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|  | **Acceptable Samples for Hematology and Special Hematology**  **IPP#17** | **Dept:** | **Inpatient Phlebotomy 324305** |
| **Effective Date:** | **2/17/2011** |
| **Revised Date:** | **March 2019** |
| **Contact:** | **Laurie Watson** |
| **Name & Title: Greg Pomper, MD Medical Director** | | **Date:** |  |
| **Signature:** | | | |

1) **General Procedure Statement:** To give guidelines to staff concerning the proper for acceptable samples for Hematology and Special Hematology.

* 1. **Purpose:** This procedure is to serve as a guide for trained personnel in the Inpatient Phlebotomy Department to perform the services described herein. These guidelines should be used in conjunction with proper training and only by qualified Phlebotomists.
  2. **Responsible Department/Party/Parties:** 
     1. Procedure owner/ Implementer: Inpatient Phlebotomy, Special Hematology
     2. Procedure prepared by: Laurie Watson MT(ASCP)
     3. Who Performs procedure: Inpatient Phlebotomy

1. **Procedure: Acceptable Samples for Hematology and Special Hematology**

The anti-coagulant of choice for routine hematological testing is EDTA (purple top tube). EDTA maintains the morphology of the blood cells and keeps platelets from clumping as well as keeping the blood from clotting.

* 1. Acceptable Samples for Hematology and Special Hematology
     1. The anticoagulant of choice for routine hematological testing is EDTA (purple top tube).
     2. EDTA maintains the morphology of the blood cells, keeps platelets from clumping, and keeps the blood from clotting.
  2. The following tests are done using EDTA anti-coagulated blood:
     1. CBC
     2. Differential
     3. Platelet Count
     4. WBC
     5. Hematocrit/Hemoglobin
     6. Sed Rate/ESR(This can also be done in Sodium Citrate ESR tube)
     7. Retic count
     8. Sickle Cell Determination
     9. Total Eosinophil Count
     10. Flow Cytometry
  3. All EDTA tubes submitted to Hematology Laboratory should be at least 1/2 full for the proper ratio of blood to anti-coagulant. Minimum draw is 1 ml.
  4. Most tests done in Hematology may be done using capillary blood samples.
     1. These tests include the following with the minimum requirements:
        1. CBC 1 EDTA microtainer
        2. Retic count 1 EDTA microtainer
        3. ESR 1 EDTA microtainer
        4. Flow Cytometry 2 EDTA microtainer
  5. The following test requires serum for testing
     1. Serum Osmolality-2ml minimum
  6. NOTES:
     1. When specimens are clotted, Hematology staff will notify the appropriate persons.
     2. Lab staff will submit an order in Beaker for Recollect for patient’s from the ED
        1. 2 EDTA tubes should be full if an ESR is ordered in addition to the CBC.
     3. Any specimen deemed unacceptable for Hematology work will be called to the ordering nursing unit to be reordered or recollected as necessary.
     4. A citrate (light blue) tube may be collected in the event platelet clumping is present. Follow specific guidelines for testing a CBC with this tube type found in the hematology manual.
  7. COLLECTION / PRESERVATION / TRANSPORTATION:
     1. Specimens are maintained at room temp (22 degrees C) during transport.

All specimens are transported to the laboratory in a biohazard bag

**Procedure Notes:**

* + - 1. When specimens are clotted, Hematology staff will notify the nursing unit.
      2. Nursing will then reenter the order for collection if necessary. EDTA tubes should be half full (1/2ml) if an ESR is ordered in addition to the CBC
      3. Any specimen deemed unacceptable for Hematology work will be called to the ordering nursing unit to be reordered or recollected as necessary.

**COLLECTION / PRESERVATION / TRANSPORTATION:**

Specimens for Special Hematology are collected and delivered to Central Processing as soon as possible. Specimens are maintained at room temperature (22' C) during transport. Plasma Viscosity, Whole Blood Viscosity and Osmotic Fragility are extremely sensitive to prolonged periods of time and Special Hematology should be alerted as soon as these samples are delivered.

**SPECIAL HEMATOLOGY TESTS/REQUIREMENTS:**

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|  | **Special Hematology/Coagulation Laboratory** | | |
|  | **Room 3123F, 3rd Floor Gray Bldg** | | |
|  | **Phone 6-4511 Open Mon - Fri 8am - 5 pm** | | |
|  |  |  |  |
| **Tests offered:** | **Tube Type** | **LIS Test Code** | ***If after hours...*** |
| **Leukocyte Alkaline Phosphatase (LAP)** | **1 Green Top** | **LAPS** | **send to hematology lab to make slides** |
| **Whole Blood Viscosity** | **2 Purple Tops** | **BVISC** | **send to WFBH Central Processing** |
| **Plasma Viscosity** | **2 Purple Tops** | **PVISC** | **send to WFBH Central Processing** |
| **Osmotic Fragility** | **1 Green Top** | **OSFRG** | **must receive by 3pm - call upon receipt if before 3pm** |
| **Thrombophilia Functional Panel (Protein S, Protein C, Plasminogen, AT3)** | **1 Blue Tops** | **THFP** | **send to WFBH Central Processing** |
| **Thrombophilia Genotype Panel (Factor V Leiden, F2 Genotype)** | **1 Blue Top** | **THGP** | **send to WFBH Central Processing** |
| **Protein C Activity** | **1 Blue Top** | **PRTCA** | **send to WFBH Central Processing** |
| **Protein S Activity** | **1 Blue Top** | **PRTSA** | **send to WFBH Central Processing** |
| **Protein C & S** | **1 Blue Top** | **PRTSC** | **send to WFBH Central Processing** |
| **Plasminogen (Activity)** | **1 Blue Top** | **PLGNA** | **send to WFBH Central Processing** |
| **Factor V Leiden Genotype** | **1 Blue Top** | **FVX10** | **send to WFBH Central Processing** |
| **MTHFR Genotype** | **1 Blue Top** | **MTHR** | **send to WFBH Central Processing** |
| **F2 Genotype (Prothrombin 20210)** | **1 Blue Top** | **F2** | **send to WFBH Central Processing** |
| **Hemochromatosis Genotypes** |  |  |  |
| **Cys282Try** | **1 Blue Top** | **HFECT** | **send to WFBH Central Processing** |
| **His63Asp** | **1 Blue Top** | **HFEHA** | **send to WFBH Central Processing** |
| **ADAMTS13 activity** | **1 Blue Top** | **ADMS13** | **send to WFBH Central Processing** |
| **ADAMTS13 inhibitor** | **1 Blue Top** | **ADM13I** | **send to WFBH Central Processing** |
| **von Willebrand Factor Activity** | **1 Blue Top** | **VWFACT** | **send to WFBH Central Processing** |
| **von Willebrand Factor Antigen 1 Blue Top VWFAG send to WFBH Central Processing** | | | |
| **von Willebrand Multimers** | **1 Blue Top** | **VWFM** | **send to WFBH Central Processing** |
| **Von Willebrand Disease Panel 1 Blue Top VWDP send to WFBH Central Processing** | | | |
| **JAK2 V617F Mutation 1 Blue Top JAK2VF send to WFBH Central Processing** | | | |
| **Heparin Induced Platelet Antibodies** | **1 Blue Top** | **HIPA** | **send to WFBH Central Processing** |
| **Special Hematology will pickup samples from Referral Testing M-F 8am, 12pm and 3pm** | | | |

**\*After 3pm all blue tops should be spun, plasma frozen and cells put in refrigerator in Referral Testing.**

**If you have any questions, don’t hesitate to call Caryl, Becky, Melanie or Diane at 6-4511**

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| **Thrombophilia screen (TBSC) requires 3 aliquots of plasma; as full as possible.** |

1. **Review/Revision/Implementation:**

All procedures must be reviewed at least every 2 years.

* All new procedures and procedures that have major revisions must be signed by the CLIA Laboratory Medical Director.

* All reviewed procedures and procedures with minor revisions can be signed by the designated section manager.

1. **Related Procedures: Specimen Collection IPP#9**
2. **References: N/A**
3. **Attachments:** **N/A**
4. **Revised/Reviewed Dates and Signatures:**

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| --- | --- | --- | --- |
| Review Date: | Revision Date: | Reason: | Signature: |
|  | 3/6/2017 | Reformatted to Medical Center standard template | Laurie Watson, MT, ASCP |
|  | 3/5/2019 | Revised signature page | Laurie Watson, MT, ASCP |
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