Purpose

The pathologist or designee reviews all CSF, Body Fluid and Synovial Fluid smears, initial findings for all peripheral blood results that meet the criteria specified in Table 1, and all hematology or hemostasis results that require clinical correlation.

Procedure

1. Saving Slides

## Submit peripheral blood and body fluid smears that meet the criteria specified in Table 1 for Hematopathology Review.

## Peripheral smears meeting the criteria are submitted on initial findings only. It is not necessary or desirable to review slides repeatedly for similar results. This can be determined by reviewing previous values, patient history or pathologist review comments. Note not all samples are submitted to Pathologist for comments and therefore will not have a Path Review test ordered (ex a low MCV may not be submitted for an official path review but does not need repeated folder slot locations and multiple reviews).

## All CSF, Body Fluid and Synovial Fluid smears are submitted for review.

## Synovial Fluid Crystals only are not submitted for review but are given to Specialist for review.

## Place saved slides in a numbered slide box, one box for each day of the month. Record this position in the F/S field in the LIS report.

### Slots 1-50 are for Peripheral blood

### Slots 51-100 are for fluids

## In instances where 1% or less (occasional, rare or "seen on scan") immature mononuclear cells, blasts or “Others” are noted on a report, the technologist will determine the cell’s position using a cell finder and note the coordinates under "Internal Comments" on the F/S.

## The reviewer will select specific slides and send them to the pathologist for review.

## Following Pathology Review, the slides and boxes will be returned to Hematology for cleaning and filing.

1. Pathology Review Selection Process

## Body Fluids (all types)

### Access Follow-up worklist under EPIC button

### Choose Path Review Hemo Supervisor

### Fluids are grouped together with Green background on Follow up worklist

### Highlight all fluid samples to be sent and click on toggle button next to Assign Self

### Choose Assign User option

### Search by Last name of the Pathologist to assign slides to

### Accept name to assign slides to specific user

### To change user, highlight sample(s), click toggle next to assign user and choose clear assignment. Once cleared leave highlighted and assign to new user.

### Make sure each sample has a slide that is barcoded and placed in Path review slide box in the order displayed to be sent for review

## Peripheral Smears

### All smears receiving a Folder Slot location 1-50 and 101 will be added to the Path Review Hemo Supervisor Follow-up automatically and are displayed with a purple background.

### Each sample is reviewed along with previous results and patient history to make a decision to submit for further evaluation. Those with unclear etiology and no previous review are sent to the pathologist.

### Typical hematology specimens to be reviewed include new/suspected leukemias/lymphomas, cases of abnormal erythroid morphology suspected of hemolytic disease or hemoglobinopathy, leukoerythroblastic processes, infectious agents, severe unexplained anemias in the outpatient population, and atypical lymphoid reactions.

### All cells reported as Immature mononuclear cells MUST be reviewed and identified by a pathologist the first time they are called.

### All cells reported as "Others" MUST be reviewed and identified by a pathologist the first time they are called.

### All “Preliminary Reports” must be reviewed by a pathologist

### If pathologist evaluation is deemed necessary highlight sample and choose result correction under Actions.

### Give reason of 16: (path review test warranted), highlight checkbox for which test correction is for and accept.

### Under Actions choose Specimen Update

#### Under Add-ons choose New Order

#### Under Procedures enter Pathologist Review, periph blood

#### Choose Accept and return to Follow-up list

### Sample should now appear as a second sample in pink as Path Review CBC sample.

### With original slide review result (purple) still highlighted choose complete from toolbar and Accept to remove Slide Review from Follow-up worklist.

### For Cancer Center peripheral blood only this process must occur while logged into the Cancer Center lab context.

### Highlight all CBC samples to be sent and click on toggle button next to Assign Self

### Choose Assign User option

### Search by Last name of the Pathologist to assign slides to

### Accept name to assign slides to specific user

### To change user, highlight sample(s), click toggle next to assign user and choose clear assignment. Once cleared leave highlighted and assign to new user.

### Make sure each sample has a slide that is barcoded and placed in Path review slide box in the order displayed to be sent for review

# Sending Slides:

## Review is performed daily excluding weekends and holidays.

## Place slide box in a large vinyl transport enveloped used for Pathology Review, making sure the delivery instructions indicate delivery to the Pathology Building.

## Deliver the envelope to SARC for next courier delivery to the Path Building.

## If original test results are deemed incorrect, appropriate changes are entered into the LIS as Amended/Corrected reports, and the smear, along with the new report, is referred to the original reporting CLS for review.

## This policy does not negate the responsibility of the original CLS to follow the Critical Value policy as defined in SOP #110.

## All blasts and/or cells suspicious for malignancy must still be called to the attention of the appropriate physician or charge nurse.

## Incorrect reporting of cell types or omission of important findings (i.e. bacteria, crystals) may result in corrective action toward the reporting CLS.

# Storing Slides

## All peripheral blood smears are saved and filed each day. These slides are saved for one month in the slide file cabinet.

## All peripheral blood smears and Body Fluid smears returned from Path Review are saved in file cabinet in the monthly area for one year.

Pathology Review Criteria

CBC

**Table I**

WBC <1.5 x 103 >35.0 x 103

HGB <6.0 gm/dl >19.0 gm/dl adults

<8.0 gm/dl Birth-6 days

HCT <21 % >60 % adults

<25 % Birth-6 days

MCV <85 fl >131 fl birth - 6 days

<64 fl >133 fl 1 wk - 6 mo

<60 fl >97 fl 6 mo - 6 yr

<70 fl >110 fl 6 yr - adult

MCHC <30 %

Plt/Plt Est <30 x 103 >900 x 103 adults

<20 x 103 neonates

Differential

Total PMNs (isolated finding) <0.5 x 103 with PLT >130 and HCT >36

Lymphs >5.0 x 103 16 yrs- adult

>7.0 x 103 6 - 16 yrs

>8.0 x 103 2 - 6 yrs

>10.0 x 103 6 mo - 2 yrs

Reactive Lymphs Marked

Abnormal Lymphs Any First time only

Atypical Monos Any First time only

Basophils >0.2 x 103

NRBCs >2/100 WBC >6 months

/Immature Mononuclear Cells/Others

Any First time only

\*\*Append "HPRL" canned text comment, **"Referred for Pathologist Review. If immediate response required call 734-2490"**, when reported on the initial presence of unidentified cells or any undiagnosed or relapsed leukemia.

**REMINDER**: If cell type is <1%, the cell finder coordinates must be listed.

Morphology

Presence of moderate spherocytes Presence of moderate schistocytes Hypersegmented neutrophils

Other

Presence of any suspected organisms (e.g. parasites or microorganisms). Call physician and submit for review.

Fluid Smears

All CSF, Body Fluid, Synovial Fluid, Dialysate and Lavage smears

Any abnormal or possible malignant cells must also be called as a critical value and have the "HPRL" canned text comment appended the first time they are reported.

Coagulation Critical values

INR >5.0

APTT >150.0 sec

Fibrinogen <50mg/dl

Procedure History

Minor revisions and annual review removed through 2004. 4/2015 LF

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| --- | --- | --- | --- | --- |
| **Date** | **Written/ Revised** | **Revision** | **Approved Date** | **Approved By** |
| 11/16/88 | D Gann | New | 11/16/88 | N Levy MD |
| 11/04 | J Cannon | Update LIS reporting steps | 11/18/04 | E Larkin MD |
| 1/05 | J Cannon | New Director | 1/27/05 | K Janatpour MD |
| 5/05 | J Cannon | Criteria Changes | 5/05 | K Janatpour MD |
| 7/06 |  | New Director | 7/1/06 | D Dwyre MD |
| 9/06 | J Cannon | Minor reporting changes | 09/18/06 | D Dwyre MD |
| 07/09 | L Gandy | Minor Revision | 07/23/09 | D Dwyre MD |
| 05/10 | L Freeman | Minor revisions | 06/01/10 | D Dwyre MD |
| 06/11 | L Gandy | Minor Revisions | 6/2/11 | D Dwyre MD |
|  |  | Biannual Review | 8/24/12 | D Dwyre MD |
|  |  | Biannual Review | 10/2/2014 | D Dwyre MD |
| 04/2015 | L Freeman | Added immature mononuclear cells, performing physician and reformatted | 5/5/15 | D Dwyre MD |
| 07/2017 | L Freeman | Beaker update |  |  |
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