Saratoga Hematology Oncology

3 Care Lane, Saratoga Springs, N.Y. 12866

**Point of Care: Beckman Coulter Hemoccult Occult Blood**

**Principle:**

The Hemoccult® test is a rapid, convenient and qualitative method for detecting fecal occult blood, which may be indicative of gastrointestinal disease. It consists of a test slide and developer solution. The slide contains a specially prepared impregnated paper for use without additional preparation. When a stool specimen is placed on the test paper, it comes in contact with the reagent. If blood is present, the developer, stabilized hydrogen peroxide, added to the reaction turns the paper blue within 60 seconds.

 **Specimen:**

 A small amount of stool specimen thinly applied to the card. Prepared slides may be stored up to 14 days at room temperature 15 to 30 °C (59 to 86°F) before developing.

***Note:*** *Specimens will be rejected if they have not been properly stored prior to testing as stated above.*

**Equipment and Materials:**

* Beckman Coulter Hemoccult Slides

*Store slides at controlled room temperature, 15°-30° C.*

* Beckman Coulter Hemoccult Developer

*Store developer at controlled room temperature, 15°-30° C. Developer bottle must be kept tightly capped, and protected from heat, due to flammability.*

* Wooden Applicator sticks for collection
* Lab certified timing device

***Note:*** *Record new shipments and lots of hemoccult slides and hemoccult developer on* **Attachment 2: Point of Care Inventory Log**

*in the***POCT Limited Service Laboratory Protocols: Saratoga Hematology Oncology** *procedure***.**

***Note:*** *Record temperatures daily on* **Attachment 2: Temperature Log** *of the***Point of Care: Roche CoaguChek-XS Plus System**

*procedure***.**

**Procedural Notes**

* Unused slides must be stored away from moisture and protected from light and heat, store in original packaging or in an envelope. If testing area has an overall bluish color, request a new specimen and tell patient to store slide in a dry location.
* **Always develop the patient test area, read the results, interpret them, and decide whether the fecal specimen is negative or positive *before* developing the Performance Monitor feature** **(Quality Control).**

**Patient Instructions**

Patients should follow the Patient Instruction sheet at least 7 days prior to and continuing through the test period. Physicians may elect not to put the patient on the recommended dietary restriction. Roughage in the diet can increase test accuracy by helping uncover “silent” lesions which bleed intermittently.

 **Quality Control**

*The positive and negative Performance Monitors [quality controls] are built into each Hemoccult test slide and must be developed each time a Hemoccult slide is used for patient testing.*

***Patient results are not reported if quality control does not perform as expected.***

### Patient Testing Procedure:

1. Open the flap on this side of the slide.
2. Apply a thin smear of specimen inside box A.
3. Obtain another sample of stool from a different area of the specimen and apply it to box B.
4. Close the cover; protect from heat and light
5. Wait **3 to 5** minutes so the specimen can be absorbed into the paper before being developed.
6. Open the flap in back of the test slide and apply two drops each of Hemoccult Developer to the guaiac paper directly over each smear.
7. Read results within 60 seconds using the lab certified timing device.

9. Develop the Performance Monitors (**Quality Control**):

1. Apply 1 drop of Hemoccult developer between the positive and negative performance areas.
2. Using the lab certified timing device, read the result within 10 seconds
	* If the slide and developer are functional, a blue color will appear in the positive Performance Monitor area and no blue will appear in the negative Performance Monitor area.
	* Neither the intensity nor the shade of blue from the positive monitor should be used as a reference for the appearance of a positive results

**Remedial Action**:

In the unlikely event that the Performance Monitor areas do not react as expected after applying the developer, the test results should be regarded as invalid.

* Check the expiration date of Hemoccult Test Slides and developer being used.
* If supplies are not expired, request new patient sample and retest using a new test slide from the kit.
* If controls are still out, retest patient sample using a test slide and developer from a different box. Discontinue use of test slides and developer from the original box.
* If quality control is still out, notify the point of care supervisor.
* Document all problems on **Attachment 3: Point of Care Remedial Action Log** *in the***POCT Limited Service Laboratory Protocols: Saratoga Hematology Oncology** *procedure***.**

**Interpretation of Results**:

***Any trace of blue on or at the edge of the smear is positive for occult blood***

**Result Reporting:**

1. Record the patient test result in the patient’s chart as **Positive** or **Negative**.
2. Record the Performance Monitors as **Valid** or **Invalid**.

**Interfering Substances**

In general, Patients should not ingest food and vitamins, which can cause false-positive or false-negative test results for a least 72 hours prior to and continuing through the test period. Aspirin and other non-steroidal anti-inflammatory drugs should be avoided for at least seven days prior to and continuing through the test period.

**References**:

 Beckman Coulter Inc., Palo Alto, California; Hemoccult Instructions, Revised 02/2000