### **CAPTURE ALS**



### BIOSAMPLE COLLECTION, PROCESSING, STORAGE, SHIPMENT

### SOP01EN03

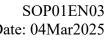
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### 1. SCOPE AND APPLICABILITY

This SOP describes the processes for the labelling, collection, processing, shipment, and storage of CAPTURE ALS biosamples including blood and cerebrospinal fluid (CSF).

### 2. SUMMARY OF METHOD

Following participant consent, blood, and optional CSF will be collected by qualified medical professionals according to the schedule outlined in the CAPTURE ALS protocol and following local site SOPs.

<u>Blood</u>: Blood will be processed at the site of collection to isolate serum and plasma, which will be aliquoted, and batch shipped to the C-BIG Repository for long-term storage. In general, blood will be shipped to and processed by the C-BIG Repository to isolate DNA, and PBMCs and for long-term storage of RNA.

<u>CSF</u>: 1-2mL of CSF will be sent to the site's local laboratory for analysis of cell count, protein, and glucose. The remaining CSF will be processed and aliquoted at the site of collection and batch shipped to the C-BIG Repository for long-term storage.

### 3. DEFINITIONS

C-BIG Clinical Biological Imaging and Genetic Repository

CSF Cerebrospinal Fluid
DNA Deoxyribonucleic acid

DOT Department of Transportation
EDTA Ethylenediaminetetraacetic acid

g Gravity

GTT Green Top Blood Collection Tube (Sodium Heparin)

IATA International Air Transport Association

LIMS Laboratory Information Management System

LORIS Longitudinal Online Research and Imaging System

MD Medical Doctor

NCCLS National Committee for Clinical Laboratory Standards

OSHA Occupational Safety and Health Administration

PBMCs Peripheral blood mononuclear cells
PTT Purple Top Blood Collection Tube

RBC Red blood cells
RNA Ribonucleic acid

RTT Red Top Blood Collection Tube

### 4. PERSONNEL QUALIFICATIONS/RESPONSIBILITIES

This SOP concerns all personnel who will be delegated to process human biosamples for CAPTURE ALS. All personnel processing specimens must be currently certified in the transportation of dangerous goods.



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### 5. CAUTIONS

- All biosamples derived from a human source are considered to be biohazardous.
  Use appropriate precautions when working with such samples (i.e. personal
  protection equipment such as gloves, lab coat and safety glasses). All waste
  (samples and related contact materials) must be placed in marked biohazardous
  waste containers and disposed of under hospital or institutional guidelines.
- Ensure that informed consent is obtained prior to participant biosample collection.
- Follow your facility's SOPs for biosample collection.
- Blood collection at each visit must not exceed 12 tubes of blood which is equivalent to 8 tablespoons or 120mL.
- CSF collection at each visit must not exceed 16mL.
- Best results are obtained when samples are processed promptly.

### **6. EQUIPMENT AND SUPPLIES**

The equipment and supplies listed below are recommendations only and may be substituted by alternative/equivalent product more suitable for site-specific tasks or procedures.

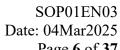
### 6.1. Equipment

- Room temperature centrifuge with swinging bucket (2000-2500g)
- Refrigerated centrifuge with swinging bucket (250g)
- -20°C freezer
- -80°C freezer
- Micropipettes (100-1000µL) and tips
  - o **Note:** if a pipette is not available, sterile transfer pipettes may be used
- Laser printer
- Windows computer with Microsoft Office and working internet
- Barcode scanner
  - Suggested: Eyoyo Wired USB 2D Barcode Scanner, Model EY-H2
     https://www.amazon.ca/Eyoyo-Handheld-Convenience-Supermarket Warehouse/dp/B088QV215Y/ref=pd lpo 1?pd rd i=B088QV215Y&psc=1

### 6.2. Supplies

CAPTURE ALS *suggests* the following supplies for the local collection, processing, storage, and shipment of all CAPTURE ALS biosamples.

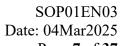
Supply Name	Supply Description	Suggested Vendor	Item/ Catalog #	Comments
Blood Collection Materials	N/A	At site's discretion	N/A	alcohol wipes, needles, gauze, bandaids etc





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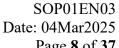
Cryovials, 1mL, conical bottom	Nunc Biobanking and cell culture cryogenic tube 1mL; polypropylene; screw cap; self-standing	ThermoFisher	366656	10 cryovials = plasma 15 cryovials = serum 45 cryovials = CSF
Sterile Transfer Pipettes  Corning <sup>TM</sup> Falcon <sup>TM</sup> Plastic DisposableTransfer Pipet; Individually Wrapped; Sterile 3mL; 1,2mL graduations		Fisher Scientific	13-669-12	To aliquot samples
15mL Tube	15mL polypropylene tube; graduation; screw cap	Sarstedt	62.554.205	1 for processing of each, serum, plasma, CSF
Cryogenic labels	Fisherbrand Micryo Label; Laser Printer Sheets; 1.2 x 2.5 cm, -196°C to 121°C	Fisher Scientific	15-930-A	label per vacutainer and cryovial     Use FISHC6 label template
SERUM COLLECT	ION			
BD Vacutainer <sup>TM</sup> venous blood collection tube, red top (RTT)	10.0mL; Glass; Conventional Closure; Red Cap; Silicone Coated	Fisher Scientific	02-685-A (BD 366430)	2 tubes per serum sample
PMBC COLLECTION	DN			
BD Vacutainer <sup>TM</sup> blood collection tube with Sodium Heparin, green top (GTT)	10mL; Glass; Conventional Closure; Green cap; Sodium Heparin	Fisher Scientific	02-685-3B (BD 366480)	5 tubes per PBMC sample
PLASMA AND DN	A COLLECTION			
BD Vacutainer <sup>TM</sup> blood collection tube with K <sub>2</sub> EDTA, purple top (PTT)	10mL; Plastic; Hemogard Closure; Lavender Cap; K <sub>2</sub> EDTA	Fisher Scientific	02-657-32 (BD 366643)	2 tubes for DNA  1 tube for plasma sample
RNA COLLECTIO	N	_		
PAXgene blood RNA tube	2.5mL; Plastic; Hemogard Closure; Red Cap; RNA stabilization additive	BD	BD 762165	2 tubes per RNA sample
CSF COLLECTION				
Lumbar Puncture Tray, preferred needle, additional supplies	N/A	At site's discretion		1 kit per LP
15mL Tube	15mL polypropylene tube; graduation; screw cap	Sarstedt	62.554.205	2 per CSF collection
SHIPPING MATER	IALS	T	T	T T
Parafilm, Elastics, Packing Tape	N/A	At site's discretion	N/A	
Thermo Scientific Cryoboxes	Cryoboxes, Chipboard, White, holds 81 vials, 132 x 132 x 51mm	Fisher Scientific	12-565-182	Holds 81 cryovials split participant samples across 2 boxes
Absorbent Materials	Absorbent Sheet; 3 x 6 in.; Absorbs up to 90mL	Fisher Scientific	22-130-040	Utilize per IATA standards





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Dry Ice Label	Labels, Dry ice; Therapak; 5.5 x 5.5 in.; Complies with DOT (49 CFR 173.217) and IATA	Fisher Scientific	22-130-065	1 per shipping box	
UN 3373 Biological Substance Category B Labels	UN 3373 Biological substance by air; complies with IATA regulations		22-130-069	1 per shipping box	
Biohazard Specimen Transport Bags	imen attached document		01-800-08	1 per cryovial box	
Absorbent Pouch 6 Bay Aqui-Pak, Absorbent Pak, Therapak		89170-936 VWR (Therapak 10316)		1 per PBMC collection	
Saf T Pak Leak Proof Bag and Tyvek Outer Envelope  Disposable 2-Part Secondary Pressure Vessel (95KPA), Medium; Inner Leak Proof Polybag 9.25 X 12in, Tyvek outer envelope, 7.5 X 9.5in		ESBE Scientific	STP-710	1 per PBMC collection	
FROZEN SHIPMEN	ITS	l			
Shipper, Insulated; ThermoSafe; For Pharamceutical Reagents; Economical; Lightweight; Reusable; Recyclable; Two- piece shippers with extra-thick insulating walls of expanded polystyrene; Dimensions (outside): 14-7/8 x 13-1/8 x 12- 1/8 in.; Dimensions (inside): 11-3/4 x 10 x 9-1/8 in		Fisher Scientific	03-529-1	About two (2) 81 cell boxes fit per shipper with dry ice	
AMBIENT SHIPMENTS					
Credo Cube Series 22 -248	Credo Cube <sup>™</sup> Series 22, 2L, +15°C -+25°C, PCM Coolant, 53h Duration, 127.5m³; Dimensions (outside, mm): 276 X 250 X 241; 4.4kg	Fischer Scientific	NC1578810 (Pelican GH02APLAT CM22C-WT)	These boxes are re- usable and will be shipped back to the site	





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### 7. PROCEDURES

### 7.1. Recommended Biosample Collection/Visit

Biosample Collection Form [blood] (Appendix 8.1) and Biosample Collection Form [CSF] (Appendix 8.2) must be completed by the person collecting the biosample.

Patient F	Participant	
Visit	Timepoint	Suggested Collection Protocol
2	0 Month	2 RTT (10mL) → Serum 5 GTT (Heparin, 10mL) → PBMC 3 PTT (K <sub>2</sub> EDTA, 10mL) → Plasma (1X), DNA (2X) 2 PAXgene RNA (2.5mL) → RNA Total Blood Tubes: 12 Total Blood Volume: 105mL
3	4 Month	CSF (up to 16mL) → optional procedure for patients only  2 RTT (10mL) → Serum  1 PTT (K <sub>2</sub> EDTA,10mL) → Plasma  Total Blood Tubes: 3  Total Blood Volume: 30mL
4	8 Month	CSF (up to 16mL) → optional procedure for patients only  2 RTT (10mL) → Serum  1 PTT (K <sub>2</sub> EDTA,10mL) → Plasma  Total Blood Tubes: 3  Total Blood Volume: 30mL
5	12 Month	CSF (up to 16mL) → optional procedure for patients only  2 RTT (10mL) → Serum  1 PTT (K <sub>2</sub> EDTA,10mL) → Plasma  Total Blood Tubes: 3  Total Blood Volume: 30mL
		CSF (up to 16mL) → optional procedure for patients only

Control	Participant		
Visit	Timepoint	Suggested Collection Protocol	
2	0 Months	2 RTT (10mL) → Serum 1 PTT (K <sub>2</sub> EDTA,10mL) → Plasma 2 PAXgene RNA (2.5mL) → RNA Total Blood Tubes: 5 Total Blood Volume: 35mL	
3	8 Months	2 RTT (10mL) → Serum 1 PTT (K <sub>2</sub> EDTA, 10mL) → Plasma Total Blood Tubes: 3 Total Blood Volume: 30mL	



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### 7.2. Recommended Order of Blood Draw Tubes

- 1. Red Top Tubes (Serum)
- 2. Green Top Heparin Tubes (PBMC)
- 3. Purple Top Tubes (Plasma, DNA)
- 4. PAXgene Tubes (RNA)

### 7.3. Managing Biosamples in the LORIS Database

The LORIS database (https://cbigr.loris.ca/, login using unique username and password) will be used to manage all samples collected through CAPTURE ALS. Personnel managing biosamples will need to request access to the Laboratory Information Management System (LIMS) module of LORIS (see LORIS manual). Samples will be collected, processed, stored, and shipped using the guidelines described below in sections 7.5 to 7.11. Processing of each sample type must be documented in LORIS. Detailed instructions and LORIS screenshots can be found in the LORIS manual. Paper processing forms may be used as an intermediary if data entry is not done directly in LORIS. The processing forms, specific to each sample type, can be found in the Appendix: Sample processing form - Serum (Appendix 8.3), Sample Processing Form -Plasma (Appendix 8.5), Sample Processing Form - CSF (Appendix 8.7). Sample Processing Form - PBMC (Appendix 8.4) and RNA processing form (Appendix 8.6) are included but may not be required by sites, as these samples will, in most cases, be processed by the C-BIG Repository. Any deviations to the sample processing protocols should be documented in the comment section of LORIS. Each sample will be identified with a label containing a QR code which will allow it to be scanned into LORIS (see section 7.4.4.2).

### 7.4. Generating and Printing Labels Overview

This section describes the processes to create labels for CAPTURE ALS biosamples (vacutainers and cryovials) at local sites, only. Labels generated at C-BIG will follow the existing LORIS formatting.

### 7.4.1. Collection Tube and Cryovial Labels

Each collection tube (vacutainer or 15mL tube) and cryovial label should contain the following information:

- CAPTURE ALS Participant ID: CAPTXXXXXXX
- Vial #: A unique number that should never be repeated within a participant
- Sample type: serum, plasma, CSF, DNA, RNA, PBMC
- Visit Label: 00M, 04M, 08M, 12M
- Collection Date: DD/MM/YYYY
- QR code: generated automatically from CAPT ID and Vial #

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### 7.4.3. Creating Labels

### 7.4.3.1. Biosample Label Excel Template

- Use the provided biosample label template (Appendix 8.8) to generate labels for collection and local processing of biosamples.
  - o This file contains four sheets, one for each visit (00M, 04M, 08M, 12M).
  - Each sheet contains all possible labels for a visit, including labels for vacutainers to collect whole blood or CSF, and labels for cryovials containing processed samples. Note: not all labels may be required for a particular visit. Consult the protocol and section 7.1 to determine what samples are collected at each visit.
  - Rows 2-15 contain vacutainer labels. The temporary labels contain the PSCID or CAPTURE ID (CAPTXXXXXX), unique vial #, sample type, visit label (XXM), collection date (DD/MM/YYYY) and barcode. The "NewCode" will be automatically generated from LORIS and will be Year000000 (where the year will be follow by a random number)
  - Rows 16-85 contain cryovial labels. The template will generate 15 serum labels, 10 plasma labels and 45 CSF labels. Labels contain the PSCID or CAPTURE ID (CAPTXXXXXXX), unique vial #, sample type (serum, plasma, CSF), visit label (XXM), collection date (DD/MM/YYYY) and barcode. The "NewCode" will be automatically generated from LORIS and will be Year000000 (where the year will be follow by a random number)
- Prior to each participant visit, complete the required fields (Xs, DD/MM/YYYY) in the label template. Ensure that the sheet that corresponds to the correct visit (00M, 04M, 08M, 12M) is used. Never modify the unique vial #, as this number is used to generate a unique barcode. A barcode will be generated via the template, this barcode is temporary.
- Enter all the information into Loris as you are processing the biological samples. In Loris, the option of « generate barcode » will be available. Click on it and this new random code (YEAR000000) need to be use as your final code on your label on the cryovials. Copy this code into the column "NewCode" in the template file and generate/print now your labels.

### 7.4.3.2. Generating labels

- Once the biosample label template has been completed with the participant information, Open Word.
- Click "Open" and open the label layout template provided: "FISH-C6 Label Template CAPTURE ALS".
- Go to "Mailings" tab. Under the "Start Mail Merge", select "Labels" and click "Cancel" in the Label Options pop up to activate the label template specified in the current Word file.
- Select "Select Recipients" and select "Use an Existing List" option.
- Select the excel file containing biosample label data.

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- Select the correct visit point (00M, 04M etc.).
- Select "Edit Recipient List" and select only the rows that you wish to print. E.g. Do not select PBMC rows if you are not collecting PBMCs at this visit.
- Select "Insert Merge Field" and select all the options (PSCID, Vial #, Type, Visit Label, Collection Date, Barcode) one at a time by pressing "insert" after each option is selected.
- Make sure the font of «PSCID» «Vial\_» «Type» «VisitLabel» «CollectionDate» is set to "Calibri (Body)" and font size to 4.
- Add a space after each selection (e.g. «PSCID»<sub>space</sub>«Vial\_»).
- Press enter to bring "«Barcode»" to a separate line and right click on "Toggle Field Codes".
- Replace MERGEFIELD with MERGEBarcode so that it reads MERGEBarcode Barcode Right click on MERGEBarcode Barcode to select the option "Edit Barcode".
- Under the "Barcode type" select QR Code.
- On the bottom left, select "Advanced" and set scale to 28%.
- Close by pressing OK.
- Center the labels and select "Update Labels".
- Select "Preview Results".
  - Note: You may see incorrect number of labels or 1 label only as Word will shift to the last label hiding others.
- Press on the icon shown in the image below underlined in red to shift back to the first label.



- Select "Finish & Merge", "Print Documents" and then select "All" to print out the labels.
- Print to a laser printer
  - Note: Only print labels from a word file. Never print from a PDF as it will make QR code unreadable by the scanner. Load the label paper into the printer tray, do not use the manual feed as this may cause the labels to print out of the margins.
- Test the QR codes using a barcode scanner to ensure that they can be read.

### 7.4.3.3. Changing labels location

A label sheet may have already been partially used. To start printing labels from a location other than the top left cell follow these steps:

Finish creating labels as normal

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- Cut the labels by highlighting the labels, right clicking the mouse and selecting the option "cut"
- Select the desired cell to paste the label selected above
- Right click the mouse and select "Paste" to move the label in selected cell

### 7.4.4. Using Labels

### 7.4.4.1. Label placement

Ensure that the label is placed **vertically** on the cryovial tube or vacutainer with the longest side of the label going up the length of the cryovial. DO NOT wrap the label around the tube, the QR code may not be readable.

### 7.4.4.2 Scanning labels into LORIS

Each sample will be identified with a label containing a unique QR code. Following processing, the barcode scanner will be used to scan each QR code, entering the biosample into LORIS. This process links each biosample to a participant, visit and processing details. For full details see the LORIS manual. This step requires access to a computer.

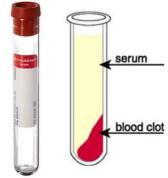


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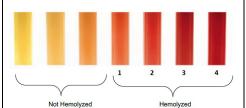
### 7.5. Whole Blood for Serum Isolation

Whole blood samples are collected at each visit for patient (MONTH 0, 4, 8, 12) and control participants (MONTH 0, 8). Samples are processed *locally* at each site for serum isolation. Two (2) tubes are suggested for this type of collection/visit.

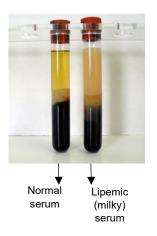
# WHOLE BLOOD COLLECTION FOR SERUM



(BD Diagnostic, Cat# 366430)



Hemolysis Index



### **PREPARATION**

Prepare two (2) 10mL red top tubes (RTT) by affixing labels. Prepare up to fifteen (15) 1.0mL cryovials by affixing labels.

### COLLECTION

- Completely fill two (2) 10mL RTT with blood.
- Complete the *Biosample Collection Form* [blood] (Appendix 8.1).
- Keep tube upright at room temperature for a minimum of 30min and maximum of 120 min to allow blood to clot.

### **PROCESSING**

- Serum isolation will be performed at the local site following SOP CBIG-02-003 titled "Serum Isolation from Whole Blood" (01May2020) as summarized below. Document serum processing on LORIS or by first completing the serum processing form (Appendix 8.3)
- Centrifuge at room temperature for 10 min at 2500Xg using a centrifuge with a swinging bucket.
- Indicate the degree of hemolysis (0-4) and whether the sample is lipemic (milky).
- Using a sterile transfer pipette, transfer supernatant (serum) to a new 15mL conical tube without disturbing the pellet.
- Using a micropipette or sterile transfer pipette, transfer 0.5mL aliquots into the 1.0mL cryovials, filling as many vials as possible.

### STORE FROZEN

- Store in a -80°C freezer until ready for shipment.
- Only if absolutely needed, aliquots can be stored at -20 °C for up to 1 week before transferring to -80 °C.

### SHIP

- Split the cryovials into two 81-cell freezer storage boxes, i.e., half of the samples in one box, half in the other.
   Each box should be shipped separately.
- For each participant, group samples by type and time point in the boxes.
- Bulk ship frozen samples on dry ice (see 7.11.4).



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### 7.6. Whole Blood for PBMC Isolation

Whole blood samples are collected from patient participants at a single time-point (MONTH 0 suggested) and shipped at room temperature to C-BIG for PBMC isolation. Five (5) tubes are suggested for this type of collection. No aliquoting is required.

### WHOLE BLOOD COLLECTION FOR PBMC



(BD Diagnostic, Cat# 366480)

### **PURPOSE OF COLLECTION**

PBMC isolation at C-BIG.

### **PREPARATION**

Prepare five (5) 10mL green top sodium heparin tubes (GTT) by affixing labels.

Ensure the tubes are at room temperature (15-25°C). **Warning:** Green vacutainers require careful handling, they are made of glass.

### COLLECTION

- Completely fill five (5) 10mL green top sodium heparin tubes with blood.
- Gently invert tube 8-10 times immediately after blood draw.
- Complete the *Biosample Collection Form* [blood] (Appendix 8.1).

### SHIP

- Vacutainers should be kept at room temperature (15-25°C) and shipped immediately.
- Ship priority overnight at ambient temperature in Credo Cube to C-BIG (see 7.11.5).

### **PROCESSING**

PBMC isolation will be performed by C-BIG following SOP *CBIG-02-002 titled "PMBC Isolation from Whole Blood (Leucosep Method) (30Apr2020).* Only if PBMC processing is done locally, does the *PBMC processing form* (Appendix 8.4) need to be completed on LORIS.



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### 7.7. Whole Blood for DNA Extraction

Whole blood samples are collected from patient participants at MONTH 0 and shipped to C-BIG for DNA extraction. Two (2) tubes are suggested for this type of collection. No aliquoting is required.

## WHOLE BLOOD COLLECTION FOR DNA



(BD Diagnostic, Cat# 366643)

### **PURPOSE OF COLLECTION**

DNA extraction at C-BIG.

### **PREPARATION**

Prepare two (2) 10mL purple top K<sub>2</sub>EDTA tubes (PTT) by affixing labels.

### COLLECTION

- Completely fill two (2) 10mL purple top K<sub>2</sub>EDTA tubes with blood.
- Complete the Biosample Collection Form [blood] (Appendix 8.1).

### STORE FROZEN

- Store vertically in a -80°C freezer until ready for shipment.
- Only if absolutely needed, vacutainer can be stored at -20 °C for 2 days before transferring to -80 °C.
- Warning: Tubes will expand during freezing, avoid storing them in a confined rack (e.g. Styrofoam rack).

### **SHIP**

- Place the frozen tube(s) in a biohazard bag.
- DNA tubes from a single participant should be shipped separately from one another.
- Bulk ship frozen samples on dry ice (see 7.11.4).

### **PROCESSING**

DNA extraction will be performed by C-BIG following SOP CBIG-02-004, titled "DNA Extraction from Whole Blood (Accelerated Method)" (01May2020).



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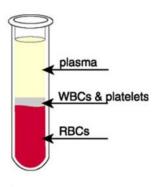
### 7.8. Whole Blood for Plasma Isolation

Whole blood samples are collected at each visit for patient (MONTH 0, 4, 8, 12) and control participants (MONTH 0, 8). Samples are processed *locally* at each site for plasma isolation. One (1) tube is suggested for this type of collection/visit.

### PLASMA COLLECTION



(BD Diagnostic, Cat# 366643)



Plasma is the top layer. White blood cells and platelets are in a whitish layer called the "buffy coat", just under the plasma and above the red blood cells.

### **PREPARATION**

Prepare one (1) 10mL purple top K<sub>2</sub>EDTA tube (PTT) by affixing a label.

Prepare up to ten (10) 1.0mL cryovials by affixing labels.

### COLLECTION

- Completely fill one (1) purple top K<sub>2</sub>EDTA tube with blood.
- Store purple top tube upright at room temperature away from direct light for a minimum of 30 min to allow blood to sediment.
- Complete the Biosample Collection Form [blood] (Appendix 8.1).

### **PROCESSING**

- Plasma isolation will be performed at the local site following SOP CBIG-02-011 titled "Plasma Isolation from Whole Blood" (02Oct2020) as summarized below. Document plasma processing on LORIS or by first completing the plasma processing form (Appendix 8.5).
- Centrifuge at 4°C for 12 min at 250Xg using a centrifuge with a swinging bucket.
- Using a sterile transfer pipette, quickly transfer supernatant (plasma) to a new 15mL polypropylene conical tube.
- Warning: Do not disturb the buffy coat.
- Using a micropipette or sterile transfer pipette, transfer 0.5mL aliquots into the 1.0mL cryovials, filling as many vials as possible.

### STORE FROZEN

- Plasma samples can be transferred directly to -80°C freezer until shipment.
- Only if absolutely needed, aliquots can be stored at -20 °C for 2 days before transferring to -80 °C.



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ALO ISINTO	
	SHIP
	<ul> <li>Split the cryovials into two 81-cell freezer storage boxes, i.e., half of the samples in one box, half in the other. Each box should be shipped separately.</li> </ul>
	<ul> <li>For each participant, group samples by type and time point in the boxes.</li> </ul>
	<ul> <li>Bulk ship frozen samples on dry ice (see 7.11.4).</li> </ul>



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### 7.9. Whole Blood for RNA Extraction

Whole blood samples are collected from patient and controls participants at MONTH 0 and shipped to C-BIG for RNA storage. Two (2) tubes are suggested for this type of collection. No aliquoting is required.

### WHOLE BLOOD COLLECTION FOR RNA



(BD Diagnostic, Cat# 762165)

### PURPOSE OF COLLECTION

RNA storage at C-BIG.

### **PREPARATION**

Prepare two (2) 2.5mL PAXgene RNA tubes by affixing labels.

### COLLECTION

- Completely fill two (2) 2.5mL PAXgene RNA tubes with blood.
- Gently invert tube 8-10 times immediately after blood draw.
- Complete the Biosample Collection Form [blood] (Appendix 8.1).

### STORE FROZEN

- Follow protocol "CAPTURE ALS RNA Processing (07Mar2022)" as summarized below and found in Appendix 8.6. This "processing" does not need to be documented in LORIS.
- Keep tubes upright at room temperature for a minimum of 2 hours and a maximum of 72hours to allow blood to clot.
- Transfer tubes to -20°C for at least 24hours before transferring to -80°C freezer until ready for shipment.

### SHIP

- Place the frozen tube(s) in a biohazard bag.
- RNA tubes from a single participant should be shipped separately from one another.
- Bulk ship frozen samples on dry ice (see 7.11.4).

### PROCESSING / LONG-TERM STORAGE

RNA tubes will be stored by C-BIG at -80°C for future RNA extraction.



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### 7.10. Cerebrospinal Fluid (CSF) Collection (optional procedure)

### **CSF COLLECTION**



Local site's preferred lumbar puncture tray

### **PREPARATION**

Prepare lumbar puncture tray and additional supplies and two (2) 15mL polypropylene tubes by affixing labels.

Prepare up to forty-five (45) 1.0mL cryovials by affixing labels.

**Warning:** Coagulation and platelets tests must be reviewed by a MD within 4 weeks of performing a lumbar puncture.

### COLLECTION

- A licensed practitioner will collect up to 16mL of CSF in accordance with local site SOPs.
- CSF should be collected in polypropylene tubes due to their low protein binding potential, no additives should be used.
- Immediately after collection, keep the CSF at 4°C or on ice until ready to process.
- Complete the *Biosample Collection Form [CSF]* (Appendix 8.2).

### **PROCESSING**

- Send 1-2ml of collected CSF to local laboratory for cell count, protein and glucose analysis, follow local laboratory guidelines.
- CSF processing will be performed at the local site following SOP CBIG-02-008 titled "CSF Processing" (01May2020) as summarized below. Document CSF processing on LORIS or by first completing the CSF processing form (Appendix 8.7).
- Process the sample promptly.
- Using a sterile transfer pipette, transfer the CSF to a new 15mL polypropylene tube.
- Centrifuge at room temperature for 10min at 2000Xg using a centrifuge with a swinging bucket.
- Using a sterile transfer pipette, transfer the supernatant (CSF) to a new 15mL polypropylene tube, do not disturb the pellet.
- Using a micropipette or sterile transfer pipette, transfer 0.5mL aliquots into the 1.0mL cryovials, filling as many vials as possible.



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STORE FROZEN

• Store cryovials directly in a -80°C freezer until ready for shipment. CSF cannot be stored at -20°C.

### **SHIP**

- Split the cryovials into two 81-cell freezer storage boxes, i.e., half of the samples in one box, half in the other. Each box should be shipped separately.
- For each participant, group samples by type and time point in the boxes.
- Bulk ship frozen samples on dry ice (see 7.11.4).

### 7.11. PACKAGING AND SHIPPING INSTRUCTIONS

### 7.11.1. Shipping to C-BIG Repository

- Samples will be shipped either frozen on dry ice or at ambient temperature in a credo cube.
- Frozen samples will be shipped in two batches to prevent the loss of all samples from a participant in the event a shipment is lost or thawed prior to delivery.
- Samples will be shipped on Monday to Wednesday for delivery on Tuesday to Thursday. *Avoid shipping on Friday to prevent sample delivery on a weekend.*
- Prior to shipment of samples, confirmation of shipment date, via telephone or email, shall be made with the C-BIG coordinator.
- To schedule a shipment, visit https://www.fedex.com/en-ca/shipping.html
- Sites will receive a sample shipment confirmation from C-BIG after samples arrive with instructions when to ship the second box.

### 7.11.2. Shipping Address

Mailing Address: Attention: Marie-Noelle Boivin

C-BIG Repository

Montreal Neurological Institute

3801 University Street

Room NWB150 Montreal, Quebec

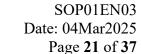
H3A 2B4

**Phone Number:** 514-398-8439

Email: cbig.mni@mcgill.ca

### 7.11.3. C-BIG Hours of Operation and Holidays

Monday to Friday 7:30 am to 4:30 pm Eastern Time





C-BIG lab coordinators will be available to receive shipments from 7:45AM to 3:00PM.

If a shipment at C-BIG is anticipated outside of these hours, an arrangement MUST be made with the C-BIG coordinator at the contact information above.

### **Holiday Observations**

Based on previous years, FedEx observes the following holidays. These dates are subject to change by FedEx.

It is **strongly recommended** that you verify FedEx and C-BIG schedules prior to any holiday shipments to Montreal.

Avoid collecting specimens for shipment on the day before an observed holiday

New Years Day January 1

Good Friday Date varies yearly

Easter Monday Date varies yearly

Victoria Day The second to last Monday in May

St. Jean Baptiste Day June 24

Canada Day July 1

Labor Day 1st Monday in September

Thanksgiving 2<sup>nd</sup> Monday in October

Christmas Day December 25\*

Boxing Day December 26\*

### 7.11.4. Frozen Sample Shipments

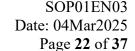
The following samples are shipped frozen on dry ice to C-BIG:

- 1. Serum, plasma, and CSF cryovials
- 2. Purple Top DNA Collection Vacutainer(s)
- 3. PAXgene RNA Collection Vacutainer(s)

### 7.11.4.1. Frozen Sample Shipping Supplies

Biohazard Specimen Transport Bags

<sup>\*</sup>C-BIG will inform Program Manager of C-BIG Christmas Holiday closure dates.





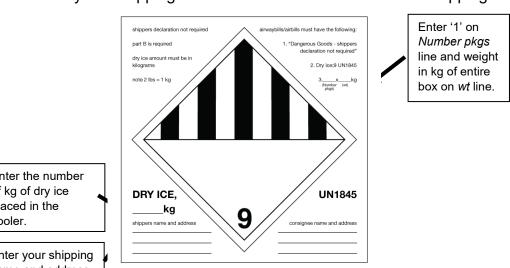
- Absorbent Sheet(s)
- Dry Ice Label(s)
- UN 3373 Biological Substance Category B Label(s)
- Insulated Shipping Container(s)
- Dry Ice
- Packing Tape

### 7.11.4.2. Frozen Sample Packing Instructions

- Order dry ice from your preferred supplier. 10lbs of dry ice is required for the suggested insulated Styrofoam shipping container.
- Complete the packing slip (see Appendix 8.9) and place it in the shipping container. Retain a copy for site records. If DNA or RNA tubes are being sent, include a copy of the Biosample Collection Form [Blood] (Appendix 8.1) showing the collection details. This will facilitate processing at C-BIG.
- Cryovials: Place each 81-cell sample cryobox in a biohazard specimen transport bag with an absorbent sheet. Do not tape the 81-cell sample box.
- Whole Tubes: Place frozen whole blood tube(s) in a biohazard bag with an absorbent sheet.
- Place up to two (2) biohazard specimen transport bags each containing a single 81cell box in an insulated Styrofoam shipping container. A third biohazard bag containing whole blood tubes may be added to the same shipping container.
- Surround samples on all sides (bottom, top, sides) with dry ice (10lbs). **Do not tape** the insulated Styrofoam shipping container.
- Seal the cardboard shipping box with standard packing tape.

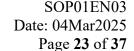
### 7.11.4.3. Frozen Sample Shipping Instructions

- Affix the 'Substance B' shipping label to the outside of the cardboard shipping box.
- Complete the 'Dry Ice' shipping label and affix to the outside of the shipping box.



Enter the number of kg of dry ice placed in the cooler.

Enter your shipping name and address.





- Complete the FedEx Intra-Canada Air waybill with the CAPTURE ALS account number. CAPTURE ALS will be charged for the shipment.
  - Section 1/From: Complete Date, Sender's Name & Shipping Address
  - Section 2/Internal Reference: CAPTURE ALS, ZAEXK
  - Section 3/To: Enter Recipient's Name & Address

• Recipient Name: C-BIG (M.N. Boivin)

• Phone: 514-398-8439

Company: CBIG MNI -MCGILL U

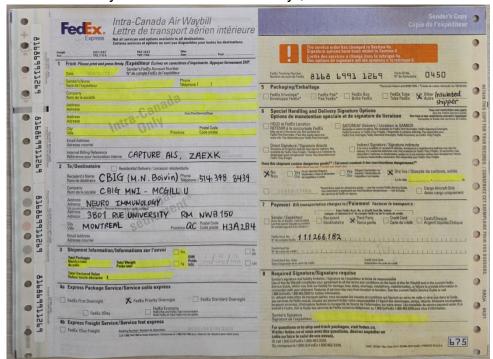
Address (line 1): Neuro Immunology

Address (line 2): 3801 Rue University, Room NWB150

City: MontrealProvince: QC

Postal Code: H3A 2B4

- Section 4/Shipment Information: Complete number packages, total weight and value.
- Section 5a/Express Package Services: Check "FedEx Priority Overnight"
- Section 6/Packaging: Check "Other", write "Insulated Shipper"
- Section 7/Special Handling:
  - Check "YES Shippers Declaration Not Required"
  - Check "Dry Ice" and enter the total weight of dry ice (10lbs).
- Section 8/Payment: Check "Third Party", FedEx Acct No. 111266182



- Schedule a pick-up time and drop off the box at the pick-up location
- Email the biobank at <a href="mailto:cbig.mni@mcgill.ca">cbig.mni@mcgill.ca</a> or call the Biobank at 514-398-8439 to let them know which samples are being sent as well as the tracking number.



7.11.5. Ambient Sample Shipments (Credo)

Green Top Blood Collection Tubes (GTTs; for PBMC isolation) are shipped at controlled ambient temperate to C-BIG in a credo cube.

### 7.11.5.1. Ambient Sample Shipping Supplies

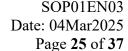
- 1. GTTs for PBMC Isolation
- 2. Elastic
- 3. Parafilm
- 4. Biohazard specimen transport bag
- 5. Absorbent Pouch
- 6. Safe T Pak Leak proof bag and Tvek outer envelope
- 7. Credo Box
- 8. Packing Tape

### 7.11.5.2. Ambient Sample Packing Instructions

- The GTTs should be kept at room temperature and sent on the same day as collection.
- A single credo cube can contain PBMC collections from two (2) participants collected on the same day. The following steps should be followed for each participant.
- Complete the packing slip (Appendix 8.9) and place it in the shipping container. Retain
  a copy for site records. Include a copy of the Biosample Collection Form [Blood]
  (Appendix 8.1) to facilitate sample processing at C-BIG.
- Place parafilm on the lids of the GTTs that have been filled.
- Place up to 6 GTTs, from a single participant, inside the absorbent Aqui-Pak pouch.
- Roll the absorbent pouch and attach it with an elastic.
- Place the absorbent protected vacutainers in the biohazard bag.
- Place the biohazard bag containing vacutainers in the Saf T Pak leak-proof poly bag (part #1 of STP-710) and seal.
- Place the leak-proof poly bag in the Tyvek outer envelope and seal (part #2 of STP-710) and seal.
- Repeat steps above as necessary for additional GTTs.
- Place the biohazard envelope in the Credo Cube.
- Seal the cardboard shipping box with standard packing tape.

### 7.11.5.3. Ambient Sample Shipping Instructions

- Affix the 'Substance B' shipping label to the outside of the cardboard shipping box.
- Complete the FedEx Intra-Canada Air waybill with the CAPTURE ALS account number. CAPTURE ALS will be charged for the shipment.
  - Section 1/From: Complete Date, Sender's Name & Shipping Address





Section 2/Internal Reference: CAPTURE ALS, ZAEXK

Section 3/To: Enter Recipient's Name & Address

• Recipient Name: C-BIG (M.N. Boivin)

• Phone: 514-398-8439

Company: CBIG MNI -MCGILL U

Address (line 1): Neuro Immunology

Address (line 2): 3801 Rue University, Room NWB150

City: MontrealProvince: QC

Postal Code: H3A 2B4

 Section 4/Shipment Information: Complete number packages, total weight and value.

Section 5a/Express Package Services: Check "FedEx Priority Overnight"

Section 6/Packaging: Check "Other", write "Insulated Shipper"

Section 7/Special Handling:

• Check "NO"

• Section 8/Payment: Check "Third Party", FedEx Acct No. 111266182



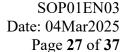
- Schedule a pick-up time and drop off the box at the pick-up location
- Email the biobank at <a href="mailto:cbig.mni@mcgill.ca">cbig.mni@mcgill.ca</a> or call the Biobank at 514-398-8439 to let them know which samples are being sent as well as the tracking number.



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### 7.11.5.4. Credo Return Shipping Instructions

- C-BIG will return credo boxes to each site using FedEx Ground and Acct No. 111266182.
- Ensure that "Collect" is checked off on the Ground waybill when items are shipped to or from the University of Alberta.





8. APPENDICES

**Appendix 8.1: CAPTURE ALS Biosample Collection Form [Blood]** 

**Appendix 8.2: CAPTURE ALS Biosample Collection Form [CSF]** 

**Appendix 8.3: Sample Processing Form - Serum** 

Appendix 8.4: Sample Processing Form - PBMC via Leucosep

Appendix 8.5: Sample Processing Form - Plasma

Appendix 8.6: Sample Processing Form - RNA

Appendix 8.7: Sample Processing Form - CSF

**Appendix 8.8: Biosample Labels Template** 

Appendix 8.9: CAPTURE ALS Packing Slip



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### **Appendix 8.1: CAPTURE ALS Biosample Collection Form [Blood]**

Found in [Biosample Collection Form [Blood] (04Mar2025) CAPTURE ALS]

SECTION 1. PARTICIPANT



### Biosample Collection Form [Blood]

CONTROL □ PATIENT □		CAPTU	RE-ALS ID:	CAPT		
SECTION 2. BASIC DEMOGRAPHIC INFORMAT	ION	l				
SEX: MALE □ FEMALE □		Date of	birth:	MM / YYYY		
SECTION 3. STUDY INFORMATION						
Study Name: CAPTURE-ALS						
Visit Month: 0 □ 4 □	8 🗆	12 □	1			
Site: Edmonton □ Montreal CHUM □	Toron	ito 🗆	Quebec Ci	ity 🗆		
Current Diagnosis: ALS □ ALS-related disease □ Healthy Control □ Other □ :						
SECTION 4. BLOOD DRAW	SECTION 4. BLOOD DRAW					
[Patient Participant]			VACCUTAINERS			
0 Month (Total tubes:12) 2 RTI (Serum), 5 GTI (PBMC),3 PTI (Plasma (1), DNA (2)), 2 PAXgene (RNA)	Purpose	Color	Type	# Requested	# Drawn	
4, 8, 12 Month (Total tubes :3)	Serum	Red	No Additive	2		
2 RTT (Serum), 1 PTT (Plasma)	PBMC	Green	Heparin	5		
[Healthy Control Participant] 0 Month (Total tubes: 5 / visit)	Plasma	Purple	K <sub>2</sub> EDTA	1		
2 RIT (Serum), 1 PIT (Plasma), 2 PAXgene (RNA)	DNA	Purple	K <sub>2</sub> EDTA	2		
8 Month (Total tubes: 3 / visit) 2 RTT (Serum), 1 PTT (Plasma)	RNA		PAXgene	2		
Recommended Order of Blood Draw: RII, GII, PII, PAXgene						
Drawn by:	Draw Da	te:	I	Draw Time:		

DD / MM / YYYY

hh / mm



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Appendix 8.2: CAPTURE ALS Biosample Collection Form [CSF]

Found in [Biosample Collection Form [CSF] (04Mar2025) CAPTURE ALS]

ALS CAPTURE	SLA CAPTURE	CAPTURE ALS	

### Biosample Collection Form [CSF]

SECTION 1. PARTICIPANT									
PATIENT		CAPTURE-ALS I	D: <i>CAPT</i>						
SECTION 2. BASIC DEMOGRAPHIC INFORMATION	ON								
SEX: MALE □ FEMALE □		Date of birth:	MM / YYYY						
SECTION 3. STUDY INFORMATION									
Study Name: CAPTURE-ALS									
Visit Month: 0 □ 4 □ 8 □ 12 □									
Site: Edmonton	Γoronto □	Quebec City [	3						
Current Diagnosis: ALS - ALS-related disease	□ Hea	lthy Control □	Other 🗆 :						
SECTION 4. CSF DRAW									
☐ PT/PTT/INR/CBC levels verified by a physician prio	r to LP								
A licensed practitioner will collect up to 16mL of CSF.		VACCU	TAINERS						
Must be collected in polypropylene tubes No additives used.	Purpose	Туре	# Requested # Draw						
1 tube (1-2 mL) goes to local lab for analysis of cell count, protein, glucose.	CSF	Polypropylene tubes	2						
Immediately after colle	ction, keep	the CSF at 4°C							
LP performed by:	Draw Da	te:	Draw Time:						
NAME / SIGNATURE	DD /	MM / YYYY	hh / n	ım					
☐ 1 tube of CSF (1-2 mL) sent to local lab for analysis☐ CSF collected for CAPTURE-ALS (volume of CSF of	□ 1 tube of CSF (1-2 mL) sent to local lab for analysis □ CSF collected for CAPTURE-ALS (volume of CSF collected: mL)								
Note (did the participant experience any adverse event, etc.):									

CAPTURE (Comprehensive Analysis Platform To Understand, Remedy, and Eliminate) ALS Biosample Collection Form [CSF] – Version date: 04 MAR 2025 Page 1 of 1



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### Appendix 8.3: Sample Processing Form - Serum

Found in [Sample Processing Form – Serum (7Mar2022) CAPTURE ALS]

ALS	CAPTURE ALS

Serum Isolation from Whole Blood Sample Processing Form: Serum Last updated: 7March2022

		_								Last upu	ак <del>с</del> и.	/ War CrizOZZ
SERUM	PRO	CESSING								SOP En	nploye	ed: CBIG-02-003
Process	ed by							CA	PT ID:			
Time sta	art pro	cessing:	_:_				Date:	1	1			
١	/ACCI	JTAINERS/TI	JBES					Ql	JANTI	TY		
RECEI	VED	TYPE	RECEIV	'ED				AL	.IQUO	TS		
				nL	× 500μL							
Issues		Milky serum		lemol )-4)	yzed, if checked, so	core		Ехр	ired tul	bes Date of e	xpiry:	
RECEI	VED	TYPE	RECEIV					AL	.IQUO	TS		
_			n	ıL	× 500μL							
Issues		Milky Serum		lemol 0-4)	yzed, if checked, so	core		Exp	ired tul	bes Date of e	xpiry:	1
STEPS:												
□ 1. F	Ceep t	ube upright at	room ter	npera	ture for a minimum	of 30r	nin and	a m	aximur	n of 120 min t	o allov	v blood to clot
□ 2. 0	Centrif	uge 10 minute	es at 250	0Xg					Start:	<u>:</u>	End:	:_
3.7	ransf	er SN to a nev	v 15 mL l	alco	n tube							
		e aliquots (50										
		at -80°C (until	ship to C	-BIG)	Date:/	1						
REAGE	NTS 1	TRACKING										
					Lot #		Expiry I	Date		Opened		Finished
Vacutai	ners							_		N/App		N/App
Notes:												



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### Appendix 8.4: Sample Processing Form - PBMC via Leucosep

Found in [Sample Processing Form – PBMC vis Leucosep (7Mar2022) CAPTURE ALS]



PBMC Isolation from Whole Blood (Leucosep Method)
Sample Processing Form: PBMC via Leucosep
Last updated: 7March2022

PBMC PROCESSING					SOP	Emplo	yed: CBIG-02-002
Processed by:			C/	APT ID	):		
Time start processing: :	_		Da	ate:	1 1		
VACCUTAINERS/TUBES			QUAI	YTITY			
RECEIVED TYPE			RECE	IVED			
_   _				_mL			
Issues Red Pellet (RP)	Clotted	☐ Expire	ed tubes Da	ate of	expiry:	/	
STEPS:							
1. Distribute 15 mL of Ficoll into the Leucosep Tube							
2. Centrifuge for 30 second	ds at 1000Xg						
3. Distribute the blood from	n the vacutainers and	dilute 1:2 with	PBS into th	ne Leu	cosep Tube	(up to	35 mL)
4. Centrifuge for 10 minute	es at 1000Xg, with No	O break	Start: :				End::
5. Collect PBMC by pourin	g into a new 50 mL t	ube and compl	ete suspens	ion to	50 mL with	PBS	
6. Centrifuge for 10 minute	es at 250Xg		Start: :			1	End::
7. Discard supernatant, loc	osen pellet, add 10 m	L of PBS					
8. Count cell							
9. Take cell if needed for to	rizol and complete su	spension to 50	mL with PE	38			
☐ 10. Centrifuge for 10 minut	tes at 250Xg		Start: :				End::
☐ 11. Discard supernatant ar	nd loosen cell pellet	•					
12. Add solution A (HI HuA	AB serum)						
☐ 13. Add solution B (HI HuA	AB serum + DMSO)						
☐ Prepare aliquots □	Date://	•					
☐ Store at -80°C	Date://	•					
☐ Store in liquid nitrogen □	Date://	•					
PBMC COUNTING					SOP	Emplo	yed: CBIG-03-001
Dilution factor	:2		Cell sus	pensi	on volume:1	10.00m	L
		Cou	intess FL II		Count #1		_ x10 <sup>6</sup> cells/ mL
	(already take into a	account the dilu	tion factor)	l)	Count #2		x 10 <sup>6</sup> cells/mL
	OF COUNTS:	_			UNTING N		
Count	#1 + Count #2	S ISOLATED	Sum of Count				nsion Volume (mL)
Coefficient of Variance (% C.V.		BOLATED	Live:	ing wie			
(need to be under 5%)	Dead:		Dead:	_	Total F	RING	x10 <sup>6</sup>
				i	f trizol done	take:	x 10 <sup>6</sup> cells
			Final PB	MC cc	ount (after	trizol)	x 10 <sup>6</sup> cells



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PBMC Isolation from Whole Blood (Leucosep Method) Sample Processing Form: PBMC via Leucosep Last updated: 7March2022

PBMC FREEZING								
FREEZING SC	LUTION B PREPATION	HuAB:	mL		NUMBER (	OE VIAL C		
Hu	(mL) AB serum + 20% DMSO	DMSO:	mL		NUMBER	OF VIALS	_	
50% Solution	G SOLUTION VOLUME U n A (HuAB serum) + 50%	Solution B	mL	Tota	CELLS I	PER VIAL	x10 <sup>6</sup>	
Total \	Volume = 1.00mL x Numb	er of Vials			**SHOULD NOT EXCE		x10°	
QUANTITY - ALIQU	JOTS							
X vials	at x 10	<sup>6</sup> cells / mL	in each vial					
REAGENTS TRAC	KING							
	Lot #	E	xpiry Date		Opened	Fir	ished	
Leucosep		_	1		N/App	N	/App	
PBS		_	1					
FicoII		_						
HI HuAB serum		_	1					
DMSO			<u>- 1 -</u>					
Vacutainers		_			N/App	N	/Арр	
Notes:								
Notes.								



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### Appendix 8.5: Sample Processing Form - Plasma

Found in [Sample Processing Form – Plasma (7Mar2022) CAPTURE ALS]

ALS	APTURE S				nple Proces	sing	n Whole Blood Form: Plasma d: 7March2022
PLASMA PRO	CESSING				SOP E	mplo	yed: CBIG-02-011
Processed by:				CAPT IE	D:		
Time start proc				Date:			
	NERS/TUBES	QUANTITY					
RECEIVED	TYPE		R	RECEIVED			
				mL			
	Expired tubes	Date of expi	iry:/				
STEPS	TT in the deals and		0 i		Ctt-		Fd
	TT in the dark and				Start: :		End: :
	ige for 12 minutes a r supernatant into a				Start::_		End::_
	e aliquots (500 µL)	a new comca	Tube				
	30°C (until ship to C	-BIG) Dat	te: _ / _ /				
			<u> </u>				
QUANTITY - A							
X vials at	500 μL						
REAGENTS TI	RACKING						
	Lot :	#	Expiry Date	0	pened		Finished
Vacutainers		_		1	N/App		N/App
Notes:							



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### **Appendix 8.6: Sample Processing Form - RNA**

Found in [Sample Processing Form – RNA (7Mar2022) CAPTURE ALS]



RNA Processing Sample Processing Form: RNA Last updated: 7March2022

RN	A PROCE	SSING					SOP emple	oyed: CAPT-01-012		
Pro	cessed by	:				CAPT	ID:			
Tin	ne collecte	d: <u>:</u>				Date:				
		VACCUTAINERS/T	UBES				QUANTITY			
R	ECEIVED	Т	YPE		RECEIVED					
	_					mL				
Iss	ues 🗌						xpired tubes Date o	f expiry:/		
ST	STEPS:									
1. Keep tubes upright at room temperature for a minimum of 2hours and a maximum of 72hours to allow blood to clot.										
	2. Transf	er tubes to -20°C for	at least 24hours.		-65					
3. Transfer tubes to -80°C freezer (until ship to C-BIG)										
RE	AGENTS	TRACKING					y			
					Expiry Date		Opened	Finished		
Va	cutainers					_	N/App	N/App		
No	tes:									
NO	165.									



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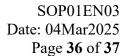
### Appendix 8.7: Sample Processing Form - CSF

Found in [Sample Processing Form - CSF (7Mar2022) CAPTURE ALS]



CSF Processing Sample Processing Form: CSF Last updated: 7March2022

CS	F PROCES	SING (SUPERNATA	NT)			SOP Emplo	yed: CBIG-02-008					
Pro	cessed by:				CAPT ID:							
Tim	ne start proc	essing: _:_			Date:/	1						
	V	ACCUTAINERS/TU	BES		QU	JANTITY						
RI	ECEIVED	TYI	PE		RECEIVED							
	_	_	_		_	mL						
Iss		Blood contamination	Not kept at 4	<sup>0</sup> C immediately puncture	☐ Expire	ed tubes Date of	expiry:/					
	STEPS:											
$\sqsubseteq$		ge for 10 minutes at				Start::_	End::_					
		supernatant, and pu		Falcon tube								
		supernatant and ali										
	· ·	aliquots (500 µL)	Date:									
	L	-80°C (until ship to C	-BIG) Date:	<u> </u>								
QU	ANTITY - A	LIQUOTS										
_	_x 500µL											
No	otes:											





### **Appendix 8.8: Biosample Labels Template**

Found in [Biosample Labels Template (EN, V2, 26Oct2022) CAPTURE ALS]

CAPTISCOSO	100		(With the law)	erreesteersee	Barcode	NewCode
CAPTICOCOS   203   PBAC   0004	Name and Address of the Owner, where the Owner, which the Owner, where the Owner, which the	-	THE RESERVE AND ADDRESS OF THE PERSON.	AND REAL PROPERTY AND ADDRESS OF THE PERSON NAMED IN COLUMN 2		
CAPTICOCOST   204   PSIANC   000M	The second secon					
CAPTIGOGO						MARKET AND ADDRESS.
CAPTISCOCO	CAPTXXXXX 20	4 PBMC	M00	DD#MM/20XX	CAPT/00/00/00/204	XX00000YY
CAPTISCOSO	Broadland Control of the Control of	0. 0.00000.000	100000000000000000000000000000000000000	Intellige Self-Self-Self-Self-Self-Self-Self-Self-		THE RESERVE AND ADDRESS OF THE PARTY.
CAPTISCOCC  209   DIAN	The second secon	D. C. Constillation	200000	production to the contract of		
CAPTIOGOGE   209   DIAS   ORM   DIMMY2000   CAPTIOGOGGE   0000000Y						
CAPTIOGOGO	- Company Comp		70.00	Bendere Delicative Company of the Bendere Com		
CAPTIOGOGO						
CAPTIOGOOD   214   FINA	AND RESIDENCE OF THE PARTY OF T	The second second	THE RESERVE THE PERSON NAMED IN COLUMN	The second secon		THE RESERVE AND PERSONS ASSESSED.
CAPTIOCOCK   216   Serum   00M			0.000000	Description (Contraction (Contr		
CAPTIOGOGO	Secretaria de la constante de	The second second	-			XX00000YY
CAPTIOGOGO						
CAPTIOGOCO	Account of the last of the las		7000000	Industrial Control of		STATE OF THE OWNER, WHEN PERSONS NAMED IN
CAPTIOGOGE   218   Serum   00M   DDIMM/200X   CAPTIOGGGGGG   M300007Y   CAPTIOGGGGGG   M300007Y   CAPTIOGGGGGG   M300007Y   CAPTIOGGGGGG   M300007Y   CAPTIOGGGGGG   M300007Y   CAPTIOGGGGGGG   M300007Y   CAPTIOGGGGGGG   M300007Y   CAPTIOGGGGGGG   M300007Y   CAPTIOGGGGGGG   M300007Y   CAPTIOGGGGGGG   CAPTIOGGGGGGG   M300007Y   CAPTIOGGGGGGG   CAPTIOGGGGGGG   M300007Y   CAPTIOGGGGGGG   CAPTIOGGGGGGG   M300007Y   CAPTIOGGGGGG   CAPTIOGGGGGG   M300007Y   CAPTIOGGGG   CAPTIOGGGGGG   M300007Y   CAPTIOGGGG   CAPTIOGGGGG   CAPTIOGGGGG   CAPTIOGGGG   CAPTIOGGGG   CAPTIOGGGG   CAPTIOGGGG   CAPTIOGGGG   CAPTIOGGGG   CAPTIOGGG   CAPT		0	75500	Designation of the Contract of		
CAPTIOGOOS			W. W	The second secon		
CAPTIOGOOF   221   Serum	The second secon					
CAPTIOCOCY 223 Serum 00M DDI/MW200K CAPTIOCOCOC223 1000000YY	CAPTXXXXXX 22		M00	DD/MM/2000	CAPT/00000000220	
CAPTIOGODE   224   Serum	CAPTXXXXXX 2	1 Serum	M00	DD#MM/20XX		XX00000YY
CAPTIOCOCY   225   Serum   OUM   DIMMA/2004   CAPTIOCOCIC224   10000007Y   CAPTIOCOCIC   225   Serum   OUM   DIMMA/2004   CAPTIOCOCIC   226   Serum   OUM   DIMMA/2004   CAPTIOCOCIC   226   Serum   OUM   DIMMA/2004   CAPTIOCOCIC   228   Serum   OUM   DIMMA/2004   CAPTIOCOCIC   228   Serum   OUM   DIMMA/2004   CAPTIOCOCIC   227   Serum   OUM   DIMMA/2004   CAPTIOCOCIC   227   Serum   OUM   DIMMA/2004   CAPTIOCOCIC   228   Serum   OUM   DIMMA/2004   CAPTIOCOCIC   230   DISSMA   OUM   DIMMA/2004   CAPTIOCOCIC   240   DISSMA   OUM   DIMMA/2004   CAPTIOCOCIC   240   DISSMA			0.000			
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CAPTIOGOGY			2000	production will be be a second of	Control of the Contro	
CAPTIXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			700000	Designation of the Control of the Co		
CAPTX00000	- Control Cont	-	77770			
CAPTIXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			G0007700114	In the California School of the	The control of the co	
CAPTX00000**231**Plasma** 00M**	CAPTXXXXX 22		M00	DD#MM/20XX	CAPTX00000000229	3000000YY
CAPTX000C         232         Plasma         00M         DDIMM/200K         CAPTX000C00232         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	ACCURATION AND ADDRESS TO A SECOND AND ADDRESS OF THE PARTY OF THE PAR			Instruction of the Control of the Co		MATERIAL PROPERTY AND ADDRESS OF THE PARTY AND
CAPTIXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Company and the Company of the Compa		1000000	Instruction of the last of the		
CAPTX000C 234 Plasma 00M DDIMM200X CAPTX000C0234 X00000YY CAPTX000C 235 Plasma 00M DDIMM200X CAPTX000C0235 X00000YY CAPTX000C 237 Plasma 00M DDIMM200X CAPTX000C0235 X00000YY CAPTX000C 238 Plasma 00M DDIMM200X CAPTX000C0237 X00000YY CAPTX000C 239 Plasma 00M DDIMM200X CAPTX000C0238 X00000YY CAPTX000C 239 Plasma 00M DDIMM200X CAPTX000C0239 X00000YY CAPTX000C 240 CSF 00M DDIMM200X CAPTX000C0240 X00000YY CAPTX000C 241 CSF 00M DDIMM200X CAPTX000C0241 X00000YY CAPTX000C 241 CSF 00M DDIMM200X CAPTX000C0241 X00000YY CAPTX000C 243 CSF 00M DDIMM200X CAPTX000C0241 X00000YY CAPTX000C 245 CSF 00M DDIMM200X CAPTX000C0241 X00000YY CAPTX000C 246 CSF 00M DDIMM200X CAPTX000C0241 X00000YY CAPTX000C 245 CSF 00M DDIMM200X CAPTX000C0241 X00000YY CAPTX000C 245 CSF 00M DDIMM200X CAPTX000C0241 X00000YY CAPTX000C 250 CSF 00M DDIMM200X CAPTX000C0241 X00000YY CAPTX000C 250 CSF 00M DDIMM200X CAPTX000C0251 X00000YY CAPTX000C 251 CSF 00M DDIMM200X CAPTX000C0251 X00000YY CAPTX000C0251 X00000YY CAPTX000C0251 X00000YY CA	- America Company of the Company of			Decision of the Control of the Contr		
CAPTX00000**235** Plasma						
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	The state of the s			Inches Control of the		
CAPTX00007 237         Plasma 00M         DDIMM/20XX CAPTX000X00237         XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX				Designation of the Control of the Co		
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	THE RESIDENCE OF THE PARTY OF T					
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			M00	DD/MM/20XX	CAPTX00000000238	XXXXXXXY
CAPTX00000						
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Transferible Contraction of the Party Contract		707000	Deschwick (Christophological)		
CAPTIXCOCC  243   CSF	- American Company of the Company of	C. C. Control of the	2000000			
CAPTX00000	Bench and the second se	-		Decision of the last of the la		
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		NO. INC. NO. OF THE PARTY NAMED IN				THE RESERVE OF THE PERSON NAMED IN
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	- According to the contract of	S 1000000000		Broken College		
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	CAPTXXXXXX 24	6 CSF	M00	DD#MM/20XX	CAPT/00000000246	
CAPTIXCOCC  249   CSF			M00	Decided the Control of the Control o		
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX						THE RESERVE OF THE PERSON NAMED IN
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	THE RESIDENCE OF THE PARTY OF T	CONTRACTOR OF THE PARTY OF THE	100000000000000000000000000000000000000	Brokenson Control of the Control of		
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	- CONTRACTOR CONTRACTOR		0.000	Bridge (State Control of State Control o		
CAPTX00000		SC TOWNS CO.				
CAPTX00000	STATE OF THE PARTY	-	-	Description of the last of the		
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX						
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			2000000	Tenhankos Charlos Charles Charles	CAPT100000000255	XXXXXXXY
CAPTX00000	- Paradicipal Company and Comp	SCHOOL SC	2000		Control of the Contro	
CAPTX00000	The control of the co	THE RESIDENCE OF THE PERSON NAMED IN	0.000			
CAPTKOOOC 261	The State of the S					
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		NO. INC. ASSESSMENT	20000000	Business Commission Commission		
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	Delical and Company of the Company o		0.0000000000000000000000000000000000000	The second second second second second		
CAPTX00000			2000			
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX			60000	December 19 and	The state of the s	
CAPTX00000	CAPTXXXXX 26		M00	DD/MM/20XX	CAPTX000XXXX264	
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX						
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		4 (400000)				
CAPTX00000	THE RESERVE THE PERSON NAMED IN COLUMN 1		200000			
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	- American Control of		2,700			
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX						
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	The second secon					
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		2 100000	2220	Technological Control of Control		
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX		IN DESCRIPTION	2.000	The County of th		XX00000YY
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX						
CAPTXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX				THE RESERVE THE PARTY OF THE PA		
CAPTXXXXXX 278 CSF 00M DDIMM/20XX CAPTXXXXXX XXXXXXX XXXXXXX XXXXXXX XXXXXX XXXX	Designation of the Party of the		2000			
CAPTXXXXX 279 CSF 00M DDHMM/20XX CAPTXXXXXXX XXXXXXX			0.000			
				The County College Control of Con		



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### Appendix 8.9: CAPTURE ALS Packing Slip

Found in [Sample Packing Slip (12July2022) CAPTURE ALS]

ALS CAPTURE SLA CAPTURE	CAPTURE ALS
Biosample Packing Slip	
Site Name:	
Date Shipped:// M M	/
Page of	
Shipped By (Full Name):	

Participant CAPTURE ID	Visit (Month)	Date Collected (dd/mm/yyyy)	# plasma vials	# serum vials	# CSF vials	#PTT (DNA)	#GTT (PBMC)	# PAXgene tubes (RNA)

PTT: Purple Top Tube, GTT: Green Top Tube

Retain one copy on site, and provide a second copy in the shipping container for use at C-BIG Repository

CAPTURE (Comprehensive Analysis Platform To Understand, Remedy, and Eliminate) ALS Sample Packing Slip – V1, Version date: 12 JUL 2022