

Document Code:	DPOTMH-E-57-P01-S11	
Effective Date: 06-30-2022		
Document Type: Standard Operating Procedure		
Page Number: 1 of 3		
Department/Section: Hematology		
Document Title:	CEREBROSPINAL FLUID (CSF) - CELL COUNT & DIFFERENTIAL COUNT	

#### **PURPOSE:**

To describe in detail how to prepare and process the Cerebrospinal Fluid (CSF) test correctly and always in the same manner. Cerebrospinal fluid (CSF) cell count and differential count are two components in a series of laboratory tests performed to analyze a person's CSF. These are helpful in diagnosing diseases and conditions of the central nervous system, which includes brain and spinal cord (Meningitis, Multiple sclerosis, hemorrhage around the brain and cancer with brain involvement).

#### SCOPE:

Applies to all Hematology Section Staff of Laboratory Department of Dr. Pablo O. Torre Memorial Hospital (DPOTMH)

### PERSON RESPONSIBLE:

Medical Technologists (Medical Laboratory Scientists), Pathologists, Medical Doctors, Nurses, Medical Trainees, Laboratory Clerks

### PROCEDURE:

- 1. Hand washing shall be performed before and after the procedure.
- The wearing of Personal Protective Equipment such as gloves, masks, goggles/face shield and gowns shall be observed in doing the procedure.
- Collection of specimen using standard laboratory procedures (cross reference to the procedure on standard operating procedures on Specimen Handling) shall be observed.
- 4. CSF sample must be placed separately in a clear, dry, leak-proof, sterile vials container labeled as number 1 for Chemistry and Serology; number 2 for Microbiological studies; and number 3 for Hematology cell counts and transported promptly to Laboratory.
- 5. The Medical Technologist or Nurse forwards properly the sample and patient's request to the Hematology Section. Medical Technologist then checks sample label, volume and clots prior to analysis. Not properly labeled sample is given back to the one endorsed for correct labeling.



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- 6. The Medical Technologist examines and records the gross appearance of CSF. Describes the color, transparency, reactions and approximate volume.
- 7. Swirl the vial to mix the fluid and load (diluted or undiluted) into the counting chamber. Let it stand for a few minutes.
- 8. Count the red and white blood cells. Note the percentage of normal and crenated red blood cells.
- 9. Make a wet mount smear, air dry and stain using Wright's stain for the differential count.
- 10. The Medical Technologist notes macroscopic and microscopic findings in the request and encodes results in the system.
- 11. The Medical Technologist/Laboratory Clerk prints out results for outpatients at the reception area upon presentation of the Official Receipt (OR) and results for admitted patients can be viewed and printed out by nurses to its respective stations.
- 12. Names and results of patient shall be recorded in the Hematology/Miscellaneous logbook.
- 13. Turn-around time for releasing CSF cell count and differential count result is within 2 hours.

## **REFERENCE:**

www.gundersenhealth.org Standard Operating Procedure
Davidsohn-Henry, Clinical Diagnosis by Laboratory Methods, 15<sup>th</sup> Edition



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# APPROVAL:

	Name/Title	Signature	Date
Prepared by:	REDABELLE DIONEO-SEGOVIA, RMT Section Head, Hematology	dads.	07-06-2022
	TIFFANY B. VILLANUEVA-COO, RMT Laboratory Manager	The	7-6-2022
Verified:	MONICA B. VILLANUEVA, RMT, PhD Laboratory Manager	Millanuera	7-6-2022
	MELANIE ROSE B. ZERRUDO, MD, FPSP Chair, Department of Pathology	Duenage Genedo	7-4-2022
Reviewed:	DENNIS C. ESCALONA, MN, FPSQua Quality Assurance Supervisor	2	7-04-2022
Recommending	ROSARIO D. ABARING, MAN, PhD Ancillary Division Officer	Plaing b. l.	07.06.2022
Approval:	FREDERIC IVAN L. TING, MD OIC - Total Quality Division		
Approved:	GENESIS GOLDI D. GOLINGAN President and CEO		



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KEY TASKS		PERSON RESPONSIBLE	
1.	Encodes the request of the patient to BIZBOX system.	Laboratory Clerks and Nurses	
2.	Extracts blood sample from the patients.		
3.	Checks sample label, volume and clots prior to analysis.		
4.	Disposes properly and safely biohazardous and infectious wastes and materials.		
5.	Forwards properly the patient's request with the results and his name initials to the Hematology Section for encoding in the system.		
6.	Processes and analyzes samples.		
7.	Releases and validates result thru BIZBOX System.		
8.	Records result to Hematology logbooks.		
9.	Endorses the patient's results to the patient or doctor.	Laboratory Clerks and Nurses	



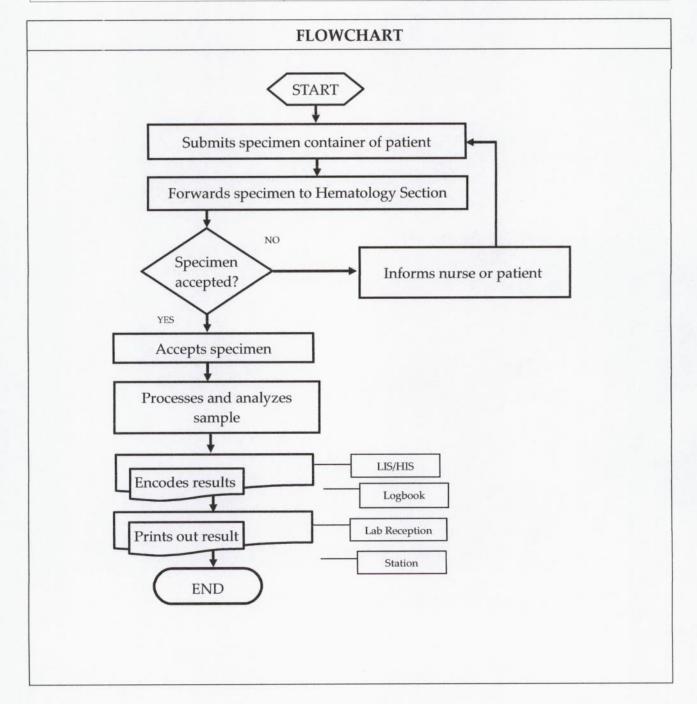
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	TIFFANY B. VILLANUEVA-COO, RMT Laboratory Manager	Blu	7-6-2022
Verified:	MONICA B. VILLANUEVA, RMT, PhD Laboratory Manager	Aillanuer.	7.6-2022
	MELANIE ROSE B. ZERRUDO, MD, FPSP Chair, Department of Pathology	Laurego-fundo	7-6-2022
Reviewed:	DENNIS C. ESCALONA, MN, FPSQua Quality Assurance Supervisor	2	7-06-2022
Recommending Approval:	ROSARIO D. ABARING, MAN, PhD Ancillary Division Officer FREDERIC IVAN L. TING, MD	alaing . k. 11.	07. 06. 2022
Approved:	OIC - Total Quality Division  GENESIS GOLDI D. GOLINGAN  President and CEO	•	



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	Name/Title	Signature	Date
Prepared by:	REDABELLE DIONEO-SEGOVIA, RMT Section Head, Hematology	Loss.	07-04-2022
	TIFFANY B. VILLANUEVA-COO, RMT Laboratory Manager	Blu	7-6-2022
Verified:	MONICA B. VILLANUEVA, RMT, PhD Laboratory Manager	Willanur.	7-6-2022
	MELANIE ROSE B. ZERRUDO, MD, FPSP Chair, Department of Pathology	Dang Gunds	7-6-282
Reviewed by:	DENNIS C. ESCALONA, MN, FPCHA, FPSQua Quality Assurance Supervisor	0	7-02-2022
Recommending Approval:	ROSARIO D. ABARING, MN, MBA-HA, PhD, FPCHA Ancillary Services Division Officer FREDERIC IVAN L. TING, MD OIC- Total Quality Division	Plaing & D.	07.06.2022
Approved:	GENESIS GOLDI D. GOLINGAN President and CEO		