vacutainers is preferred, and will improve turn-around time. See the table at the end of the chapter for test specific details.

7. Hematology Specimen Rejection Criteria:
   a) Specimens that are clotted or grossly hemolyzed.
   b) Micro Hct tubes less than 1/2 full or more than 4 hours old.
   c) Poorly made peripheral blood smears.
   d) EDTA blood samples stored at refrigerated temperature for more than 48 hours.
   e) Unrefrigerated EDTA blood samples greater than 24 hours.
   f) Sed rate samples more than 12 hours old.
   g) EDTA tubes less than 75% full.

B. Coagulation

1. Testing:
   a) All routine inpatient coagulation tests are performed in the SF Laboratory.
   b) All outpatient coagulation tests are performed at Regional Lab except for:
      i) ASAP (STAT) Requests
      ii) aPTT
      iii) The patient is waiting for the result(s)

2. Requisitions:
   a) Use the General Procedures requisition for routine requests. Indicate type of anticoagulant therapy, if any, and date and time of last dose.

   b) Special coagulation studies (those not listed on the requisition) should be written in under OTHER on the General Procedures requisition. These often require special handling. Consultation with pathologist (designee) required.

3. Coagulation Specimen Requirements:
   a) Light Blue (3.2% Buffered Sodium Citrate) tubes: for PT, PTT, Fibrinogen, Anti-Xa, and D-Dimer.

   b) Must allow tube to fill to expected fill line.

   c) Fibrin Split Products – call Laboratory for a special FSP collection tube.

4. Coagulation Specimen Rejection Criteria:

a) Clotted specimen for PT, PTT, Fibrinogen, and D-Dimer tests.
b) Improper ratio of anticoagulant to blood (i.e. improperly filled tube).
c) Specimen submitted in wrong type tube.

d) Specimen grossly hemolyzed.
e) Samples more than 1 hour old for APTT on heparinized patients.

5. Anti Factor Xa Assay for Unfractionated Heparin (UFH)
   a) Continuous Infusions: This assay is drawn 6 hours after initiation, and each dosage change.

   b) Intermittent (Q12h) Subcutaneous Injections: The Anti Xa Assay is drawn 6 hours after a dose.

   c) The date and time of the last dose must be specified on the laboratory requisition.

   d) Order HEP UF on lab requisition.

6. Anti Factor Xa Assay for Low Molecular Weight Heparin (LMWH)
   a) This assay must be drawn 4 hours after a dose of LMWH.

   b) The date and time of the last dose must be specified on the laboratory requisition.

   c) Order HEP LMW on lab requisition.

7. Anti Factor Xa Assay for the drug Fondaparinux (Arixtra)
   a) Collect specimen in a 2.7 ml blue top tube (3.2% sodium citrate).

   b) Test is performed at the Regional Laboratory.

   c) How to order:

      i) HealthConnect: order Anti Factor Xa (Fondaparinux) EAP# 85520M

      ii) Lab requisition: write AntiFactor Xa for Fondaparinux.

C. Bone Marrow

1. Biopsy for pathology:

   a) Submit in Bouin's Fixative, obtained from the hospital laboratory.

   b) Submit directly to the Pathology Dept. at 350 St. Joseph's, 1st floor, with a Surgical Pathology Requisition.

2. Aspirates for pathology:

a) Submit specimens Monday-Friday 9:00 a.m. – 4:30 p.m.

b) Collect in a small sterile EDTA vial; mix immediately after collection and submit directly to the Pathology Dept.

c) Each specimen must be accompanied with a properly completed Bone Marrow Consultation requisition.

d) A peripheral blood specimen for CBC and differential should also be submitted to the Clinical Laboratory (2425 Geary, 1st floor) with a properly completed General Procedures requisition. Write "WITH BONE MARROW" in the comments section.

3. Bone Marrow Culture (Routine, AFB, Mycology): EDTA is toxic to bacteria. Heparin or SPS are the recommended anticoagulants. Blood culture bottles may be used.

D. Special Studies (to rule out leukemia, or identify other hematologic processes)

1. Immunophenotyping by flow cytometry (at Regional Lab):

a) Service available Monday - Friday only.

b) Submit specimen as early in the day as possible, but NO LATER THAN 5 PM. These specimens have limited viability, and must be transported to the Regional Lab. Specimen may be rejected if not submitted on time.

2. Specimen:

a) Bone marrow aspirate: 3 - 5 cc in EDTA (lavender top) or heparin (green top).

b) Blood: 1 EDTA (lav top) and 1 acid citrate dextrose (yellow top). Peripheral blood specimens must be received in Lab by 8 PM.

c) Body fluids: pleural, pericardial, or peritoneal fluid. Submit in EDTA (lav top) or Na heparin (green). CSF may be submitted, provided enough cells (>100/uL) are available

d) Tissue: Lymph node, bone marrow core biopsy, or other tissue with possible lymphoid or hematologic malignancy. Submit in approximately 2 ml RPMI (cytogenetics) medium. For tissue, a gram or more is preferred, sectioned into 1-2 ml slices (not diced).

e) Submit specimen with a properly completed Special Procedures requisition.

f) DO NOT refrigerate or freeze specimen. Submit at room temperature.

g) Requests for specific markers must be discussed with a Regional Lab pathologist.

h) If necessary, flow cytometery may be performed on Saturday, but this must be

arranged with and approved by a Regional Laboratory pathologist.

i) Turn-around Time: Phoned next day to the requesting physician. If faster TAT is needed, please discuss with Regional Lab pathologist.

E. Cytogenetics

1. Bone Marrow Aspirates:

a) Collection media tubes and Cytogenetics requisitions are provided by the Lab. If a direct harvest is desired, request a second media tube. The media must be defrosted to room temperature before use.

b) Complete the requisition with the following information:
   i) Patient name, MR number, and date of birth
   ii) Physician name and phone number
   iii) Date and time of procedure
   iv) Clinical diagnosis (e.g., CML, ALL, MDS, anemia, etc.)
   v) Prior studies
   vi) Patient history (exam, symptoms, etc.)
   vii) WBC and current medications
   viii) Indicate if direct harvest is required

c) Collect 1-3 cc bone marrow, immediately place in defrosted media tube, and mix well. If a direct harvest is desired, place 5 drops into a second media tube and mix well.

   i) If bone marrow aspirate is unobtainable, a bone core biopsy or peripheral blood is acceptable. Obtain 0.5 - 1 cm of bone core, and place in collection media tube, or draw blood into a Na heparin tune (green top).

   ii) If collection media tube is unavailable, bone marrow aspirate may be placed in a sodium heparin (green top) vacutainer.

d) Cap tube(s) tightly and deliver STAT to the Lab

2. Peripheral Blood for Molecular Testing:

a) Submit 10 ml blood in EDTA (lavender top), maintained at room temperature.

b) Cap tightly and wrap tube with parafilm to seal and prevent leakage.

3. Turn-around Time:

a) All results called to the ordering provider

b) Preliminary results ASAP (2 - 7 days)

c) Final report within 7 - 14 days

BONE MARROW / SPECIAL STUDIES			
Test	**Specimen**	**Collection**	**Requisition**
Routine Bone Marrow Examination	Bone Marrow Biopsy	Bouin's fixative	Surgical Pathology
	Bone Marrow Aspirate	EDTA (lavender top)	Bone Marrow Consultation Form
Flow cytometry (Regional Lab) Submit specimens at room temperature, NOT frozen or refrigerated	Bone Marrow Aspirate	EDTA (lav), or Na heparin (green) 1 ml minimum	Special procedures
	Blood	1 EDTA (lav) and 1 acid citrate dextrose (yellow)	
	Body Fluids	EDTA (lav), or Na heparin (green)	
	Tissue: Lymph node, Bone Marrow Core Biopsy, etc.	≥ 1 gram, sliced, not diced, in 2 ml RPMI (cytogenetics) medium	
Cytogenetics (Santa Theresa Cytogenetics Lab)	Bone Marrow Aspirate	Media provided by the Lab 1 - ml required	Cytogenetic Analysis (provided by Lab, when media requested)
	Blood for Molecular Testing	10 ml in EDTA (lav)	
Routine / AFB / Mycology culture	Bone Marrow Biopsy/Aspirate	Heparin (green top)	Microbiology

CHEMISTRY

A. Chemistry General Policies

1. Blood for chemical analysis should be drawn while the patient is in the fasting state. If this is not practical, the specimen may be collected 4-6 hours after the last meal. (Exceptions include triglyceride and lipoprotein tests which require fasting for 12 - 14 hrs. prior to blood collection.)

2. Hemolysis will significantly elevate some constituents in serum. Hemoglobin may interfere in a chemical reaction by enzyme inhibition and color interference.

3. Lipemic specimens will affect test results by altering the true sample size and the optical density readings in a chemical analysis.

4. Any lipemia or hemolysis will be qualitatively noted as Slight, Moderate, or Gross.

5. When specimens are hemolyzed or lipemic, collection should be repeated.

B. Specimen Collection and Handling Requirements

1. Refer to the section "Laboratory Collection Requirements" in this manual.

   a) "Plasma" refers to the Lithium Heparin plasma obtained in a green-topped vacutainer tube unless stated otherwise. All chemistry tests done in San Francisco can be performed on plasma with the exception of serum osmolality and alcohol.

   b) Routine use of green Hemoguard tubes or PST (mottled green) vacutainers is recommended, exceptions noted above in Order Chart. Because it is unnecessary to wait for the specimen to clot, TAT will be improved. However, red tops or SST's are acceptable.

   c) Always collect STAT specimens on patients receiving anticoagulants in a green top tube. They require more time than usual to clot. Therefore, use of plasma will improve turn-around time.

2. 4 ml draw tubes (13 x 75mm) are preferred. Their use will improve our TAT because this size fits the racks on the chemistry analyzers. Other sizes are acceptable, but require aliquoting which delays testing and may result in labeling error.

3. Forward specimens to the laboratory as soon as possible to reduce cellular metabolism and chemical or bacterial decomposition of some constituents in blood or urine.

C. Criteria for Rejection of Specimens

1. Hemolyzed specimens received for potassium levels and enzyme studies are rejected.
2. Specimens drawn using wrong tube are rejected.

SERUM SAMPLING GUIDELINES FOR DRUG ASSAYS

DRUG	ROUTE	SAMPLING TIME
Aminoglycosides (Gentamicin & Tobramycin)	IV: Intermittent Infusion over 30 minutes	Peak: 30 min (30-60 min ok) after the end of a 30 min infusion Trough: 30-60 min before the dose
Aminophylline (Theophylline)	IV: Continuous Infusion	Obtain any time at least 1 hour after a bolus dose
	Oral: Sustained Release Product (e.g., TheoDur, etc.)	Peak: Obtain 4-6 hr after the dose Trough: 30-60 min before the dose
	Oral: Not Sustained Release Product (e.g., aminophylline tablets, liquid, etc.)	Peak: 2 hr after the dose Trough: 30-60 min before the dose
Digoxin	IV: Intermittent Injection	Obtain 4 hr or more after the IV dose
	Oral	Obtain at least 6 hr after a dose or preferably 30-60 min before the next dose
Phenobarbital	IV: Intermittent Injection	Any time between 1 hr after the dose and 30-60 min before the next dose
	Oral	Any time
Phenytoin	IV: Intermittent Injection or rapidly absorbed Oral product (e.g., suspension and chewable forms)	30-60 min before the next dose preferable; any time between 1 hr after the dose and 30-60 min before the next dose acceptable
	Oral: Extended release form (e.g., oral capsule)	Any time
Procainamide	IV: Continuous Infusion	Obtain any time at least 1 hr after a bolus dose
	Oral and Oral Sustained Release Product (e.g., Procan and Procan-SR, etc.)	Peak: 2 hr after the dose Trough: 30-60 min before the dose
Quinidine	Oral: Sustained Release Product (e.g., Quinaglute, etc.)	Obtain any time during the dosing interval
	Oral: Not Sustained Release Product (e.g., Quinidine Sulfate, etc.)	Peak: 2 hr after the dose Trough: 30-60 min before the dose
	IV: Continuous Infusion	Obtain any time at least 1 hr after a bolus dose
Vancomycin	IV: Intermittent 1 hr infusion	Peak: 1 hr after a 1 hr infusion Trough: 30-60 min before the dose

URINALYSIS

I. Urinalysis General Policies

1. Requisitions:
   a) Use the General Procedures requisition for routine urinalysis.
   b) Use the Special Procedures requisition for “Timed Urine Tests”.
   c) The date and time of specimen collection MUST be provided on the requisition.
   d) For timed urine specimens, both the “Start” and “Completion” times must be indicated on the slip.

2. Routine Urinalysis Procedure:
   a) Routine urinalysis is performed by dipstick. The components are glucose, bilirubin, ketone, specific gravity, blood, pH, protein, urobilinogen, nitite, and leukocyte esterase.
   b) Microscopic examination on urine sediment will be performed only if one or more of the following urine dipstick results are abnormal: blood, protein, leukocyte esterase, or nitrite. Exceptions must be approved by a pathologist.

3. Urine Culture: See Microbiology section.
   a) When the “Culture per protocol” box is checked, a bacteriology culture will be added if the screening tests are positive (see attached Testing Protocol).
   b) If culture is needed regardless of dipstick results, submit a separate Microbiology requisition.

II. Specimen Collection and Handling Requirements

1. Refer to patient instructions in the "Patient Instructions" section of this manual.

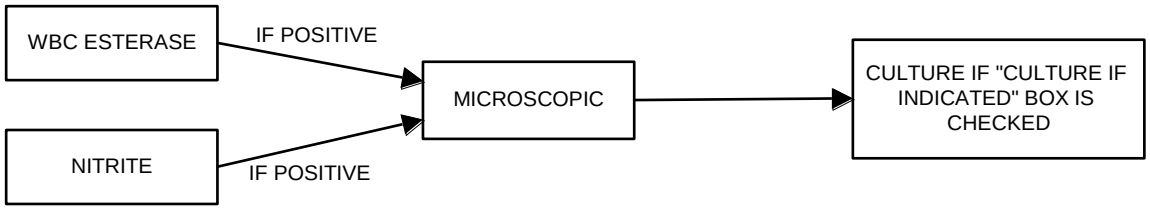
2. For timed urine collections, special containers must be obtained in the laboratory. Specific preservatives are needed for most timed tests. The label on the container indicates the type of preservative used, and the warning concerning the hazard of the preservative. Nurses should note these hazards and give appropriate instructions to their patients. Timed urines that do not require a preservative should be refrigerated during the collection period, and until submitted to the laboratory.

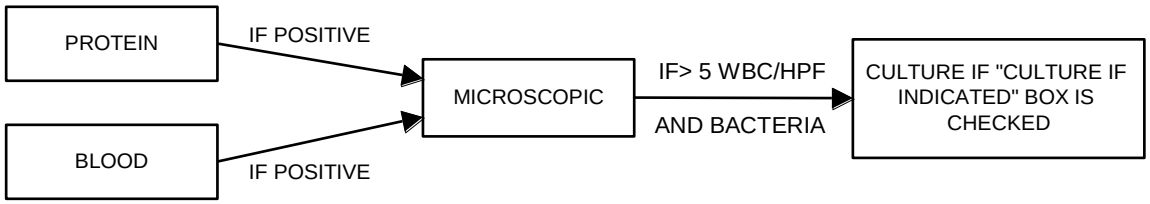
III. Criteria for Rejection of Specimens

1. Specimens received in visibly unclean containers (i.e., leaking).

2. Timed urine specimens received in containers other than those provided by the laboratory.

3. Specimens for routine urinalysis which have been kept at:
   a) Room temperature for more than 2 hours, or
   b) In the refrigerator at 4° C for more than 6 hours





OTHER DIPSTICK TESTS, IF POSITIVE, WILL BE REPORTED WITHOUT MICROSCOPIC.

IF URINE CULTURE IS NEEDED REGARDLESS OF URINALYSIS REPORT, CULTURE SHOULD BE ORDERED ON A SEPARATE BACTERIOLOGY REQUISITION.

PRECOLLECTION URINE PRESERVATIVE REQUIREMENTS

Specimen collection requirements may be updated with new information as testing processes change. To view the most up-to-date information, refer to the Reference Lab websites below:

Note: All timed urine specimens must be refrigerated during collection. Instruct the patient to record collection time start and time end on the specimen container. These times should always correspond to 24 hrs. (per instructions, refer to Appendix A). The entire specimen must be submitted to the laboratory the morning the collection is completed.

Instructions on how to access Reference Lab websites for the most up-to-date specimen requirements:

REGIONAL LABORATORY: http://lablink/test_directory/

Type "lablink" into web browser. This will direct you to the Regional Laboratory Services website.
In the upper right hand corner you can search for tests using the "Laboratory Test Directory".

QUEST REFERENCE LABORATORY:

Most sendout tests are performed at Quest Diagnostics:
http://www.questdiagnostics.com/home/physicians.html
Click on: **Test Center.**
In the dropdown menu for "REGIONAL LABORATORY" click on: **"CA-San Juan Capistrano 33608 Ortega Hwy (800)642-4657 (SJC)".**
Then type in the test you are looking for in the search box and push return.

MICROBIOLOGY CULTURE REQUIREMENTS (REGIONAL LAB): http://lablink/labs/regional_lab/microbiology/

LIST OF KAISER APPROVED REFERENCE LABORATORIES:

For a list of Kaiser Permanente approved Reference Laboratories **CLICK ON LINK** or paste into your web browser: http://cl.kp.org/pkc/ncal/clib/lab/info/approved_ref_labs.pdf

HEAVY METAL COLLECTIONS

- Heavy Metal Tests include AS Arsenic, CD Cadmium, CO Cobalt, CU Copper, PB Lead, HG Mercury, and TL Thallium.

- Heavy Metal Panels for blood and urine include Arsenic, Lead, and Mercury:
  HEAVY U HEAVY 24 U HEAVY RN
  Any other metals should be ordered separately - See the Quest Interfaced Test List.

- The four RILIS container types for Heavy Metal collections that match the Heavy Metal Collection Kits provided by Quest are:

RILIS Label	Specimen	Container Description	Quest Label
Metal-PL	Plasma	Royal Blue - Gel Barrier	Lavender Trace-Metal Free
Metal-WB	Whole Blood	Royal Blue - No Gel Barrier	Lavender Trace-Metal Free
MetalSER	Serum	Royal Blue - No Gel Barrier	Red Trace-Metal Free
U*AcWash	Urine	Acid-Washed Container	

Patient Preparation:

- Patient should refrain from eating seafood, antacids, and taking mineral or herbal supplements prior to specimen collection. See additional individual test requirements in the Quest Catalog.

Specimen Collection:

- Plasma collection tubes with the gel barrier are plastic, and can be shipped to Quest without pouring off plasma into transport containers. Whole blood and serum tubes are glass, and the specimens must be poured into plastic transport tubes.

- To avoid contaminating the specimen, Quest states that powder-free gloves must be worn.

- 24-Hr Urine Collection: Give the patient Quest acid-washed collection containers and a Quest acid-washed jug. Do not give out paper or plastic collection containers that are not acid washed.

- Random Urine Collection: Give the patient a Quest acid-washed collection container.

- Instruct patient to wash hands before opening the container and to collect specimens away from the work environment where metal contamination may be a problem.

Special Processing Notes:

- In order to avoid any possible contamination, Urine specimens for heavy metals are not to be measured. There are no prompts for volume on the 24-hour urine heavy metal tests.

- Heavy Metals cannot be added-on to any other specimen. An original specimen collection is required.

MICROBIOLOGY

Standardized Microbiology Specimen Collection Requirements

Source: Kaiser Regional Laboratory Microbiology Department

TEST	MNEMONIC	COLLECTION CONTAINER	SPECIAL INSTRUCTIONS
Acanthamoeba Culture	C ACAN	Screw cap container	Prior phone notification from Facility Laboratory to Regional Laboratory is required to prepare special medium for recovery of free living ameba.
Actinomycetes Culture	C FU	Screw cap container or Culturette	Test order must specify "R/O Nocardia".
Actinomyces or Actinomycosis Culture	C AN	Anaerobic transport vial (for aspirates) or sterile tube (for swabs)	Specify "R/O Actinomyces". IUD specimens not acceptable for Actino culture.
AFB Culture, Blood	C AFBB	Green top (heparin) Vacutainer tube or yellow top (SPS) if heparin tube not available	5 mL blood. Do not collect in EDTA tube.
AFB Culture, Body Fluid	C AFB	Sterile screw cap container	
AFB Culture, Bone Marrow	C AFB	Green top (heparin) Vacutainer tube or yellow top (SPS) if heparin tube not available	5 mL blood. Do not collect in EDTA tube.
AFB Culture, CSF	C AFB	Sterile screw cap tube or CSF tube	3 - 5 mL optimum volume; 1 mL minimum volume
AFB Culture, Gastric Lavage	C AFB	Sterile test tube or sterile screw cap container	Acidity of specimen must be neutralized at the facility following collection or within 4 hours to prevent destruction of mycobacteria: For each 20 to 30 mL of gastric lavage, add 1.0 mL of 10% sodium carbonate.
AFB Culture, Skin	C AFB	Sterile container containing 0.5 mL sterile saline	Source of specimen must be stated.
AFB Culture, Sputum	C AFB	Sterile container. Transfer to 50 mL screw cap centrifuge tube for transport to Regional Laboratory.	Recommended screening procedure is three specimens collected over 24 hours. To ensure optimal recovery of TB bacilli from sputum, at least one should be an "early morning" specimen. Collect the other two specimens every 8 hours.
AFB Culture, Tissue	C AFB	Screw cap container	Add small amount of sterile saline or sterile water to keep specimen moist.
AFB Culture, Urine	C AFB	Sterile container. Transfer to 50 mL screw cap centrifuge tube for transport to Regional Laboratory.	Collect first early morning specimen.
AFB Culture, Wound	C AFB	Sterile screw cap tube or Culturette	Site of specimen must be stated.
Anaerobic Culture	C AN	Fluids: anaerobic transport container	Keep specimen at room temperature. Do not refrigerate. Fluids collected in a syringe should NOT be recapped

		Tissue: sterile container, no preservative. Place in a small amount of saline to prevent drying of the specimen.	because of safety concerns involving needle stick injuries. Inject fluid into an oxygen-free transport tube or vial. Place container with tissue into an anaerobic transport pouch for submission to Regional Laboratory.
Arthropod Identification	PARA ID	Screw cap container	Arthropods are best submitted in 10% alcohol (rubbing (isopropyl) alcohol is suitable). For skin scrapings, add a small amount of saline or water (just enough to keep specimen moist).
Bacterial Antigens	BACAG	Sterile CSF tube	Refrigerate prior to shipment to Regional Laboratory. If specific antigen(s) to be tested are indicated, specify in the comments field.
Blood Culture, Brucella Blood Culture, Routine	C BL C BL2 C BL3 C BL4	Adults: BacT/Alert aerobic (SA or FA) and anaerobic (SN or FN) bottles Pediatrics: BacT/Alert Pediatric FAN (PF) bottle	Adults: inoculate 4 - 10 mL of blood per bottle. Pediatrics: inoculate 1 - 4 mL of blood in pediatric bottle. Send to Regional Laboratory ASAP. Hold bottles at room temperature up to 48 hours prior to loading at Regional Laboratory. Enter site of collection during order entry.
Body Fluid Culture, collected in blood culture bottle	C BFB	BacT/Alert aerobic (SA or FA) and anaerobic (SN or FN) bottles	Indicate the type of fluid in the Freetext Source field.
Body Fluid Culture, Routine	C BF	Sterile tube or container with lid	Anaerobic transport tube or vial should be injected if anaerobes are suspected. Type of fluid specimen must be stated.
Bordetella pertussis Culture	C BO	Calcium alginate swab (Calgiswab) or dacron or rayon-tipped swab **Do not use cotton-tipped swabs, as cotton is inhibitory.	Inoculate Regan-Lowe at the Facility Laboratory or transport in Amies transport media. If calcium alginate or green top PCR swab is used, inoculation of plates must be performed locally; calcium alginate swabs are not compatible with Amies transport.
Bordetella pertussis/parapertussis By PCR	BORD P	Nasopharyngeal specimens collected on wire rayon-tipped swabs in liquid Stuart's transport media. **Calcium alginate swab (Calgiswab) is not suitable for PCR test.	Swabs may be held at room temperature for 3 days or at 2-8° C for up to 7 days before testing.
Catheter Tip Culture, Routine	C CT	Sterile container	State site of catheter or catheter tip type. Foley cath tip not acceptable for culture. Catheter tip MUST BE cultured within 2 hours of removal from the patient.
Cerebrospinal Fluid Culture, Routine	C CSF	Sterile CSF tube (#2 preferred)	Do not refrigerate. Hold at room temperature and inoculate appropriate media as soon as possible. Gram stain must be read STAT at the Facility Laboratory.
Chlamydia and GC By Amplified Probe, Swab	GCCTS	Female endocervical, male urethral, throat, or rectal swab collected using Gen-Probe APTIMA Unisex Swab Specimen Transport Tube	Source of specimen must be stated. Place the BLUE shaft swab in the Gen-Probe APTIMA Swab Transport Tube and transport to Regional Laboratory at 2 - 30° C. Tubes with two swabs, no swab, or the WHITE shaft swab will be rejected for testing. This method has not been assessed for performance with other sources, e.g. eye. Please submit GC and/or Chlamydia culture for other sources.
Chlamydia and GC By	GCCTU	Sterile urine collection container	The patient should not have urinated for at least 1 hour

Amplified Probe, Urine		and APTIMA Urine Collection Tube	prior to specimen collection. Collect the first 20 - 30 mL of voided urine (the first part of the stream, not midstream). Transfer 2 mL of urine into Gen-Probe APTIMA Urine Specimen Transport Tube within 24 hours of collection. Transport to Regional Laboratory at 2 - 30° C.
Chlamydia Culture	C CH	Universal Viral Transport System	Do not use wooden shafted swabs. Refrigerate specimen prior to shipment to the Regional Laboratory. Do not freeze.
Clostridium difficile Panel	CDIF PANEL	Screw cap container	Only liquid, soft or nonformed (takes the shape of the container) stool specimens are acceptable. Specimen should be collected in a sterile container and transported to the Facility Laboratory within two hours of collection or if more than two hours, stored/transported on cold packs to the Facility Laboratory. At the Facility Laboratory, the specimen should be transferred to a screw cap container and kept refrigerated at 2° C to 8° C or frozen at -10° C or colder until shipment to the Regional Laboratory. Transport to Regional Laboratory with frozen cold packs.
Cryptococcal Antigen Titer	CRAG	CSF: sterile test tube Blood: red top Vacutainer tube	CSF (1 mL): refrigerate Blood: separate serum (1 mL) and refrigerate
Cryptosporidium by EIA	CEIA	Parasitology stool collection container with formalin	Stool specimen must be preserved in 10% formalin.
Cyclospora	CSPORA	Parasitology stool collection container with formalin	Stool specimen must be preserved in 10% formalin.
Cystic Fibrosis Respiratory Culture	C CF RE	Sterile container	Respiratory specimen only. Read Gram stain at Facility Laboratory but do not reject specimen. Send specimen to Regional Laboratory for plating on selective media.
Cytomegalovirus (CMV) Culture	C CMV	Throat: Universal Viral Transport System Urine: Sterile screw cap container Blood: Heparin or green top tube	Refrigerate specimen until shipment to the Regional Laboratory. Transport to Regional Laboratory with frozen cold packs. Store and transport whole blood at ambient temperature.
DFA, Herpes DFA, Varicella-Zoster Virus	FHSV FVZ	Slide	Air dry slide. Do not use fixatives.
Ear Culture, Routine	C MB	Sterile tube or Culturette	
Enterovirus, CSF By PCR	ENTV P	Sterile screw cap container	CSF (0.5 mL minimum): transport to Regional Laboratory at 2 – 8° C.
Environmental Culture	C EN	Refer to the procedure at the Facility Laboratory	
Eye Culture, Routine	C MB	Culturette or BAP & CHOC plates directly inoculated by the physician	
Fungus Culture, Blood or Bone Marrow	C FUB	Green top (heparin) Vacutainer tube or yellow top (SPS) if heparin tube not available	3 - 5 mL blood. Do not use BacT/Alert blood culture bottles or lavender top (EDTA) tubes.
Fungus Culture, Body Fluid	C FU	Sterile screw cap tube or 50 mL centrifuge tube	Site of specimen must be stated.
Fungus Culture, CSF	C FU	Sterile screw cap tube or CSF	

		tube	
Fungus Culture, Eye	C FU	Directly inoculated fungal media or sterile tube or swab transport device	
Fungus Culture, Genital	C FU	Culturette	Site of specimen must be stated.
Fungus Culture, Skin	C FU	Sterile container	Site of specimen must be stated.
Fungus Culture, Sputum	C FU	Sterile container. Transfer to 50 mL screw cap centrifuge tube for transport to Regional Laboratory.	Early morning specimen is preferred.
Fungus Culture, Stool	C FU	Screw cap stool container	Specimen must be unpreserved.
Fungus Culture, Tissue	C FU	Sterile screw cap test tube	Add 0.5 mL sterile saline or sterile water to tissue. Site of specimen must be stated.
Fungus Culture, Upper Respiratory Tract	C FU	Culturette or sterile screw cap test tube	Site of specimen must be stated.
Fungus Culture, Urine	C FU	Screw cap stool container	First morning specimen is preferred.
Fungus Culture, Wound	C FU	Sterile screw cap tube or Culturette	For actinomycosis, use anaerobic swabs or anaerobic transport vials.
GC and Chlamydia By Amplified Probe, Swab	GCCTS	Female endocervical, male urethral, throat, or rectal swab collected using Gen-Probe APTIMA Unisex Swab Specimen Transport Tube	Source of specimen must be stated. Place the BLUE shaft swab in the Gen-Probe APTIMA Swab Transport Tube and transport to Regional Laboratory at 2 - 30° C. Tubes with two swabs, no swab, or the WHITE shaft swab will be rejected for testing. This method has not been assessed for performance with other sources, e.g. eye. Please submit GC and/or Chlamydia culture for other sources.
GC and Chlamydia By Amplified Probe, Urine	GCCTU	Sterile urine collection container and APTIMA Urine Collection Tube	The patient should not have urinated for at least 1 hour prior to specimen collection. Collect the first 20 - 30 mL of voided urine (the first part of the stream, not midstream). Transfer 2 mL of urine into Gen-Probe APTIMA Urine Specimen Transport Tube within 24 hours of collection. Transport to Regional Laboratory at 2 - 30° C.
GC Culture	C GC	Culturette or sterile container; or direct planting on room temperature Thayer-Martin medium (or Martin-Lewis with lincomycin) or chocolate/Thayer-Martin medium	Inoculate specimens collected on swabs to plates within 6 hours of collection and place in a CO_2 enriched environment (BioBag).
Giardia by EIA	GEIA	Parasitology stool collection container with formalin	Nonstool specimens are not acceptable.
Gram Stain for CSF	GCSF	Sterile CSF tube (#2 preferred)	Alcohol and flame slide to remove debris prior to specimen inoculation. Read CSF Gram stain STAT at Facility Laboratory.
Gram Stain for Genital	GGE	Swab or slide	Gram stain mnemonics for stains read at the Facility Laboratory.

Gram Stain for Miscellaneous	GRAM	Sterile container	Gram stain mnemonics for stains read at the Facility Laboratory. Gram stain requests accompanying a culture request need not be ordered separately. Enter "Do GS" in the comments field of the culture request. Enter "GS Done" in the Micro Comments field if the Gram stain has been read at the Facility Laboratory.
Gram Stain for Respiratory	GRE	Sterile container	Read at Facility Laboratory to determine acceptability of specimen for culture and the extent of culture workup.
Gram Stain for Stool	GST	Culturette (uncrushed ampule), dry swab or enteric transport vial (Cary Blair)	Gram stain mnemonics for stains read at the Facility Laboratory.
Gram Stain for Throat	GTH	Culturette (uncrushed ampule) or dry swab	Gram stain mnemonics for stains read at the Facility Laboratory.
Gram Stain for Urine	GUR	Sterile container	Gram stain mnemonics for stains read at the Facility Laboratory.
Group B Streptococcus, Prenatal Screen	GBS	Red-capped dual swab in Stuart's Transport system	Indicate whether patient has a SEVERE allergy to Penicillin, if known.
Helicobacter pylori by Rapid Urease	C HP	CLOtest	Criteria for rejection: Specimens >24 hours old. Submit to Regional Laboratory within 3 hours of collection.
Helminth Screen	HELM	Parasitology stool collection container with formalin	Test order must indicate patient's travel history and parasite suspected.
Hepatitis B DNA, Viral Load (Quantitative Assay)	HBV LOAD	Red top SST tube	2 mL serum. Centrifuge within 4 hours to separate serum from cells. Store at -20° C or colder in sterile screw-capped tubes.
Hepatitis C RNA, Genotype	HCV GENO	Red top SST tube	2 mL serum. Centrifuge within 2 hours to separate serum from cells. Store at -20° C or colder in sterile screw-capped tubes.
Hepatitis C RNA, Post Treatment, Qualitative	HCV POST	Red top SST tube	Test should only be ordered by GI and infectious disease specialists. 2 mL serum. Centrifuge within 2 hours to separate serum from cells. Store at -20° C or colder in sterile screw-capped tubes.
Hepatitis C RNA, Qualitative Assay	HCV QUAL	Red top SST tube	2 mL serum. Centrifuge within 2 hours to separate serum from cells. Store at -20° C or colder in sterile screw-capped tubes.
Hepatitis C RNA, Viral Load (Quantitative Assay)	HCV LOAD	Red top SST tube	1 mL serum. Centrifuge within 4 hours to separate serum from cells. Store at -60° C to -80° C in sterile screw-capped tubes.
Herpes Simplex Virus Antigen by DFA	FHSV	Slide	Air dry slide. Do not use fixatives.
Herpes Simplex Virus Culture	C HSV	Universal Viral Transport System	Do not use calcium alginate swab. Refrigerate specimen until shipment to the Regional Laboratory. Transport to Regional Laboratory with frozen cold packs.
Herpes Simplex Virus, CSF By PCR	HSV PCR	Sterile screw cap container	CSF (0.5 mL minimum): transport to Regional Laboratory at 2 – 8° C.
HIV-1 Viral Load	HIV LOAD	Lavender top (EDTA) tube	5 mL plasma. Separate plasma from cells within 4 hours of collection; store at -60° C to -80° C in sterile screw-capped tube.
HPV (Human Papillomavirus)	HPV	Digene Cervical Sampler	

India Ink	II	Sterile tube or CSF tube	Performed at Regional Laboratory, order CRAG.
Influenza A By PCR	RESP P	Universal Viral Transport System	Do not use calcium alginate swab.
Influenza B By PCR	RESP P	Universal Viral Transport System	Do not use calcium alginate swab.
Isospora	ISOS	Parasitology stool collection container with formalin	
KOH/Calcofluor Preparation	KOH	Screw cap container or tube	Test order must state site of specimen and etiological agent suspected.
Legionella pneumophila Culture	C LE	Sterile screw cap container	Avoid saline during collection, processing, and storage of specimens. Formalinized specimens are unacceptable.
Malaria Smear	MALARIAR	Six slides: three thick and three thin smears. Place in slide holder after slides have dried.	Prepare smears directly from finger puncture. EDTA blood is not acceptable at Regional Laboratory for malaria identification.
Microsporidia	MICR	Parasitology stool collection container with formalin	
MRSA Culture	C MRSA	Swab	Send swab to Regional Laboratory for plating.
Nocardia Culture	C FU	Screw cap container or Culturette	
Parasite Identification	PARA ID	Screw cap container	Separate suspected parasite or worm from stool and add a small amount of 10% formalin to preserve specimen. Arthropods are best submitted in 10% alcohol (rubbing (isopropyl) alcohol is suitable). For skin scrapings, add a small amount of saline or water (just enough to keep specimen moist).
Parasite, Blood	C PARREF	Six slides: three thick and three thin smears. Place in slide holder after slides have dried.	Test order must indicate patient's travel history and parasite suspected.
Pinworm Preparation	PINW	Pinworm paddle	Best sampling occurs in the morning just after waking before bathing or a bowel movement. Stool specimens are not acceptable.
Pneumocystis carinii Stain (P. jiroveci)	PCP STAIN	Sterile screw cap container	Noninduced sputum, lung tissue and fixed specimens are not acceptable.
Protozoa Smear and Giardia EIA	PR	Parasitology stool collection containers containing 10% formalin and polyvinyl (PVA)	Unpreserved specimens for routine parasitological examination are not acceptable.
Protozoa Smear, Trichrome Stain	PRSM	Parasitology stool collection container with polyvinyl (PVA)	Test order must indicate patient's travel history and parasite suspected. Material must not be allowed to dry out.
Respiratory Culture	C RE	Sputum container or sputum trap, sterile tracheal aspirate or bronchoscopy aspirate tube	Gram stain should be read at Facility Laboratory to determine acceptability of specimen for culture and the extent of culture workup. Rejection criteria: Expectorated or induced sputum - reject if >10 squamous epithelial cells/lpf. Adult ETT - reject if >10 squamous epithelial cells/lpf or NOS (no organisms seen). Pedi ETT - reject if NOS (no organisms seen).
Respiratory Syncytial	RESP P	Universal Viral Transport	Do not use calcium alginate swab.

Virus (RSV) By PCR		System	
Respiratory Virus Culture	C VIRR	Universal Viral Transport System	Do not use calcium alginate swab. Refrigerate specimen until shipment to the Regional Laboratory. Transport to Regional Laboratory with frozen cold packs.
Schistosoma haematobium Exam, Urine	HELM	Screw cap container	Collect specimen between noon and 3 PM. Peak egg excretion occurs between midday.
Sputum Culture, Routine	C RE	Sputum container or sputum trap, sterile tracheal aspirate or bronchoscopy aspirate tube	Gram stain should be read at Facility Laboratory to determine acceptability of specimen for culture and the extent of culture workup. Rejection criteria: Expectorated or induced sputum - reject if >10 squamous epithelial cells/lpf. Adult ETT - reject if >10 squamous epithelial cells/lpf or NOS (no organisms seen). Pedi ETT - reject if NOS (no organisms seen).
Stool Culture, Routine	C ST	Culturette or enteric transport vial (Cary Blair)	Incubate plates as follows: Routine culture plates- HE, XLD - 35 ± 2° C, non-CO_2 CAMPY - 42° C, CAMPY bio-bag (TIMS # E2558). Additional special request plates- CIN - room temperature CNA - 35 ± 2° C MAC-SOR - 35 ± 2° C, non-CO_2 TCBS - 35 ± 2° C, non-CO_2
Strep A Probe, Throat	SAP	Red-labeled "Strep Screen Only" swab	Uncrushed culturette swab also acceptable.
Throat Culture, Routine	C RE	Culturette	State the organism(s) to R/O in the comments field.
Tissue/Biopsy Culture, Routine	C TI	Sterile screw cap tube or sterile container. For bone marrow use heparinized syringe or yellow top SPS Vacutainer tube.	Site of specimen must be stated. Tissue must be kept moist with 0.5 mL sterile nonbacteriostatic saline or sterile water.
Urine, Chlamydia By Amplified Probe	GCCTU	Sterile urine collection container and APTIMA Urine Collection Tube	Refer to Chlamydia and/or GC amplification, Urine
Urine, GC By Amplified Probe	GCCTU	Sterile urine collection container and APTIMA Urine Collection Tube	Refer to Chlamydia and/or GC amplification, Urine
Urine Culture, Routine	C UR	Sterile plastic urine cup or sterile tube	Test order must clearly specify clean catch, suprapubic or catheterized.
Varicella-Zoster Virus Antigen by DFA	FVZ	Slide	Air dry slide. Do not use fixatives.
Viral Culture, Miscellaneous	C VIR	Universal Viral Transport System or sterile screw cap tube or sterile container or heparin tube (green top)	Do not use calcium alginate swab. To prevent drying of tissues, samples should be kept refrigerated in a small volume of viral transport medium, sterile saline or bacteriologic broth. Refrigerate specimen until shipment to the Regional Laboratory. Transport to Regional Laboratory with frozen cold packs. Store and transport whole blood at ambient temperature.

Viral Culture, Respiratory	C VIRR	Universal Viral Transport System	Do not use calcium alginate swab. Refrigerate specimen until shipment to the Regional Laboratory. Transport to Regional Laboratory with frozen cold packs.
Wound Culture, Routine	C MB	Sterile screw cap tube, aerobic Culturette	If anaerobes are suspected, an anaerobic transport tube/vial system must be used. See Anaerobic Culture.

GUIDELINES FOR TESTING OF ACUTE DIARRHEA IN IMMUNOCOMPETENT ADULT

The majority of acute diarrheal illnesses are caused by viruses and self-limited, requiring only supportive care. Bacterial infection should be suspected in cases lasting ≥ 3 days with one or more of the following:

- fever > 101F
- abdominal pain
- blood diarrhea

1. Perform stool culture on suspected bacterial diarrhea; only one culture per episode.

2. Alert the laboratory if bloody diarrhea is present; Lab will set up for enterohemorrhagic E. coli (O157:H7).

3. Fecal leukocyte testing or gram stain are generally not clinically useful.

4. Do not culture traveler's diarrhea, except for patients with bloody diarrhea *bacteria culture and protozoal screen for amoebiasis), and profuse watery diarrhea (Vibrio cholerae), or patients who otherwise meet criteria for bacterial culture.

5. Consider testing for protozoa if diarrhea persists ≥ 10 days. Crytosporidium and cyclospora testing is generally not helpful in acute diarrhea.
   - Protozoal testing consists of one stool for Protozoa screen. This includes a smear for amebas and an EIA assay for Giardia.
6. Consider C. difficile toxin assay with a history of recent antibiotic use.

7. It is acceptable to treat suspected bacterial diarrhea or traveler's diarrhea empirically with Ciprofloxacin (500 mg bid x 3 days), if diarrhea is persistent.

8. Document on the medical record:
   - patient's profession (be sure to ask if food handler or day care)
   - travel history in the last 4 weeks
   - history of contact with known or suspected gastroenteritis

Hospitalized Patients

1. Patients who are ill enough to require hospitalization for diarrhea should have a stool culture performed.

2. In patients who develop diarrhea after 3 days of hospitalization, perform C. difficile toxin assay only. Stool cultures and protozoal exams are not useful in this population, unless the patient is immunocompromised, or there is a recent history of travel. If the first C. difficile is negative but the clinical suspicion is high, repeat the test. Empiric metronidazole PO or NG can be started in likely cases while awaiting test results.

3.

GUIDELINES FOR TESTING OF ACUTE DIARRHEA IN IMMUNOCOMPETENT CHILDREN

Acute diarrheal illness in infants and children is most often viral and self-limited, requiring supportive care to prevent or treat dehydration; diagnostic testing is generally unnecessary.

Bacterial infection should be suspected in cases with one or more of the following:

- fever > 101F
- signs/symptoms of systemic illness (lethargy, toxic appearance)
- prolonged abdominal pain
- blood or mucous in stools
- seizures
- history of contact with another known or suspected case of bacterial enteritis.

1. Perform stool culture on suspected bacterial diarrhea; only one culture per episode.

2. Alert the laboratory if bloody diarrhea is present; Lab will set up for enterohemorrhagic E. coli (O157:H7).

3. Do not culture traveler's diarrhea, except for patients with bloody diarrhea (bacteria culture and protozoal screen for amoebiasis), and profuse watery diarrhea (Vibrio cholerae), or patients who otherwise meet criteria for bacterial culture.

4. Prolonged diarrhea in infants and children, particularly those attending a childcare center, is often caused by Giardia lamblia.

5. Consider testing for protozoa if diarrhea persists ≥ 10 days. Crytosporidium and cyclospora testing is generally not helpful in acute diarrhea.

6. Document on the medical record:
   - childcare attendance
   - travel history in the last 4 weeks
   - history of contact with known or suspected gastroenteritis

<u>Hospitalized Patients</u>

1. All patients with diarrhea severe enough to require hospitalization should have bacterial cultures.

2. In patients who develop diarrhea after 3 days of hospitalization, stool cultures are not useful unless the patient is immunocompromised, or there is a recent history of travel. In this situation, C. difficile toxin assay only should be considered in patients who have been on antibiotics.

PATIENT / COLLECTION INSTRUCTIONS

Patient instructions available in this manual:

Special Instructions

- Instructions for Fasting Blood Work
- Instructions for Glucose Tolerance Test
- Instructions for Two Hour P.C. Glucose
- Blood Collection Instructions for Quantiferon ® TB Gold (Client Incubated)
- Clean Catch, Midstream Urine Collection

Instructions for Special Urine Tests

- AFB urine Culture; Urine Drugs of Abuse and Adulteration Panels; Urine Microalbumin
- Heavy Metals

Instructions for 24 Hour Urine Collection

- Dietary Preparation for 24 Hour Urine Collection
- Instructions for Urine Pregnancy Test Specimen Collection
- Instructions for Collecting Sputum Specimens for Routine Culture
- Instructions for Collecting Sputum Specimens for Acid Fast Bacilli (AFB)
- Instructions for Collecting Sputum Specimens for Cytology
- Instructions for Stool Specimen Collection – Stool Culture; Ova and Parasite; C. difficile or WBC Smear
- Instructions for Obtaining Stool Occult Blood Test Specimens
- Instructions for Obtaining Pinworm Test Specimens
- Instructions for Obtaining 72 Hour Fecal Fat Specimen

Instructions for Complete Semen Analysis Specimen Collection

- Instructions for Post-Vasectomy Specimen Collection

SPECIAL INSTRUCTIONS

Specimens which CANNOT be collected on weekends:

When the following tests are ordered, patients should be informed when the specimen CAN or CANNOT be collected. These are usually less commonly ordered tests which are run by our reference labs, including the Regional Lab, only once or twice per week. If collected on weekends the specimens are not stable long enough for accurate results to be obtained.

Test	CANNOT be collected on:	CAN be collected on:
Chromosome Analysis on Bone Marrow Aspirate	Sat – Sun	Mon - Fri
CLL Panel Marker	Sat – Sun	Mon - Fri
Leukemia/Lymphoma Panel	Sat – Sun	Mon - Fri
Natural Killer Cells	Sat – Sun	Mon - Fri
HLA Phenotyping	Sat – Sun	Mon - Fri
CMTI Evaluation Profile	Fri – Sun	Mon - Thur
Pressure Palsy Neuropathy	Fri – Sun	Mon - Thur
TTR met 30 Amyloidosis DNA Test	Fri – Sun	Mon - Thur

A. Northern California Region Standardized Patient Instructions: Patient Instructions for the following tests have been standardized throughout the NCR. See the following pages for specifics.

1. Fasting blood work
2. Glucose tolerance test
3. Glucose 2 hour P.C.
4. Urine, clean catch
5. Special urine tests: Urine AFB Culture; Urine Drugs of Abuse & Adulteration Panels; Urine Microalbumin
6. Urine 24 hour: Specimen collection and Dietary preparation for Creatinine clearance, Catecholamines, Fractionation, and Dopamine; 5-HIAA, HVA, Total Metanephrines, Oxalate, Quantitative Porphyrins, VMA
7. Urine pregnancy test
8. Sputum - routine culture
9. Sputum for AFB
10. Sputum for cytology
11. Stool specimen collection: Stool Culture; Ova and Parasite; C. difficile or WBC Smear
12. Colorectal screening, Fit kit, and stool for occult blood.
13. Pinworms
14. Fecal Fat, 72 hour
15. Semen analysis (local instructions)
16. Semen, post vasectomy

B. d-Xylose tolerance test. Patient should be instructed to:

1. Fast from midnight. Water is permitted.

2. Arrive at the Laboratory as early as possible. The test takes 5 hours and the patient must fast until the test is completed. Therefore, the patient should be advised to arrive at the Laboratory as early as possible. The Clinic Lab opens at 6:45 a.m., Monday - Friday

3. Protocol:
   a) The lab will give the patient 25 grams of d-xylose dissolved in 250 ml of water. The patient is asked to drink an additional 250 ml of water or as much as possible during the next 5 hours.
   b) From this point on save all voided urine until test is completed. Lab will provide a container.
   c) One hour from the start of the test (administration of d-xylose) a blood specimen will be collected.
   d) Five hours from the start of the test, the patient empties his/her bladder completely, and adds this specimen to the urine pool. The test is now complete, and normal diet may be resumed.

C. Triglycerides and lipoproteins. Patient must be fasting per the Standardized Specimen Collection Instructions.

D. Schilling test. The Laboratory is no longer involved in the Schilling test. Please contact Radiology for information.

Instructions for Fasting Blood Work

Your doctor has ordered a test that requires a 12-hour period of fasting before your blood is drawn.

1. Do not eat or drink anything for 12 hours before having your blood drawn. You may have water only (no coffee, tea or juice).

2. Avoid smoking, breath mints and gum chewing prior to having your blood drawn.

3. Take any medications ordered by your doctor according to instructions.

4. Bring all the laboratory slips the doctor gave you with your Kaiser Health Plan card when reporting for the tests.

Instructions for Glucose Tolerance Test

Your doctor has ordered a test that requires a 12-hour period of fasting before your blood is drawn.

1. Eat your usual, well-balanced meals, including starches and sweets for three days before the test.

2. Do not eat or drink anything for 12 hours before having your blood drawn. You may have water only (no coffee, tea or juice).

3. Avoid smoking, breath mints and gum chewing prior to having your blood drawn.

4. Take any medications ordered by your doctor according to instructions.

5. Bring all the laboratory slips the doctor gave you when reporting for the tests.

6. You will be given a glucose (sugar) solution to drink and blood samples will be drawn at timed intervals. The timing of each blood draw is critical for test accuracy.

7. This test will take _____hours. Please plan to remain in the building until the test is completed.

8. If you have an appointment for this test, it is on _____at _____.
   (date) (time)

Note: Fasting is not required for prenatal one-hour glucose screen tests (GLUCP).

Instructions for Two Hour P.C. Glucose

Your doctor has ordered a test that requires a 12-hour period of fasting before your blood is drawn.

1. Do not eat or drink anything (except water) for 12 hours before your morning meal.

2. If your doctor has ordered a FASTING GLUCOSE, come to the laboratory to have your blood drawn before eating.

3. Eat your morning meal exactly 2 hours before having your blood drawn for the TWO-HOUR P.C. GLUCOSE. Please come to the laboratory 20 minutes before the blood should be drawn to allow time for registration.

4. Your meal should consist of food you normally eat at breakfast time. You may have coffee, tea or water with your meal.

    a) pancakes with syrup or
    b) toast with jam or
    c) cereal with milk or
    d) eggs and toast

5. Take any medications ordered by your doctor according to instructions.

6. Bring all the laboratory slips the doctor gave you with your Kaiser Health Plan card when reporting for the tests.

DO NOT FORGET TO BE 20 MINUTES EARLY!

Blood Collection Instructions for Quantiferon ® TB Gold (Client Incubated)

1. For each patient, collect 1.0 ml of blood by venipuncture directly into each of three (3) unique Quantiferon-TB GOLD IT blood collection tubes. Tubes must be at room temperature prior to collection. Under or overfilling of the tubes may lead to erroneous results.

2. Shake them ten (10) times just firmly enough to ensure the entire surface of the tube is coated with blood to solubilize antigens on the tube walls.

3. Transport specimens at room temperature to the laboratory immediately for processing.

Clean Catch, Midstream Urine Collection

Your doctor has ordered a test that requires a clean catch, midstream urine specimen.

1. Wash your hands thoroughly with soap and water.

2. Remove the container lid, without touching the inside of the lid or cup.

3. Clean the area around your genitals.

    - For men: Retract the foreskin, if present, and clean the head of your penis with medicated towelettes or swabs.

    - For women: Spread open the genital folds of skin with one hand. Then use medicated towelettes or swabs in your other hand to clean the area where urine comes out (the urethra). Wipe the area from front to back.

4. Urinate a small amount into the toilet bowl. Collect only the middle portion of urine flow in the cup. Fill the cup no more than half-full. Finish urinating into the toilet bowl.

5. Replace the lid to prevent leakage, handling only the top of the lid.

6. Be sure the container is labeled with the following:

    - Your full name
    - Your Kaiser medical record number
    - Date of collection

7. Place the specimen cup and laboratory slip, if you have one, through the specimen window in the restroom or return the specimen cup to the front desk, as you were instructed.

8. **PLEASE DO <u>NOT</u> LEAVE THE SPECIMEN IN THE RESTROOM.**

Instructions for Special Urine Tests
(Page 1 of 2)
(Follow instructions, as marked.)

I. AFB Urine Culture (First morning clean-catch, midstream urine is required.)

1. When you get up, wash your hands thoroughly with soap and warm water.

2. Remove the container lid, without touching the inside of the lid or cup.

3. Clean the area around your genitals.

   - For men: Retract the foreskin, if present, and clean the head of your penis with medicated towelettes or swabs.

   - For women: Spread open the genital folds of skin with one hand. Then use medicated towelettes or swabs in your other hand to clean the area where urine comes out (the urethra). Wipe the area from front to back.

4. Urinate a small amount into the toilet bowl. Collect only the middle portion of urine flow in the cup. Fill the cup no more than half-full. Finish urinating into the toilet bowl.

5. Replace the lid to prevent leakage, handling only the top of the lid.

6. Be sure the container is labeled with the following:
   a. Your full name
   b. Your Kaiser medical record number
   c. Date and time of collection
   d. The urine specimen must be refrigerated or packed on wet ice if it is not going to be delivered to the laboratory within one hour of collection.
   e. Return the urine specimen and the slip(s) the doctor gave you to the laboratory receptionist within four hours of collection.

II. Urine Drugs of Abuse and Adulteration panels

1. Do not use an alcohol-containing disposable wipe (e.g. Rantex Wipes) for cleansing before collecting the urine.

2. Collect urine in the cup provided, filling at least half-full (full cup is preferred).

3. Replace the lid to prevent leakage.

4. Be sure the container is labeled with the following:

   a) Your full name
   b) Your Kaiser medical record number
   c) Date and time of collection

5. Place the specimen cup and laboratory slip, if you have one, through the specimen window in

the restroom or return it to the front desk, as you were instructed.

KAISER PERMANENTE

Medical Toxicology Consultation Service
Kaiser Permanente Northern California

Urine Heavy Metals Screening
Patient Information Sheet

Please read this sheet prior to collecting your heavy metals specimen. ***To ensure accurate measurement of the heavy metals in your body, the following protocol has been developed and should be followed closely:***

1.) Prior to collecting the urine specimen, go to the laboratory and pick up the collection container. It needs to be a special container (free of trace metals) for urine collection.

2.) Abstain from eating any seafood for at last ten (10) days prior to collection of the sample for analysis. This includes all fish, shellfish, and seaweed. The reason for this is that many types of seafood contain trace elements which can show up on urine analysis.

3.) Please abstain from taking any over-the-counter nutrition supplements, herbal medications, or vitamins for at least ten (10) days prior to collection. These substances contain various trace elements which can show up on analysis.

4.) Collect the urine specimen ONLY in the container provided by the laboratory. Other containers may contain metals residues which can influence your analysis.

5.) Please wash hands with soap and water prior to urine collection or handling containers. Dry hands with clean cloth towels. Do not use recycled paper towels. On the first day of collection, discard first morning void then collect all urine including the final specimen voided at the end of the 24-hour collection period, i.e., the same time the next morning. All excreted urine for a 24-hour period should be collected. Please collect urine only in the container(s) provided by the laboratory. Screw the lid on securely.

6.) Please store the collected urine specimen in the refrigerator until it is time to take it to the laboratory. Please return the specimen to the lab within 12 hours of collection and within 2 hour of leaving the refrigerated environment. If you drive to the laboratory, turn on the air conditioner, and place the specimen in the cabin of the car. Do not place the specimen in the trunk, or leave it in the cabin without air conditioning.

Instructions for Special Urine Tests
(Page 2 of 2)

III. Urine Microalbumin

1. Do not exercise just before the test.

2. Tell your doctor if you are having your period or have vaginal discharge.

3. Tell your doctor about all the nonprescription and prescription medicines and herbs or other supplements you take. Some medicines and supplements can affect the results of this test.

4. Your doctor or the lab will probably give you the container you need to hold the urine and give you instructions on when and how to collect the urine. This might be a one-time collection or a collection over a period of time.
    - First morning urine: Empty bladder immediately before going to sleep. Do not drink water or other liquids after 11 p.m. (unless specified by physician). Collect the first void concentrated urine upon arising (Do not collect urine the patient may pass during the middle of the night). Follow the above instructions for any other eight-hour period to accommodate insomniacs and night-shift workers.

    - Random urine: Avoid urine collection after exertion or drinking large amount fluids.

    - 24 hr collection: Void on arising the first day, and discard the specimen. Then collect all urine including the final specimen voided at the end of the 24-hour collection period (ie, the same time the next morning). Screw the lid on securely.

5. Wash your hands to make sure they are clean before collecting the urine.

6. If the collection cup has a lid, remove it carefully and set it down with the inner surface up. Do not touch the inside of the cup with your fingers.

7. Clean the area around your genitals.
    - A man should retract the foreskin, if present, and clean the head of his penis with medicated towelettes or swabs.
    - A woman should spread open the genital folds of skin with one hand. Then use her other hand to clean the area around the urethra with medicated towelettes or swabs. She should wipe the area from front to back so bacteria from the anus are not wiped across the urethra.

8. Begin urinating into the toilet or urinal. A woman should hold apart the genital folds of skin while she urinates.

9. After the urine has flowed for several seconds, place the collection cup into the urine stream and collect about 2 fluid ounces of this "midstream" urine without stopping your flow of urine.

10. Do not touch the rim of the cup to your genital area. Do not get toilet paper, pubic hair, stool (feces), menstrual blood, or anything else in the urine sample.

11. Finish urinating into the toilet or urinal.

12. Carefully replace and tighten the lid on the cup, and then return it to the lab. If you are collecting the urine at home and cannot get it to the lab in an hour, refrigerate it.

13. Be sure the container is labeled with the following:
    a) Your full name
    b) Your Kaiser medical record number
    c) Date and time of collection: For timed collections - date and time collection started, and date and time collection finished.

14. Transport the specimen with the slip(s) the doctor gave you promptly to the laboratory.

* Note: Follow these instructions for any other eight-hour period to accommodate insomniacs and night-shift workers.

Instructions for 24 Hour Urine Collection

Your doctor has ordered a test that requires a timed urine collection. You may be asked to follow a special diet prior to and during the specimen collection period. Please follow the instructions outlined below.

- Container has preservative
- Container has NO preservative

Caution:
The large urine container given to you may contain a preservative. If so, DO NOT DISCARD IT. The preservative is **POISONOUS. AVOID ANY CONTACT AND DO NOT BREATHE ITS VAPORS. KEEP OUT OF REACH OF CHILDREN**. Any spilled preservative should be washed off immediately with plenty of water.

1. Most people find the collection easiest when started on a Sunday. Unless the laboratory will be open the following day, do not begin collection on a Friday, Saturday or the day before a holiday. Follow any instructions your doctor gave you regarding the collection date.

2. At your "TIME START", when you get up in the morning, empty your bladder and discard this urine. Record your "TIME START" and the date on the urine container label.

3. Collect urine in a clean paper or plastic cup and pour the urine into the container. DO NOT URINATE DIRECTLY INTO THE LARGE CONTAINER.

4. During the next 24 hours, collect all of your urine and add it to the large container.

5. Store the urine in the refrigerator or in a separate insulated container packed with wet ice away from direct light. Keep the container tightly capped to prevent leakage.

6. After 24 hours, at “TIME END”, empty your bladder and add this urine to the container. Record your "TIME END" and the date on the container label. "TIME START" and "TIME END"

should be the same time, 24 hours apart.

7. Do not bring in an incomplete collection (e.g. forgetting one specimen during the 24 hours). Instead, come to the laboratory for a new container and begin again.

8. Be sure the container is labeled with the following:
    a) Your full name
    b) Your Kaiser medical record number
    c) Date, collection "TIME START" and date, collection "TIME END"

9. Return the urine specimen with the slip(s) the doctor gave you to the laboratory the same day the specimen collection is completed.

Note: Instructions for a 12-hour, 2-hour or any other timed urine collection are the same as above, except for the specimen collection time period.

Additional Instructions for Creatinine Clearance Test

1. Do not do any strenuous exercise for 2 days (48 hours) before having the tests.

2. Drink plenty of fluids if you are asked to collect your urine for 24 hours. But do not drink coffee or tea. These are diuretics that cause your body to pass more urine than normal.

3. Do not eat more than 8 ounces of meat, especially beef, or other protein for 24 hours before the blood creatinine test and during the creatinine clearance urine test.

4. Do not do any strenuous exercise for 2 days (48 hours) before having the tests.

5. You must come to the laboratory for a required blood test the day the urine collection is completed, when returning the urine specimen.

6. Tell your doctor about all the nonprescription and prescription medicines and herbs or other supplements you take. Some medicines and supplements can affect the results of these tests.

Dietary Preparation for 24 Hour Urine Collection

Dietary Restrictions and Medication Precautions (Refer to marked instructions):

1. Catecholamines, Fractionation, Urinary Free (Epinephrine, Free Catecholamine) and Dopamine
   Avoid caffeine 4 hours prior to and during collection. Avoid vigorous exercise during urine collection. Mandelamine should be avoided 48 hours prior to and during collection. If you are taking Mandelamine, please consult your doctor before discontinuing medication.

2. 5-HIAA (5-Hydroxyindoleacetic Acid)
   Avoid bananas, avocados, plums, eggplant, tomatoes, plantain, pineapples, walnuts, and kiwi for a 72-hour period prior to and during the collection. Avoid smoking and alcohol for 72 hours prior to and during collection. Reserpine, imipramine, isoniazid, methyldopa, monoamine oxidase inhibitors or any compound containing these drugs will affect test results. If you are on any of

these medications, please consult your doctor prior to discontinuing.

3. HVA (Homovanillic Acid)
   Avoid disulfiram, reserpine and pyridoxine for 48 hours prior to and during collection. Avoid levodopa for 2 weeks prior to and during collection. If you are on any of these medications, please consult your doctor prior to discontinuing.

4. Metanephrines, Total
   Avoid caffeine 4 hours prior to and during collection. Monoamine oxidase inhibitors affect test results and should be discontinued at least 1 week prior to beginning collection. If you are taking this medication, please consult your physician prior to discontinuing.

5. Oxalate
   Avoid excessive amounts of vitamin C (more than 2 grams/day) or vitamin C-rich foods for 48 hours prior to and during collection.

6. Porphyrins, Quantitative
   Avoid alcohol 24 hours prior to and during collection. Phenazopyridine, oxytetracycline, sulfamethoxazole, acriflavine, ethoxazene, and tetracycline affect test results and should be discontinued 2-4 weeks prior to and during urine collection. If you are on any of these medications, please consult your doctor prior to discontinuing. Store the urine container away from direct sunlight during the entire collection period.

7. VMA (Vanillylmandelic Acid)
   Anti-hypertensive agents (e.g. alpha-methyldopa) affect test results and should be avoided for 48 hours prior to collection. If you are on this type of medication, please consult your doctor prior to discontinuing.

Instructions for Urine Pregnancy Test Specimen Collection

1. Pregnancy testing should be done at least one week after your first missed period.

2. If your test result is negative and pregnancy is still suspected, a repeat test should be done no sooner than 7 to 10 days.

3. If the second test is negative and you still have not had a period, contact your doctor.

4. Urine specimens may be collected in any clean, dry, plastic or glass container with a tight-fitting lid. Your first morning urine is preferred.

5. Be sure the container is labeled with the following:
   - Your full name
   - Your Kaiser medical record number
   - Date of collection

6. Return the urine specimen to the laboratory receptionist the same day the specimen was collected.

7. Results will be available in 24 hours (one working day) after the specimen was received in

the laboratory, Monday through Friday. Results will be available on Monday for specimens received on the weekend.

8. Pregnancy test results are confidential and will only be given to the patient. Results will not be given to spouses, relatives or friends.

9. To obtain the results of your pregnancy test, you may call the advice nurse at extension _____ Monday through Friday between the hours of _____a.m. and _____p.m. Have your Kaiser Health Plan card ready when you call.
Do not call the lab for test results.

Instructions for Collecting Sputum Specimens for Routine Culture

Your doctor has ordered a test that requires a sputum specimen collection. It is very important that an adequate sputum specimen is collected for this procedure.

- Saliva is the watery fluid in the mouth and is not desirable for culture.

- Post-nasal drainage is the thick material which drains down from the nose and sinuses at the back of the throat, especially during the night. This material should be cleared from the throat and discarded before collecting the sputum specimen.

- Sputum is material from deep down in the chest which is obtained by deep coughing.

Collection Instructions

1. Collect sputum early in the morning immediately after waking up and before eating or drinking. Rinse mouth with water and remove dentures, if any.

2. Breathe in and out deeply 2 to 4 times.

3. Give a series of low, deep coughs to raise sputum from the lungs and deposit material into the sterile container. It is helpful to have about 2 teaspoons of sputum.

4. Replace the lid to prevent leakage.

5. Be sure the container is labeled with the following:
    - Your full name
    - Your Kaiser medical record number
    - Date and time of collection

6. Return the specimen container with the slip(s) your doctor gave you to the laboratory receptionist on the same day.

Instructions for Collecting Sputum Specimens
for Acid Fast Bacilli (AFB)

Your doctor has ordered a test that requires a sputum specimen collection. It is very important that an adequate sputum specimen is collected for this procedure.

- Saliva is the watery fluid in the mouth and is not desirable for culture.

- Post-nasal drainage is the thick material which drains down from the nose and sinuses at the back of the throat, especially during the night. This material should be cleared from the throat and discarded before collecting the sputum specimen.

- Sputum is material from deep down in the chest which is obtained by deep coughing.

Collection Instructions

1. Collect sputum early in the morning immediately after waking up and before eating or drinking. Rinse mouth with water and remove dentures, if any.

2. Breathe in and out deeply 2 to 4 times.

3. Give a series of low, deep coughs to raise sputum from the lungs and deposit material into the sterile container. It is helpful to have about 2 teaspoons of sputum.

4. Secure the lid to prevent leakage.

5. Be sure the container is labeled with the following:
    - Your full name
    - Your Kaiser medical record number
    - Date and time of collection

6. If your doctor wants you to collect more than one specimen, collect a sputum specimen each morning for as many times as you have containers. If your doctor has requested a total of three specimens, the specimens for the first and second days may be refrigerated until the third specimen is collected, so that you can take all three specimens to the laboratory at the same time.

7. Return the specimen container(s) and with the slips the doctor gave you to the laboratory receptionist on the same morning the last specimen was collected.

Instructions for Collecting Sputum Specimens for Cytology

Your doctor has ordered a test that requires a sputum specimen collection. It is very important that an adequate sputum specimen is collected for this procedure.

- Saliva is the watery fluid in the mouth and is not desirable for culture.

- Post-nasal drainage is the thick material which drains down from the nose and sinuses at the back of the throat, especially during the night. This material should be cleared from the throat and discarded before collecting the sputum specimen.

- Sputum is material from deep down in the chest which is obtained by deep coughing.

Collection Instructions

1. Collect sputum early in the morning immediately after waking up and before eating or drinking. Rinse mouth with water and remove dentures, if any.

2. Breathe in and out deeply 2 to 4 times.

3. Give a series of low, deep coughs to raise sputum from the lungs and deposit at least 1 to 2 teaspoons of material into the container which contains a preservative. WARNING: The preservative is POISONOUS. Avoid contact and keep out of reach of children.

4. Secure the lid to prevent leakage.

5. Be sure the container is labeled with the following:
    - Your full name
    - Your Kaiser medical record number
    - Date and time of collection

5. If your doctor wants you to collect more than one specimen, collect a sputum specimen each morning for as many times as you have slips. If your doctor has requested a total of three specimens, the specimens for the first and second days may be kept at room temperature until the third specimen is collected, so that you can take all three specimens to the laboratory at the same time.

6. Return the specimen container(s) with the slips the doctor gave you to the laboratory receptionist on the same morning the last specimen was collected.

Needle Aspiration Cytology

Test Includes Examination of stained slides. Cell block or filter preparation may be included.

Department/Phone Cytology, ext 5406

Setup Date/Time Mon-Fri, 7 AM - 11 PM **Report Date/Time** 24-48 hours

Special Instructions

Syringe needles **must** always be removed prior to shipping specimen to Cytology. Information regarding specific site of specimen, pertinent clinical data (i.e., age, preoperative diagnosis, and history of carcinoma or infection suspected) is essential to interpretation and should be received with the specimen.

Specimen

Needle aspirate

Pediatric Volume

Air-dried slides, alcohol fixed slides, or aspirated specimen in plastic container with Carbowax® fixative added.

Container

Extra specimen should be placed in a container with saline for a cell button and additional slides.

Collection

The aspiration procedure requires facility and practice. Place a drop of needle aspirate onto glass slide and prepare the smear using the blood smear technique. Fix immediately in 95% ethyl alcohol. Rinse needle with 10-20 mL saline and expel rinse material into a glass tube. Label frosted slides with patient's name and medical record number. If air-dried smears are submitted, this must be noted.

Specimen Processing and Storage Instructions

Some cytopathologists prefer air-dried smears, which must be stained differently from alcohol-fixed smears. If air-dried smears are submitted, this must be noted. Check the fixative preferences of the Cytopathology Department. Transport specimen to the Cytology Laboratory immediately. Slides fixed in 95% alcohol are to remain in that fixative until they are forwarded to the laboratory. Submit all tissue and fluid obtained by needle biopsy to Cytology for preparation of smears and cell block. If smears are made by the physician, follow instructions above and submit all remaining aspirated material to the Cytology Laboratory.

Cause(s) of Specimen Rejection

Improper fixation or drying artifact

Reference Range

Negative for abnormal cells compatible with malignant neoplasm, inflammatory processes, and some infectious diseases

Use

Diagnose primary or metastatic malignant neoplasms; aid in the diagnosis of bacterial and fungal infections; diagnose amyloidosis

Limitations

Like all cytologic procedures, needle aspiration is subject to sampling error; small lesions may be difficult to hit. Aspirations of the thyroid are **unable** to distinguish follicular **adenoma** from follicular **carcinoma**. Aspiration is **not** the procedure of choice to diagnose lymphoma, or soft tissue neoplasms.

Contraindications

Severe COPD is a contraindication to pulmonary aspiration, which has a 15% to 30% risk of pneumothorax.

Additional Information

Culture should always be considered and obtained frequently. Needle aspiration has very acceptable accuracy in the diagnosis of breast cancer, lung cancer, pancreatic cancer, and metastatic nodal lesions. In many centers definitive surgery is undertaken on the basis of needle aspiration. Close communication among clinician, radiologist, and cytopathologist maximizes the usefulness of this procedure.

Specimen Collection & Processing: For General Lab – Local Facility Staff

INTRODUCTION

The quality of results from laboratory testing depends greatly on the proper collection and handling of the specimen submitted for analysis. Correct patient preparation, specimen collection, specimen packaging, and transportation are essential factors.

Exception for specimen rejection:

The following specimens are difficult to collect and/or critical to patient care, Lab staff will attempt to run test and resolve specimen problem retrospectively and refer to manager/supervisor for resolution.

1. Cerebrospinal fluid (CSF)
2. Medical Emergency (ME) priority specimen
3. Situations when redraw is not possible ex. timed draw for patient on certain medication.
4. Bone marrow specimen

Health and Safety Precautions

All specimens should be handled as potentially infectious. The greatest dangers to health care workers exposed to blood and body fluids are the human immunodeficiency virus (HIV) and the hepatitis virus.

Vacutainer® specimens should be placed in appropriate racks. All other specimens should be properly sealed prior to being transported and placed in plastic specimen bags. Leaking containers pose a health hazard. Safety regulations require that only specimens in proper containers be permitted to be transported to Regional Lab.

Supplies

Regional Lab supplies STAT envelopes, green racks, Bacti plate holders for specimen transport, urine porphyrin vials, and transport boxes to facility laboratories. Each department is responsible for ordering all other supplies.

Body Fluids for Cytology

Purpose
Body fluids for cytologic examination, including cerebrospinal fluid, are aliquoted, cytocentrifuge and slides made in San Francisco, prior to transport to Kaiser's Regional Laboratory in Berkeley. The only exceptions are urine and peripheral blood/sputum.

Equipment
Shandon, Cytospin3 cytocentrifuge.

Reagents
22% albumin and normal saline.

Specimen

Body fluid collected in red top and lavender top tube.

Container	Red top and lavender top tube
Preferred volume	50-200 ml
Acceptable volume	1-1000 ml
Pediatric volume	5 ml

Procedure

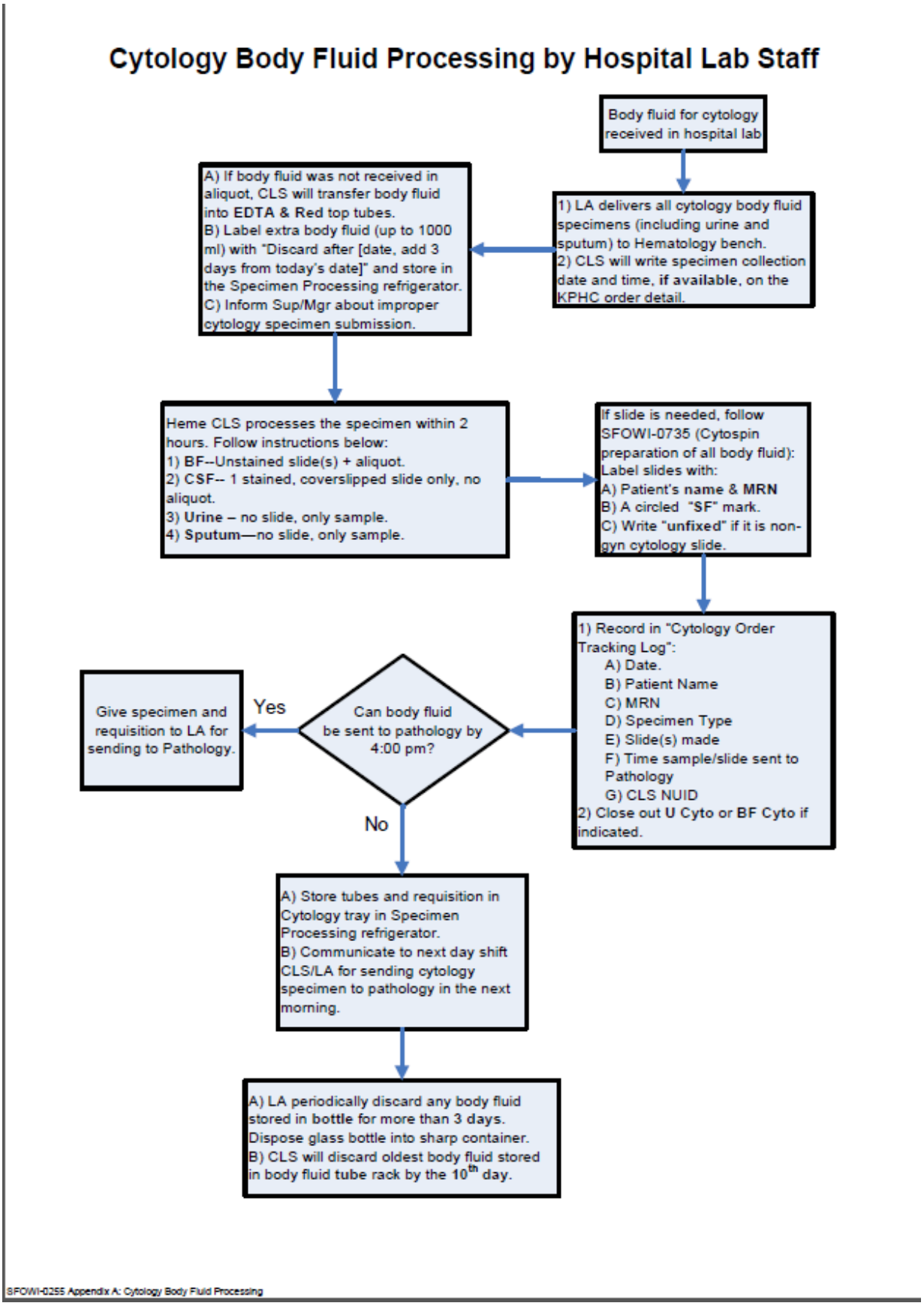
1. Lab assistants (LAs) will route all body fluids (including CSF) with Cytology requisitions to the hematology department, except aliquot of urine and peripheral blood, or sputum along with cytology requisition can be sent to pathology directly. Bacti LA or the first CLS who handles the specimen will transfer body fluid into

Container	Red top and lavender top tube
Preferred volume	50-200 ml
Acceptable volume	1-1000 ml
Pediatric volume	5 ml

2. Label tubes with:
   a. Patient name and MR#
   b. Collect Date and *Time (if available)*
   c. Type of fluid
   Refer to Flow Diagram for quick reference.

3. RILIS Millennium entry is not required.
4. Lab Assistant or CLS writes on the original bottle, **discard after** [**date** (add 3 days from today's date)], and store in the specimen processing refrigerator.
5. Hematology CLS will process the specimen within two hours. Keep specimen refrigerated or on ice.
6. If an aliquot is provided, cytocentrifuge the aliquot according to the cytospin procedure (refer to Hematology Procedure Manual; Slide preparation for CSF and Body Fluids or **SFOWI-0735**: Heme-Cytospin preparation of all body fluids).
7. Make one smear labeled with the **patient's name, MR# and a red "X" mark** (to indicate the smear was made in San Francisco). Make one additional smear if cell count is ordered.
8. Set a timer and air-dry the smear for 15 minutes, following the Cytospin procedure.
9. Place the slide in a holder, secure with a rubber band and label the holder with the patient's name and MR#.
10. Record in the Body Fluids for Cytology log book:
    a. Patient's name and MR#.
    b. Date
    c. Type of fluid
    d. Time specimen signed out of the Hematology department to log-in.
11. Give the aliquot specimen, slide and cytology requisition to the Lab Assistant in Pouring/Distribution to send to Pathology, which will route it to Regional Cytology Lab. If specimen cannot be sent by 4:30 pm, save the aliquot and requisition in Cytology tray in the specimen processing refrigerator. Communicate to next day's CLS/LA to send it to Pathology in the morning.
12. LA periodically discards all body fluid stored in bottles or tube for more than 3 days; CLS will periodically discard oldest body fluid stored in the tube.

Flow Diagram



SPECIMEN COLLECTION FOR REGIONAL LAB TESTING

http://lablink.ca.kp.org/test_directory/

Fasting instructions: Patient should be fasting for 12 hours prior to blood collection. During the fasting period, limit liquid intake to water only; no coffee, tea, or juice. Continue to take any medication ordered by provider, according to instructions.

Generally speaking, whole blood yields 40% serum or plasma; therefore, a completely filled 10 mL tube will yield 4 mL serum or plasma.

For routine collections, please submit the 10 mL SST tube and 5 mL EDTA tubes unless specified otherwise.

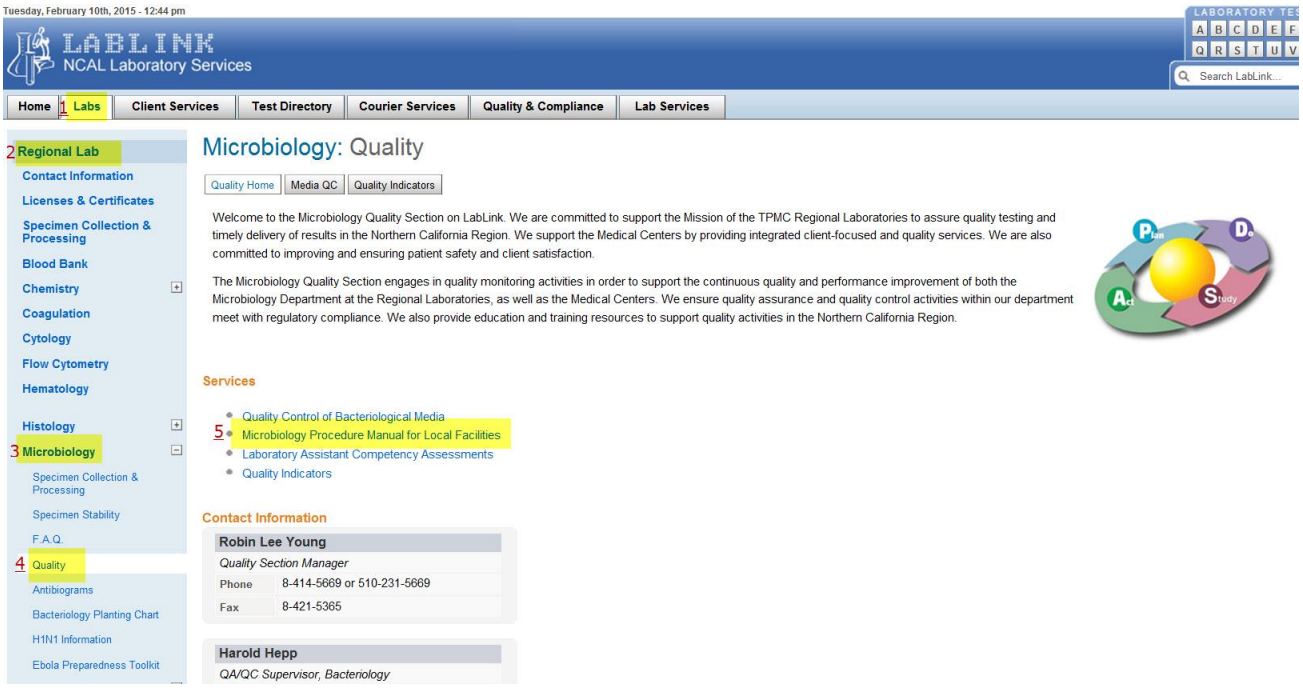
Blood Collection

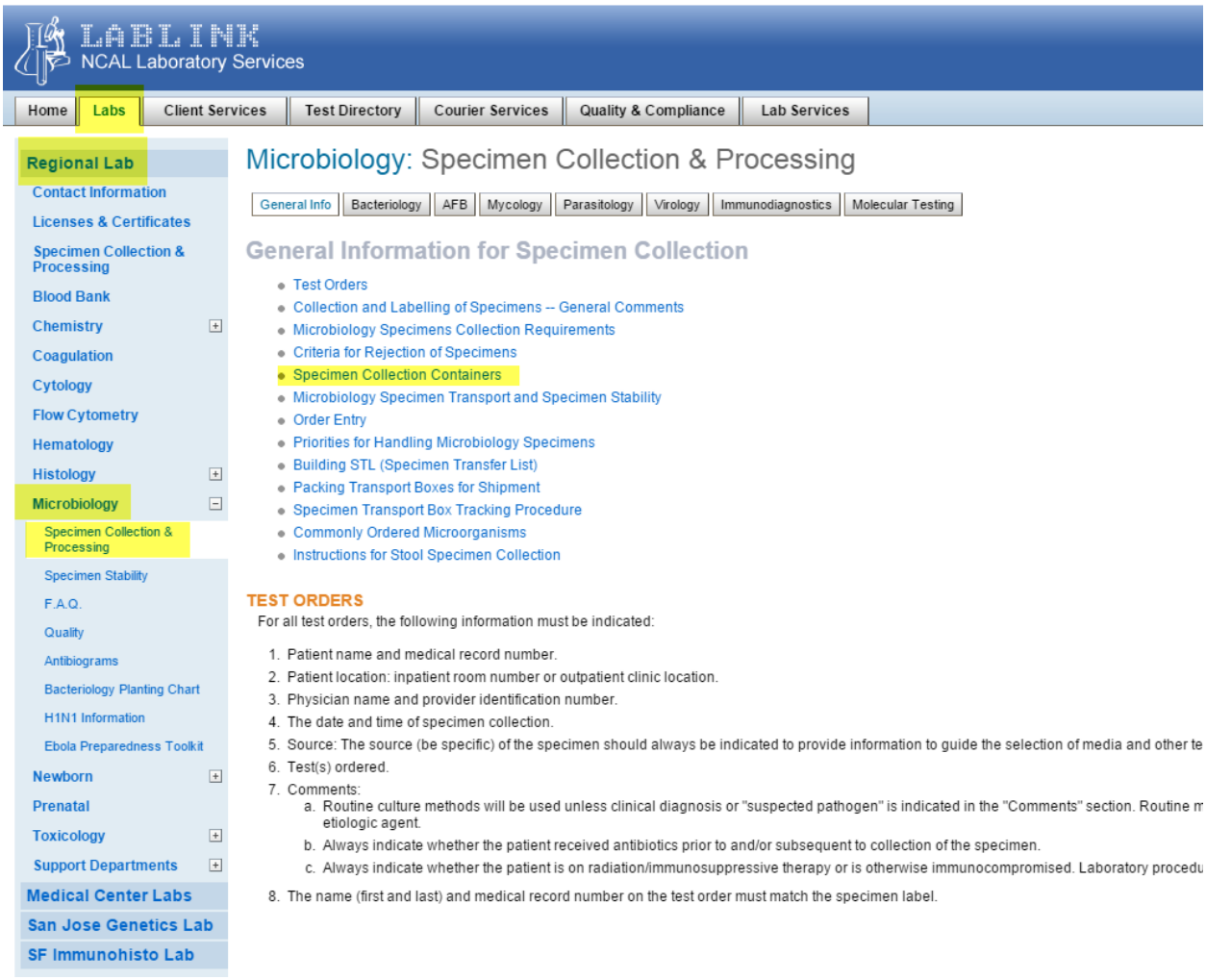
Tube Top Color	Additives	General Use
Red/Red speckled (tiger top)	Inert barrier	Autochem, Most Immunochemistry Tests, Immunodiagnostics
Red	None	Blood Bank, Toxicology, Progesterone
Lavender	EDTA	CBC, HgB A_{1c}, HIV Load, Cyclosporine, B Comp, FK506, Sirol, Hgbnp Scr, G6PD
Light blue	Sodium citrate	Coagulation tests
Dark blue	Sodium EDTA	Lead
Green	Heparin, Lithium	Special Tests
Pink	EDTA	Blood Bank

Specimen Processing and Storage Instructions:

Gently invert the SST tube 5 times after drawing. Allow blood to clot for 30 minutes at room temperature with tube in a vertical position. Observe a dense clot. Centrifuge at 1000-1100 xg relative centrifugal force for 10 minutes. Barrier will form, separating serum from clot. Keep serum refrigerated. Perform a gentle end-to-end tube inversion on EDTA tube for 7-8 times immediately after specimen collection to prevent clotting.

Using this link: http://lablink.ca.kp.org/test_directory/





Microbiology Specimen Collection Containers

KAISER PERMANENTE®

For further information: Micro Client Services at **8-414-4390** or **ncal-micro-client-services@kp.org**.

BACTERIOLOGY

Urine Culture

KIT: STRAW + TUBE
OneLink: 10008187

STRAW
OneLink: 10133999

VACUTAINER
OneLink: 10008186
- Fill to Min. line

Adult & Pedi Blood Culture

ANAEROBIC
OneLink: 10008592

AEROBIC
OneLink: 10008591

PEDI/DIFFICULT DRAWS (AEROBIC)
OneLink: 10121082

Routine Bacterial Culture

Includes Misc, Resp (ENT), GBS Screen, GC, MRSA, Yeast, Anaerobe (non-fluids)

E-SWAB
OneLink: 10007937
- Provide the source
- Not for tissues, body fluids, cath tip, Viral cultures, or Bordetella PCR

Anaerobic Culture

TUBE
OneLink: 10007989
- For tissue

VIAL
OneLink: 10007990
- For fluids only

GC & Chlamydia Screen

A. OneLink: 10227706 (swab)
- For cvx, vaginal, urth, throat & rectal only
- Clean with white swab & discard
- Collect & Transport with **BLUE SWAB** only

B. OneLink: 10134720 (urine)
- Collect 20–30 mL urine **AND**
- Transfer to transport tube within 24 hrs of collection (fill between the 2 arrows)

Strep A PCR, throat (previously SAP)

E-SWAB
OneLink: 10007937
- For Throat only
- Collect & ship to Reg Lab within 48 hrs

Enteric Pathogen Panel/ Vibrio Stool Culture

OneLink: 10245913

Bordetella pertussis by PCR

OneLink: 10240095
- For B. pertussis/B. parapertussis PCR only

Sterile Container for Specimen Collection

OneLink: 10076860
- Provide the source
- Add 0.5 mL saline to biopsy & tissue specimens
- Acceptable for body fluids, sputum specimens, AFB & Mycology cultures

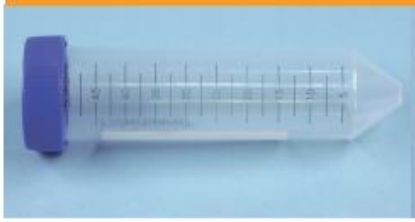
Microbiology Specimen Collection Containers

KAISER PERMANENTE®

For further information: Micro Client Services at **8-414-4390** or **ncal-micro-client-services@kp.org**.

AFB & MYCOLOGY

AFB & Mycology Cultures



OneLink: 10240144
- Sterile 50 mL tube

Blood/Bone Marrow Specimens for AFB/Fungal/CMV Cultures

OneLink: 10177831
- SPS

Alternate: Sodium Heparin (green top)

Cryptococcal Antigen Testing

A. CSF
B. OneLink 10008242 (serum)
- No Body Fluids

VIROLOGY

U BKV Load

(BK Virus DNA, Quant, Urine, Real Time)

OneLink: 10265068
- 2 mL min., frozen urine
- Dry ice transportation within 24 hours of collection

Ship to MWS

Universal Viral Transport

OneLink: 10228237
- For Virus & Chlamydia cultures
- Respiratory PCR for influenza and RSV (Oct.–May)
- Send out tests for Mycoplasma or Ureaplasma
- Respiratory viral panel

SEND SLIDES FOR HSV AND VZ DFA

HPV Screen

OneLink: 10117219
- Send all tubes to Regional Microbiology (not Cytology)
- Place HPV specimens in separate zip lock bags with separate STLs

PARASITOLOGY

Helminth & Protozoa

OneLink: 10439333
- Giardia
- Cryptosporidium
- Helminth (Ova)
- Protozoa/Trichrome smear

Pinworm Prep

OneLink: 10007534
- Source: Perianal

Malaria Screen

3 thin smears
3 thick smears
- Prepare smears directly from finger stick

AND
- Submit EDTA (for State Confirmation Testing)

Revision #8 • July 2015

Urine Collection

Urine Chemistry tests are collected in one of the following manner:

Random - obtain at least half a container. For urine drugs of abuse and adulteration panels, patient **cannot** use disposable wipes with/alcohol for cleaning prior to collection. Obtain a full cup of urine for urine drugs of abuse panels.

First morning void - collect half a container and keep specimen refrigerated.

24 hour – On the first day of collection, instruct the patient to discard first morning void then collect all urine including the final specimen voided at the end of the 24-hour collection period, i.e., the same time the next morning. Screw the lid on securely. Transport the specimen promptly to the laboratory. Container **must** be labeled with patient's full name, MR#, date and time urine collection started and finished for a 24-hour collection.

- The container may contain a preservative. The patient should be cautioned that the preservative may be toxic and caustic, and not to discard or spill it.

- Measure the total volume, mix the urine, and send a 100 mL refrigerated aliquot. Be sure to record volume and hours into RILIS

SPECIMEN PROCESSING

Specimen Racking

To expedite Regional Laboratories specimen processing, STLs should be compiled in the following sequence: specials, routine serum, lavenders, prenatals, general lab urines, room temperature, and frozens.

Racking specimens for building STLs (Specimen Transfer List) should follow current Regional Laboratory guidelines. The categories for STLs are:

- **Specials:** BHCG, PREGS, ESTRADIOL, therapeutic drug monitoring, B COMP, U COMP, and CAFF are considered "Special" because of the time constraints in running the tests

- **Priority or Expedited Samples:** Transplants, Pre-Op, Oncology and CO2

- **Routine serum:** All routine general lab tests

- **Lavenders:** All routine lavender tests

- **General Lab Urines:** All general lab urine tests

- **Room temperature:** CD4/CD8, Leukemia/Lymphoma, Bone Marrow Aspirate

- **Frozens:** Tests include: Folic Acid, C3, C4, Coagulation Factors, Total Complement (CH50), MS Banding (serum and CSF), Protein C, Protein S, Antithrombin 3, Activated Protein C, PT/APTT, LUPUS A/C, PSAF, Hepatitis B Viral Load, HIV Viral Load, Hepatitis C Viral Load, Hepatitis C Qual, Hepatitis C Genotype, B-Type Natriuretic Peptide, FOND (Fa Xa), HEP UF, HEP LMW, VWF Ag, AND VWP

The specimens are racked from left to right, front to back. When the rack is full, the STL must be closed and transmitted. Start a new STL for the next rack. **Note**: If an accession has both a "special" test and routine tests, all the tubes for that accession should be placed together in the "specials" rack.

Mixed racks for small facilities are allowed when very few specimens are sent. Two or more small STLs may be placed in separate rows of one rack. If a dozen or less general laboratory specimens are being sent, they may all be put together on one mixed STL. Frozen and room temperature specimens should be handled separately.

Packing Transport Boxes for Shipment

- Check the transmitted copy of the STL against the rack to confirm that all specimens in the rack have been entered on the STL. Attach this copy of the STL to the rack with a rubber band.

- Urine Chemistry specimens are aliquoted into 16 x 100 Sarstedt Reagent and Centrifuge Tube (TIMS #04598; MPN #55.515, call Regional Lab for yellow caps), labeled with name and patient MR#, and placed into individual plastic specimen bags. Do not send UDAP or CDRP samples in these. Use the regular orange screw cap containers.

- All Regional Lab specimens must be placed in the appropriate transport box. The fifth character on the permanent barcode labels affixed to the outside of the transport boxes identifies the specimen type: "G" - General Lab, "M" - Microbiology, "C" - Cytology, "H" - Histology.

- Place the rack and absorbent material inside a plastic bag before shipping in the transport box to avoid spillage.

- Place 3 frozen cold packs in the General Lab and the Microbiology – On Cold Pack boxes only. Refer to Specimen Transport Protocol below.

- Room temperature specimens are never to be packed inside the transport boxes. These specimens are placed individually in plastic specimen bags which are then placed inside a brown bag with a 'ROOM TEMP' sticker on the outside and handed to the courier to ensure proper handling during transport.

- Frozen specimens are never packed inside the transport boxes. These specimens are placed individually in plastic specimen bags which are then placed inside a brown bag with a 'FROZEN' sticker on the outside. Keep in the freezer until the courier comes to pickup.

- STATs are placed in plastic specimen bags which are then placed inside a special "STAT" bag. Notify Regional Laboratory by phone prior to sending STAT samples. If a STAT is requested on a test not offered STAT, prior authorization by a Supervisor in that department is required.

- Bone marrows are placed in plastic specimen bags which are then placed inside a brown paper bag with a Flow Cytometry label and ‘Room Temp” label. **Call** Regional Laboratory Flow Cytometry Department to alert them that a bone marrow is being sent.

- Microbiology plates in cans need to be placed in secondary biohazard bags.

Specimen Transport Protocol: Facility Laboratories to Regional Laboratories

	Location/Testing Department	Type of Specimen	Transport Box Label	Transport Conditions	Comments
Clinical	**MWS** 914 Marina Way South, Richmond, CA **Central Specimen Processing Area** (CSPA) **General Lab**	Chemistry Hematology Immunodiagnostics General Lab Urines	Large or small insulated **Blue** totes **G** in barcode label	2-25◦ C Pack with 3 frozen cold packs	DO NOT include Micro/Bacti, Cytology or Histology specimens. Include STAT white envelopes for Chemistry (red marking) or Toxicology (blue marking)** Place the rack and absorbent material inside a plastic bag before shipping in the transport box to avoid spillage
		Frozen Specimen	Brown paper bag "Frozens for Reg Lab" Z label - dest. RLA1 Address to: MWS	Hold in freezer	MUST be frozen before transport. Couriers will transfer frozen specimens from the freezer (if allowed) directly into a dry ice cooler or facility staff will hand over specimen to courier. Specimens to be delivered to RL CSPA*.
		Flow Cytometry: CD4/CD8	Brown paper bag Z label - dest. RLA1 Address to: MWS	Room Temp	Driver will hand deliver to CSPA
	Berkeley 1725 Eastshore Hwy Berkeley, CA	Flow Cytometry (incl. LEUKEMIA, BM ASP)	Brown paper bag "STAT Flow" sticker "Room Temp" sticker Z label - dest. RLA5 Address	Room Temp. Ship ASAP to ensure cells are viable when received	Notify Flow Cytometry (8-421-5120) that specimen is enroute.

			to: BRK		
	Berkeley 1701 Eastshore Hwy Berkeley, CA **Microbiology - No Cold Packs**	Bacteriology, SAP, GCCT, GBS, Parasitology	Large or small insulated BLUE totes **M** in barcode	Room Temp (No cold packs)	DO NOT pack virology specimens in the room temperature box.** Microbiology plates in cans need to be placed in secondary biohazard bags
	Berkeley 1701 Eastshore Hwy Berkeley, CA **Microbiology - On Cold Packs**	Virology, PCP, *C. difficile*, HPV, Chlamydia culture, AFB, Mycology, Cryptococcal Antigen, PCR specimens	Large or small insulated BLUE totes **M** in barcode	2-10˚C Pack with 3 frozen cold packs	*C. difficile* specimens MUST be frozen or refrigerated before transport. DO NOT include STAT Microbiology envelopes.
Pathology	**Cytology**	Gyn (PAP Smears)	Large or small insulated BLUE totes **C** in barcode	Room Temp	OK to pack in same box with non-Gyn, *but* protect smears & requisitions from moisture/leakage.
		Non-Gyn (urine, body fluids, CSF, FNA's)	Igloo **C** in barcode	2-25◦ C Pack with 3 frozen cold packs	Body fluids should be refrigerated ASAP after collection. Protect contents of box against leakage.
	Histology	Tissue	Large or small insulated BLUE totes **H** in barcode	Room temp	Specimens should be in 10% buffered formalin in a "Tupperware" container.

STAPLE PAPER BAGS CLOSED TO KEEP PROTECTED HEALTH INFORMATION (PHI) CONFIDENTIAL IN COMPIANCE WITH HIPAA REGULATIONS

* If the driver has no dry ice, (s)he cannot pick up frozen specimens. Notify Regional Lab Client Services 8-421-5119.

** Virology specimens must be kept cold. Bacteriology specimens are transported with no cold packs. If virology specimens are packed in the room temperature box, even in a biohazard bag with frozen cold packs, the correct temperature cannot be assured during transport due to the proximity to the bacteriology specimens which have been incubated at 37° C.

STAT's via external couriers:

1. Dynamex is exempt from DOT/HMR regulations per RSPA-98-3971(HM-226); Hazardous Materials: Revision to Standards for Infectious Substances

2. From 7 AM to 12:30 AM, address to the appropriate Regional Lab campus, per protocol above

3. From 12:30 AM to 7 AM, address **all** STAT's to CSPA at 914 Marina Way South, Richmond, CA

(Approved by Regional Lab Technical Department Managers; effective 10/26/05)

Instructions for Stool Specimen Collection

Your doctor has ordered a test that requires a stool specimen.
Pass stool (bowel movement) into a clean, dry container (may be provided). Alternately, place plastic wrap over the toilet bowl and pass stool onto the plastic. Do not allow urine or water to come in contact with the stool specimen.

Make sure each specimen container is labeled with the following:

- Your full name
- Your Kaiser medical record number
- The date and time of collection

FOLLOW THE INSTRUCTIONS THAT ARE MARKED.

I. STOOL CULTURE: CARY BLAIR MEDIUM (yellow cap)
CAUTION: The preservative fluid in the vial is POISONOUS.

1. Remove the specimen cap and with the attached spoon, place stool into the vial until the liquid reaches the "Fill Line".
2. Mash the specimen in the vial until mixed well with the preservative.
3. Replace and tighten the screw cap. Shake the contents until mixed well.
4. Return the "filled" vial with the slip(s) the doctor gave you to the laboratory receptionist the same day the specimen was collected.

II. OVA AND PARASITE: Total-Fix

III. CAUTION: The fluid in the vial(s) is POISONOUS.

1. Collection of fecal specimens for intestinal parasites should always be performed prior to the use of any antacids, barium, bismuth, antidiarrheal medication, or oily laxatives.
2. Routine examination for parasites prior to treatment, a minimum of three specimens, collected on alternate days, is recommended. Two of the specimens should be collected after normal movements, and one after a cathartic, such as magnesium sulfate or fleet Phospho-Soda. If the patient has diarrhea, do not use a laxative.
3. Fecal specimens should be collected in a clean, dry wide mouthed container; a bedpan is

ideal. However a waxed, cardboard half-pint container with a tight-fitting lid, a clean, dry milk carton with the top two thirds removed or a plastic bag or plastic wrap placed over the toilet seat opening is acceptable. Contamination with urine should be avoided.

4. Small samples of the specimen should be placed into the vial using the spork built into the lid of the vial. Pay particular attention to the areas that appear bloody or contain a lot of mucus. Add samples until the fluid level reaches the red "fill line". This will insure the appropriate three to one ratio of fixative to sample.
5. Use the spork to thoroughly stir and mix the stool with fixative. Recap the vial, making sure the lid is securely fastened. Firmly shake the vial until contents are thoroughly mixed (the solution should appear homogeneous) Stool should be in Total-Fix for at least 30 minutes for complete fixation.
6. Fill out the patient information on the side of each vial. Reseal the vials in the plastic bag. Caution: Every sample should be treated as a potential source of contamination. Total-Fix preserved stool samples stored at room temperature are preferred but refrigerated samples are acceptable.
7. Return "filled" vials with the slip(s) the doctor gave you to the laboratory receptionist the same day the specimen was collected.
8. Total-FixTM Stool Collection System
   Catalog # 2807-05 Patent # 8,338,130
   Revision date: Jun. 3, 2014

IV. DIFFICILE OR WBC SMEAR: STERILE CONTAINER

1. Remove the specimen cap from screw cap container enclosed in a leakproof plastic bag. Place a single, **freshly passed liquid or soft stool specimen** directly into clean, dry container. **Only liquid or loose stool is acceptable.** Formed stool sample will be rejected.

2. Replace and tighten the screw cap container and enclose in a leakproof plastic bag.

3. Transport the container to the Facility Laboratory immediately on cold packs, with the slip(s) the doctor gave you to the laboratory receptionist within two hours of collection.

4.

Note: Discard any remaining stool.

Instructions for Obtaining Stool Occult Blood Test Specimens

The purpose of this test is to check the stool for blood not apparent to visual examination. Instructions must be followed to get accurate results.

General Instructions

1. Please do not collect specimens during, or until three days after a menstrual period, or while you have bleeding hemorrhoids or blood in your urine.

2. Collected specimens may be kept at room temperature. Do not leave the slides in the heat, sunlight, or under fluorescent light.

3. Keep the cover of slide closed when not in use.
   Diet: Follow the special diet for three days prior to and during the entire test period.

   - Do not eat red meat (beef, lamb), including processed meats and liver.
   - Do not eat raw fruits and vegetables (especially melons, radishes, turnips and horseradish).
   - Do not take vitamin C in excess of 250 mg. per day. Some iron supplements contain vitamin C in excess of this daily limit.

Collection Instructions

1. Read FIT kit instructions and collect specimen accordingly. Ensure patient name, medical record number, and collection date are on the label.

2. Return the specimen envelope by mail or bring it back to the laboratory receptionist within two days after the last specimen has been collected.

Instructions for Obtaining Pinworm Test Specimens

Pinworms, when present, migrate out of the anus (bowel opening) to lay eggs during periods of sleep. The eggs are rapidly dispersed after arising.

1. Collection should be made upon arising in the morning before bathing, cleansing or passing a bowel movement. On very active children, specimens may be collected a few hours after going to bed, while the child is sleepy and more cooperative.

2. Remove the cap in which is inserted a plastic paddle with one side coated with a non-toxic, mildly adhesive material. This side is marked “sticky side”. Do not touch the “sticky side” with your fingers.

3. Separate the buttocks and press the “sticky side” against several areas of the perianal region, around the outside of the bowel opening, using moderate pressure to flatten the perianal folds. Replace the paddle in the tube.
   NO STOOL (BOWEL MOVEMENT) SHOULD BE ON THE PADDLE.

4. Be sure the container is labeled with the following:
   - Your full name
   - Your Kaiser medical record number
   - Date of collection

5. You may be asked to collect one or more specimens. Collect specimens on consecutive days for the number of tubes you receive from the laboratory. Use a separate tube for each specimen.

6. Collected specimens may be kept at room temperature until the last specimen is collected. Return all tubes with the slip(s) the doctor has given you to the laboratory receptionist the day the last specimen is collected.

Instructions for Obtaining 72 Hour Fecal Fat Specimen - page 1

This test measures fat in stool (feces). A consistent 100 grams of fat must be eaten for five days. Stool collection begins the morning of the third day and continues for two more days (72 hours total collection time).

Diet Plan

It is very important that you follow this diet as closely as possible. A sample daily menu is provided to help you with your meal planning. Be very careful to measure your meat, milk and fats to ensure you eat the correct amount.

Food	Fat (grams)
2 cups whole milk (see note 1)	20
8 oz. lean meat: chicken, turkey breast, pork loin, beef loin or round	24
1 egg	5
4 or more servings fruit/vegetables (see note 2)	0
4 or more servings whole grain bread, cereal, rice or pasta (see note 3)	0
10 teaspoons fat servings: margarine, butter, or oil, added to the food you eat popsicles, unbuttered popcorn, fruit,	50
non-fat frozen yogurt	0
Total	99 Grams

Notes

1. If you cannot tolerate milk, substitute 1 teaspoon of margarine or oil for each cup of milk.

2. All fresh, canned or frozen fruits and vegetables are acceptable. They may be eaten raw or cooked without additional fat.

3. Other alternatives in the category include: corn or no-fat flour tortillas, pita bread, bagels, matzos, noodles, chapatis, brown or white rice, low fat crackers and hot cereal made with water.

4. If you do not eat meat you may substitute any of the following for one ounce of lean meat: 4 oz. tofu, 1 egg, 1½ oz. natural cheese, 1 oz. fish, 2 Tbls. nuts or seeds, 2 Tbls. peanut butter or 1/3 cup whole milk.

Sample Menu

Breakfast

- 1 egg fried with 1 teaspoon oil
- 1 cup whole milk
- toast with 1 teaspoon margarine or butter
- juice or fruit
- coffee

Lunch

- Sandwich: 3 oz. lean meat (turkey, chicken, ham, roast beef or tuna), 2 slices bread and 1 teaspoon mayonnaise
- green salad (no avocados, olives, nuts, seeds) with 2 Tbls. salad dressing (not fat-free)
- 1 cup whole milk
- Fruit

Dinner

- 5 oz. lean meat (turkey, chicken, roast beef)
- baked potato with 1 tsp. margarine or butter
- vegetables, plain

Specimen Collection

1. The laboratory will provide you with a specimen container. It is very important to collect all the stool you pass for 3 days.

2. Pass the stool directly into the specimen container or place plastic wrap over the toilet bowl and pass stool onto the plastic. Transfer the entire stool into the specimen container.

3. Do not allow urine or water to come in contact with the stool specimen.

4. Keep the specimen cool during the collection time. The collection container may be kept in the refrigerator or in a separate insulated cooler, packed in wet ice, until returning the specimen to the laboratory.

5. Collect all stool (bowel movements) you pass for 72 hours (3 days).

6. Be sure the container is labeled with the following:

    - Your full name
    - Your Kaiser medical record number
    - Dates of collection

7. Return the specimen container with the slip(s) your doctor gave you to the laboratory receptionist the day you finish collection.

Instructions for Complete Semen Analysis Specimen Collection

KAISER PERMANENTE

Name: _____

MR#: _____

SEMEN COLLECTION INFORMATION FORM

IMPRINT AREA

To ensure accuracy of semen analysis, please follow the collection instructions below and indicate collection information where specified.

Note: It is optimal to analyze a semen sample within 1 hour of collection. Delivering the specimen to the laboratory as quickly as possible will allow the laboratory to adequately prepare the sample for analysis. For patients who are more than 30 minutes from the laboratory, a private room near the laboratory is available for collection. After 1 hour, changes may occur that can affect semen quality and adequate analysis. Samples that are more than 1 hour old will be analyzed but depending on the results, your physician may request another sample.

You may drop your specimen off at the following Kaiser Permanente laboratory:

Kaiser Foundation Hospital Laboratory
1st Floor
2425 Geary Blvd, San Francisco, CA 94115

Specimen are accepted:

Monday-Friday

8:30-10:00 AM

INSTRUCTIONS FOR SEMEN SPECIMEN COLLECTION		Please answer (non-shaded areas)
1. Days of Abstinence	Refrain from ejaculation for 2 to 3 days. (Minimum 2 days, no more than 7 days.)	a. Days abstained: _____
2. Collection Method	• Collect by masturbation only • Do not use artificial lubrication • Do not use condom • Do not collect by withdrawing during intercourse	a. Collected by masturbation? ___ Yes ___ No Indicate if other method of collection used: _____
3. Container Type	Collect whole ejaculate sample directly into the sterile container provided by the laboratory. Label the container with: • Your full name • Your KP Medical Record Number • Date and time of collection	a. Lab provided container used? ___ Yes ___ No If not, what container was used? _____ b. Was entire specimen collected into container? ___ Yes ___ No c. Sample Collection: Date:_____ Time:_____
4. Specimen Transport	Keep the specimen warm by placing the container in your pocket or elsewhere close to your body until it is delivered to the laboratory.	a. Was the specimen exposed to temperature extremes of less than 50°F (10°C) or greater than 100°F (40°C)? ___ Yes ___ No
For Lab Only: Note date/time of specimen receipt in lab: _____		

NEWBORN SCREENING

For Your Information: Laboratory Staff

THE TEST REQUEST FORM

- Ensure that the Test Request Form is not expired – the expiration date is in the bottom right corner.
- MRN on the Rilis label has to match the MRN hand written on the bottom of the TRF
- Affix a Rilis label to the back of the original Test Request form
- Baby's name on the addressograph/Rilis has to match the name hand written on the TRF
- Point out omissions and errors on the TRF to the nursing unit staff for correction prior to collection and/or send out. Most successful facilities incorporate a procedure for information verification.

COLLECTING THE SCREEN

- Verify that the baby is at least 12 hours of age or older prior to collecting the screen
- A Newborn Screen **must be collected prior to an RBC transfusion**. If baby is greater than 12 hrs of age at time of draw, then proceed as usual. If baby is less than 12 hrs of age at time of draw, then a second Newborn Screen must be drawn at least 24 hrs after completion of the transfusion. If a baby is transfused and there was no Newborn Screen drawn, then draw a Newborn Screen at least 24 hrs after completion of the transfusion. Whenever there is a transfusion, please indicate that on the TRF along with the date and time of transfusion and date and time of Newborn Screen collection.
- Once collected, paper clip the form away from the filter paper to facilitate drying and avoid smudging. **Do not crease the form!**

SENDING THE SCREEN

- Do not batch samples, send newborn screens to the Regional Lab **daily** after they are dried.
- Use appropriate packaging and envelope per Regional Lab instructions for daily specimen send outs.

Contact Newborn Screening Area Service Center at 8-492-6192 for questions and concerns

KAISER PERMANENTE®

PATHOLOGY

POST-MORTEM EXAMINATIONS

I. General Procedure:

A. Weekday autopsies are done between 9:00 a.m. and 3:00 p.m. upon receipt of a legal autopsy permit. If autopsy permission is obtained, the Pathology Department (415-833-3870) must be notified immediately by the Hospital Administration office during regular working hours (Monday – Friday, 8:30 a.m. – 5 p.m., excluding holidays).

B. Weekend autopsy examinations are limited to those of a semi-emergency nature.

   a. Such cases might fall into the following categories:
      - Religious reasons, such as burial within 24 hours
      - Shipment of remains out of the State of California
      - Need for cultures, i.e. viral, bacterial isolation

   b. Autopsies not falling into any of the above categories will be deferred until the following Monday morning.

   c. If an autopsy is to be performed during the weekend, the pathologist on-call is paged by the Administrative House Supervisor's office as soon as autopsy permission is granted and all applicable forms have been completed, The on-call pathologist is paged by contacting the hospital Page Operator.

C. If autopsy permission is granted after Pathology Department hours, the Pathology Department must be notified the following workday morning, no later than 9 a.m. This is essential to facilitate cooperation with the decedent's family/authorized designee and mortuary for an early completion of the examination.

D. Absolutely no estimate or restriction regarding the time of completion of an autopsy examination is to be given, either to the family/authorized designee of the deceased patient or to the mortuary, without first consulting the Pathology Department to ascertain that the time limit can, indeed, be met.

E. The physician requesting the postmortem examination must fill out the clinical summary on the reverse side of the autopsy permit as completely as possible. If the physician wishes to observe the autopsy, name and telephone extension should also be recorded, as well as that of any colleagues who also wish to be contacted.

F. Please refer to the local SF Decedent Affairs Policy **SF-PATH-04-01** for autopsy permit completion instructions and death packet details.

G. The Pathology Department will page the interested staff physicians and residents on the service. The house staff is invited to attend all autopsies and is expected to attend the autopsies of patients who have been under their care.

H. Please phone the pathologist assigned to the case for advice on any special problems that may arise.

I. The attending physician is, in all cases, responsible for all aspects of the care of his patient, including final disposition.

II. Autopsy Reports

A. Complete autopsy reports are available to the decedent's family/authorized designee upon a signed authorization request. The authorization request is included in the death packet. Refer to the local Decedent Affairs Policy **SF-PATH-04-01** for autopsy permit completion instructions and death packet details.

a. If such a request is made, the attending physician must complete the corresponding portion of the autopsy consent form with the recipient's name, relationship to the deceased, and the address where the report is to be sent.

b. The family/authorized designee should be told to allow at least two months for the report to be completed and mailed.

B. Complete reports are available to insurance companies, lawyers, Veterans Administration Representatives, family physicians, etc., upon the Pathology Department's receipt of a signed authorization from the decedent's family/authorized designee.

C. Complete autopsy reports are available in Health Connect as soon as the report is completed and signed out. Please call Pathology at (415) 833-3870 for status inquiry if necessary.

III. Autopsy Permits - refer to the local **Decedent Affairs Policy: SF-PATH-04-01.**

IV. Fetal Deaths - refer to the NCAL **Decedent Affairs Policy: SF-PATH-04-01.**

V. Medical Examiner's Cases - refer to the local **Decedent Affairs Policy: SF-PATH-04-01.**

SURGICAL PATHOLOGY

I. General Procedures

A. Gross examination of surgical specimens is performed regularly each weekday from 8:30 a.m. to 5:00 p.m. Routine specimens received after 3:00 p.m. are accessioned and processed the following day. Once accessioned, the case number is available in Health Connect with the status "in process" until it is signed out, at which time the status changes to "Final Result".

B. Microscopic sections are available for examination approximately 24 hours after the examination of the specimen in Pathology. Please call Pathology at (415) 833-3870 for status inquiries.

C. Typed reports are usually completed 48 - 72 hours after receipt of the specimen. Completed reports are occasionally delayed because of the need for deeper sections, special stains, decalcification, consultation, etc.

D. Final reports are available in Health Connect (HC) once the cases have been signed out in Pathology. If the HC status shows, “in process", and any questions arise, call Pathology at (415) 833-3870 for status inquiries.

E. Each surgical specimen must be accompanied by an appropriately completed Health Connect order print-out or Pathology Consultation Request form (requisition). For In-Patients, the HC order **plus** a paper requisition must be completed (unless the specimen parts and clinical history is entered in the HC order). For Out-Patients, the HC order must accompany the specimen.

F. The order/requisition must include the patient’s full name, Kaiser Medical Record #, M.D. name and 5 digit number, identification of each specimen, number of containers, the clinical diagnosis and relevant history and operative findings, and location where procedure performed, and whether the procedure was done as an In-Patient or Out-Patient. If previous material has been examined by the Pathology Laboratory, this fact should be noted.

G. Gynecologic material must be accompanied by a menstrual history and a history of prior cytology examinations and results.

H. Dermatologic material must include a clinical diagnosis or a differential diagnosis.

I. No surgical specimen is to be dissected by anyone without specific approval of the pathologist. A specimen which must be dissected in the operating room will be so dissected by the pathologist (in the morgue exam room) on request of the surgeon.

J. Photographs of patients are not routinely taken by the Pathology Department. The Pathology Department should be notified if a physician desires a specific specimen photographed.

K. Any special arrangements or processing specimens should be made with the appropriate staff Pathologist.

L. No tissue is to be released from the premises without the expressed permission of the pathologist. The only exceptions allowed for release of tissue or devices are:

   a. Placenta: released to patients for religious, ethnic, or cultural reasons, with a signed Placenta Release Consent, due to an exception provision in California state law. This release is generally managed by the MCH unit staff.
   b. Explanted devices released to a designated entity as directed by Regional Risk Management, as in product liability cases.
   c. Bullets released to the medical examiner or law enforcement with appropriate chain of custody documentation.
   d. Tissues or devices released to the Coroner/Medical Examiner taking jurisdiction of the decedent as required by legal subpoena.

II. **Specimen Requirements** (Please call Pathology at 415-833-3870 with any questions.)

A. All tissue, foreign bodies, and similar substances, must be submitted to Pathology for examination and report except for the exempt specimens meeting the criteria outlined in local policy **SF-PATH-05-19: Exempt Surgical Specimens.**

    a. If the tissue is not sent to the Pathology Department, the clinician will be responsible for seeing that there is a complete description in the chart of the tissue or other material removed during surgery, including volume, size, color, shape, etc., whichever is appropriate.

    b. Each submitting department is responsible for the proper disposal of the exempt specimen and documentation of the disposition in the patient's medical record.

B. Each specimen must be accompanied by an appropriately completed Health Connect order print-out or Pathology Consultation Request form (requisition). For In-Patients, the HC order **plus** a paper requisition must be completed. For In-Patients, the paper requisition must accompany the specimen.

    a. The HC Order/Requisition must include the following:
        a. Patient's name
        b. Patient's sex
        c. Medical Record Number
        d. Date Obtained
        e. Organ/Tissue Site
        f. Responsible (staff) physician
        g. Clinical information pertinent to the procedure or diagnosis

    2. For Frozen sections, include the OR phone number, RN/Scrub initials, Date and time specimen ready for pick up.

C. Guidelines for Exempt Specimens: refer to local policy SFOWI-0346 and SFOWI-0686

D. Submission of Specimens:.

    1. In general, specimens are to be submitted for delivery intact and in 10% formalin/4% formaldehyde in the 9:1 ratio (9 parts formalin to 1 part specimen). Appropriate Hazardous warning labels must be attached to each formalin-filled container.

        a. All hollow viscera (e.g, small and large intestines, esophagus) must be opened in the standard manner in the O.R. Suite before being placed in formalin, to ensure appropriate fixation.
        b. Large specimens may be divided into two or more containers to achieve the optimal 9:1 ratio, as needed.

    2. Routine specimens must be delivered to Pathology (350 St. Joseph's) between 8:30 am and 5:00 pm. Specimens that cannot be delivered to Pathology during this time must be held in the originating department, and must be delivered to Pathology by the specimen runner the following workday morning at 8:30 a.m. The cut-off time for the processing of routine specimens is 3:00 p.m. The cut-off

time for RUSH and Bone Marrow specimens is 4:30 4:15 p.m.

3. If **multiple specimens** are removed, each is placed in a separate container and accurately and completely labeled, with the name of the specimen and site specified. All labels on specimen containers and Pathology orders must be verbally and visually verified by the scrub person and clinician prior to being placed in the Pathology pick-up bin. The clinician is ultimately responsible for the accurate labeling of each specimen

4. Frozen section: Surgical cases from the O.R. which require a frozen section to be performed by Pathology are generally scheduled between 8:30 a.m. and 5:00 p.m. The Pathology Department (415-833-3870) must be notified at the time of frozen section specimen collection (prior to transport). Frozen section specimens must be taken directly to the Pathology Laboratory (350 St. Joseph's Avenue). Frozen section specimens may be transported to the 2425 Geary Morgue (Frozen Section Suite), at the request of the surgeon if the surgeon wants to review the case with the pathologist.

    a. **If it is neces**sary to perform frozen sections before 8:30 a.m. or after 5:00 p.m., the surgeon must notify the appropriate On-Call Pathologist a day before the surgery or prior to 5 p.m., as the case may dictate, to make specific arrangements on a case-by-case basis.

    b. The Page Operator must be contacted to determine the "On-Call Pathologist".

    c. Tissues must be submitted fresh and delivered directly STAT via a special runner or O.R. nurse to the Pathology Department or Main Hospital Lab at 2425 Geary and placed in the designated Frozen Section Bin.

    d. The O.R. staff must work with the pathologist before the specimen is taken from the patient so that the pathologist can be sure to be there for the runner. Special arrangements for pick-up/delivery of frozen section specimen may be made on a case-by-case basis by individual pathologists if necessary.

E. Specimens requiring special handling:

a. **Amyloidosis:** The aspiration of fat for amyloid must be placed on poly-lysine slides (positively charged slides; available in Pathology) for optimal adherence, and submitted to Regional Cytology Lab along with a cytology requisition. A more preferable alternative is to submit tissue in formalin and send to Pathology with a surgical requisition. Pathology will process the tissue and do special stains from the paraffin block.

b. **Amputations:** During regular business hours, the specimen and requisition must be delivered directly to pathology. Outside regular hours, the specimen and requisition must be sent to the cold room in the morgue by the O.R. staff. The O.R. personnel must obtain the morgue keys from Hospital Administration and complete the Morgue Admission and Release Record Book in the Hospital

Administration Office (room L140, 2425 Geary). A copy of the requisition form is sent to Pathology by the O.R. indicating that the specimen is in the morgue. A call from O.R. to Pathology must also be placed.

c. **Bone Marrow Specimens**

i. **Bone marrow aspirate**s must be submitted in EDTA (purple-top) tubes.

ii. **Bone marrow core biopsies** must be submitted in Bouin's solution.

iii. **Bone marrow phenotyping by Flow Cytometry** must be collected in an EDTA tube or heparin tube and sent STAT (time sensitive) at room temperature to the Pathology Department (during Department hours, until 4:30 PM) or to the 2425 Geary Hospital Lab (after 4:30 PM and on weekends/holidays). Pathology will be responsible for ensuring transport of the specimen to the Main Hospital Lab at 2425 Geary; to be forwarded to the Regional Flow Cytometry Lab in Berkeley.

iv. **Bone marrow for Cytogenetics** must be collected in transport medium (identified as RPMI or MEM) and sent STAT to the Pathology Department. Pathology will be responsible for ensuring transport of the specimen to the Main Hospital Lab at 2425 Geary; to be forwarded to the Regional Cytogenetics Lab in Santa Teresa.

d. **Breast specimens**

i. Specimens should be immersed in fixative within one hour of the biopsy or resection.
ii. If delivery of a resection specimen to the pathology department is delayed (e.g. specimens from remote sites), the tumor should be bisected prior to immersion in fixative. In such cases, it is important that the surgeon ensure that the identity of the resection margins is retained in the bisected specimen; alternatively, the margins may be separately submitted.
iii. The time of removal of the tissue and the time of immersion of the tissue in fixative should be recorded the requisition or Health Connect order and submitted to the laboratory.

e. **Eye Biopsy specimens for sendout to Castle Biosciences**

i. Sumbit in dry ice using the shipping container (styrofoam box placed inside the outer cardboard box) provided by Castle Biosciences.
ii. Include the pathology requisition or Health Connect order, the Castle Biosciences requisition, and the shipping label provided by Castle Biosciences.

f. **Bullets** (see section 'n' below: Forensic Evidence/Specimens of Legal Nature).

g. **Cardiac biopsies for anthracycline toxicity** evaluation must be collected in glutaraldehyde and sent to Pathology to forward to Stanford (650 723-7211).

h. **Electron microscopy** specimens must be minced into 1 mm pieces and placed immediately into glutaraldehyde. If unsure of the need for EM studies on any tissue (including kidney): tissue must be sent fresh (no fixative) to Pathology. Pathology will save some tissue in glutaraldehyde until the determination is made as to whether the EM studies are needed or not.

i. **Immunofluorescence skin specimens** are sent to UC Davis DermatoPathology (866-323-9061), directly by Dermatology, in special transport media prepared by UC Davis. Transport media and shipping supplies are kept in the KPSF Dermatology Department.

j. **Immunofluorescence specimens other than skin** must be sent fresh (no fixative) to Pathology to snap freeze and send to Stanford or other appropriate institution for IF studies if indicated.

k. **Kidney biopsies for Electron Microscopy (EM) and/or Direct Immunofluorescence (DIF)** are collected in the fixatives provided by Stanford (650-725-5196). Vials of the fixatives are obtained from Stanford and saved in the radiology department. A Stanford Renal Pathology requisition form must be completed in addition to placing a HC order. Call the pathology department at 415-833-3870 for assistance if needed. Arrival of any specimen after 2:30 PM on routine workdays should be handled in conjunction with Pathology on a case-by-case basis. The pathologist on-call must be notified after regular work hours so that the specimen can be processed and resulted in a timely manner. To reach the on-call pathologist, contact the hospital Page Operator.

l. **Forensic Evidence/Legal Nature** specimens (bullets, knives, glass, etc.) are typically exempt from Pathology examination. The clinician/nursing staff is responsible for the proper handling and disposition of the item. Such specimens should not be touched or handled with a metal instrument. Specimen must be placed in a plastic specimen container identified with the patient's name, MR#, Doctor's name, time, date, & location where object was removed. The container is placed in a biohazardous bag, and turned over to a law enforcement officer in the presence of Security. A receipt must be received and placed in the patient's medical record. If a law enforcement officer is not available, the specimen should be kept in a locked area (e.g., narcotics cabinet). If death occurs, the potential criminal evidence is given to the coroner; NOT THE LAW ENFORCEMENT.

m. **Liver transplant rejection biopsies** must be submitted to Pathology in formalin. Write "send to UCSF" on the surgical Pathology requisition

n. **Muscle biopsies for enzyme studies to rule out neuromuscular disease** must be placed on a piece of saline-dampened sterile surgical gauze, and submitted to Pathology STAT along with a Stanford requisition. Pathology will forward the specimen to Stanford Neuropathology. Call Stanford at (650-723-6041) to notify them of the specimen and for further instructions if needed. Notify the KPSF Pathology Department (415-833-3870) of such requests, prior to submission. Arrival of any specimen after 2:30 PM on routine workdays should be handled in conjunction with Pathology on a case-by-case basis. The pathologist on-call must be notified after regular work hours so that the specimen can be processed and

resulted in a timely manner. To reach the on-call pathologist, contact the hospital Page Operator.

o. **Nerve biopsies for enzyme studies to rule out neuromuscular disease** must be placed on a piece of saline-dampened sterile surgical gauze, and submitted to Pathology STAT along with a Stanford requisition. Pathology will forward the specimen to Stanford Neuropathology. Call Stanford at (650-723-6041) to notify them of the specimen and for further instructions if needed. Notify the KPSF Pathology Department (415-833-3870) of such requests, prior to submission. Arrival of any specimen after 2:30 PM on routine workdays should be handled in conjunction with Pathology on a case-by-case basis. The pathologist on-call must be notified after regular work hours so that the specimen can be processed and resulted in a timely manner. To reach the on-call pathologist, contact the hospital Page Operator.

p. **Placentas and Fetuses/Products of Conception for autopsy or genetic studies** must be placed in saline and sent to Pathology with clinical history clearly stated. Fetal autopsies and select placentas, as determined by the pathologist, are forwarded to Oakland Fetal Pathology for processing. Fetuses for autopsy must have the authorization for autopsy completed and documented in the Decedent Affairs Log Book in Nursing Administration.

q. **Temporal artery biopsies** must be sent as a STAT specimen to Pathology, in formalin.

r. **Tissue for Flow Cytometry** must be either sent fresh to Pathology or submitted directly to the Main Hospital Lab (2425 Geary) in special transport medium (identified as RPMI or MEM).
   i. Transport medium is available in the Main Hospital Lab.
   ii. Pathology will transfer the fresh specimen to RPMI/MEM as needed.

s. **Tissue for Cytogenetics** must be either sent fresh to Pathology or submitted directly to the Hospital Lab in special transport medium (identified as RPMI or MEM).
   i. Transport medium is available in the 2425 Geary Hospital Lab.
   ii. Pathology will transfer the fresh specimen to RPMI/MEM as needed.

t. **Urologic bladder and prostate biopsy** specimens must be sent to Pathology in Bouin's fixative.

u. Calculi for X-ray Diffraction analysis must be submitted fresh to pathology with a Surg Path HC order. The specimen will be forwarded to Quest Diagnostics.

v. **CSF fluid** from cases in which Creuzfeldt-Jacob disease (CJD) is suspected must be handled with special precaution. Apply universal precaution to all specimens received.

w. **Corneas** must be sent to Pathology in formalin.

III. Supplies:

A. **Specimen Containers**: may be obtained through Materials Management.

B. **Formaldehyde fixative**: may be obtained through Materials Management.

C. **Glutaraldehyde** is obtained from Radiology.

D. **EDTA tubes** (purple-top) are available in the Main Hospital Lab (2425 Geary).

E. **Bouin's fixative** is available through Materials Management, from the Main Hospital Lab (2425 Geary), or from Pathology (350 St. Joseph's).

F. **RPMI/MME medium** supplied by Kaiser Santa Teresa Cytogenetics and is stored in the Main Hospital Lab freezer (2425 Geary).

G. **Surgical Pathology Requisition: may be obtained through Materials Management (form # 97682 (Rev 5-96)**

H. **Cytology Requistion : may be obtained through Materials Management (form # 90478-000 (Rev 6-01)**

IV. Specimen Rejection: If a specimen is unlabeled, mislabeled or does not have two patient identifiers (name and MRN), only a signature by the submitting provider (or licensed designee) will be acceptable for a correction to be made. The provider (or licensed designee) must come to Pathology (350 St. Joseph's) to directly resolve the issue. The specimen will not be accepted under the following circumstances until the deficiency is resolved**:**

A. Specimen has no patient ID (**Name & MR# required**)
B. Requisition has no patient ID (**Name & MR# required**)
C. Patient ID mismatch between container & requisition
D. Specimen site (left/right) mismatch between container & requisition
E. No requisition w/ specimen
F. No specimen w/ requisition

VI. Disposition of surgical specimens:

A. All Pathology surgical specimens are saved in the department for a minimum of 2 weeks after the case has been signed out/results reported, and then disposed of as biohazardous waste, unless a written request is made to handle otherwise.

B. Disposition of exempt specimens is handled by each individual department and recorded in the patient's medical record.

C. Formalin fixative is chemically neutralized in Pathology. After neutralization (aldehyde content and pH within acceptable limits) it is disposed of as non-hazardous waste.

D. For treatment purposes or follow up with vendors on implants/explants or prosthetic equipment, the specimen may be released (upon the expressed permission of the pathologist) to the responsible party (manufacturer, legal representative). Written acknowledgement is required. Hardware/tissue may not be released to the patient or any family member. **Exception: Placentas may be released for religious reasons to the patient, and may be obtained from the ordering department upon written request.**

E. Breast implants are saved in the Pathology Department for at least two weeks, and then are disposed of as biohazardous waste.

F. All explanted Hip Hardware (and associated tissue) is retained by Pathology until otherwise specified, and is documented intra-departmentally as such. The hardware/tissue may be released to the responsible party (manufacturer, legal representative). Written acknowledgement is required. Disposition occurs after six months.

Cytology

Cytology test information is accessible here: http://lablink/test_directory/query/cytology/q.php

GENERAL INFORMATION

Cytology Department

1. **Location:** The Regional Cytology Laboratory is located at 1750 Eastshore Highway, Berkeley, CA 94710.

2. **Hours:** The Cytology Laboratory is open:
   7:00 AM to 11:00 PM. Monday through Friday.
   7:00 AM to 5:00 PM. Saturday.

3. **Telephone:** Cytology Laboratory:

Locator Code:	8-421
Outside Number:	(510) 559 + ext
Results:	5406
Prep Room:	5406

Director: Kiranjit Grewal, Ext. 55404
Laboratory Director: Tom Lorey, M.D. Ext. 5372

SFO Medical Center Crosswalk of Tests

KPHC DISPLAY NAME (.2)	EAP# (100)	Inactive? (207)	RILIS TD# (5001)	RILIS PRIMARY NAME
17-HYDROXYPREGNENOLONE	84143B	No	9400591	17OH Pregn
17 OH-PROGESTERONE	83498C	No	1004510	17OHP
17 OH-PROGESTERONE, NEONATAL	83498H	No	9407150	17OHP LCMS
CHRG PL 7 AB, FOR MYOSITIS AB PANEL, QN, RIA	83519AA	No	9460052	18-Hydroxy
5 NUCLEOTIDASE	83915B	No	9405940	5' Nucleot
68 KD AB	84182A	No	9405915	68 KD
THIOPURINE METABOLITES	80299AFJ	No	9406160	6MP
IGE ARA H PANEL (ARA H1, ARA H2, ARA H3, ARA H8, ARA H9)	246942	No	1512000	A hypogaea
ALPHA-1 ANTITRYPSIN	82103B	No	1002970	A1AT
ALPHA-1 ANTITRYPSIN DEFICIENCY, SERPINA1 COMMON VARIANTS	81332A	No	9407060	A1AT Mut
ANTIBODY 1 ID	86870H	Yes	4012018	Ab #1 ID Reg
ANTIBODY 1 TITER	86886F	Yes	4012019	Ab #1 Titer Reg
ANTIBODY 2 ID	86870I	Yes	4012020	Ab #2 ID Reg
ANTIBODY 2 TITER	86886G	Yes	4012021	Ab #2 Titer Reg
ANTIBODY 3 ID	86870J	Yes	4012022	Ab #3 ID Reg
ANTIBODY 3 TITER	86886H	Yes	4012023	Ab #3 Titer Reg
ANTIBODY SCREEN (MEDICAL CENTER).	86850N	Yes	4011020	Ab Screen
ANTIBODY SCREEN	86850C	No	4010385	Ab Screen Reg
ANTIBODY SCREEN, MANUAL	86850X	Yes	4100005	Ab Scrn Manual
RBC AB TITER, INDIRECT COOMBS	86886K	No	4100105	Ab Titer Reg
ABG W CALCULATED O2 SAT	82803B	No	1005400	ABG
BLOOD GASES, ARTERIAL, CORD BLOOD	82803L	No	1005410	ABG CB
ABO-RH INFANT	227965	Yes	4100000	ABORh - Baby
ABO-RH CORD	208208	Yes	4010069	ABORh - Cord
ABO-RH	200497	No	4010360	ABORh Reg
ABO-RH (MEDICAL CENTER).	211282	No	4010071	ABORh Typing
IGE, ACACIA	86003Z64	No	1502138	Acacia
ACANTHAMOEBA SP CULTURE	87081K	No	6000518	Acanthamoeba C
ANGIOTENSIN CONVERTING ENZYME	82164B	No	1002420	ACE
ACETAMINOPHEN LEVEL	80329A	No	7000020	Acetaminophen
ACETYLCHOLINESTERASE AND HEMOGLOBIN F, AMNIOTIC FLUID, QUALITATIVE	249569	No	9460097	ACHE FHgb
ACETYLCHOLINE RECEPTOR BINDING AB	83519AJ	No	9400462	AChR BndAB
ACETYLCHOLINE RECEPTOR BLOCKING AB	83519AO	No	9400995	AChRBlocAb

CARDIOLIPIN ANTIBODY	86147B	No	7000671	ACL
CARDIOLIPIN, IGG	86147G	Yes	7000677	ACLG
CARDIOLIPIN IGG AND IGM	206475	Yes	7000672	ACLGRP
CARDIOLIPIN, IGM	86147H	Yes	7000673	ACLM
ADRENOCORTICOTROPIC HORMONE	82024B	No	1001830	ACTH
ACYLCARNITINE, PLASMA, QUANTITATIVE	82017B	No	9000955	AcylcarnProfile
DNASE B AB, STREPTOCOCCAL	86215A	No	9405645	ADB
ADENOVIRUS DNA EYE, PCR	87798BJ	No	9460091	AdenoQLEye
ADENOVIRUS ANTIBODY	86603B	No	9403100	Adenovirus Ab
WBC AUTOMATED DIFFERENTIAL	85004B	Yes	2001571	ADIF
BILIRUBIN, AMNIOTIC FLUID	82247B	No	9000010	AF Bili
CREATININE, AMNIOTIC FLUID	82570R	No	9000020	AF Creat
FETAL LUNG MATURATION ASSESSMENT, FLUORESCENCE POLARIZATION	83663B	No	1001300	AF FLM
LAMELLAR BODY COUNT, AMNIOTIC FLUID	83664C	No	2002150	AF LBC
PHOSPHATIDYLGLYCEROL, SEMI-QUANTITATIVE, AMNIOTIC FLUID	84081B	Yes	9000195	AF PG
AFB CULTURE, BLOOD	87116H	No	6000459	AFB Blood Cult
AFB CULTURE AND SMEAR	206535	No	6000050	AFB Culture
AFB REFERRAL	87116N	Yes	6000055	AFB Ref Culture
ALPHA-1-FETOPROTEIN, SERUM	82105A	No	1001295	AFP
ALPHA-1 FETOPROTEIN, AMNIOTIC FLUID, W REFLEX TO FETAL HGB AND ACETYLCHOLINESTERASE	82106D	No	9460096	AFP AF
MATERNAL QUAD SCREEN (AFP, UE3, HCG, INHIBIN A)	219417	No	9000205	AFP4 LateM
GLOMERULAR BASEMENT MEMBRANE IGG IFA	86255Q	No	9400724	AGBM
ALBUMIN, SERUM	82040B	No	1000060	Albumin
ALBUMIN, BODY FLUID	82042A	No	1003535	Albumin BF
ALCOHOL SCREEN (ETOH, METHANOL, ISOPROPANOL, ACETONE), GLC	80320A	No	7000680	Alcohol Screen
ALDOLASE	82085B	No	9400495	Aldolase
ALDOSTERONE, SERUM	82088D	No	9400504	Aldosterone
ALKALINE PHOSPHATASE ISOENZYMES	84080B	No	9400497	Alk Phos Iso
ALKALINE PHOSPHATASE	84075B	No	1000070	Alk Phosphatase
ALKALINE PHOSPHATASE BONE ISOENZYME	84080A	No	9400687	Alkp Bone
IGE, ALMOND	86003N	No	1502630	Almond
ALPHA SUBUNIT	83519I	No	9400582	Alpha Subunit
AUTOIMMUNE LYMPHOPROLIFERATIVE SYNDROME PANEL (CD4, CD8), FLOW CYTOMETRY	86360E	Yes	2008000	ALPS
AUTOIMMUNE LYMPHOPROLIFERATIVE SYNDROME	220602	No	0502005	ALPS Panel

ALT, SERUM	84460B	No	1001680	ALT
IGE, ALTERNARIA ALTERNATA	86003Z176	No	1502425	Alter
ALUMINUM, SERUM	82108A	No	9404101	Aluminum
MITOCHONDRIAL ANTIBODY	86256A	No	9400760	AMA
AMIKACIN LEVEL, PEAK	80150A	No	7000485	AmikP
AMIKACIN LEVEL	80150C	No	7000480	AmikR
AMIKACIN LEVEL, TROUGH	80150B	No	7000489	AmikT
AMINO ACIDS 6 PLUS, PLASMA	82139C	No	9000670	Amino
AMIODARONE AND DESETHYLAMIODARONE LEVEL	80299AER	No	9404050	Amiodarone
AMITRIPTYLINE AND NORTRIPTYLINE	80335G	No	9404140	AmitripNortrip
AMMONIA	82140B	No	1001400	Ammonia
ENTAMOEBA HISTOLYTICA IGG, EIA	86753C	No	9405515	Amo Ab
AMYLASE ISOENZYME	82150D	No	9406036	Amy Iso
AMYLASE, SERUM	82150E	No	1000200	Amylase
ANA	86038B	No	5202000	ANA
ANA, IFA	86038P	No	9460038	ANA IFA Screen
NUCLEAR AB PANEL (DS DNA Q,SSA,SSB,RNP,SM,CHROMATIN,RIBOSOMAL P,CENTROMERE B,SMRNP,SCL70,JO 1)	229925	No	5202190	ANA Panel
NUCLEAR AB PANEL (DS DNA Q,SSA,SSB,RNP,SM,CHROMATIN,RIBOSOMAL P,CENTROMERE B,SMRNP,SCL70,JO 1)	229925	No	5300010	ANA PanelQ
ANA PATTERN 1	86038I	Yes	5202051	ANA Pattern 1
ANA PATTERN 2	86038J	Yes	5202101	ANA Pattern 2
ANA PATTERN 3	86038K	Yes	5202151	ANA Pattern 3
ANA PATTERN 4	86038L	Yes	5202161	ANA Pattern 4
ANA TITER AND PATTERN	86039J	Yes	9460039	ANA Titer & Pattern Reflex
ANTINUCLEAR AB TITER, PATTERN 1	86039H	Yes	5202053	ANA Titer1
ANTINUCLEAR AB TITER, PATTERN 2	86039I	Yes	5202102	ANA Titer2
ANTINUCLEAR AB TITER, PATTERN 3	86039F	Yes	5202152	ANA Titer3
ANA TITER 4	86039G	Yes	5202162	ANA Titer4
ANAEROBIC CULTURE	87075G	No	6001550	Anaerobe Cult
ANCA SCREEN WITH REFLEX TO ANCA TITER	86021AN	Yes	9460087	ANCA Pro
ANCA SCREEN	86255ZE	No	5002600	ANCA Vasculitis
IGE, ANCHOVY	86003Z303	No	1502781	Anchovy
ANDROSTENEDIONE	82157B	No	9400520	Androstenedione

ANGELMAN SYNDROME/PRADER-WILLI SYNDROME, SNRPN/UBE3A, METHYLATION ANALYSIS	81331A	No	9040405	Angel M
THYROPEROXIDASE ANTIBODY	86376B	No	1002505	Anti TPO
ANTIBODY IDENTIFICATION, RBC	86850A	Yes	4100015	Antibody ID
RBC AB IDENTIFICATION, INDIRECT COOMBS	86870O	No	4100100	Antibody ID Reg
DOUBLE STRANDED DNA ANTIBODY	86225B	No	5202205	Anti-DNA Quant
BLOOD TYPING, RBC AGS, OTHER THAN ABO OR RHO (D)	86905D	No	4012030	AntigenType Reg
ANTI-MULLERIAN HORMONE, QUANTITATIVE	83520ZV	No	9460027	Anti-Mullerian
ACTIVATED PROTEIN C RESISTANCE	85307B	No	3000950	APCR
APOLIPOPROTEINS B	82172D	No	9406255	Apo B
APOLIPOPROTEIN E GENOTYPE	82172B	No	9405965	ApoE Geno
IGE, APPLE	86003U	No	1502532	Apple
IGE, APRICOT	86003Z106	No	1502570	Apricot
APTT	85730B	No	3000430	APTT
ANTIDIURETIC HORMONE	84588B	No	9400440	Arg Vas
CHROMOSOME ANALYSIS (ARRAY COMPARATIVE GENOMIC HYBRIDIZATION, ACGH)	219962	No	9040350	Array CGH
ARSENIC, BLOOD	82175B	No	9404054	Arsenic, Blood
ARSENIC, URINE	82175A	No	9405270	Arsenic, Urine
ALBUMIN, ASCITES GRADIENT	82042H	Yes	1000061	Asc Alb
AUTOLOGOUS SERUM EYEDROPS	227397	No	0000080	ASED
IGE, ASH, WHITE	86003Z60	Yes	1502134	Ash, White
ASO TITER	86060B	No	5203000	ASO
IGE, ASPARAGUS	86003Z208	No	1502726	Asparagus
IGE, ASPERGILLUS FUMIGATUS	86003Z210	No	1502422	Asper
ASPERGILLUS AB	86606H	No	9403107	Asper Ab
ASPERGILLUS GALACTOMANNAN AG	87305B	No	9460111	ASPERAG
ASPERGILLUS GALACTOMANNAN ANTIGEN, BAL, SEMIQUANTITATIVE, EIA	87305C	No	9460108	ASPERAGB
AST, SERUM	84450B	No	1001660	AST
ANTITHROMBIN III ACTIVITY	85300B	No	3000820	AT3
IGE, AVOCADO	86003Z336	No	1502695	Avocado
BARTONELLA HENSELAE ANTIBODY	86611B	No	9405900	B Hen Ab
BARTONELLA HENSELAE IGG TITER, IFA	86611M	Yes	9460035	B Hen IgG Titer
BARTONELLA HENSELAE IGM TITER, IFA	86611N	Yes	9460036	B Hen IgM Titer
BARTONELLA HENSELAE IGG TITER	86611C	Yes	9460031	B. HenIgG Titer
BARTONELLA QUINTANA IGM TITER	86611F	Yes	9460034	B. QunIgM Titer

BARTONELLA HENSELAE IGM TITER	86611D	Yes	9460033	B.HenIgMRfx
BARTONELLA QUINTANA IGG TITER	86611E	Yes	9460032	B.QunIgGTiter
BETA 2-GLYCOPROTEIN 1 IGG, IGM, IGA	200973	Yes	9406210	B2GP
BETA 2 GLYCOPROTEIN 1 ANTIBODY	247536	No	3100013	B2GP1 AB
BETA 2 GLYCOPROTEIN 1 IGG AND IGM	218191	Yes	3100020	B2GP1 G/M
BETA 2 GLYCOPROTEIN 1 IGA	86146H	Yes	3100025	B2GP1 IgA
BETA 2 GLYCOPROTEIN 1 ANTIBODY SCREEN	86146I	Yes	3100015	B2GP1 Scrn
BETA-2-MICROGLOBULIN	82232B	No	1001765	B2M
BILE ACID, SERUM	82239A	No	1002035	Ba Tot
BACTERIOLOGY REFERRAL.	87070ZZ	Yes	6000529	Bact Ref Cult
IGE, BANANA	86003AM	No	1502545	Banana
BARTONELLA HENSELAE AND QUINTANA IGG, IGM	208016	No	9405895	Bar Ab
BARBITURATES, CONFIRMATORY, GC/MS	80345A	Yes	7001084	Barb Con
BARBITURATES, CONFIRMATORY, GC/MS, CDRP	80345C	No	7002550	Barb Con C
IGE, BARLEY FOOD	86003Z104	No	1502592	Barley
BASEMENT MEMBRANE ZONE ANTIBODY TITER	86256AJ	Yes	9460004	BaseMemRf
IGE, BASIL	86003Z184	No	1502717	Basil
ANTIBODY ID, REFERENCE LAB	86870K	Yes	4010219	BB Ref Lab WkUp
BONE CORE, IMMUNOPHENOTYPING	234043	No	2009020	BC IPTYP
BCR/ABL GENE TRANSLOCATION, PCR, QUANTITATIVE	202760	No	9040622	BCR-ABL QNPCR
IGE, BEEF	86003E	No	1502611	Beef
BENZODIAZEPINES (8 DRUGS), URINE, CONFIRMATORY, LC/MS/MS	80346X	Yes	7001073	Benzo Con
BENZODIAZEPINES (8 DRUGS), URINE, CONFIRMATORY, LC/MS/MS, CDRP	80346C	No	7002545	Benzo ConC
IGE, BERMUDA GRASS	86003Z20	No	1502101	Bermuda
HCG, SERUM, QUAL	84703B	No	1006012	Beta hCG Qual
HCG, URINE	81025B	No	1006022	Beta hCG Qual U
ADENOSINE DEAMINASE, BODY FLUID	84311D	No	9407075	BF ADA
AMYLASE, BODY FLUID	82150B	No	1003500	BF Amyl
BETA-2 TRANSFERRIN, BODY FLUID	86335G	No	9405985	BF B2Tran
BILIRUBIN, BODY FLUID	82247D	No	1003525	BF BiliT
UREA NITROGEN, BODY FLUID	84520B	No	1003565	BF BUN
CALCIUM, BODY FLUID	82310D	No	1003580	BF CA
CELL COUNT AND DIFFERENTIAL, BODY FLUID	89051B	No	2003502	BF Cell
CHOLESTEROL, BODY FLUID	84311U	No	1003590	BF Chol
CHLORIDE, BODY FLUID	82438B	No	1003520	BF CL
CREATININE, BODY FLUID	82570B	No	1003510	BF Creat

CRYSTALS, BODY FLUID	89060C	No	2004000	BF Crys
SPECIMEN TRACKING, NON-GYN CYTOLOGY	221885	No	0000220	BF Cyto
GLUCOSE, BODY FLUID	82945F	No	1003540	BF Gluc
BODY FLUID, IMMUNOPHENOTYPING	234042	No	2009010	BF IPTYP
POTASSIUM, BODY FLUID	84999Z	No	1003570	BF K
LDH, BODY FLUID	83615B	No	1003550	BF LD
LIPASE, BODY FLUID	83690E	No	1003545	BF Lipase
NA, BODY FLUID	84302D	No	1003560	BF NA
OCCULT BLOOD, BODY FLUID	82271B	No	2003300	BF OCB
SPECIFIC GRAVITY, BODY FLUID	84315B	No	2003290	BF SG
BODY FLUID CYTOSPIN AND SMEAR REVIEW	88108L	Yes	2200004	BF SmrRev
PROTEIN, BODY FLUID	84157B	No	1003530	BF TP
TRIGLYCERIDES BODY FLUID	84478A	No	1003595	BF Trig
URIC ACID, BODY FLUID	84560B	No	1003585	BF Uric
URIC ACID, BODY FLUID	82330J	No	1005360	BG CA
CHLORIDE, BLOOD GAS	82435F	No	1005365	BG CL
POTASSIUM, BLOOD GAS	84132E	No	1005355	BG K
SODIUM, BLOOD GAS	84295D	No	1005350	BG NA
BETA-HYDROXYBUTYRATE	82010A	No	1001055	BHB
BETA-HYDROXYBUTYRATE (DKA), QUANTITATIVE	82010E	No	1001060	BHBR
HCG, SERUM, QUANT	84702C	No	1001098	BHCG
BILIRUBIN, DIRECT	82248B	Yes	1000275	Bili Dir
BILIRUBIN, TOTAL AND DIRECT	200468	No	1000210	BiliD
BILIRUBIN, TOTAL, SERUM	82247F	No	1000250	Bilirubin Total
BILIRUBIN TOTAL, NEONATAL	82247A	No	1000260	BiliTN
IGE, BIRCH, COMMON SILVER	86003Z51	No	1502122	Birch
BK VIRUS DNA, QUANT, PLASMA OR SERUM, REAL-TIME PCR	87799I	No	5002050	BKV Load
BLOOD, PERIPHERAL, IMMUNOPHENOTYPING	234041	No	2009000	BL IPTYP
IGE, BLACKBERRY	86003Z148	No	1502563	Blackberry
IGE, PEPPER, BLACK	86003Z89	No	1502820	Blackpep
BLEEDING TIME, IVY	85002B	Yes	3000100	Bleeding Time
BLOOD CULTURES (2 SETS)	218763	No	6000496	Blood Cult x2
BLOOD CULTURES (3 SETS)	218764	No	6000420	Blood Cult x3
BLOOD CULTURES (4 SETS)	218765	No	6000421	Blood Cult x4
NEONATAL BLOOD CULTURE	87040X	No	6600300	Blood Cult, Neo
BLOOD CULTURE	87040D	No	6000501	Blood Culture

BLOOD CULTURE 2	87040J	No	6000497	Blood Culture 2
BLOOD CULTURE 3	87040I	No	6000495	Blood Culture 3
BLOOD CULTURE 4	87040H	No	6000493	Blood Culture 4
MALARIA THIN AND THICK EVALUATION	87207K	Yes	6000522	Blood Parasites
IGE, BLUEBERRY	86003Z248	No	1502585	Blueberry
BONE MARROW ASPIRATE, IMMUNOPHENOTYPING	234044	No	2009030	BM IPTYP
B-TYPE NATRIURETIC PEPTIDE (BNP)	83880B	No	1001390	BNP
BODY FLUID CULTURE IN BOTTLE	87070ZW	No	6000487	Body Fld C Btl
CULTURE, BODY FLUID	87070ZZAB	No	6000489	Body Fld Cult
BONE MARROW ASPIRATE EXAM	88305F	Yes	2004600	Bone Marro
BORDETELLA PERTUSSIS, PARAPERTUSSIS DNA PCR	213117	No	6001000	Bper/pper PCR
BRAF, V600E GENE ANALYSIS	81210A	No	9040630	BRAF
IGE, NUT, BRAZIL	86003AC	No	1502628	Brazlnut
IGE, BROCCOLI	86003Z239	No	1502715	Broccoli
QUANTITATIVE AEROBIC CULTURE W GRAM STAIN	206506	No	6000514	BronchCult Quan
BRUCELLA AB, AGGLUTINATION	86622L	No	9460047	Bru Ab
BRUCELLA ANTIBODY	86622H	Yes	9460025	BruAggRflx
IGE, BUCKWHEAT	86003Z315	No	1502596	Buckwheat
BUN, SERUM	84520M	No	1000090	BUN
CLOSTRIDIUM DIFFICILE ANTIGEN AND TOXIN, A AND B, W REFLEX TO PCR	231607	No	5100219	C Diff Quick
CLOSTRIDIUM DIFFICILE ANTIGEN AND TOXIN, A AND B	249479	No	5100237	C Diff QuickIP
ENTEROVIRUS CULTURE	87252H	Yes	5100213	C Enterovirus
CHLAMYDIA TRACHOMATIS CULTURE AND TYPING BY IMMUNOFLUORESCENT AB	240345	No	9460078	C trach
C1 ESTERASE INHIBITOR, FUNCTIONAL	86161C	No	9400761	C1 Inh F
C1 INHIBITOR, PROTEIN	86160T	No	9400776	C1 Inh Pro
C2 COMPLEMENT	86160I	No	9400770	C2 Complement
CA 125	86304A	No	9040011	CA 125
CA 15-3	86300A	No	1001575	CA 15-3
CA 19-9	86301A	No	1001585	CA 19-9
CALCIUM IONIZED, SERUM	82330C	No	9400573	CA Ion
IGE, CABBAGE	86003AN	No	1502704	Cabbage
CADMIUM, BLOOD	82300A	No	9505560	Cadmium Level
CADMIUM, URINE	82300C	No	9405745	Cadmium, Urine
CAFFEINE LEVEL SERUM	80155B	No	7000595	Caffeine
CALCITONIN	82308B	No	9400544	Calcitonin

CALCIUM, SERUM	82310G	No	1000360	Calcium
CALCIUM, TOTAL, URINE	82310C	No	1004124	Calcium Urine
CANDIDA ALBICANS ANTIBODY	86628B	No	9403112	Can Ab
CANDIDA ALBICANS IGG,IGA,IGM	221399	No	9401523	Can Al Gam
IGE, CANARY FEATHERS	86003Z250	No	1502398	Canary
CANAVAN DISEASE, COMMON VARIANTS	81200A	No	9040618	Canavan
IGE, CANDIDA ALBICANS	86003Z252	No	1502424	Candida
CARBAMAZEPINE LEVEL	80156B	No	7000510	Carb
CARBON DIOXIDE, SERUM	82374C	No	1000640	Carbon Dioxide
CARBON MONOXIDE, QUANTITATIVE	82375B	Yes	9411269	Carbon Monoxide
CARNITINE (FREE, TOTAL) AND ACYLCARNITINE, BLOOD, QN	218613	No	9000675	Carnitine Level
CAROTENE	82380B	No	9400463	Carotene
IGE, CARROT	86003AO	No	1502669	Carrot
IGE, CASEIN	86003Z258	Yes	1502513	Casein
IGE, NUT, CASHEW	86003AD	No	1502636	Cashews
IGE, CAT DANDER	86003D	No	1502300	Cat Dander
CATECHOLAMINES, FRACTIONATION, PLASMA	82384A	No	9400584	CATS
COMPLEMENT, C3, CORD BLOOD	86160K	No	1001170	CB C3
COMPLEMENT, C4, CORD BLOOD	86160L	No	1001190	CB C4
IGA, CORD BLOOD	82784ZC	No	1002867	CB IgA
IGG, CORD BLOOD	82784ZE	No	1002897	CB IgG
IGM, CORD BLOOD	82784ZG	No	1002907	CB IgM
TREPONEMA PALLIDUM AB, PARTICLE AGGLUTINATION	86780D	Yes	5201152	CB TPPA
VDRL, CORD BLOOD, QUANT	86592K	Yes	5201151	CB VDRLQ
CBC NO DIFFERENTIAL	85027A	No	2001570	CBC
CBC W AUTOMATED DIFFERENTIAL	85025B	Yes	2001525	CBC Local
EDTA PSEUDOTHROMBOCYTOPENIA	246224	No	2200002	CBC & DIFF EDTA CLUMPER
CBC + DIFF (FAC LAB).	211999	No	2001521	CBCD
CBC + DIFF (AT REG LAB).	211998	No	2001574	CBCDR
BLOOD GAS, CAPILLARY	82803F	No	1005450	CBG
CYCLIC CITRULLINATED PEPTIDE (CCP) IGG	86200C	No	5003005	CCP
CYCLIC CITRULLINATED PEPTIDE AB	86200D	Yes	9460089	CCP G
CD4/CD8 ABSOLUTE AND RATIO	86360A	No	2006550	CD4CD8
CLOSTRIDIUM DIFFICILE, PCR	87493B	Yes	5100220	CDIF Toxin PCR
DRUG SCREEN, URINE, CDRP	247290	Yes	7000720	CDRP Drug
MDMA (ECSTASY), URINE, USING AUTOMATED ANALYZER, CDRP	80301AK	No	7002338	CDRP MDMA

OXYCODONE, URINE, USING AUTOMATED ANALYZER, CDRP	80301AI	No	7000840	CDRP Oxyco
THC QUANTITATION AND CREATININE, URINE, CDRP	229065	No	7000760	CDRP THC Q
METHADONE, URINE, CDRP	80358F	No	7000710	CDRPMethad
CEA	82378B	No	1000420	CEA
ACCUTE MYELOID LEUKEMIA, CEBPA MUTATION ANALYSIS	81403B	No	9460073	CEBPA by PCR
IGE, CELERY	86003Z197	No	1502690	Celery
CERULOPLASMIN	82390B	No	1002972	Ceruloplasmin
CYSTIC FIBROSIS RESPIRATORY CULTURE	87070Q	No	6045431	CF Resp Culture
CYSTIC FIBROSIS,165 COMMON VARIANTS, CFTR	81220D	No	9460133	CF VAR
CYSTIC FIBROSIS, CFTR, FULL SEQUENCE ANALYSIS	81223A	No	9040460	CFTR Sequence
TOTAL HEMOLYTIC COMPLEMENT	86162A	No	1002975	CH50
CHEMISTRY PANEL NON-FASTING (NA, K, GLUC, CR)	208231	Yes	1050023	CHEM4
CHEMISTRY PANEL FASTING (NA, K, GLUC, CR)	208232	Yes	1050022	CHEM4F
CHEM 6 (NA, K, CL, CO2, BUN, R GLUC)	208228	Yes	1050010	CHEM6
CHEM 7 (NA, K, CL, CO2, BUN, R GLU, CREAT)	200430	No	1050020	CHEM7
NA, K, CO2, ICA, GLUC, CR, BUN, HCT, HB, ARTERIAL BLOOD, POCT	218568	Yes	1200201	CHEM8+A
NA, K, CO2, ICA, GLUC, CR, BUN, HCT, HB, CAPILLARY BLOOD, POCT	218570	Yes	1200202	CHEM8+C
NA, K, CL, CO2, CA-I, GLU, CREAT, BUN, HEMATOCRIT, HB, POCT, OTHER	218571	Yes	1200204	CHEM8+O
NA, K, CO2, ICA, GLUC, CR, BUN, HCT, HB, VENOUS BLOOD, POCT	218569	Yes	1200203	CHEM8+V
CHEMISTRY PANEL (13 COMPONENTS), PRE HEART LUNG TRANSPLANT-NCAL.	208230	Yes	1050070	CHEMHL
IGE, CHERRY	86003Z109	No	1502572	Cherry
IGE, CHESTNUT, SWEET FOOD	86003Z259	No	1502648	Chestnut
IGE, CHICKEN FEATHERS	86003Z269	No	1502384	Chick
IGE, CHICKEN MEAT	86003AK	No	1502615	Chicken
IGE, CHILI PEPPER	86003Z254	No	1502718	Chilipep
CHLAMYDIA IGG AB	86631O	No	9403246	Chlam IgG
CHLAMYDIA GROUP SCREEN (IGG, IGM)	227145	No	9407130	ChlamGrpAb
CHLORIDE, SERUM	82435C	No	1000580	Chloride
CHLORIDE, URINE	82436A	No	9406015	Chloride Urine
CHOLINESTERASE, DIBUCAINE INHIBITION	208233	No	9406380	Cho DI
CHOLINESTERASE, RBC AND PLASMA	200442	No	9406320	Cho RP
IGE, CHOCOLATE	86003Z220	No	1502797	Chocolate
CHOLESTEROL, SERUM	82465B	No	1000620	Chol
CHROMOSOME ANALYSIS, AMNIOTIC FLUID.	246067	No	9040320	Chr AF
CHROMOSOME ANALYSIS, BONE CORE	246156	No	9040312	Chr BC

CHROMOSOME ANALYSIS, BLOOD.	246068	No	9040295	Chr Blood
CHROMOSOME ANALYSIS, BONE MARROW.	246070	No	9040310	Chr BM
CHROMOSOME ANALYSIS, CHORIONIC VILLUS.	213206	No	9040330	Chr CVS
CHROMOSOME ANALYSIS, FISH	246158	No	9040315	Chr FISH
CHROMOSOME ANALYSIS, LEUKEMIC BLOOD	246157	No	9040298	Chr Leu Bl
CHROMOSOME ANALYSIS, TISSUE.	246074	No	9040305	Chr Tis
CHROMOSOME ANALYSIS, SOLID TUMOR.	246069	No	9040345	Chr Tumor
CHROMIUM, SERUM	82495D	No	9405660	Chromium
CHROMOGRANIN A	86316E	No	9405870	Chromogranin A
IGE, CINNAMON	86003Z277	No	1502812	Cinnamon
CKMB	82553B	No	1000700	CKMB Isoenzyme
CYSTIC FIBROSIS SWEAT TEST	89230A	No	9000590	CL Sweat
IGE, CLADOSPORIUM HERBARUM	86003Z287	No	1502421	Clados
IGE, CLAM	86003BA	No	1502770	Clam
CLOMIPRAMINE LEVEL	80335J	No	9404150	Clomipramine
CLONAZEPAM LEVEL	80346H	No	9404031	Clon
HIV 1 RNA, QUANTITATIVE PCR	87536C	No	5001775	Clostridium difficile Panel
CYTOMEGALOVIRUS, IGG	86644B	No	5001411	CMV
CYTOMEGALOVIRUS CULTURE	87252C	Yes	5100215	CMV Culture
CYTOMEGALOVIRUS ANTIBODY	86644A	Yes	9460088	CMV G
CYTOMEGALOVIRUS IGG IGM	200487	No	9403187	CMV GM
CYTOMEGALOVIRUS IGM	86645A	No	9403186	CMV M
CYTOMEGALOVIRUS DNA QUALITATIVE PCR	87496A	No	9405975	CMV QLP
CYTOMEGALOVIRUS DNA QUANTITATIVE PCR	87497A	No	9405845	CMV QNP
CMV, SALIVA, PCR, QUALITATIVE	87496F	No	9460065	CMVPCR SAL
CARBOXYHEMOGLOBIN (CARBON MONOXIDE), QUANT	82375A	No	1005550	CO OX
COBALT LEVEL	83018G	No	9407135	Cobalt
COCCIDIOIDES IMMITIS ANTIBODY, SERUM	86635B	No	9403962	Cocci
COCCIDIOIDES PANEL, UC DAVIS.	211439	No	9401372	Coccid
COCCIDIOIDES IMMITIS AB, CF, UC DAVIS.	86635AY	No	9513723	Coccid CF
COCCIDIOIDES IMMITIS AB, ID, UC DAVIS.	86635AX	Yes	9510672	Coccid ID
IGE, COCKROACH	86003Z223	No	1502855	Cockroach
IGE, COCONUT	86003AP	No	1502528	Coconut
IGE, CODFISH	86003AA	No	1502730	Codfish
IGE, COFFEE	86003Z291	No	1502811	Coffee
COLD AGGLUTININ..	86157A	No	5100102	Cold

COLON CANCER, MOLECULAR GENE PANEL.	246405	No	9040351	Colon CP
C 3 COMPLEMENT	86160B	No	1001160	Complement C3
C 4 COMPLEMENT	86160A	No	1001180	Complement C4
COPPER, SERUM	82525C	No	9404250	Copper
COPPER, URINE	82525A	No	9405750	Copper, Urine
ABO-RH AND DIRECT COOMBS PANEL, CORD BLOOD	246840	No	4010475	Cord Workup
IGE, CORIANDER	86003Z294	No	1502793	Coriander
IGE, CORN FOOD	86003V	No	1502594	Corn Food
CORTISOL LEVEL, TOTAL, 30 MINUTE	82533G	No	1000445	Cort 30
CORTISOL TOTAL, 60 MINUTE POST ACTH	82533L	No	1000450	Cort 60
CORTISOL, 9 HRS POST 1.0 MG DEXAMETHASONE DOSE	82533M	No	1000460	CortDex1.0
CORTISOL, 48 HRS POST Q6H 2.0 MG DEXAMETHASONE DOSE	82533O	No	1000470	CortDex2.0
CORTISOL, 48 HRS POST Q6H 500 UG DEXAMETHASONE DOSE	82533N	No	1000465	CortDex500
CORTISOL, SERUM	82533A	No	1000660	Cortisol
CORTISOL, TOTAL, AM	82533I	No	1000645	Cortisol AM
CORTISOL, TOTAL, PM	82533J	No	1000650	Cortisol PM
IGE, COTTON SEED	86003Z297	No	1502831	Cotton
IGE, COTTONWOOD	86003W	No	1502133	Cottonwood
IGE, COW DANDER	86003Z306	Yes	1502303	Cow Dander
COXSACKIE B VIRUS (1-6) AB, COMPLEMENT FIXATION	200435	No	9403120	CoxBP
C-PEPTIDE	84681B	No	1001810	CPPTD
IGE, CRAB	86003BB	No	1502735	Crab
IGE, CRANBERRY	86003ZZAE	No	1502586	Cranberry
CREAT SERUM, CREAT, URINE.	82565G	Yes	1000760	CrCl-Crea
CARBAPENEM RESISTANT ENTEROBACTERIACEAE SCREENING CULTURE	87081ZAR	No	6600420	CRE Culture
CREATININE, SERUM, WITH GLOMERULAR FILTRATION RATE, CALCULATED	82565O	No	1000671	Creat with GFR
CREATINE KINASE	82550B	No	1000705	Creatine Kinase
CROSS-REFERENCE MOB TO FOB	207959	No	2007010	Cross FOB
CROSS-REFERENCE FOB TO MOB	207958	No	2007000	Cross MOB
CROSSMATCH, EXTENDED	86921A	Yes	4010546	Crossmatch Ext
CROSSMATCH, ELECTRONIC	86923A	Yes	4100010	Crossmatch Flex
CROSSMATCH, IMMEDIATE SPIN	86920P	Yes	4010469	Crossmatch IS
CRP, SERUM	86140C	No	5204010	CRP
HIGH SENSITIVITY C-REACTIVE PROTEIN	86141B	No	1001540	CRP HS
CRYOGLOBULIN	82595B	No	9405730	Cryo Eval
CRYOFIBRINOGEN	82585B	No	9411660	Cryofib

CRYOGLOBULIN, QUANTITATIVE	246999	Yes	9460002	Cryoglob Rflx
CRYPTOCOCCUS SP ANTIGEN, EIA	87327B	No	6000540	Cryptococcal AG
CRYPTOSPORIDIUM ANTIGEN, EIA	87328A	No	6000967	Cryptospor EIA
AMINO ACIDS, QUANTITATIVE, CSF	82139F	No	9000980	CSF Amino
CELL COUNT W DIFF, CSF	89051A	No	2002998	CSF Cell
CHLORIDE, CEREBROSPINAL FLUID	82438A	No	1000485	CSF CL
COCCIDIOIDES IMMITIS ANTIBODY, CSF	86635C	No	9403912	CSF Cocci
CULTURE, CSF	87070I	No	6000533	CSF Culture
GLUCOSE, CSF	82945H	No	1000480	CSF Gluc
CSF, IMMUNOPHENOTYPING	234045	No	2009040	CSF IPTYP
LACTIC ACID, CSF	83605A	No	1000500	CSF LA
MYELIN BASIC PROTEIN, SPINAL FLUID	83873B	No	9407005	CSF MBP
PROTEIN ELECTROPHORESIS, CEREBROSPINAL FLUID	84166B	No	1000559	CSF PEP
CSF PATHOLOGY REVIEW	247443	Yes	2200005	CSF SmrRev
TOXOPLASMA IGG CSF	86777K	No	9405545	CSF Toxo G
PROTEIN, CSF	84157E	No	1000540	CSF TP
VDRL, CSF, QUALITATIVE	86592D	No	5201100	CSF VDRL
VDRL, CSF, QUANTITATIVE	86593B	Yes	5201101	CSF VDRLQ
WEST NILE VIRUS IGG, IGM, CSF	206528	No	9406145	CSF WNV
IGE, CUCUMBER	86003Z309	No	1502711	Cucumber
IGE, CURRY	86003Z158	No	1502821	Curry
CYCLOSPORA IDENTIFICATION	87207C	No	6000519	Cyclospora Scrn
CYCLOSPORINE LEVEL, WHOLE BLOOD	80158A	No	7000170	Cyclosporine
IGE, CYPRESS, ITALIAN	86003Z67	Yes	1502142	Cypress
CYSTICERCUS ANTIBODY	86682D	No	9403754	Cys Ab
CYSTIC FIBROSIS, CFTR, COMMON VARIANTS	81220A	No	9040600	Cystic F
CYSTIC FIBROSIS, CFTR, COMMON VARIANTS, CORD BLOOD	81220C	No	9040608	CysticF CB
DIRECT ANTIGLOBULIN TEST (REG LAB).	86880J	Yes	4100095	DAT Manual Reg
DIRECT ANTIGLOBULIN TEST.	86880G	No	4010390	DAT(Coombs) Reg
DIRECT ANTIGLOBULIN TEST - INFANT	86880M	Yes	4100020	DAT(Coombs)Baby
ANTIGLOBULIN, DIRECT, CORD BLOOD	86880D	Yes	4010168	DAT(Coombs)Cord
D-DIMER, SEMIQUANTITATIVE	85378B	No	3000600	DDimer
IGE, DUST MITE (DERMATOPHAGOIDES FARINAE)	86003Z279	No	1502411	Dermaf
IGE, DUST MITE (DERMATOPHAGOIDES PTERONYSSINUS)	86003Z282	No	1502410	Dermap
DESIPRAMINE LEVEL	80335P	No	9404148	Desi
DEXAMETHASONE LEVEL	80299ZZZAD	No	9460040	Dexamethasone

DENGUE VIRUS ANTIBODY	200471	No	9402222	DF Ab
DHEAS	82627B	No	1001573	DHEAS
DEHYDROEPIANDROSTERONE	82626B	No	9400418	DHEAU
DIHYDROTESTOSTERONE	80327A	No	9400426	DHT
DIGOXIN LEVEL, TOTAL	80162B	No	7000145	Digoxin
DIPHTHERIA ANTIBODY	86648B	No	9403183	Dip At
DISOPYRAMIDE LEVEL	80299D	No	9404007	Disopyr
IGE, DOG DANDER	86003Z284	No	1502304	Dog Dander
SPECIAL COLLECTION, RESEARCH.	234138	No	0000088	DOR SP COL
RESEARCH URINE COLLECTION 1	243075	No	0000089	DOR UrineColl 1
RESEARCH URINE COLLECTION 2	243076	No	0000090	DOR UrineColl 2
DOXEPIN LEVEL	80335M	No	9404156	Dox
DENTATORUBRAL-PALLIDOLUYSIAN ATROPHY, ATN1 MUTATION ANALYSIS	81401G	No	9040610	DRPLA
DRUG CONFIRMATION PANEL 1.	208243	Yes	7002730	Drug Con1
DRUG CONFIRMATION PANEL 2.	208244	Yes	7002930	Drug Con2
DRUG SCREEN	246517	Yes	9000160	Drugs
IGE, DUCK FEATHERS	86003Z293	No	1502385	Duck
EBV PANEL (EBNA, VCA IGG, VCA IGM)	208246	No	5000060	EBV
EBV PANEL (EA, EBNA, VCA IGG + IGM)	208046	Yes	9460081	EBV PAN
EPSTEIN-BARR VIRUS DNA, PCR	87798A	No	9411953	EBV QLP
EPSTEIN BARR VIRUS DNA, PCR, QUANTITATIVE	87799B	No	9405855	EBV QNP
NA, K, HEMATOCRIT, HB, POCT	208292	Yes	1200112	EC3+
NA, K, GLUC, HCT, HB, POCT	208288	Yes	1200110	EC4+
EHRLICHIA CHAFFEENSIS IGG, IGM	208247	No	9403853	Echa
ECHINOCOCCUS SPECIES ANTIBODY	86682E	No	9405620	Echino
ECHINOCOCCUS SPP IGG, WESTERN BLOT	86682O	No	9460037	EchinoRflx
EGFR MUTATION ANALYSIS, COMMON VARIANTS	81235A	No	9040480	EGFR Mutation
IGE, EGG WHITE	86003AI	No	1502500	Egg White
IGE, EGG YOLK	86003AB	No	1502510	Egg Yolk
IGE, EGGPLANT	86003Z189	No	1502716	Eggplant
IGE, ELM	86003Z55	No	1502127	Elm
ENDOMYSIAL IGA TITER, IFA	86256V	No	9460134	EndoAb IgA
BACTERIAL ENTERIC PATHOGEN PANEL (6 COMPONENTS), STOOL, PCR	87506A	No	5100217	Enteric Panel
ENTEROVIRUS RNA PCR, QUAL	87498B	No	9407030	Entero P
ENTEROVIRUS DETECTION, CSF, PCR	87498A	No	6001050	Enterov PCR CSF
EOSINOPHIL AUTOMATED COUNT	85004H	No	2002300	Eosa

EPIDERMAL ANTIBODY	86255G	No	9400711	Epi Ab
IGE, EPICOCCUM PURPURASCENS	86003Z305	Yes	1502433	Epicocc
EPINEPHRINE, SERUM	82384J	No	9404452	Epin
ERYTHROPOIETIN	82668B	No	9400634	Erythropoietin
ERYTHROCYTE SEDIMENTATION RATE, AUTOMATED	85652B	No	2000860	ESR
ESTRADIOL, ULTRASENSITIVE BY LC MS/MS	82670K	No	9405945	Estra LCMS
ESTRADIOL, IVF ONLY	82670L	No	1600005	Estrad IVF
ESTRADIOL	82670B	No	1002475	Estradiol Level
ESTRIOL SERUM	82677A	No	9400972	Estriol
ESTROGENS, TOTAL	82672B	No	9400588	Estrogen, Total
ESTRONE	82679B	No	9400410	Estrone
ETHANOL, URINE, USING AUTOMATED ANALYZER	80301O	No	7000045	Ethanol, Urine
ETHOSUXIMIDE LEVEL	80168B	No	9404008	Ethx
ALCOHOL	80320E	No	7000039	ETOH
ETHANOL LEVEL, URINE, CONFIRMATORY, GC	80320N	Yes	7002650	ETOH Con
ETHANOL, CONFIRMATORY, URINE, GC, CDRP	80320B	No	7002655	ETOH Con C
IGE, EUCALYPTUS	86003Z63	Yes	1502137	Eucalyptus
EVEROLIMUS LEVEL	80169A	No	7100010	Everolimus
EXCEPTION INDICATOR	207938	Yes	0000003	Except
ALPHA-1 ANTITRYPSIN, STOOL	82103C	No	9405880	F A1AT 24
ALPHA-1 ANTITRYPSIN, STOOL RANDOM	82103D	No	9406135	F A1AT Ran
APT TEST (HEMOGLOBIN), STOOL	83033B	No	3502080	F APT
CALPROTECTIN, STOOL	83993A	No	9460101	F CalPro
CHLORIDE, STOOL	82438E	No	9460068	F CL
ELASTASE, STOOL	82656B	No	9406010	F Elastase
FAT, STOOL SCREEN	82705B	No	9405805	F Fat Ql
FECAL FAT, QUANTITATIVE	82710C	No	9491700	F Fat Qn
HELICOBACTER PYLORI ANTIGEN, STOOL	87338B	No	9405540	F HPY
GLOBIN, FECAL	82274A	No	3506050	F IT
STOOL POTASSIUM, 24 HOUR	84999AJ	No	9460067	F K
ELECTROLYTE PANEL (NA, K, CL), STOOL	249489	No	9405300	F Lytes
SODIUM, STOOL	84302H	No	9460066	F NA
OCCULT BLOOD ST 1 SPECIMEN.	82272A	No	3502000	F OCB
OCCULT BLOOD STOOL 3 SPECIMENS SCREENING	82270A	No	3502040	F OCB3
REDUCING SUBSTANCE, STOOL, QL	84376A	No	3502060	F RedSub
ROTAVIRUS DETECTION	87425A	No	9403173	F Rota

STARCH, STOOL	89240K	No	3502055	F Starch
STOOL WBC	89055A	No	3502070	F WBC
FACTOR IX ANTIGEN	85250D	No	9060085	FA IX Ag
FACTOR VII ACTIVITY	85230B	No	9060035	FA VII
FACTOR VIII ACTIVITY	85240B	No	9060055	FA VIII
FACTOR VIII INHIBITOR	85335E	No	9406250	FA VIII In
FACTOR VIII HUMAN INHIBITOR	85335N	Yes	9460005	FA VIII In Rflx
FACTOR X ANTIGEN	85260D	No	9060095	FA X Ag
FACTOR XII ACTIVITY	85280B	No	9060105	FA XII
FACTOR II ACTIVITY	85210B	No	9060025	Factor II Assay
FACTOR IX ACTIVITY	85250B	No	9060075	Factor IX Assay
FACTOR V	85220B	No	9060029	Factor V Assay
FACTOR X ACTIVITY	85260B	No	9060089	Factor X Assay
FACTOR XI ACTIVITY	85270B	No	9060099	Factor XI Assay
FACTOR XIII	85290B	No	9403098	Factor XIII
FAMILIAL DYSAUTONOMIA, IKBKAP, COMMON VARIANTS	81260A	No	9040412	Fam Dy
FAX OR CALL TO.	208494	No	9000009	Fax or Call to
FELBAMATE LEVEL	80339C	No	9404321	Fel
IGE, FENNEL SEED	86003Z322	No	1502810	Fennel
FERRITIN	82728B	No	1000820	Ferritin
FETAL FIBRONECTIN	82731B	No	1000895	FFn
1ST TRIMESTER SCREEN, CALIFORNIA (PAPP-A, HCG).	227020	No	1002750	FHCG PAPP
FIBRINOGEN ACTIVITY	85384B	No	3000390	Fibrinogen
IGE, FIG	86003Z317	Yes	1502587	Fig
IGE, FIRE ANT	86003Z192	Yes	1502860	Fire Ant
TACROLIMUS LEVEL	80197B	No	7000165	FK506
FLECAINIDE	80299ABS	No	9404035	Flec
FLT3 MUTATION ANALYSIS (INTERNAL TANDEM DUPLICATION +TYROSINE KINASE DOMAIN VARIANTS)	245662	No	9460071	FLT3 by PCR
FLUOXETINE LEVEL	80332C	No	9404185	Fluoxetine
FNA, IMMUNOPHENOTYPING	234046	No	2009050	FNA IPTYP
FOLIC ACID , SERUM	82746C	No	1002440	Folate
FONDAPARINUX LEVEL, ANTI XA	80299ADV	No	3001020	Fond
POST FRACTURE FOLLOW-UP.	208300	No	0000205	Fracture
FRAGILE X, FMR1, W REFLEX TO SOUTHERN BLOT	81243B	No	9040400	Fragile X
FETAL RBCS, FLOW CYTOMETRY	88184ZY	No	2007110	FRBC

FRIEDREICH ATAXIA, FXN MUTATION ANALYSIS	81401F	No	9040401	Fried Atax
FRUCTOSAMINE	82985B	No	1000595	Fructosamine
FRUCTOSE, SEMEN	82757B	No	9411816	Fructose, Semen
FSH	83001B	No	1002470	FSH
FSH, PEDIATRIC	83001I	No	9400393	FSH Ped
FIBRIN DEGRADATION PRODUCTS (FDP), SEMI-QUANTITATIVE	85362B	No	3000290	FSP
CULTURE, BLOOD FOR FUNGUS	87103A	No	6000543	Fungal Bld Cult
MYCOLOGY CULTURE	87102B	No	6000542	Fungal Culture
MYCOLOGY REFERRAL	87102L	No	6000541	Fungus Ref Cult
IGE, FUSARIUM MONILIFORME	86003Z330	No	1502428	Fusarium
GLUCOSE-6-PHOSPHATE DEHYDROGENASE	82955A	No	2000887	G6PD
GABAPENTIN LEVEL	80171A	No	9404061	Gab
GLUTAMATE DECARBOXYLASE 65 ANTIBODY	83519C	No	9406634	GAD
IGE, GARLIC	86003Z112	No	1502680	Garlic
GASTRIN, FASTING	82941D	No	1001835	Gastrin
IGE, BEAN, GREEN	86003Z340	No	1502725	Gbean
NEISSERIA GONORRHOEAE CULTURE	87081B	No	6000528	GC Screen
CHLAMYDIA/GC, <12 YEARS OF AGE, URINE, AMPLIFIED PROBE TECHNIQUE	246865	No	9460093	GCCT <12
CHLAMYDIA/GC, SWAB AMPLIFIED PROBE TECHNIQUE	219376	No	6200000	GCCTS
CHLAMYDIA/GC, URINE AMPLIFIED PROBE TECHNIQUE	219374	No	6300000	GCCTU
GENTAMICIN LEVEL, PEAK	80170B	No	7000232	GentP
GENTAMICIN LEVEL	80170E	No	7000231	GentR
GENTAMICIN LEVEL, TROUGH	80170A	No	7000233	GentT
GGT	82977B	No	1001670	GGT
GIARDIA LAMBLIA ANTIGEN, EIA	87329A	Yes	6000527	Giardia by EIA
IGE, GINGER	86003Z119	No	1502818	Ginger
GLIADIN ANTIBODY	83516AJ	No	9400947	Gliad
GLUCOSE TOLERANCE TEST, 1 HOUR	82947Q	Yes	1000980	Glu1
GLUCOSE TOLERANCE TEST, 2 HOURS	82951F	Yes	1000990	Glu2
GLUCOSE, 2 HR, POST 75 GM PO GLUCOSE	82950I	Yes	1000954	Glu2-75
GLUCOSE TOLERANCE TEST, 3 HOURS	249491	Yes	1001000	Glu3
GLUCAGON	82943B	No	9400496	Glucagon
GLUCOSE, POCT	82962D	No	1201020	Glucose (ISTAT)
GLUCOSE, FASTING	82947B	No	1000900	Glucose Fasting
GLUCOSE, RANDOM	82947A	No	1000920	Glucose Random
GLUCOSE, URINE	82945G	Yes	1004340	Glucose Urine

GLUCOSE, 1 HOUR POST PRANDIAL	82947E	No	1000930	GlucP
GLUCOSE, 2 HOUR POST PRANDIAL	82950A	No	1000940	GlucPP
BETA-GLUCURONIDASE	82657C	No	9000975	Glucuron
GLUCOSE TOLERANCE TEST, FASTING	82947T	Yes	1000905	GluF
GLUCOSE, FASTING, PRIOR TO 75G PO GLUCOSE	82947U	Yes	1000952	GluF-75
IGE, GLUTEN	86003Z341	No	1502605	Gluten
GANGLIOSIDE GM1 IGG AND IGM, EIA	200987	No	9403356	GM1 GM
IGE, GOOSE FEATHERS	86003Z75	No	1502369	Goose
GASTRIC PARIETAL CELL ANTIBODY	86256F	No	9406240	GPC Ab
GRAM STAIN, CSF	87205M	No	6001528	Gram St CSF
GRAM STAIN, GENITAL SOURCE	87205ZA	No	6001366	Gram St Genital
GRAM STAIN, RESPIRATORY	87205U	No	6045450	Gram St Resp
GRAM STAIN, STOOL	87205T	No	6045433	Gram St Stool
GRAM STAIN, URINE	87205Z	No	6000539	Gram St Urine
GRAM STAIN	87205B	No	6000526	Gram Stain
IGE, GRAPE	86003Z118	No	1502576	Grape
IGE, GRAPEFRUIT	86003Z280	No	1502561	Grapefruit
GROUP B STRE PRENATAL SCREENING CULTURE	87081ZAP	No	6000368	Grp B Strep Scr
GLUCOSE TOLERANCE TEST PANEL, 2 HR.	211430	No	1001021	GTT2
GLUCOSE TOLERANCE TEST PANEL, 2 HR, 75 GM.	211429	No	1000950	GTT2 75
GLUCOSE TOLERANCE TEST PANEL, 3 HR.	211431	No	1001024	GTT3
IGE, GUAVA	86003Z99U	No	1502539	Guava
IGE, GUINEA PIG EPITHELIUM	86003Z83	No	1502305	Guinepig
H PYLORI, RAPID UREASE	87070ZX	No	6045470	H.pylori-Rapid
IGE, HALIBUT	86003Z95	No	1502778	Halibut
HEPATITIS A VIRUS IGM	86709B	No	5002051	HAM
ACIDIFIED SERUM LYSIS TEST, RBC	85475B	No	9000240	Ham Test
IGE, HAMSTER EPITHELIUM	86003Z85	No	1502383	Hamster
HANTAVIRUS IGG AND IGM	200982	No	9401856	Hanta
HAPTOGLOBIN	83010B	No	1001070	Haptoglobin
HEPATITIS A VIRUS ANTIBODY, TOTAL	86708C	No	5002010	HAVT
IGE, HAZEL NUT	86003AH	No	1502627	Hazel Nut
HEPATITIS B CORE ANTIBODY	86704B	No	5002201	HBcAb
HEPATITIS B CORE IGM	86705B	No	5002251	HBcAb M
HEPATITIS BE ANTIBODY	86707B	No	5002351	HBeAb
HEPATITIS BE ANTIGEN	87350B	No	5002301	HBeAg

HEPATITIS B SURFACE ANTIBODY	86706B	No	5002151	HBsAb
HEPATITIS B SURFACE AB , QUANT	86317AA	No	9400910	HBsAb QN
HBSAG	87340B	No	5002101	HBsAg
HEPATITIS B DNA, QUANTITATIVE	87517C	No	5002070	HBV Load
HEPATITIS C ANTIBODY	86803B	No	5002395	HCAb
BETA HCG (TUMOR), QUANT	84702G	No	1001325	HCGT
HEPATITIS C VIRUS RNA NS5B GENOTYPE SUSCEPTIBILITY, PCR W SEQUENCING	87902H	Yes	9460090	HCV HiRs Geno
HEPATITIS C RNA GENOTYPE, PCR	87902E	No	5001085	HCV Geno
IL28B, RS12979860 C/T AND RS8099917 T/G, SNP ANALYSIS	81401D	No	9460102	HCV IL28 B
HEPATITIS C VIRUS RNA PCR QUANTITATIVE	87522C	No	5003050	HCV Load
HEPATITIS D ANTIBODY	86692A	No	9400595	HDAb
HIGH DENSITY LIPOPROTEIN	83718A	No	1001080	HDL
IGE, DUST, HOLLISTER STIER	86003Z98	Yes	1502400	Hdust
HEPATITIS E AB IGG	86790P	No	9406110	HE G
HEPATITIS E IGG, IGM	207988	No	9406120	HE GM
HEPATITIS E AB IGM	86790Q	No	9406115	HE M
HEAVY METAL PANEL (ARSENIC, LEAD, MERCURY), BLOOD	251028	No	9404363	Heavy
HEINZ BODY, DIRECT	85441B	No	2004530	Heinz Stn
IGE, HELMINTHOSPORIUM HALODES	86003Z87	No	1502427	Helmintho
HELMINTH IDENTIFICATION	87177E	No	6000521	Helminths
HEMATOCRIT	85014C	No	2000080	Hematocrit
HEMATOCRIT, SPUN	85013E	No	2000750	Hematocrit Spun
HEREDITARY HEMOCHROMATOSIS, C282Y AND H63D, HFE MUTATION ANALYSIS	81256A	No	9040617	Hemochrom
HEMOGLOBIN A1C	83036B	No	1002000	Hemoglobin A1c
PLATELET ANTIBODY, HEPARIN INDUCED	86022B	No	9406235	Hep I Ab
LOW MOLECULAR WEIGHT HEPARIN, ANTI FACTOR XA	85520D	No	3000994	Hep LMW
UNFRACTIONATED HEPARIN, ANTI FACTOR XA	85520G	No	3000989	Hep UF
HEPATITIS C SCREENING PANEL	251043	No	5100238	Hepatitis C Screening Panel
HERPES SIMPLEX TYPE 1 ANTIBODY	86695B	Yes	9460085	Herp I
HERPES SIMPLEX VIRUS 2 GLYCOPROTEIN G IGG	86696G	Yes	9460086	Herp II
HEMOGLOBIN, PLASMA	83051B	No	9406104	Hgb Pl
HEMOGLOBINOPATHY SCREEN PANEL, PRENATAL.	211428	Yes	0501230	HGBEP PN
HEMOGLOBINOPATHY SCREEN, FATHER OF THE BABY	211426	No	0501150	HGBNP FOB
HEMOGLOBIN ELECTROPHORESIS, PRENATAL	211427	No	0501200	HGBNP PN
HEMOGLOBIN ELECTROPHORESIS	83020B	No	1000788	Hgbnp Scr

GROWTH HORMONE, SERUM, 60 MINUTES	83003H	No	1001890	HGH 1HR Post
GROWTH HORMONE, SERUM, 120 MINUTES	83003L	No	1001900	HGH 2HR Post
GROWTH HORMONE, SERUM, BASELINE	83003D	No	1001880	HGH Baseline
HUMAN GROWTH HORMONE	83003B	No	1001870	HGH Random
HGH SUPPRESSION PANEL.	227264	No	1001875	HGH2-75
HEMOGLOBIN AND HEMATOCRIT	200476	No	2000010	HH
HERPESVIRUS 6 IGG, EIA	86790AL	No	9460053	HHV6 IgG Ab
HERPESVIRUS 6 IGM, IFA	86790AJ	No	9460045	HHV6 IgM Ab
HERPESVIRUS 6 IGM TITER	86790AO	No	9460062	HHV6 IgM Titer
HISTONE ANTIBODY	83516BD	No	9400702	His Ab
HISTAMINE, SERUM	83088A	No	9406354	Hista
HISTOPLASMA ANTIGEN QUANTITATIVE, EIA	87385G	No	9411685	Histo Ag
HISTOPLASMA ANTIBODY ASSAY	86698D	No	9403144	Histo CF
HIV 1 AND 2 AB, SCREEN	86703B	Yes	5001710	HIV
HIV 1 RNA QUALITATIVE, TMA	87535C	Yes	9460099	HIV1 RNA
HIV1/HIV2 CONFIRMATION + DIFFERENTIATION, ICA	249438	No	5100234	HIV1,2 Conf
HTLV ANTIBODY, CONFIRMATORY	86689B	Yes	5001772	HIV Load
HIV1/HIV2 AB DIFFERENTIATION, RAPID IMMUNOASSAY	240425	Yes	5100221	HIV Multispot
HIV QUICK (HIV AND HIV RAPID).	218674	No	0502000	HIV QUICK
RAPID HIV TEST	86703E	Yes	5001650	HIV Rapid
HIV SCREEN (HIV1 ANTIGEN, HIV1 AND 2 ANTIBODIES), QUALITATIVE, IMMUNOASSAY	87389C	Yes	5100232	HIV Screen
HIV 1/2 AG AB SCREEN AND CONFIRMATION	249568	No	5100236	HIV Scrn Conf
HIV, CONFIRMATORY (STATE)	86689F	Yes	5000033	HIV State
HIV 1 DRUG SUSCEPTIBILITY, GENOTYPIC	87901C	No	9001090	HIV1 Geno
HIV-1 DNA PCR, QUALITATIVE	87535B	Yes	9403060	HIV1 QLP
HIV 1 RNA + DNA, QUALITATIVE, PCR	87535E	No	9460107	HIV1 QLPCR
CARBAMAZEPINE HYPERSENSITIVITY, HLA-B*1502 TYPING	81381A	No	9405560	HLA B1502
ABACAVIR HYPERSENSITIVITY, HLA-B*5701 TYPING	81381B	No	9460028	HLA B5701
HLA A, B TYPING, DNA	86813G	No	9401367	HLA Pheno
HLA B27 TYPING	86812A	No	9405810	HLA-B27 Antigen
HLA B HIGH RESOLUTION TYPING	81380B	Yes	9460059	HLABHighRf
HLA DR TYPING	86816A	No	9001105	HLADR Phenotype
DRAW AND HOLD BLOOD BANK TUBE FOR TRANSFUSION SERVICE	207961	No	4010340	Hold BB
DRAW AND HOLD BLOOD CULTURE	207951	Yes	0000160	Hold C BL
DRAW AND HOLD PLASMA, CITRATE TUBE	207943	No	0000110	Hold Cit

DRAW AND HOLD CORD BLOOD FOR TRANSFUSION SERVICE	207932	No	4010341	Hold Cord
HOLD CSF TUBE	207946	Yes	0000125	Hold CSF
DRAW AND HOLD EDTA TUBE	208577	No	0000120	Hold EDTA
HOLD BODY FLUID SPECIMEN	207949	No	0000150	Hold Fluid
DRAW AND HOLD HEPARIN TUBE	207948	No	0000140	Hold Hep
DRAW AND HOLD AND FROZEN SERUM FOR HIV, SST	207941	Yes	0000104	Hold HIV
HOLD HPV FOR FUTURE TESTING	207952	Yes	0000165	Hold HPV for Future Testing
DRAW AND HOLD PINK TOP TUBE	208578	No	0000115	Hold Pink
DRAW AND HOLD PLASMA, PST	207947	No	0000130	Hold PST
DRAW AND HOLD SERUM, RED TOP TUBE	207942	No	0000105	Hold Red
DRAW AND HOLD SLIDE	207957	No	2001560	Hold Slide
DRAW AND HOLD SERUM, SST	207940	No	0000100	Hold SST
HOLD URINE SPECIMEN	207950	Yes	0000155	Hold Urine
HOMOCYSTEINE, PLASMA	83090C	No	1002520	Homoc
IGE, HONEY	86003Z101	Yes	1502588	Honey
IGE, HONEY BEE	86003AY	No	1502850	Honey Bee
IGE, HORSE DANDER	86003AQ	No	1502302	Horse
HYPERSENSITIVITY PNEUMONITIS ANTIBODY SCREEN (6 AB), IMMUNODIFFUSION	207296	No	9400784	HPS
HPV, HIGH RISK, DNA, HYBRID CAPTURE 2	87624G	No	5002500	HPV
HELICOBACTER PYLORI AB	86677B	No	5001750	HPY
HERPES SIMPLEX VIRUS AB, TYPE 1 AND 2, IGG	218608	No	5001610	HSV
HSV, DFA	87206M	Yes	6000552	HSV by DFA
HERPES SIMPLEX VIRUS CULTURE	87252A	Yes	6000548	HSV Culture
HERPES SIMPLEX, PCR CSF	87529C	Yes	6001100	HSV PCR for CSF
HERPES SIMPLEX, PCR	87529B	No	5100225	HSV1/2 PCR
HSV TYPE-2 IGG	86696B	No	5001618	HSV2
HTLV 1 AND 2 AB, REFLEX TO WESTERN BLOT	86790AE	No	9407125	HTLV
HUNTINGTON DISEASE, HTT MUTATION ANALYSIS	81401C	No	9040500	Hunting D
NA, K, GLUC, ICA, POCT	212045	Yes	1200310	I4EC
IA-2 AB	86341E	No	9460042	IA-2 Antibody
ACTIVATED CLOTTING TIME, POCT	85347D	No	1201070	IACT C
ACTIVATED CLOTTING TIME W KAOLIN, POCT	85347G	No	1201075	IACT K
CALCIUM IONIZED, POCT	82330E	No	1201022	ICA++
ISLET CELL ANTIBODY	86341B	No	9405725	ICAb
CREATININE, POCT	82565H	No	1201040	ICreat

SERUM IMMUNOELECTROPHORESIS	86320B	No	1002852	IEP
INTRINSIC FACTOR BLOCKING ANTIBODY	86340C	No	9400522	IFBAb
IGA	82784C	No	1002860	IgA
IMMUNOGLOBULIN D	82784D	No	9406200	IgD, Serum
IGE	82785B	No	1002880	IgE
IGE, SPECIFIC	86003ZZJ	No	1510010	IgE, Specific
INSULIN-LIKE GROWTH FACTOR BINDING PROTEIN 1	83519L	No	9400658	IGFBP1
INSULIN-LIKE GROWTH FACTOR BINDING PROTEIN 3, CHEMILUMINESCENT ASSAY	82397F	No	1001815	IGFBP3
INSULIN LIKE GROWTH FACTOR I	84305C	No	9400641	IGF-I
IGG	82784B	No	1002890	IgG
IGG SUBCLASS PANEL (SUBCLASSES 1,2,3,4)	200504	No	9400771	IgG Sub
IMMUNOGLOBULIN M	82784A	No	1002900	IgM
LACTATE, ARTERIAL, POCT	83605G	Yes	1201060	ILactate A
LACTATE, CAPILLARY, POCT	83605H	Yes	1201061	ILactate C
LACTATE, OTHER, POCT	83605J	No	1201063	ILactate O
LACTATE, VENOUS, POCT	83605I	Yes	1201062	ILactate V
IMIPRAMINE AND DESIPRAMINE	80335F	No	9404158	Imipramine
IMMUNE CELL FUNCTION, ANTIGEN INDUCED BLASTOGENESIS	86353E	No	9407140	ImmCellFunction
IMMUNOGLOBULINS G A M	200540	No	1002855	Immuno
INFLUENZA VIRUS A AND B AB	211678	Yes	9403199	Inf AB
INHIBIN A	86336A	No	9405595	Inhibin A
INSULIN LEVEL AND GLUCOSE	**251279**	**No**	**1002547**	**Insu**
INSULIN AUTOANTIBODY	86337D	No	9406280	Insu Auto
INSULIN, FREE	83527B	No	9400407	Insuf
INTERCELLULAR SUBSTANCE ANTIBODY TITER	86256AI	Yes	9460003	Intercell Rflx
IRON AND TIBC	206483	No	1001115	Iron and TIBC
IRON, SERUM	83540B	No	1001245	Iron Level
ISLET CELL ANTIBODY TITER	86341C	Yes	9460007	IsletCell Rflx
ISOSPORA STAIN	87206W	No	6000520	Isospora Screen
NA, K, GLUC, CL, BUN, HCT, HB, POCT	208282	Yes	1200130	i-STAT 6+
CBG, LACTATE, POCT	212049	Yes	1200198	i-STAT CG4+ CAP
ABG, LACTATE, POCT	212046	Yes	1200197	i-STAT CG4+Art
BLOOD GAS, LACTATE, POCT	212048	No	1200200	i-STAT CG4+OTH

VGB, LACTATE, POCT	212047	Yes	1200199	i-STAT CG4+VEN
NA, K, GLUC, ICA, HCT, HB, CBG, POCT	208285	Yes	1200134	i-STAT CG8+ CAP
NA, K, GLUC, ICA, HCT, HB, VBG, POCT	208287	Yes	1200136	i-STAT CG8+ Ven
NA, K, GLUC, ICA, HCT, HB, ABG, POCT	208283	Yes	1200132	i-STAT CG8+ART
NA, K, GLUC, ICA, HCT, HB, BG, POCT	208284	No	1200138	i-STAT CG8+OTH
ABG, POCT	82803O	No	1200115	i-STAT EG3+ Art
CBG, POCT	82803S	Yes	1200117	i-STAT EG3+ Cap
VBG, POCT	82803U	No	1200118	i-STAT EG3+ Ven
BLOOD GAS, POCT	82803Q	No	1200120	i-STAT EG3+Oth
NA, K, HCT, HGB, CAPILLARY BLOOD GAS, POCT	208356	Yes	1200142	i-STAT EG6+ Cap
NA, K, HCT, HGB, VENOUS BLOOD GAS, POCT	208355	Yes	1200144	i-STAT EG6+ Ven
NA, K, HCT, HGB, ARTERIAL BLOOD GAS, POCT	208357	Yes	1200140	i-STAT EG6+Art
NA, K, HCT, HGB, BLOOD GAS, POCT	208354	Yes	1200146	i-STAT EG6+Other
NA, K, ICA, HCT, HGB, ABG, POCT	208273	Yes	1200105	i-STAT EG7+ Art
NA, K, ICA, HCT, HB, CBG, POCT	208278	Yes	1200107	i-STAT EG7+ Cap
NA, K, ICA, BUN, GLUC, HCT, HGB, BG POCT	208274	No	1200109	i-STAT EG7+ Oth
NA, K, ICA, HCT, HB, VBG, POCT	208281	Yes	1200108	i-STAT EG7+ Ven
TROPONIN I, POCT	84484E	No	1201090	ITrop I
MYELOPROLIFERATIVE DISORDER, V617F, JAK2, QUAL	81270A	No	9040415	JAK2
IGE, JOHNSON GRASS	86003Z27	Yes	1502109	Johnson
IGE, CEDAR, MOUNTAIN	86003Z99C	No	1502125	Juniper
POTASSIUM, SERUM	84132C	No	1001520	K
KAPPA, LAMBDA LIGHT CHAINS, FREE W RATIO, SERUM	214864	No	1004745	Kap/Lam LCF
KAPPA LIGHT CHAIN, FREE	83883I	No	1004750	Kappa LC Free
KENNEDY DISEASE, AR MUTATION ANALYSIS	81401H	No	9040402	Kennedy
KETONE, SERUM, QUAL	82009F	Yes	1001052	Ketone (Reflex)
KETONE BODIES, QUALITATIVE	82009B	No	1000890	Ketone, Serum
KETONE/ACETONE BODIES, URINE, QL	82009C	No	3500235	Ketones Urine
C-KIT, CELL BASED, MUTATION ANALYSIS	81404A	No	9460074	KIT by FA-SQC
IGE, KIWI FRUIT	86003Z2	No	1502540	Kiwi Fruit
FETOMATERNAL HEMORRHAGE SCREEN, KLEIHAUER-BETKE	85460B	Yes	4006664	Kleihauer Betke Test
KOH WET MOUNT	87210C	No	6000538	KOH Prep
KRAS, CODONS 12, 13, AND 61 MUTATION ANALYSIS	228870	No	9040624	KRAS MUTA
IGE, LACTALBUMIN, ALPHA	86003Z116	Yes	1502511	Lacta
IGE, LACTOGLOBULIN, BETA	86003Z222	Yes	1502512	Lactb
LACTIC ACID	83605D	No	1001200	Lactic Acid

IGE, LAMB	86003ZZB	No	1502617	Lamb
LAMBDA LIGHT CHAIN, FREE	83883J	No	1004755	Lambda LC Free
IGE, LAMBS QUARTERS	86003Z33	No	1502218	Lambsq
LAMOTRIGINE LEVEL	80175A	No	7000448	Lamotrigine
LEUKOCYTE ALKALINE PHOSPHATASE SCORE	85540B	Yes	9400809	LAP Stn
IGE, LATEX	86003Z16	No	1502837	Latex
LACTATE DEHYDROGENASE	83615C	No	1001220	LD
LDH ISOENZYME	83625A	No	9400491	LD Iso
LDL DIRECT	83721C	No	1001275	LDL Direct
LDL GOAL < 100	207954	Yes	1000615	LDL Goal < 100
LDL GOAL < 160	207956	Yes	1000619	LDL Goal < 160
LDL GOAL < 130	207955	Yes	1000617	LDL Goal <130
LDL GOAL < 70	212187	Yes	1000613	LDL Goal <70
LOW DENSITY LIPOPROTEIN	83721B	Yes	1001255	LDLD
LEAD, BLOOD	83655D	No	7005000	Lead Level
LEAD SCREEN, URINE	83655B	No	9405735	Lead, Urine
LEGIONELLA SPECIES CULTURE	87081E	No	6000575	Legionella Cult
IGE, LEMON	86003Z3	No	1502560	Lemon
IGE, LENTIL	86003Z5	No	1502710	Lentil
LEPTOSPIRA ANTIBODY	86720J	Yes	9403154	Lepto
LEPTOSPIRA ANTIBODY TITER	86720L	Yes	9460022	Leptos Rflx
INDICATOR TO PRINT PATIENT LETTER	207937	Yes	0000002	Letter
IGE, LETTUCE	86003Z4	No	1502703	Lettuce
LEVETIRACETAM LEVEL	80177A	No	9406245	Levetiracetam
NONALCOHOLIC STEATOHEPATITIS (10 BIOMARKERS W PROGNOSTIC ALGORITHM)	246944	No	9460057	LF Panel
LH	83002B	No	1002480	LH
LH, PEDIATRIC	83002H	No	9400391	LH Ped
LIDOCAINE LEVEL	80176B	No	9404242	Lido
IGE, LIME	86003Z8	No	1502559	Lime
IGE, LINSEED	86003Z10	No	1502822	Linseed
LIPASE	83690B	No	1002040	Lipase
LIPID PANEL, FASTING	80061H	No	1000612	Lipid Panel
LIPID PANEL, NON-FASTING (CHOL, DHDL, TRIG, CALC LDL W REFLEX TO DLDL)	80061Q	No	1300005	Lipid Panel NF
LIPOPROTEIN (A)	83695A	No	1002045	Lipoprotein (a)

LITHIUM LEVEL	80178B	No	7000280	Lithium
LIVER KIDNEY MICROSOMAL ANTIBODY	86376A	No	9403476	LKMAb
IGE, LOBSTER	86003Z1	No	1502760	Lobster
LIVER PANEL (ALKP, AMYLASE, ALT, TBILI)	208268	Yes	1050090	LP4
LIPOPROTEIN ELECTROPHORESIS	208481	No	9400445	LPEP
LEGIONELLA PNEUMOPHILA ANTIBODY	86713B	No	9403300	LPNE Ab
LEGIONELLA DFA	87278B	No	9406125	LPNE Ag
LUPUS ANTICOAGULANT	85705A	No	3000895	Lupus A/C
BORRELIA BURGDORFERI ANTIBODY	86618B	No	5001600	Lyme
BORRELIA BURGDORFERI DNA, CSF OR SYNOVIAL, PCR	87476F	No	9406300	Lyme PCR
BORRELIA BURGDORFERI ANTIBODY CONFIRMATORY	86617A	Yes	5001595	Lyme WB
LYSOSOMAL ENZYME IDENTIFICATION	85549B	No	9000970	Lysosomal
LYSOZYME	85549C	No	9403264	Lysozyme
ELECTROLYTE PANEL (NA, K, CL, CO2)	80051E	No	1050030	Lytes
IGE, NUT, MACADAMIA	86003AR	No	1502638	Macadamia
MYELIN ASSOCIATED GLYCOPROTEIN ANTIBODY	83520G	No	9408870	MAG
MAGNESIUM, SERUM	83735A	No	1000130	Magnesium Level
MALARIA AND BLOOD PARASITES PANEL	246745	No	5100222	MALARIA PANEL
PLASMODIUM FALCIPARUM/PAN-MALARIA AG, RAPID TEST	242325	Yes	5100223	MalariaEIA
WBC MANUAL DIFFERENTIAL	85007B	Yes	2001526	Man Diff
IGE, MANGO FRUIT	86003Z145	No	1502544	Mango
IGE, BOX ELDER	86003Z49	No	1502120	Maple
MATERNAL DNA CONTAMINATION, COMPARATIVE ANALYSIS USING SHORT TANDEM REPEAT MARKERS	81265A	No	9040414	MCC
WBC MANUAL DIFFERENTIAL, REFLEX	85007H	Yes	2001572	MDIFR
RUBEOLA VIRUS ANTIBODY	86765E	Yes	9460082	Measles G
IGE, MELON	86003Z308	No	1502542	Mel/Cant
MERCURY, BLOOD	83825F	No	9404132	Mercury, Blood
MERCURY URINE	83825C	No	9405290	Mercury, Urine
METHOTREXATE LEVEL	80299AFL	No	7000400	Methotrexate
METHSUXIMIDE	**80339E**	**Yes**	**9494281**	**Methsux**
METHYLMALONATE	83921B	No	1004520	Methylmal
METANEPHRINES	83835C	No	9405885	METS
MEXILETINE	**80299ABX**	**Yes**	**9404751**	**Mex**
MGMT GENE METHYLATION ASSAY	81287A	No	9040440	MGMT Meth
MICROSPORIDIA IDENTIFICATION	87207D	No	6000517	Microsporidia

IGE, MILK	86003P	No	1502501	Milk
MISCELLANEOUS LAB TEST	89240A	Yes	9090035	Misc
CULTURE, MISCELLANEOUS	87070ZA	No	6000502	Misc Bac Cult
MISCELLANEOUS REFERENCE LAB TEST 1	220319	No	9090000	Misc Ref
MISCELLANEOUS REFERENCE LAB TEST 2	89240D	No	9090001	Misc Ref2
MISCELLANEOUS HEMATOLOGY STAINS	85999G	No	2004510	Misc Stn
MITOCHONDRIAL ANTIBODY, TITER	86256I	Yes	9460008	MitochonRf
APTT W REFLEX TO MIXING STUDY	85730R	No	3001720	Mix APTT
PT W PT MIXING STUDY	206481	No	3001729	Mixing Study PT
MLH1 PROMOTER METHYLATION ANALYSIS	246386	No	9040352	MLH1 Promoter Methylation Detection
HETEROPHILE ANTIBODY SCREEN	86308B	No	5205000	Mono
MORPHINE LEVEL, UR	80361J	No	7000665	Morphine, Urine
IGE, MOUSE	86003Z165	No	1502370	Mouse
MYCOPHENOLIC ACID LEVEL	80180B	No	9406170	MPA
MRSA CULTURE	87081ZJ	No	6045435	MRSA Scrn Cult
MULTIPLE SCLEROSIS BANDING PANEL.	211440	No	1001591	MSB
MULTIPLE SCLEROSIS PANEL INTERPRETATION.	208618	Yes	1002894	MSInterps
MULTIPLE SCLEROSIS PANEL (8 COMPONENTS), CSF AND SERUM	206490	Yes	1002884	MSQuant
IGE, MUCOR RACEMOSUS	86003Z171	No	1502423	Mucor
IGE, MUGWORT	86003I	No	1502214	Mugwort
IGE, MULBERRY	86003Z349	No	1502189	Mulberry
MUMPS VIRUS IGG	86735A	No	5000024	Mumps
MUMPS VIRUS ANTIBODY	86735C	Yes	9460084	Mumps G
MUMPS IGM	86735B	No	9403595	Mumps M
IGE, MUSHROOM	86003Z105	No	1502700	Mushroom
IGE, MUSSEL, BLUE	86003Z175	No	1502740	Mussel
IGE, MUSTARD	86003Z242	No	1502795	Mustard
MYASTHENIA GRAVIS PANEL	200496	No	9405625	Myas
MYCOPLASMA PNEUMONIAE IGM ANTIBODY	86738A	No	5001640	Myco
MYOCARDIAL ANTIBODY	**86256B**	**Yes**	**9405715**	**Myoc**
MYOCARDIAL ANTIBODY TITER	86256AK	Yes	9460020	Myocard Rf
MYOGLOBIN, SERUM	83874A	No	1000755	Myoglobin
MYOTONIC DYSTROPHY, DMPK MUTATION ANALYSIS WITH REFLEX TO SOUTHERN BLOT	81401I	No	9040700	Myotonic
SODIUM, SERUM	84295A	No	1001700	NA
EOSINOPHIL COUNT, NASAL	89190B	No	2000875	Nasal Eos

NEONATAL SCREEN CA.	208293	No	1002600	Neo Scrn
NEURONAL NUCLEAR (HU) TYPE 1 ANTIBODY, TITER	86256P	Yes	9460024	NeurNuc Titer
NEURONAL NUCLEAR (HU) TYPE 1 ANTIBODY, WESTERN BLOT	84181B	Yes	9460023	NeurNuc WestBlot
NEUROGENETIC PANEL (ATXN1, ATXN2, ATXN3, CACNA1A, ATXN7, ATN1)	240945	No	9040905	Neurogen
NICOTINE SCREEN, GC/MS	80323A	No	9405920	Nic
NIJMEGEN ASSAY	85335O	Yes	9460006	NijmegenRf
TRISOMY 21, 18, 13, RISK W X AND Y ANEUPLOIDY ANALYSIS, MATERNAL BLOOD, DIRECTED CFDNA ANALYSIS	245637	No	1002730	NIPT TRSMY XY
NEURONAL NUCLEAR (HU) TYPE 1 ANTIBODY	86255N	No	9403867	NNH
NOREPINEPHRINE, SERUM	**82384I**	**Yes**	**9404432**	**Norepi**
NORTRIPTYLINE	80335N	No	9404142	Nortrip
ACCUTE MYELOID LEUKEMIA, EXON 12 VARIANTS, NPM1 MUTATION ANALYSIS	81310A	No	9460072	NPM1 by PCR-FA
IGE, NUT, PECAN	86003AE	No	1502635	Nut, Pecan
IGE, OAK	86003Z54	No	1502126	Oak
IGE, OAT, FOOD	86003S	No	1502593	Oat, Food
IGE, OLIVE POLLEN	86003Z56	No	1502128	Olive
IGE, OLIVE, BLACK, FOOD	86003Z373	No	1502631	Olives
IGE, ONION	86003Z110	No	1502681	Onion
IGE, ORANGE	86003K	No	1502526	Orange
IGE, OREGANO	86003Z196	No	1502814	Oregano
OSMOLALITY, SERUM	83930B	No	1001380	Osmolality
OSTEOCALCIN	83937B	No	9400486	Ost
OSTEOPOROSIS PANEL.	214985	Yes	0501160	OSTOP
OSTEOPOROSIS PANEL + VITAMIN D.	214986	No	0501161	OSTOP D
OSTEOPOROSIS PANEL, MALE.	214987	Yes	0501162	OSTOP M
OUTREACH INDICATOR	207953	No	0000200	Outreach
OXALATE, 24 HOUR URINE	83945A	No	1005000	Oxalate Urine
MONOHYDROXYOXCARBAZEPINE (OXCARBAZEPINE OR ESLICARBAZEPINE METABOLITE) LEVEL	80183D	No	9460100	Oxcarbazepine Metabolite
IGE, OYSTER	86003BC	No	1502774	Oyster
PANCREATIC POLYPEPTIDE	83519F	No	9400546	Pan P
PROSTATIC ACID PHOSPHATASE	84066B	No	9400576	PAP
IGE, PAPER WASP	86003AX	No	1502853	Paper Wasp
IGE, PAPRIKA	86003AS	No	1502705	Paprika

PARASITE IDENTIFICATION	87169A	No	6000524	Parasite ID
REFERRAL PARASITOLOGY	87177K	Yes	6000523	Parasite Ref
PAROXETINE	**82941A**	**Yes**	**9404328**	**Paroxetine**
IGE, PARSLEY	86003Z338	No	1502691	Parsley
PARVOVIRUS B19 ANTIBODY	86747A	No	9403703	Parvo GM
PARVOVIRUS, DNA, PCR	87798D	No	9405925	Parvo P
BLOOD SMEAR REVIEW BY PATHOLOGIST	85060J	Yes	2001530	Path Rev
PNEUMOCYSTIS CARINII STAIN.	87205F	No	6000569	PCP Stain
FACTOR V LEIDEN AND PROTHROMBIN 20210G-A MUTATION ANALYSIS	242785	No	3000945	PCR Coag
IGE, PEA	86003Z91	No	1502650	Pea
IGE, PEACH	86003Z121	No	1502548	Peach
IGE, PEANUT	86003Q	No	1502625	Peanut
IGE, PEAR	86003Z124	No	1502547	Pear
IGE, PECAN, HICKORY POLLEN	86003Z359	Yes	1502141	Pecanhic
IGE, PENICILLIUM NOTATUM	86003Z68	No	1502420	Penicil
IGE, PENICILLIN G	86003T	No	1502870	PenicilG
IGE, PENICILLIN V	86003J	No	1502871	PenicilV
PROTEIN ELECTROPHORESIS PANEL, SERUM.	211433	No	1001597	PEP
PROTEIN ELECTROPHORESIS, SERUM	84165C	Yes	1001595	PEP Fractions
PROTEIN ELECTROPHORESIS INTERPRETATION, SERUM.	208617	Yes	1001625	PEP Intrp
FATTY ACIDS PROFILE, PEROXISOMAL	82726D	No	9411295	Perox
PLATELET FUNCTION TEST	85576A	Yes	3000350	PFA
PH, BODY FLUID	83986C	No	2003280	pH Body Fluid
PH, CAPILLARY	82800L	No	1005070	pH Capillary
PH STOOL	83986A	No	3502050	pH Stool
PH, URINE	83986D	No	3500180	pH Urine
PH, VENOUS CORD BLOOD	82800K	No	1005065	pH Ven CB
PH, VENOUS	82800A	No	1005060	pH Venous
PHENOBARBITAL LEVEL	80184B	No	7000432	Phenobarbital
PHENYLALANINE	84030A	No	9407050	Phenylal
PHENYLKETONURIA TEST	84030B	No	1002560	Phenylalanine
PHENYTOIN LEVEL	80185B	No	7000312	Phenytoin
PATIENTS HOME AND WORK PHONE NUMBERS.	208493	No	9000005	Phone
PHOSPHORUS	84100C	No	1001480	Phos
IGE, PINE NUT	86003Z88	No	1502645	Pine Nut
IGE, PINE, WHITE	86003Z61	Yes	1502135	Pine White

IGE, PINEAPPLE	86003Z182	No	1502562	Pineapple
PINWORM SLIDE	87172B	No	6000532	Pinworm Prep
IGE, PISTACHIO	86003Z90	No	1502637	Pistachio
IGE, PLANTAIN, ENGLISH	86003Z32	No	1502217	Plantain
PLATELET AUTOMATED COUNT	85049D	No	2000160	Platelet Count
PLATELET ASSOCIATED ANTIBODY, DIRECT	86023B	No	9406628	PLT Ab D
INDIRECT PLATELET ANTIBODY SCREEN	86022C	No	9400952	PLT Ab I
PLATELET AGGREGATION	85576C	No	9060170	Plt Aggr
PLATELET MANUAL COUNT	85032B	Yes	2001090	PLTM
IGE, PLUM	86003Z120	No	1502574	Plum
PM-1 ANTIBODY	86235I	No	9405820	PM-Scl Antibody
PNEUMOCOCCAL IGG 14 SEROTYPES PANEL	218994	No	9407055	PNE 14S
PAROXYSMAL NOCTURNAL HEMOGLOBINURIA	206465	No	2006950	PNH Panel
PRENATAL PANEL, INITIAL WORKUP.	211425	No	0501000	PNI
PRENATAL WORKUP DETAIL, INITIAL	207939	Yes	0000075	PNID
POLIO VIRUS ANTIBODY	200478	No	9403418	Pol Ab
IGE, POPPY SEED	86003Z327	No	1502813	Poppy Seed
IGE, PORK	86003O	No	1502610	Pork
PORPHYRIN, PLASMA, HPLC	82542AQ	No	9460058	Porph w/Rflx
IGE, POTATO	86003B	No	1502673	Potato
PRE-SURGERY EVALUATION	207934	Yes	0000011	POW
PANEL REACTIVE AB (STANFORD).	86807C	No	9001110	PRA PHR
PREALBUMIN	84134B	No	1002872	Prealb
PREGNENOLONE	84140B	No	9400574	Pregnenolone
PRIMIDONE LEVEL	80188B	No	9405890	Primidone
PROCAINAMIDE AND N-ACETYLPROCAINAMIDE LEVEL	**80192B**	**Yes**	**7000582**	**Proc**
PROCALCITONIN	84145B	No	9460098	Procalcitonin
PROGESTERONE	84144B	No	1002485	Progest
PROGESTERONE, IVF ONLY	84144D	No	1600006	ProgestIVF
PROINSULIN	84206B	No	9400575	Proinsulin
PROLACTIN	84146B	No	1001560	Prolactin
PROPAFENONE LEVEL	80299M	No	9402767	Propafenone

PROTEIN C ACTIVITY	85303B	No	3000800	Prot C
PROTEIN C ANTIGEN	85302B	No	9400649	Prot C Ag
PROTEIN S, TOTAL	85305B	No	3000810	Prot S
PROTEIN S ANTIGEN	85305D	No	9400659	Prot S Ag
TOTAL PROTEIN, SERUM	84155G	No	1001620	Protein Total
TOTAL PROTEIN, URINE	84156F	No	1004405	Protein Urine
PT, POCT	85610F	Yes	1201050	Protime (ISTAT)
PROTOZOA SMEAR AND GIARDIA BY EIA PANEL.	211438	No	6001525	Protozoa & GEIA
PROTOZOA, SMEAR W TRICHROME STAIN	87209D	No	6000525	Protozoa Smear
PSA	84153B	No	1001570	PSA
PSA, FREE AND TOTAL	202757	No	1001564	PSAF
PT	85610D	No	3000470	PT
PT AND APTT	200485	Yes	3000615	PT and APTT
PTH	83970B	No	1002450	PTH
PTH, INTRAOPERATIVE	83970K	Yes	1002455	PTH IO
PTH, POSTOPERATIVE	83970Z	No	1300006	PTH PO
PARATHYROID RELATED PROTEIN	83519E	No	9400654	PTHRP
IGE, PUMPKIN	86003Z310	No	1502707	Pumpkin
PYRUVATE	84210B	No	9000410	Pyruvic Acid
COXIELLA BURNETII ANTIBODY	86638B	No	9405905	QF GM
COXIELLA BURNETII IGG PHASE 1 TITER	86638D	Yes	9460011	QF IgG I Rflx
COXIELLA BURNETII IGG PHASE 2 TITER	86638E	Yes	9460012	QF IgG II Rflx
COXIELLA BURNETII IGM PHASE 1 TITER	86638F	Yes	9460013	QF IgM I Rflx
COXIELLA BURNETII IGM PHASE 2 TITER	86638G	Yes	9460014	QF IgM II Rflx
2ND TRIMESTER SCREEN, CALIFORNIA (AFP, HCG, UE3, INHIBIN).	227021	No	1002650	Quad State Lab
GAMMA INTERFERON (TB)	86480A	No	9407145	Quantiferon
QUINIDINE LEVEL	80194B	No	7000570	Quinidine Level
RHEUMATOID FACTOR, SERUM	86431B	No	5204005	RA
IGE, RABBIT EPITHELIUM	86003Z126	No	1502381	Rabbit
RABIES VIRUS ANTIBODY	86382A	No	9401455	RabiesTiter
IGE, WESTERN RAGWEED	86003Z28	No	1502210	Ragweed
SPECIFIC IGE, SEND OUT	86003ZZN	No	1509990	Rastsend
IGE, RAT	86003Z133	No	1502386	Rat
FOLIC ACID, RBC	82747B	No	9404412	RBC Fol
OSMOTIC FRAGILITY	85555A	No	2002020	RBC Frag

RBC MORPHOLOGY	85008F	Yes	2001573	RBC Morphology
IGE, BEAN, RED KIDNEY	86003Z69	No	1502720	Rbean
PLASMA RENIN	84244D	No	9405970	Renin A
CULTURE, RESPIRATORY	87070F	No	6045432	Resp Culture
INFLUENZA A, INFLUENZA B, AND RSV BY PCR	87801H	No	5100206	Resp PCR
RESPIRATORY VIRAL CULTURE	87252AD	Yes	6000546	Resp Viral Cult
RESPIRATORY VIRUS PANEL (14 VIRUSES), MULTIPLEX PCR	87633C	No	5100211	RespViral Panel
RETICULIN IGA SCREEN	86255P	Yes	9404257	Ret Ab A
RETICULOCYTE AUTOMATED COUNT_	85045G	No	2000825	Retic
RETICULIN IGA TITER	86256K	Yes	9460021	ReticulnRf
RH COMMENT	239645	No	4100110	Rh Comment
RH PHENOTYPING, COMPLETE	86906A	No	4012024	RH Pheno Reg
RH PHENOTYPING, COMPLETE (MEDICAL CENTER).	86906B	Yes	4012011	Rh Phenotype
RHO (D) BLOOD TYPING	86901B	Yes	4003778	Rh Type
IGE, RHIZOPUS NIGRICANS	86003Z140	No	1502429	Rhizopus
IGE, RICE	86003G	No	1502595	Rice
RICKETTSIAL DISEASE IGG, IGM PANEL (SPOTTED FEVER, TYPHUS, Q FEVER PHASE 1 AND 2)	207987	No	9405910	Rickett
RICKETTSIA RICKETTSIAE SPOTTED FEVER GROUP ANTIBODY	86757F	No	9403449	RMSF
ROCKY MOUNTAIN SPOTTED FEVER IGG TITER	86757K	Yes	9460015	RMSFIgG Rf
ROCKY MOUNTAIN SPOTTED FEVER IGM TITER	86757L	Yes	9460016	RMSFIgM Rf
RPR, QUANTITATIVE	86593E	Yes	5200999	RPR Q
RESEARCH BLOOD DRAW P1.1.	228311	No	0000060	RSRCH1P1
RESEARCH BLOOD DRAW P1.2.	230937	No	0504020	RSRCH1P2
RESEARCH BLOOD DRAW P1.2, EDTA #1.	230939	Yes	0000064	RSRCH1P2E
RESEARCH BLOOD DRAW P1.2, EDTA #2.	230940	Yes	0000068	RSRCH1P2P
RESEARCH BLOOD DRAW P1.2, SST.	230938	Yes	0000058	RSRCH1P2R
RESEARCH BLOOD DRAW P1.3.	233265	No	0504030	RSRCH1P3
RESEARCH BLOOD DRAW P1.3, EDTA #1.	233267	Yes	0000084	RSRCH1P3E
RESEARCH BLOOD DRAW P1.3, EDTA #2.	233268	Yes	0000086	RSRCH1P3P
RESEARCH BLOOD DRAW P1.3, SST.	233266	Yes	0000078	RSRCH1P3R
RESEARCH BLOOD DRAW P1.4	245585	No	0000091	RSRCH1P4
RESEARCH BLOOD DRAW P1.5	245586	No	0504040	RSRCH1P5
RESEARCH BLOOD DRAW P1.5, EDTA	245587	Yes	0000093	RSRCH1P5E

RESEARCH BLOOD DRAW P1.5, SST	245588	Yes	0000094	RSRCH1P5R
RESEARCH BLOOD DRAW P1.6	246265	No	0100007	RSRCH1P6
RESEARCH BLOOD DRAW P1.6, EDTA	246266	Yes	0000095	RSRCH1P6E
RESEARCH BLOOD DRAW P1.6, SST #2	246268	Yes	0000097	RSRCH1P6G
RESEARCH BLOOD DRAW P1.6, SST #1	246267	Yes	0000096	RSRCH1P6S
RESEARCH BLOOD DRAW P2.1, (FIRST TRIMESTER).	228312	No	0504000	RSRCH2P1
RESEARCH BLOOD DRAW P2.1, EDTA TUBE.	228727	Yes	0000061	RSRCH2P1E
RESEARCH BLOOD DRAW P2.1, SST TUBE.	228728	Yes	0000054	RSRCH2P1R
RESEARCH BLOOD DRAW P2.2, (SECOND TRIMESTER).	228726	No	0504010	RSRCH2P2
RESEARCH BLOOD DRAW P2.2, EDTA TUBE.	228729	Yes	0000076	RSRCH2P2E
RESEARCH BLOOD DRAW P2.2, SST TUBE.	228730	Yes	0000066	RSRCH2P2R
RESEARCH BLOOD DRAW P2.3, 1ST PRENATAL DRAW	246269	No	0100008	RSRCH2P3
RESEARCH BLOOD DRAW P2.3, EDTA	246270	Yes	0000098	RSRCH2P3E
RESEARCH BLOOD DRAW P2.3, SST #2	246272	Yes	0000106	RSRCH2P3G
RESEARCH BLOOD DRAW P2.3, SST #1	246271	Yes	0000099	RSRCH2P3S
RESEARCH BLOOD DRAW P2.4, 2ND PRENATAL DRAW	246285	No	0100009	RSRCH2P4
RESEARCH BLOOD DRAW P2.4, EDTA	246286	Yes	0000101	RSRCH2P4E
RESEARCH BLOOD DRAW P2.4, SST #2	246288	Yes	0000103	RSRCH2P4G
RESEARCH BLOOD DRAW P2.4, SST #1	246287	Yes	0000102	RSRCH2P4S
RESEARCH BLOOD DRAW P3.1	247002	No	0100010	RSRCH3P1
RESEARCH BLOOD DRAW P3.1, EDTA	247003	Yes	0000107	RSRCH3P1E
RESEARCH BLOOD DRAW P3.1, SST #2	247005	Yes	0000109	RSRCH3P1G
RESEARCH BLOOD DRAW P3.1, SST #1	247004	Yes	0000108	RSRCH3P1S
RESEARCH BLOOD DRAW P3.1, SST #3	247006	Yes	0000111	RSRCH3P1S2
RSV ANTIGEN, NASAL WASHING	87280A	Yes	5008050	RSV Antigen
RUBELLA SCREEN, LA	86762B	No	5001180	RUB
RUBEOLA IGG	86765D	No	5001142	Rubeo
IGE, RYEGRASS	86003Z23	No	1502104	Rye Grass
IGE, RYE, FOOD	86003Z166	No	1502591	Rye, Food
ALBUMIN, SERUM AND ASCITES FLUID PANEL.	214723	No	1000056	SAAG
SALMONELLA ANTIBODY	86768R	No	9405835	Sal Ab
SALICYLATE LEVEL	80329D	No	7000380	Salicylate
IGE, SALMON	86003BD	No	1502743	Salmon
SPINOCEREBELLAR ATAXIA 1, ATXN1 MUTATION ANALYSIS	81401N	No	9040620	SCA1
SPINOCEREBELLAR ATAXIA 2, ATXN2 MUTATION ANALYSIS	81401O	No	9040410	SCA2

SPINOCEREBELLAR ATAXIA 3, ATXN3 MUTATION ANALYSIS	81401P	No	9040615	SCA3
SPINOCEREBELLAR ATAXIA 6, CACNA1A MUTATION ANALYSIS	81401Q	No	9040404	SCA6
SPINOCEREBELLAR ATAXIA 7, ATXN7 MUTATION ANALYSIS	81401R	No	9040407	SCA7
IGE, SCALLOPS	86003ZZM	No	1502771	Scallops
SCHISTOSOMA IGG	86682G	No	9405935	Schisto Ab
SELENIUM BLOOD	84255A	No	9404230	Selenium
SEMEN ANALYSIS PANEL, COMPLETE	246385	No	3501071	Semen Analysis Panel, Complete
SEMEN ANALYSIS (COUNT, FORMS)	221260	Yes	3501072	Semen Count
SEMEN ANALYSIS, (SPERM PRESENCE AND OR MOTILITY)	89321F	Yes	3501069	Semen Motility
SEROTONIN, BLOOD	84260B	No	9400663	Serotonin
IGE, SESAME SEED	86003AT	No	1502790	Sesame
SEZARY SYNDROME SCREEN	234047	No	2009060	SEZARY SYN
SEX HORMONE BINDING GLOBULIN	84270B	No	1002500	SHBG
IGE, SHRIMP	86003AJ	No	1502736	Shrimp
SIDEROCYTE STAIN	85536A	No	2004500	Sidero Stn
SIROLIMUS LEVEL	80195A	No	7000065	Sirolimus Level
ACTIN (SMOOTH MUSCLE) IGG	83516F	No	9406225	Sm Musc Ab IgG
IGE, SHEEP SORREL	86003Z39	No	1502226	Sorrel
IGE, SOYBEAN	86003M	No	1502600	Soybean
SPERMATOZOA ANTIBODY	89325B	No	9403852	Sperm Ab
SPERM AGGLUTINATION, DUKE METHOD	89310E	No	3501120	Sperm Agg
SEMEN ANALYSIS, COUNT ONLY	89310C	Yes	3501061	Sperm Ct
SPERM COUNT POST VASECTOMY	89310D	No	3501080	Sperm PV
IGE, TARRAGON, MARJORAM, THYME, LOVAGE	86005D	No	1502825	Spice#1
SPICE IGE SCREEN (CARAWAY SEED, CARDAMOM, CLOVE, MACE)	**86005E**	**No**	**1502826**	**Spice#2**
IGE, ANISE SEED, BASIL, FENNEL SEED, GINGER	86005B	No	1502827	Spice#3
IGE, SPINACH	86003AU	No	1502702	Spinach
SPINAL MUSCULAR ATROPHY, SMN1 MUTATION ANALYSIS	81400C	No	9040420	Spinal MA
IGE, SQUID, PACIFIC	86003Z224	No	1502750	Squid
SEROTONIN RELEASE ASSAY	83519T	No	9407070	SRA
STRIATED MUSCLE ANTIBODY SCREEN	86255ZA	No	9400705	STM Ab
STONE ANALYSIS	82365F	No	9406951	Stone
STOOL CULTURE	87045B	Yes	6000511	Stool Culture
STRONGYLOIDES IGG, EIA	86682I	No	9402861	STR G
IGE, STRAWBERRY	86003AV	No	1502530	Strawberry
STREPTOCOCCUS GROUP A DNA, QUALITATIVE, PCR	87651A	No	5100228	Strep A PCR

STREP A PROBE, THROAT	87650B	Yes	5100205	Strep A Probe
STREPTOZYME	86403A	No	9406230	Strepto
STREPTOZYME TITER	86406C	Yes	9460019	Strepto Rflx
STRIATED MUSCLE ANTIBODY TITER	86256M	Yes	9460009	StriatMcRf
IGE, SUNFLOWER	86003Z44	No	1502832	Sunflower
IGE, SWEET POTATO	86003Z127	No	1502682	Swpotato
IGE, MAPLE LEAF SYCAMORE	86003Z58	No	1502130	Sycamore
TRI-IODOTHYRONINE, TOTAL	84480A	No	1001750	T3
T3 UPTAKE	84479B	Yes	9400480	T3 Uptake
T3, FREE	84481B	Yes	9404582	T3F ND
T3, FREE , TRACER DIALYSIS	208014	Yes	9400400	T3F TD
T4 FREE	84439B	No	1001786	T4 Free
T4 FREE, DIRECT DIALYSIS	84439D	No	9400524	T4F DD
TAY-SACHS DISEASE, 1278INSTATC, IVS12, IVS9, G269S, 7.6 KB DEL, HEXA MUTATION ANALYSIS	81255A	No	9040408	Tay Sachs
THYROXINE BINDING GLOBULIN	84442B	No	9400516	TBG
CD19, HEAVY MU CHAINS BM	208223	Yes	2006680	TBNK Panel
TOXOCARA CANIS ANTIBODY	86682A	No	9402087	TCan Ab
IGE, CAMELLIA SINENSIS	86003Z99L	No	1502815	Tea
THROMBOELASTOGRAPH, BASIC	232011	No	3100000	TEG Basic
THROMBOELASTOGRAPH PLATELET MAPPING	232028	No	3100005	TEG PltMap
THROMBOELASTOGRAPH, RAPID	232012	No	3100010	TEG Rapid
TESTOSTERONE, FREE	84402D	No	1600001	Testo Free
TESTOSTERONE, TOTAL, ULTRASENSITIVE, LC/MS/MS	84403P	No	7100009	Testo LCMS
TESTOSTERONE, TOTAL, SUPPRESSION MONITORING	84403Q	No	1600002	TestoMonitor
TESTOSTERONE, TOTAL W REFLEX TO FREE	84403O	No	1600000	Testosterone
TETANUS ANTIBODY	86774B	No	9403534	Tet At
THYROGLOBULIN ANTIBODY	86800B	No	1002515	Tg Ab
THYROGLOBULIN PANEL, USC (THYROGLOBULIN AB, THYROGLOBULIN)	215235	No	9407010	TG USC Int
THYROGLOBULIN PANEL RE-MEASUREMENT, USC	216184	No	9407000	TG USC Rep
ALPHA-THALASSEMIA, HBA1 AND HBA2, COMMON DELETIONS MUTATION ANALYSIS	81257A	No	9040403	Thal A DNA
BETA THALASSEMIA, HBB MUTATION ANALYSIS	81404B	No	9040650	Thal B DNA
CANNABINOIDS, URINE, CONFIRMATORY, GC/MS	80349A	Yes	7001063	THC Con
CANNABINOIDS, URINE, CONFIRMATORY, GC/MS, CDRP	80349C	No	7002540	THC Con C
THEOPHYLLINE	80198B	No	7000430	Theophylline

THIOCYANATE	84430A	No	9494402	Thiocyanate
IGE, RUSSIAN THISTLE	86003H	No	1502219	Thistle
THROMBIN TIME	85670B	No	3000580	Thrombin Time
THYROGLOBULIN PANEL (THYROGLOBULIN, THYROGLOBULIN AB)	208063	No	1002525	Thyrog
IGE, TILAPIA	86003ZZAQ	No	1502777	Tilapia
IGE, TIMOTHY GRASS	86003Z24	No	1502105	Timothy
TISSUE, IMMUNOPHENOTYPING	234048	No	2009070	TIS IPTYP
TISSUE CULTURE	87081J	No	6000535	Tissue Cult
TOBRAMYCIN LEVEL, PEAK	80200A	No	7000473	TobraP
TOBRAMYCIN LEVEL	80200C	No	7000472	TobraR
TOBRAMYCIN LEVEL, TROUGH	80200B	No	7000474	TobraT
IGE, TOMATO	86003C	No	1502663	Tomato
TOPIRAMATE LEVEL	80201B	No	9405610	TOP
TOXOPLASMA ANTIBODY	86777E	No	5001511	Toxo G
TOXOPLASMA GONDII IGG AND IGM	205402	No	9403181	Toxo GM
TOXOPLASMA GONDII, DNA QUALITATIVE, PCR	87798J	No	9406150	Toxo P
THIOPURINE DRUG TOXICITY, TPMT, GENOTYPING	81401A	No	9406155	TPMT Genotype
TREPONEMA PALLIDUM PASSIVE PARTICLE AGGLUTINATION TEST FOR AB TO SYPHILIS	86780C	Yes	5201002	TPPA
TRANSFERRIN	84466B	No	1002840	Transferrin
PREPARE CRYOPRECIPITATE FOR TRANSFUSION	243128	No	4100130	Transfuse CRYO
PREPARE FRESH FROZEN PLASMA FOR TRANSFUSION	243126	No	4100125	Transfuse FFP
PREPARE PLATELETS FOR TRANSFUSION	243125	No	4100120	Transfuse PLT
PREPARE PACKED RED BLOOD CELLS FOR TRANSFUSION	243127	No	4100115	Transfuse RBC
T PALLIDUM IGG + IGM	86780B	No	5200990	Trep Ab
TRICHINELLA IGG, EIA	86784B	No	9402427	Tri Ab G
TRIGLYCERIDES, SERUM	84478B	No	1000630	Trig
TROPONIN I	84484B	No	1000728	Troponin-I
IGE, TROUT	86003BE	No	1502767	Trout
TRANSFUSION REACTION, ABO-RH, POST TRANSFUSION	227966	Yes	4100035	TRxn ABORh Post
TRANSFUSION REACTION, ABO-RH, PRE TRANSFUSION	227967	Yes	4100070	TRxn ABORh Pre
TRANSFUSION REACTION , ANTIBODY SCREEN, POST TRANSFUSION	86850V	Yes	4100040	TRxn ABSC Post
TRANSFUSION REACTION, ANTIBODY SCREEN, PRE TRANSFUSION	86850W	Yes	4100075	TRxn ABSC Pre
TRANSFUSION REACTION CLERICAL AND HEMOLYSIS CHECK	227944	Yes	4100045	TRxn Check
CULTURE, BLOOD BANK PRODUCT FROM TRANSFUSION REACTION	87081ZAQ	No	6600001	TRXN Culture
TRANSFUSION REACTION, DIRECT ANTIGLOBULIN TEST, POST	86880N	Yes	4100055	TRxn DAT Post

TRANSFUSION				
TRANSFUSION REACTION, DIRECT ANTIGLOBULIN TEST, PRE	86880O	Yes	4100080	TRxn DAT Pre
TRANSFUSION BLOOD BANK PATHOLOGIST SERVICES, EXTENDED TRANSFUSION REACTION WORKUP, INTERP AND RPT	86078L	Yes	4100060	TRxn Path Rpt
TRYPSIN	83519AV	No	9406633	Trypsin
TRYPTASE	83520J	No	9406472	Tryptase
TYPE (ABO-RH) AND ANTIBODY SCREEN PANEL (MEDICAL CENTER).	210949	No	4010372	TS
TYPE AND SCREEN (STANFORD).	86850K	Yes	9001100	TS PHR
TSH	84443B	No	1001740	TSH
TSH, PREGNANCY	84443Q	No	1600004	TSH Pregnancy
TSH, ULTRASENSITIVE	84443P	No	1001785	TSH Ultrasensitive
TSI	84445B	No	9400585	TSI
TISSUE TRANSGLUTAMINASE IGA, IGG	207973	No	5003020	TTG
TISSUE TRANSGLUTAMINASE IGG AND IGA, EIA, MULTIPLE STEP METHOD	243925	No	9406260	TTG Ab Conf
FRANCISELLA TULARENSIS ANTIBODY	86668B	No	9405930	Tul Ab
IGE, TUNA	86003A	No	1502742	Tuna
IGE, TURKEY MEAT	86003AL	No	1502620	Turkey
TRICHOMONAS VAGINALIS RNA, AMPLIFIED	87661A	No	9460079	Tvag RNAQL
TYPE AND CROSSMATCH PANEL, IMMEDIATE SPIN (MEDICAL CENTER).	210951	No	4010547	TX FLEX
RICKETTSIA TYPHUS GROUP ANTIBODY	86757B	No	9403451	Typhus GM
TYPHUS FEVER (MURINE) IGG TITER	86757I	Yes	9460017	TyphusG Rf
TYPHUS FEVER (MURINE) IGM TITER	86757J	Yes	9460018	TyphusM Rf
THYROGLOBULIN ANTIBODY W REFLEX TO THYROGLOBULIN	86800E	No	9460109	Thyrogl
URINE ADULTERATION PANEL, CDRP.	82570ZAK	No	7002675	U Adult
DELTA AMINOLEVULINIC ACID 24 HR URINE	82135A	No	9406953	U ALA 24
DELTA AMINOLEVULINIC ACID, URINE	82135B	No	9405795	U ALA Ran
AMINO ACID SCREEN (MULT), URINE	82128A	No	9000910	U Amino
AMITRIPTYLINE, URINE, LC/MS/MS	80335A	No	7000850	U Amitrip
AMPHETAMINE, URINE	80324B	No	7000275	U Amphet
AMYLASE, URINE	82150C	No	1004050	U Amyl Ran
AMYLASE, TIMED URINE	82150J	No	1004070	U Amyl TM
ARSENIC, 24 HOUR URINE	82175D	No	9404107	U AS 24
BARBITURATES, URINE, USING AUTOMATED ANALYZER	80301AP	No	7000014	U Barb Scr
BENZODIAZEPINE SCREEN, URINE, USING AUTOMATED ANALYZER	80301W	No	7000135	U Benzo
BK VIRUS DNA, QUANT, URINE, REAL-TIME PCR	87799H	No	5002080	U BKV Load
BUPRENORPHINE SCREEN, URINE, LC/MS/MS	80348A	No	7000935	U Buprenorphine

CALCIUM, 24 HR URINE, KIDNEY STONE	82340G	Yes	1003165	U CA (KP1)
CALCIUM, 24 HR URINE	82340B	No	1004122	U CA 24
CARNITINE, FREE AND TOTAL, URINE	82379B	No	9000940	U Carn
CATECHOLAMINES, FRACTIONATION, 24 HR URINE	82384D	No	1004552	U CATS 24
CATECHOLAMINES, FRACTIONATION, URINE, PEDIATRIC	82384E	No	1004560	U CATS Ped
CADMIUM, 24 HOUR URINE	82300B	No	9404114	U CD 24
DRUG SCREEN (AMP, BAR, BDZ, COC, ETOH, OPI, OXYCOD, THC), URINE, USING AUTOMATED ANALYZER, CDRP1	80301H	No	7002505	U CDRP1
DRUG SCREEN (AMP, COC, ETOH, OPI, OXYCOD, THC), URINE, USING AUTOMATED ANALYZER, CDRP2	80301I	No	7002510	U CDRP2
CITRATE, 24 HR URINE KS.	82507E	Yes	1003145	U Cit (KP1)
CITRATE 24 HOUR URINE	82507A	No	1005700	U Citr
CHLORIDE, 24 HR URINE	82436B	No	9491085	U CL 24
COCAINE, URINE	80353C	No	7000195	U Coca
CODEINE, URINE	80361K	No	7000320	U Codeine
DRUG SCREEN COMP (AMP, COC, OPI, PCP, BZD, BAR, OXYCOD), URINE, USING AUTOMATED ANALYZER	80301P	No	7004010	U Comp
CORTISOL, FREE, 24H URINE	82530G	No	1007000	U CORT 24
CREATININE CLEARANCE PANEL.	211435	No	1004260	U CRCL
CREATININE, 24 HOUR URINE	82570A	No	1004232	U Cre 24
CREATININE, URINE	82570M	No	1004236	U Cre Ran
CREATININE CLEARANCE, CALCULATED	82575L	Yes	1004265	U CreClr
COPPER, 24 HOUR URINE	82525B	No	9404030	U CU 24
CYSTINE, QUANT RANDOM URINE	82131D	No	9405995	U Cyst QN
SPECIMEN TRACKING, URINE CYTOLOGY	221883	No	0000215	U Cyto
DRUG SCREEN 1 (AMP, BAR, BDZ, COC, ETOH, OPI, OXYCOD, THC), URINE, USING AUTOMATED ANALYZER	80301F	No	7002205	U DAP 1
DRUG SCREEN 2 (AMP, COC, ETOH, OPI, OXYCOD, THC), URINE, USING AUTOMATED ANALYZER	80301G	No	7002202	U DAP 2
DRUG SCREEN (AMP, METH, BAR, BZD, COC, MTD, OPI, OXYCOD, PCP, THC), URINE, USING TEST W VISUAL READ	80306A	No	7000122	U DAP L
DRUG PAIN PANEL (OPI, AMP, COC, THC, BZD, BAR, ETOH, OXYCOD, CR), URINE, USING AUTOMATED ANALYZER	229062	No	7002210	U DAP P
DESIPRAMINE, URINE, LC/MS/MS	80335C	No	7000858	U Desipram
DOPAMINE, 24 HR URINE	82384H	No	1004452	U Dopa 24
DOPAMINE URINE, PEDIATRIC	82384G	No	1004453	U Dopa Ped
DOXEPIN LEVEL, UR	80335S	No	7000860	U Doxepin

EOSINOPHILS, URINE	81015D	No	3500310	U Eos
FENTANYL SCREEN, URINE	80354A	No	7000930	U Fentanyl
GLUCOSE 24 HR URINE	82945A	Yes	1004365	U Glu 24
HEAVY METAL PANEL (ARSENIC, LEAD, MERCURY), 24 HR URINE	251027	No	9400102	U Heavy 24
HEAVY METAL PANEL (ARSENIC, LEAD, MERCURY), URINE	251026	No	9404411	U Heavy Rn
HEMOSIDERIN, URINE	83070B	No	9491486	U Hem Ql
MERCURY 24 HOUR URINE	83825E	No	9404133	U HG 24
HISTAMINE, 24 HOUR URINE	83088C	No	9406952	U Hista 24
HISTOPLASMA ANTIGEN, URINE	87385C	No	9411680	U Histo Ag
HOMOVANILLIC ACID, 24 HOUR URINE	83150B	No	1006002	U HVA 24
HOMOVANILLIC ACID URINE, PEDIATRIC	83150E	No	1006050	U HVA Ped
HYDROCODONE, URINE, LC/MS/MS	80361B	No	7000950	U Hydrocod
HYDROMORPHONE, URINE, LC/MS/MS	80361A	No	7000945	U Hydromor
BILIRUBIN , UR (ICTOTEST)	81002Y	No	3500290	U Icto
IMMUNOELECTROPHORESIS PANEL, 24 HOUR URINE.	214822	No	1004705	U IEP 24
IMMUNOELECTROPHORESIS PANEL, URINE.	210945	No	1004720	U IEP Ran
IMMUNOGLOBULIN A, URINE	82784E	No	1002863	U IgA
IMMUNOGLOBULIN G, URINE	82784F	No	1002893	U IgG
IMMUNOGLOBULIN M, URINE	82784H	No	1002903	U IgM
IMIPRAMINE, URINE, LC/MS/MS	80335E	No	7000855	U Imipram
IGG, IGA, IGM , UR	207962	Yes	1002853	U Immuno
POTASSIUM, 24 HR URINE	84133A	No	1004292	U K 24
POTASSIUM, URINE	84133C	No	1004294	U K Ran
KAPPA/LAMBDA RATIO, BOUND , FREE, URINE	208264	Yes	1002854	U KLBF
KIDNEY STONE RISK PANEL, 24HR URINE	235445	No	1003105	U KP2
LEGIONELLA PNEUMOPHILA ANTIGEN URINE	87449A	No	9403652	U Leg Ag
LSD, URINE, QUALITATIVE, EIA	80307B	No	9494247	U LSD Qual
MICROALBUMIN 24 HR URINE	82043A	No	1002809	U MALB 24
MDMA SCREEN, URINE, USING AUTOMATED ANALYZER	80301AL	No	7000225	U MDMA
MEPERIDINE, URINE	80362B	No	7000695	U Meper
METHADONE, URINE	80358C	No	7000690	U Methadon
METANEPHRINES, FRACTIONATED, 24 HR URINE	83835G	No	1004612	U METS 24
METANEPHRINES, FRACTIONATED, URINE, PEDIATRIC	83835L	No	1004605	U METS Ped
MAGNESIUM, URINE	83735C	No	1300003	U MG Ran
MICROALBUMIN, URINE, QUANTITATIVE	82043B	No	1002808	U MicroAlb
METHYLMALONIC ACID, URINE, QN	83921E	No	9412058	U MMA

MUCOPOLYSACCHARIDES URINE SCREEN	84999AF	No	9000960	U Mucopoly
MYOGLOBIN, URINE	83874B	No	9404403	U Myog Ran
SODIUM, 24 HR URINE	84300A	No	1004312	U NA 24
SODIUM, URINE	84300B	No	1004314	U NA Ran
NICOTINE METABOLITE, URINE	80323E	No	9402297	U Nic Ran
NMP-22	86316C	No	9000935	U NMP22
NORTRIPTYLINE, URINE, LC/MS/MS	80335B	No	7000853	U Nortrip
COLLAGEN CROSSLINKED N-TELOPEPTIDE, 24 HOUR URINE	82523C	No	9406311	U NTX 24
COLLAGEN CROSSLINKED N-TELOPEPTIDE, URINE	82523G	No	9400342	U NTX Ran
OLIGOSACCHARIDES, URINE	84376D	No	9000965	U Oligosac
OPIATE (300NG/ML CUTOFF) AND OXYCODONE (100NG/ML CUTOFF) SCREEN, URINE, USING AUTOMATED ANALYZER	80301E	No	7000240	U OPI 300
OPIATES AND OXYCODONE, URINE, USING AUTOMATED ANALYZER	80301AR	No	7002200	U Opi Oxy
OPIATES SCREEN, URINE, USING AUTOMATED ANALYZER	80301Y	Yes	7000215	U Opiates
ORGANIC ACID SCREEN, URINE	83919B	No	9000925	U Org Ac
OROTIC ACID, URINE	83921C	No	9000985	U Orotic
OSMOLALITY, 24 HOUR URINE	83935C	No	1004335	U Osmo 24
OSMOLALITY, URINE	83935B	No	1004333	U Osmo Ran
OXALATE, 24HR URINE KS.	83945E	Yes	1003125	U Ox
OXYCODONE SCREEN, URINE, USING AUTOMATED ANALYZER	80301AQ	No	7000845	U Oxycodo
LEAD, 24 HOUR URINE	83655E	No	9404128	U PB 24
PORPHOBILINOGEN 24 HOUR URINE, QUANTITATIVE	84110A	No	9406026	U PBG 24
PORPHOBILINOGEN , QUANTITATIVE, URINE	84110B	No	9406054	U PBG Ran
PHENCYCLIDINE SCREEN, URINE, USING AUTOMATED ANALYZER	80301AO	No	7000255	U PCP
PROTEIN ELECTROPHORESIS PANEL, 24 HOUR URINE.	214821	No	1002400	U PEP 24
PROTEIN ELECTROPHORESIS PANEL, URINE.	211434	No	1002405	U PEP Ran
PROTEIN ELECTROPHORESIS, URINE	84166A	Yes	1002403	U PEPFrac
PHOSPHORUS, 24H URINE	84105B	No	1004468	U Phos 24
PHOSPHORUS, URINE	84105A	No	1004448	U Phos Ran
PROTEIN IMMUNOELECTROPHORESIS PANEL, 24 HOUR URINE.	214823	No	1002300	U PIE 24
PROTEIN IMMUNOELECTROPHORESIS PANEL, URINE.	210944	No	1002305	U PIE Ran
PROPOXYPHENE SCREEN, URINE, LC/MS/MS	80367A	No	7000685	U Propoxy
PROTEIN , QUANTITATIVE, 24 HR URINE	84156G	No	1002402	U Prot 24
PROTEIN/CREATININE, URINE	200483	No	1006400	U ProtCrea
REDUCING SUBSTANCES, URINE	81005I	No	3500285	U RedSub
URINALYSIS, SPECIFIC GRAVITY	81002E	No	3500205	U SG Man

URINE PROTEIN, SULFOSALICYLIC ACID METHOD	84156J	No	3500295	U SSA
CANNABINOIDS SCREEN, URINE, USING AUTOMATED ANALYZER	80301L	No	7000205	U THC
THC QUANTITATION AND CREATININE, URINE	229064	No	7000750	U THC Q
TRICYCLIC ANTIDEPRESSANT SCREEN (5 DRUGS), URINE, LC/MS/MS	80336A	No	7000815	U Tricycl
UCSF DRUG SCREEN (AMP, BAR, BDZ, COC, ETOH, OPI, OXYCOD, THC), URINE, USING AUTOMATED ANALYZER.	80301C	No	7004600	U UCSF Tox
UREA NITROGEN, URINE	84540G	No	1004470	U UREA RAN
UREA NITROGEN, TIMED URINE	84540K	No	1004498	U Urea TM
URIC ACID, 24 HR URINE	84560D	No	1004142	U Uric
URIC ACID, 24 HR URINE KS.	84560F	Yes	1003185	U Uric (KP1)
VANILLYLMANDELIC ACID 24 HR URINE	84585A	No	1004853	U VMA 24
VANILLYLMANDELIC ACID, URINE, PEDIATRIC	84585G	No	1004840	U VMA Ped
17 KETOSTEROIDS, 24 HR URINE	83593A	No	9406920	U24 17Keto
17 HYDROXYCORTICOSTEROIDS 24 HR URINE	83491C	No	9406312	U24 17OHCS
5-HIAA, 24 HR URINE	83497E	No	1004392	U24 5HIAA
ALDOSTERONE, 24 HR URINE	82088E	No	9406936	U24 Aldosterone
MAGNESIUM, 24 HR URINE	83735F	No	1004888	U24 MG
5-HIAA , URINE, PEDIATRIC	83497G	No	1004388	U5HIAA Ped
URINALYSIS W REFLEX TO MICROSCOPY PANEL	246839	No	3500099	UA
URINALYSIS, AUTOMATED WO MICRO	81003B	Yes	3500100	UAD
URINALYSIS, MICROSCOPIC ONLY	81015B	Yes	3500101	UAM
URINE ADULTERATION PANEL, CDRP.	82570ZAL	No	7002680	UC Adult
AMPHETAMINE, URINE, USING AUTOMATED ANALYZER, CDRP	80301AB	No	7002300	UC Amphet
BARBITURATE SCREEN, URINE, USING AUTOMATED ANALYZER, CDRP	80301AG	No	7002330	UC BarbScr
BENZODIAZEPINE, URINE, USING AUTOMATED ANALYZER, CDRP	80301AF	No	7002325	UC Benzo
COCAINE, URINE, USING AUTOMATED ANALYZER, CDRP	80301AD	No	7002310	UC Coca
ETHANOL, URINE, USING AUTOMATED ANALYZER, CDRP	80301AH	No	7002335	UC ETOH
OPIATES AND OXYCODONE, URINE, USING AUTOMATED ANALYZER, CDRP	80301AM	No	7002515	UC Opi Oxy
OPIATE, URINE, USING AUTOMATED ANALYZER, CDRP	80301AC	No	7002305	UC Opiates
PHENCYCLIDINE, URINE, USING AUTOMATED ANALYZER, CDRP	80301AE	No	7002320	UC PCP
THC (CANNABIS) SCREEN, URINE, USING AUTOMATED ANALYZER, CDRP	80301AJ	No	7002315	UC THC
DRUG CONFIRMATION, URINE	247291	Yes	7004060	UDrugCon
IRINOTECAN TOXICITY, UGT1A1*28, GENOTYPING	81350A	No	9040613	UGT1A1
URINALYSIS W MICROSCOPY PANEL.	211436	No	3500055	UM
UREAPLASMA AND MYCOPLASMA SPP DNA, UROGENITAL SPECIMEN, QUALITATIVE, PCR	247267	No	9460076	Urea/Myco PCR

URIC ACID, SERUM	84550B	No	1001840	Uric Acid
URIC ACID, SERUM, GOUT MONITORING	84550E	No	1300004	Uric Gout
CULTURE, URINE	87088C	No	6000536	Urine Culture
URO, RISK DIAGNOSTIC PROFILE	215096	No	9407020	Urorisk
VALPROIC ACID LEVEL, TOTAL	80164B	No	7000540	Valp
VANCOMYCIN LEVEL, PEAK	80202B	No	7000533	VancoP
VANCOMYCIN LEVEL	80202C	No	7000531	VancoR
VANCOMYCIN LEVEL, TROUGH	80202A	No	7000534	VancoT
VARICELLA ZOSTER ANTIBODY	86787C	No	5001132	Varz
VARICELLA ZOSTER VIRUS IGM	86787A	No	9403536	Varz M
VARICELLA ZOSTER, PCR	87798E	No	9406295	Varz P
BLOOD GASES, VENOUS	82803A	No	1005502	VBG
BLOOD GAS, VENOUS, CORD BLOOD	82803M	No	1005510	VBG CB
VDRL, CORD BLOOD, QUAL	86592J	No	5201150	VDRL Cord Blood
VIBRIO CULTURE, STOOL	87046J	No	6600200	Vibrio Culture
VASOACTIVE INTESTINAL PEPTIDE	84586B	No	9400518	VIP
VIRAL CULTURE	87252D	No	6000547	Viral Culture
VISCOSITY	85810B	No	5206000	Viscosity
VITAMIN A	84590B	No	9400443	Vit A
VITAMIN B1, WHOLE BLOOD	84425E	No	9404045	Vit B1 WB
VITAMIN D, 25-HYDROXY	82306B	No	1002424	VIT D
VITAMIN D, 1, 25-DIHYDROXY	82652B	No	9407120	VIT D 1,25
VITAMIN D, 25-HYDROXY, INFANT	82306G	No	9460044	Vit D Infant
VITAMIN E	84446B	No	9400453	Vit E
VITAMIN B12	82607B	No	1002430	Vitamin B12
VITAMIN B6	84207B	No	9400299	Vitamin B6
ASCORBIC ACID	82180B	No	9404425	Vitamin C
LIPOPROTEIN FRACTIONATION, ULTRACENTRIFUGATION	216362	No	9400483	VLDL
VORICONAZOLE LEVEL, HPLC	80299AAC	No	9460070	Voricon
ENTEROCOCCUS VANCOMYCIN RESISTANT CULTURE	87075C	No	6004500	VRE Screen Cult
VON WILLEBRAND FACTOR, MULTIMERIC	85247A	No	9403275	VW Multi
VON WILLEBRAND FACTOR ACTIVITY	85397C	No	3100030	VWF Activity
FACTOR VIII VON WILLEBRAND FACTOR ANTIGEN	85246B	No	3000830	VWF Ag
VON WILLEBRAND PANEL (VWF AG, VWF ACTIVITY, FACTOR VIII)	247322	No	3100026	VWF Panel
RISTOCETIN COFACTOR	85245A	Yes	3000835	VWF RCO
VWF ANTIGEN, VWF RISTOCETIN COFACTOR, FACTOR VIII	208317	Yes	3000825	VWP2

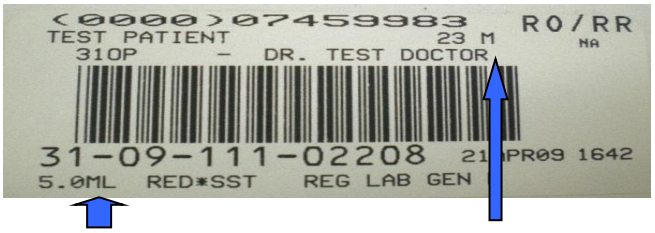
VARICELLA ZOSTER VIRUS IGG	86787B	Yes	9460083	VZV G
IGE, WALNUT TREE POLLEN	86003Z57	No	1502129	Walnut
IGE, WALNUT, FOOD	86003AF	No	1502647	Walnuts
IGE, WATERMELON	86003Z99O	No	1502543	Watermelon
WBC AUTOMATED DIFFERENTIAL	85048D	Yes	2000020	WBC
WBC MANUAL COUNT	85032C	Yes	2001080	WBCM
IGE, BEAN, WHITE	86003Z70	No	1502653	Wbean
HIV 1 WESTERN BLOT ASSAY	86689A	Yes	5000034	West Blot
WEST NILE VIRUS ANTIBODY IGM	86788A	No	5001900	West Nile Virus
WET PREP	87210J	No	6000415	Wet Prep
IGE, WHEAT	86003AG	No	1502590	Wheat
IGE, HORNET, WHITE FACED	86003AW	No	1502851	Whornet
WEST NILE VIRUS AB, CONFIRMATORY	86790V	Yes	5001920	WNV State
OLIGOSPERMIA/AZOOSPERMIA, Y CHROMOSOME MICRODELETION, DNA ANALYSIS	81403F	No	9040409	YDel
BAKERS YEAST, SACCHAROMYCES CEREVISIAE IGE	86003Z152	No	1502889	Yeast
IGE, HORNET, YELLOW	86003Z11	No	1502854	Yhornet
IGE, YELLOW JACKET	86003AZ	No	1502852	Yjacket
RBC ANTIGEN	86905Z	No	4100065	yyAntigen Typing
LIVER FIBROSIS PROFILE (GGT, T BILI, HYALURONIC ACID, ALPHA-2 MACROGLOBULIN, HEPASCORE)	219961	Yes	9407065	yyLFP
PRADER-WILLI SYNDROME, SNRPN METHYLATION ANALYSIS	81331B	Yes	9040406	yyPrader W
ZINC PROTOPORPHYRIN	84202B	No	9460026	Zinc Proto
ZINC PLASMA	84630C	No	9404154	Zinc, Plasma
PT AND INR	85610H	Yes	3000480	
APTT REGIONAL LAB.	85730H	Yes	3000555	
11-DEOXYCORTISOL	82634B	Yes	9400424	

How to Label Laboratory Tubes

1. RILIS SPECIMEN LABELS ARE TEST AND TUBE SPECIFIC.

Match tube color printed on the RILIS label and tube drawn.

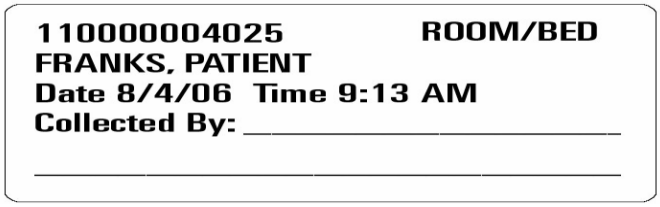
RILIS LABEL (test specific)*:



Tube color

Test ordered

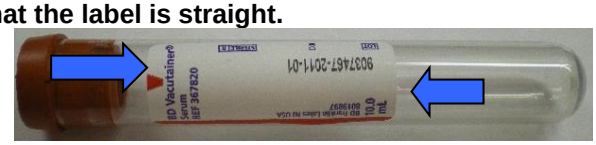
GENERIC LABEL (not test specific):



****** NOTE: SEND UNUSED RILIS LABELS TO THE LAB. DO NOT DISCARD. ******

2. HOW TO AFFIX THE LABEL TO THE TUBE

a. **Use the top edge of the manufacturer's label (see arrows below) to guide your placement of the patient's label. This helps to make sure that the label is straight.**



b. **Place the patient's name near the cap/stopper end of the tube (see below).**

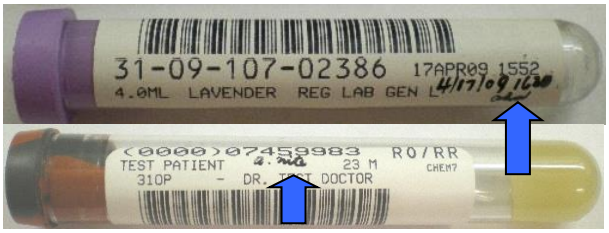
c. **Completely cover the manufacturer's label.**

For tubes with rubber stoppers, leave a ½ to ¼ inch gap (see arrows below) between the top of the tube and the lat

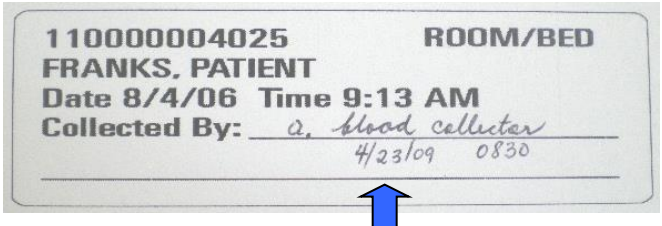
For smaller capped tubes, put the label as close tc the cap as possible.

3. BLOOD DRAWER MUST SIGN OR INITIAL, DATE, and TIME (use Military Time).

DO NOT WRITE IN THE SPACES TO THE RIGHT AND LEFT OF THE BARCODE.



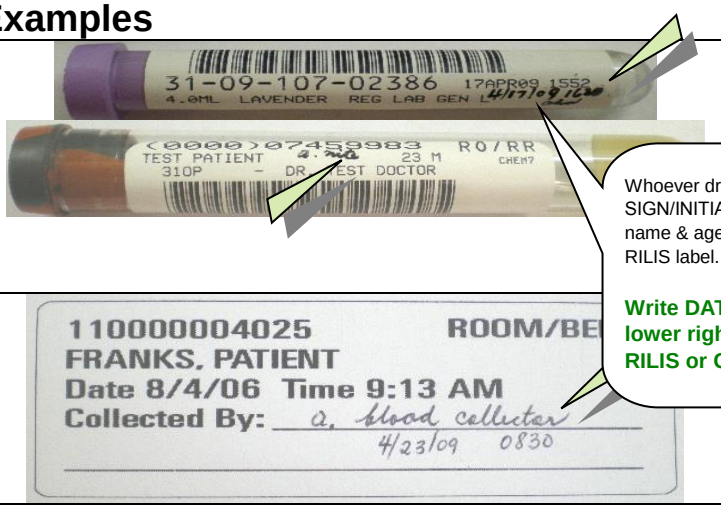
Sign/initial between patient's name & age OR at th bottom. Write Date & Time at the bottom lower rig hand corner of RILIS label.



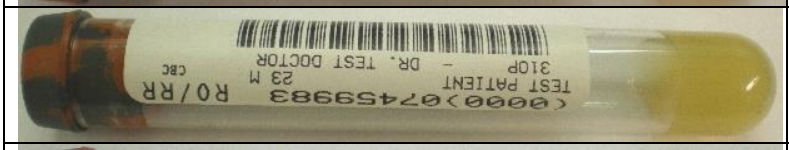
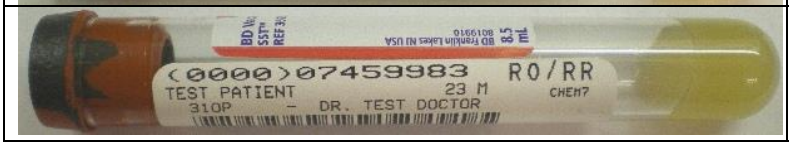
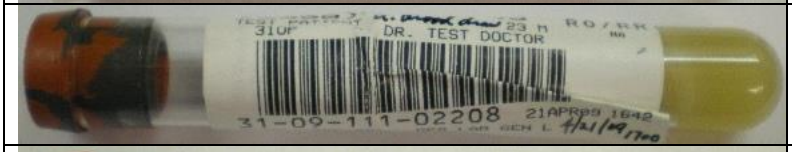
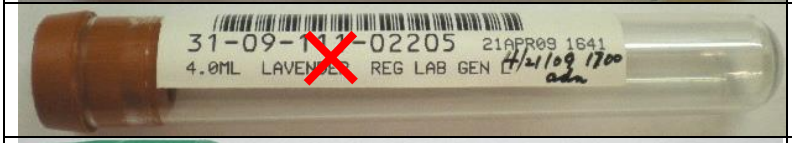
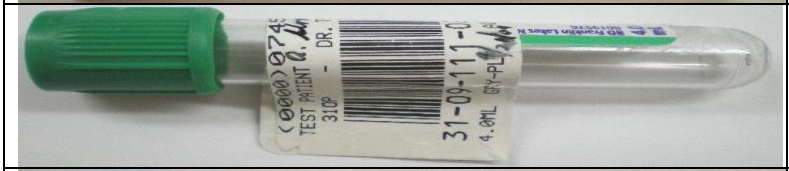
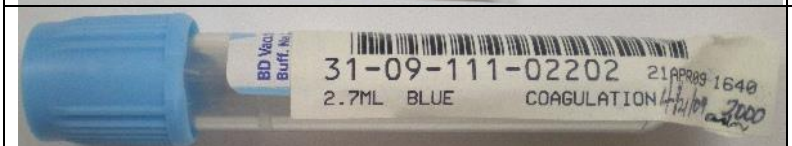
Sign/Initial, Date, Time Generic label at the bottom

Correct Way to Label Lab Tubes

SF LAB

Examples	OK?	Comments
 	**YES**	• **Ordered test/tube color on label matches tube color** • **Label is <u>STRAIGHT & FLAT</u>** • **Patient name is near cap** • **Manufacturer's label is completely covered** • **Gap left between the top of tube and label**

Incorrect Way to Label Lab Tubes

	**NØ**	**Label is <u>NOT STRAIGHT</u>** • **Not readable by analyzer**
	**NØ**	**<u>PATIENT NAME IS NOT NEAR STOPPER/CAP</u>** • **Label is upside down** • **Not readable by analyzer**
	**NØ**	**<u>MANUFACTURER'S LABEL IS NOT COVERED</u>** • **Amount of specimen cannot be seen clearly**
	**NØ**	**Label is <u>COVERING CAP</u>** • **Label will tear when stopper/cap is removed for processing**
	**NØ**	**Label is <u>CRIMPED</u>** • **Will not fit in and will get stucked in the analyzer** • **Not readable by analyzer**
	**NØ**	**<u>TEST ON LABEL DOES NOT MATCH TUBE COLOR</u>** • **Label says "LAVENDER". Tube is RED top.**
	**NØ**	**<u>INCORRECTLY ORIENTED LABEL (FLAG LABEL)</u>** • **Not readable by analyzer** • **Tube will not fit in analyzer**
	**NØ**	**<u>LABEL "TAIL" AT TIP OF TUBE</u>** • **Not readable by analyzer** • **Tube will not fit in analyzer**
	**NØ**	**<u>DO NOT WRITE IN THE WHITE SPACES TO LEFT AND RIGHT OF THE BAR CODE</u>** • **Analyzer will not be able to read the barcode**

******NOTE: SEND UNUSED RILIS LABELS TO THE LAB. <u>DO NOT DISCARD</u>. ******

How to Label Other Laboratory Specimens

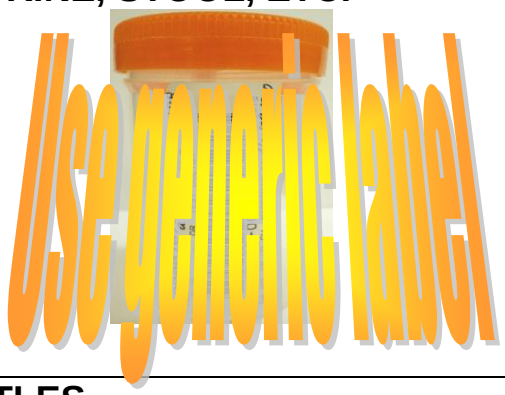
Write signature or initials, date, and time of collection on <u>all</u> laboratory specimens.

BLOOD GAS SYRINGE

- Use the <u>generic</u> label. Place along the length of the syringe.
- Fold up long sides of label so that patient's name and MR # are visible.
- Print Order Detail and write patient's temperature in °F and F1O2 in %.
- Put labeled syringe inside the biobag.
- Do not put in ice.
- Put barcode label and Order Detail in the outside pocket of biobag.
- Walk specimen to the lab within 30 minutes of collection. Do not send via the pneumatic tube system.

STERILE CONTAINER FOR SPUTUM, URINE, STOOL, ETC.

- Use the <u>generic</u> label. Place vertically; do not put generic label on the screw cap.
- Put labeled container inside the biobag.
- Place barcode label in the outside pocket of biobag.



SWAB SPECIMENS

- Use the generic label.
- Put labeled container inside the biobag.
- Place barcode label in the outside pocket of biobag.

BLOOD CULTURE BOTTLES

- Need two barcoded labels.
- Match the type of blood culture bottle printed on the bottom of the RILIS label with the correct color of blood culture bottle to draw:

"5ml BACT-AER REG LAB MICRO"
(Means: Bacti **Aerobic** label for **BLUE** colored blood culture bottle to be sent to Regional Lab)

"5ml BACT-ANA REG LAB MICRO"
(Means: Bacti-**Anaerobic** label for **RED** colored blood culture bottle to be sent to Regional Lab)

- Place label vertically, straight up and down, not twisted or crimped.
- Do not cover the manufacturer's barcode.
- Leave a "window" to see the fluid inside.

How to Label Other Laboratory Specimens