# Laboratory Working Practice Document 3: AMBITION-cm AMBISON Therapy Induction Optimization Sample Processing and Storage

Ambition Trial Coordinating Centre Private Bag 320, Princess Marina Hospital Gaborone, Botswana



Laboratory Work Practice Document: 3 (Harare) Sample Processing and Storage								
Title of study  High Dose AMBISOME® on a Fluconazole Backbone for Cryptococcal  Meningitis Induction Therapy in sub-Saharan Africa: A Phase III Randomized  Controlled Non-inferiority Trial								
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Version Number	Effective Date	Reason for Change						
1.0	29/06/2018	First version						
1.1	10/09/2019	Addition of PAXgene Specimen Collection and Storage						

## Laboratory Working Practice Document 3: AMBITION-cm AMBISON Therapy Induction Optimization Sample Processing and Storage

#### **Purpose**

This document describes the day to day laboratory duties

#### References

**Ambition Phase III Trial Protocol** 

#### **Materials**

Lab WPD 1 - Laboratory equipment

Lab WPD 2 - Quantitative Cryptococcal cultures

Lab WPD 9 - PAXgene Specimen Collection and Storage

Clinical WPD 15- Timing of evaluation and tests

#### **Appendices**

Lab Processing Chart: Cape Town, Harare, Lilongwe and Kampala

#### Section A – Lab maintenance, quality control

Monitoring of freezer and fridge temperatures, reagents/agar expiration dates, working order of autoclaves, incubators and other laboratory equipment, should all be performed in line with on-site laboratory quality control and health and safety procedures

Weekly stock check of lab consumables for trial. Inform trial team on-site and trial manager when replacements required. See Laboratory WPD 1 – Laboratory equipment

#### Section B - Samples required

All results should be recorded with patient study number, date, and study day.

All results should be communicated to the study team.

#### - Study bloods

The following must be performed according to the trial protocol

- CD4 at baseline if not done within 3 months
- FBC and ALT on days 1, 7, 14, 28
- Creatinine, electrolytes on days 1, 3, 5, 7, 10, 12, 14, 28
- PAXgene tube on D1 (2.5mL of blood)
   (please see Appendix and Lab WPD 9- PAXgene Specimen Collection and Storage)

#### - CSF

- India Ink examination AND/OR Cryptococcal antigen (IMMY CrAg) on D1
- CSF cell count and differential, protein, glucose and routine culture on D1 for all patients and additional LPs, as indicated
- Quantitative fungal culture will be conducted on D1, 7, and 14
- PAXgene tube on D1 (2.5mL of CSF)
   (please see Appendix and Lab WPD 9- PAXgene Specimen Collection and Storage)

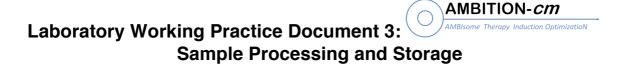


Table 1: Timings of study bloods and CSF analyses

TABLE 6.1. Event Schedule	Screening			٧	Veek	1			Week 2					Wk 4		
Study Day	≤D0	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14	
Clinical labs																
HIV testing (if status unknown)*		X							Г							
Pregnancy Test (Urine/Serum) (2)		X														
Full Blood Count		X						X							X	Х
CD4 count & Viral load (if needed)*		X														
ALT		X						Х							X	X
Urea, creatinine and electrolytes		X		X		X		X			X		X		X	Х
CSF																
Opening pressure		Х						Х							X	
Cell count and differential*		X														
Protein, glucose*		X														
Routine culture *		Х														
India ink examination* (3)		X														
Cryptococcal antigen* (3)		X														
Quantitative fungal culture		X						X							X	
Immune parameters (4)		X						X							X	
									I							

#### Section C - Procedures for sample processing and saving - Please see Appendix: Lab Processing Chart

#### Day 1 (or 0)

#### Required samples:

- 2 yellow (or red) top (1 for biochemistry, 1 for serum storage)
- ≥3 purple top (1 for FBC, 1 for whole blood storage, 1 for plasma and buffy coat storage and other samples may be for CD4, viral load and resistance testing)
- CSF sample in 3 x white top tube (5 mls each)
- 2 PAXgene tubes (1 for blood, 1 for CSF)

(Please see WPD 9 - PAXgene Specimen Collection and Storage)

#### **DAY 1 CSF SAMPLES**

NB CSF must be processed within 4 HOURS of receipt

- 1. Perform protein and glucose on CSF
- 2. Perform India Ink, CrAg (if required), cell count (on day 0/1 sample)
- 3. Plate out day 1 unspun CSF dilutions 0-4 (neat, one in 10, 100, 1,000 and 10,000) for quantitative culture (see WPD 2: Quantitative Cryptococcal Cultures)
  - Store isolate once grown in 2 Microbank vials.
- 4. Vortex CSF and save: divide into 3 x 2ml Cryovials min 200  $\mu$ L each. Label and place into freezer box.
- 5. PAXgene tube: Please see WPD 9 PAXgene Specimen Collection and Storage

TB culture only if clinically indicated (will be performed in TB lab, and is not mandated by trial protocol)

#### **DAY 1 BLOOD SAMPLES**

- Take blood for CD4, viral load and resistance testing (if indicated), whole blood, plasma and buffy coat (all purple tops), and serum (yellow or red top). Total required = ≥ 3 purple tops (4 ml each) and 2 yellow or red top (4 ml).
- 2. Perform FBC, ALT, creatinine and electrolytes on Day 1.
  - Store plasma and serum from surplus monitoring samples.
- 3. <u>WHOLE BLOOD</u>: take 2x cryovials and pipette 900 uL of WHOLE BLOOD (unspun sample) into each (should be mixed well in purple top tubes prior to transfer). Label and place into whole blood storage box.
- 4. PLASMA AND BUFFY COAT:

Spin blood from purple top tube at 800xg for 15 minutes. Avoiding the buffy coat and red cells at the bottom, remove as much of the plasma as possible using a sterile Pasteur pipette and divide into 2 cryovials.

Buffy coat is the small region between the plasma and red blood cells. After removing the plasma, use a sterile Pasteur pipette to carefully aspirate the buffy coat in a circular movement trying not to disturb the red blood cell layer then store in a single cryovial

- 5. <u>SERUM</u>: Spin yellow (or red) top sample at 800xg for 15 minutes. In the yellow top, gel now separates cells from serum. Use a sterile Pasteur pipette to remove as much of the serum possible and divide into 2 cryovials.
- 6. PAXgene tube: Please see WPD 9 PAXgene Specimen Collection and Storage

#### Day 3

#### **Required samples:**

- 1 purple top (for plasma and buffy coat storage)
- 1 yellow/red top tube (4ml)

#### **DAY 3 BLOOD SAMPLES**

- Perform urea, creatinine and electrolytes on Day 3.
   Store serum from surplus monitoring samples.
- 2. PLASMA AND BUFFY COAT

#### Day 5

#### **Required samples:**

1 yellow/red top tube (4ml)

#### **DAY 5 BLOOD SAMPLES**

Perform urea, creatinine and electrolytes on Day 5.
 Store serum from surplus monitoring samples.

#### Day 7

#### **Required samples:**

- 2 purple top (1 for FBC, and 1 for plasma and buffy coat storage)
- 1 yellow/red top tube (4ml)
- CSF sample in 2 x white top tubes (5 mls each)

#### **DAY 7 CSF SAMPLES**

1. Perform quantitative cultures on Day 7 LP.

- 2. Save remaining CSF, divide into 3 Cryovials.
- 3. Save Cryptococcus isolate in 2 Microbank vial if growth from Day 7 LP

#### **DAY 7 BLOOD SAMPLES**

- Perform FBC, ALT, urea, creatinine and electrolytes on Day 7.
   Store plasma and serum from surplus monitoring samples.
- 2. PLASMA AND BUFFY COAT

#### **Day 10**

#### Required samples:

- 1 yellow/red top tube (4ml)

#### **DAY 10 BLOOD SAMPLES**

Perform urea, creatinine and electrolytes on Day 10.
 Store serum from surplus monitoring samples.

#### Day 12

#### **Required samples:**

1 yellow/red top tube (4ml)

#### **DAY 12 BLOOD SAMPLES**

Perform urea, creatinine and electrolytes on Day 12.
 Store serum from surplus monitoring samples.

#### **Day 14**

### **Required samples:**

- 2 purple top (1 for FBC, and 1 for plasma and buffy coat storage)
- 1 yellow/red top tube (4ml)
- CSF sample in 2 x white top tube (5 mls each)

#### **DAY 14 CSF SAMPLES**

- 1. Perform quantitative cultures on Day 14 LP. Save remaining CSF, divide into 3 Cryovials.
- 2. Save Cryptococcus isolate in 2 Microbank vial if growth from Day 14 LP

#### **DAY 14 BLOOD SAMPLES**

- Perform FBC, ALT, urea, creatinine and electrolytes on Day 14.
   Store plasma and serum from surplus monitoring samples.
- 2. PLASMA AND BUFFY COAT

#### **Day 28**

#### **Required samples:**

- 1 purple top (for FBC)
- 1 yellow/red top tube (4ml)

#### **DAY 28 BLOOD SAMPLES**

Perform FBC, ALT, urea, creatinine and electrolytes on Day 28.
 Store plasma and serum from surplus monitoring samples.

# Laboratory Working Practice Document 3: AMBITION-cm AMBISON Therapy Induction Optimization Sample Processing and Storage

#### PROCESSING AND LABELLING

SPINNING: For all samples use 800xg for 15 mins, unless stated otherwise on LPC.

**LABELLING**: Each sample must be labelled with study number (e.g. AMB 1-1-001), nature of sample (e.g. CSF/ plasma etc), study day (e.g. d3), date and time (time specimen taken, <u>not</u> time specimen received in lab).

The study day is derived from the first day the patient receives study drugs. That is day 1. That is not necessarily the day of hospital admission.

**STORAGE:** Cryovials containing samples should be stored in appropriately labelled cryoboxes. Cryoboxes should be stored in -80°C freezer

**CRYPTOCOCCAL ISOLATE STORAGE:** Cryptococcal isolates are stored in Microbank beads in an appropriately labelled cryobox and stored in -80°C freezer.

#### PROCEDURE FOR STORING ON MICROBANK BEADS:

- 1. Using a permanent marker, label with the study number, date and day of study (e.g. AMB 1-1-001, 12.10.15, d7)
- 2. Under aseptic conditions open the screw cap cryovial.
- 3. Inoculate the cryopreservative fluid with young colonial growth (18-24 hours) picked from a pure culture to approximately a 3-4 McFarland standard.
- 4. Close vial tightly and invert 4-5 times to emulsify organism. DO NOT VORTEX!
- 5. At this point the microorganisms will be bound to the porous beads. The excess cryopreservative fluid should be well aspirated leaving the inoculated beads as free of liquid as possible. Close the vial finger tight.
- 6. Record on the storage log.
- 7. Store the inoculated cryovial in -80°C freezer.

#### Section D - Summary of samples to be saved

**Day 1:** Serum (stored in 2 Cryovials)

Plasma (divided into 2 Cryovials)

Buffy coat (1 Cryovial)

Whole blood (divided into 2 cryovials)

CSF (divided into 3 Cryovials)

Crypto isolate (in 2 Microbank vials)

Blood PAXgene tube CSF PAXgene tube

**Day 3:** Plasma (divided into 2 Cryovials)

Buffy coat (1 Cryovial)

**Day 7:** Plasma (divided into 2 Cryovials)

Buffy coat (1 Cryovial)

CSF (divided into 3 Cryovials)

Crypto isolate (in 2 Microbank vials – if growth from day 7 LP)

Day 14: Plasma (divided into 2 Cryovials)

Buffy coat (1 Cryovial)
CSF (divided in 3 Cryovials)

Crypto isolate (in 2 Microbank vial (if growth from Day 14 LP)



## Lab Processing Chart: Harare

### **AMBITION-cm**

High Dose AMBISOME on a Fluconazole Backbone for Cryptococcal Meningitis Induction Therapy in sub-Saharan Africa: A Phase 3 Randomised Controlled Non-inferiority Trial

(As per Protocol version 2.1: 07/11/2017)

Protocol Version: 2.1 07/11/2017 LPC Version: 1.0: 29/06/2018 Revised/Updated:

Version 1.1 10/09/2019: addition of PAXgene specimen collection and storage at D1

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### Table 1: Schedule of Events (as per Study Protocol)

TABLE 6.1. Event Schedule	Responsibility	Screening			٧	Veek	1						Weel	ς 2			Wk 4	Wk 6	Wk 8	Wk 10	Wk 16	TOTAL
Study Day		≤D0	D1	D2	D3	D4	D5	D6	D7	D8	D9	D10	D11	D12	D13	D14						
Consent forms																						
PIS and signed consent	RN	Х	Х																			
Follow up																						
Screening and randomisation	RN	Х	Х																			
Clinical review	RN		Χ	Х	Х	Х	Χ	Х	Χ	Х	Χ	Х	Х	Х	Х	Х						
Outpatient follow-up	RN																Х	Х	Х	Х		
Week 16 telephone	RN																				Х	
Clinical labs																						
HIV testing (if status unknown)*	RN		Х																			1
Pregnancy Test (Urine/Serum) (2)	RN		Х																			1
Full Blood Count	UZ-CTRC		Х						Х							Х	Х					4
CD4 count & Viral load/ Genotyping (if needed)*	IDRL		Х																			1
ALT	UZ-CTRC		Χ						Χ							Х	Х					4
Urea, creatinine and electrolytes	UZ-CTRC		Χ		Χ		Х		Χ			Х		Х		Х	Х					8
Clinical evaluation																						
Chest X-ray (1)	STUDY DOCTOR		Х																			1
CSF																						
Opening pressure	STUDY DOCTOR		Х						Χ							Х						3
Cell count and differential*	MEDMICRO		Х																			1
Protein, glucose*	IDRL		Х																			1
Routine culture *	MEDMICRO		Х																			1
India ink examination* (3)	MEDMICRO	Х																				1
Cryptococcal antigen* (3)	IDRL	Х																				1
Quantitative fungal culture	MEDMICRO		Χ						Χ							Х						3

<sup>\*</sup>Part of routine care. 1. If clinically indicated. 2. For women of childbearing age. 3. India ink or cryptococcal antigen required for inclusion. 4. As part of sub-studies at limited sites.



## Table 2: Specimen Log

Evaluation	Classification	Specimen	Tests	Special Notes
Haematology UZ-CTRC	Monitoring	EDTA	FBC	All patients, when applicable
CD4 IDRL (UZ-CHS)	Routine	EDTA	CD4 count	Should be performed if it has not been done within 3 months or if there is reason to suspect it is required.
Viral Load IDRL (UZ-CHS)	Routine	EDTA	Viral load	Should be performed if it has not been done within 3 months or if there is reason to suspect it is required.
Resistance IDRL (UZ-CHS)	Routine	EDTA	Resistance testing	If patient is on ART, has a detectable viral load, and reports good adherence or their ART history gives reason to suspect resistance, then resistance testing will be performed if possible at the site.
Chemistry UZ-CTRC	Monitoring	Yellow/Red Top Tube	ALT, Creatinine, Electrolytes	All patients, when applicable
Whole Blood IDRL (UZ-CHS)	Study	EDTA	For further analysis and sub-studies	Storage at -80°C until shipment
Plasma & Buffy Coat IDRL (UZ-CHS)	Study	EDTA	For further analysis and sub-studies	Storage at -80°C until shipment
Serum IDRL (UZ-CHS)	Study	Yellow/Red Top Tube	For further analysis and sub-studies	Storage at -80°C until shipment
Chemistry – CSF IDRL (UZ-CHS)	Routine	CSF tube	Protein, Glucose	All patients, when applicable
Blood PAXgene	Study	PAXgene tube	For PAXgene tube sub-study	Storage immediately at 18-25°C, then at -20°C or at -80°C
CSF PAXgene	Study	PAXgene tube	For PAXgene tube sub-study	Storage immediately at 18-25°C, then at -20°C or at -80°C
Microbiology – CSF MEDMICRO	Routine and Study	CSF tube	India Ink, CrAg, Gram stain, Cell count and differentiation, Routine culture (for D1 CSF and if clinically indicated thereafter)  Quantitative cryptococcal culture (for all CSF)	Store isolate and any unused sample at -80°C until shipment



#### **Classification of samples:**

Routine Tube: Part of routine clinical care, tests performed by usual laboratory and not required to be in an ISO accredited lab. Not curated by Ambition.

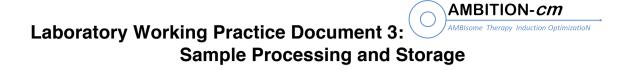
Monitoring Tube: As part of protocol driven monitoring, stored if samples remain and curated by Ambition.

**Study Tube:** For specified sub-studies or storage for future research. Curated by Ambition.

Laboratory	Lab Name	Location	Role
IDRL	Infectious Diseases Research Laboratory	C Floor, Department of Medicine UZ-CHS	<ul> <li>Central hub for study</li> <li>Management of specimen receipt, accessioning, referral to other labs, results reporting activities</li> <li>Stores all study samples</li> <li>Ensures all results are reported</li> <li>Performs screening tests (CrAg) and other routine tests if requested</li> <li>Performs routine tests e.g. CD4, VL, resistance testing, CSF protein and glucose tests</li> </ul>
UZ-CTRC	UZ –Clinical Trials Research Unit	B and C Floor, UZ-CHS	<ul> <li>Performs all monitoring tests</li> <li>Ensure any left-over sample is sent to IDRL for storage</li> <li>Ensures all monitoring results are reported</li> </ul>
MedMicro	Department of Medical Microbiology	B-Floor, UZ-CHS	<ul> <li>Performs Routine CSF cell count &amp; differential, culture and QFC.</li> <li>Ensures all study processing logs are maintained</li> <li>Ensures all routine and study results are reported</li> </ul>

Table 3: Study lay-out

Visit	Specimen	Tests Conducted	Storage	Special Notes
			*Store any unused samples at IDRL*	
	*/	A number of samples on Day 1 are routine tests v	which may be handled by other labora	tories*
		*Aim for a <u>minimum</u> of 5r	ml CSF from each LP*	
Day 1	CSF (5ml) x 3	Routine/Study Tube 1: Perform protein and	Vortex and divide remaining CSF	
		glucose,	into 3x2ml cryovials (min. 200µl	
		(IDRL)	each) and store at -80°C (IDRL)	
		Routine/Study Tube 2: Perform cell count and		Store isolate once grown in 2
		differential, CrAg, India Ink, Gram stain,		Microbank vials (MEDMICRO) and
		routine culture and quantitative cryptococcal		keep at -80°C (IDRL)
		culture in duplicates (MEDMICRO)		
		Routine/Study Tube 3: Sample for storage	General CSF storage:	Store at -80°C (IDRL)
		(IDRL)	Unspun sample (IDRL)	
	CSF PAXgene	Immediately after adding CSF, gently invert	Immediately after collecting	When storing in the freezer the
	tube	the PAXgene tube 8-10 times.	specimens, store the PAXgene tube	preference is to store on a wire rack:
			at 18-25°C for a minimum of 2 hours	do not freeze tubes upright in a
		Samples do not require any processing.	and a maximum of 72 hours.	Styrofoam tray as this may cause the
			The PAXgene tubes can then be	tubes to crack.
			stored at -20°C or below.	If you cannot store on a wire rack
			If you would prefer to store at -80°C	then keep the tubes in a freezer bag
			then it will be necessary to first	and store them in a safe, secure
			store at -20°C for at least 24 hours	position in the freezer.
			before transferring to the deep	
			freeze.	



EDTA (4ml)	Optional Routine Tube 1 and 2: CD4 and/or VL/Resistance Test (one tube for each test) (IDRL)		
	Monitoring Tube 1: FBC (UZ-CTRC)	After FBC, spin at 800*g for 15min and store remaining plasma as below	Store at -80C (IDRL)
	Study Tube 1: Whole blood (IDRL)	Invert 8-10 times and pipette into 2x2ml cryovials (min. 900µl each) and store at -80°C	
	Study Tube 2: Spin tube at 800 <sup>x</sup> g for 15min and remove plasma (IDRL)	Divide plasma into 2x2ml cryovials.  Remove buffy coat and put into 1 x 2ml cryovial	Store at -80°C
Yellow/Red Top Tube (4ml) x 2	Monitoring Tube 1: ALT, urea, creatinine, and electrolytes (UZ-CTRC)	Spin and store remaining serum as below.	If being performed in research laboratory.
	Study Tube 1: Spin tube at 800*g for 15min and remove serum (IDRL)	Divide serum into 2x2ml cryovials and store at -80°C	
Blood PAXgene tube	Immediately after adding the blood, gently invert the PAXgene tube 8-10 times.	Immediately after collecting specimens, store the PAXgene tube at 18-25°C for a minimum of 2 hours	When storing in the freezer the preference is to store on a wire rack: do not freeze tubes upright in a
	Samples do not require any processing.	and a maximum of 72 hours.  The PAXgene tubes can then be stored at -20°C or below.	Styrofoam tray as this may cause the tubes to crack.  If you cannot store on a wire rack
		If you would prefer to store at -80°C then it will be necessary to first store at -20°C for at least 24 hours	then keep the tubes in a freezer bag and store them in a safe, secure position in the freezer.



			before transferring to the deep freeze.	
Day 3	Yellow/Red Top Tube (4ml)	Monitoring Tube 1: Urea, creatinine and electrolytes (UZ-CTRC)	Spin and store remaining serum.	Storage at IDRL
	EDTA (4ml)	Study Tube 1: Spin tube at 800 <sup>x</sup> g for 15min and remove plasma (IDRL)	Divide plasma into 2x2ml cryovials. Remove buffy coat and put into 1 x 2ml cryovial	Store at -80°C
Day 5	Yellow/Red Top Tube (4ml)	Monitoring Tube 1: Urea, creatinine and electrolytes (UZ-CTRC)	Spin and store remaining serum.	Storage at IDRL
Day 7	CSF (5ml) x 2	Study Tube 1: Perform quantitative cryptococcal culture in duplicates (MEDMICRO) Study Tube 2: Sample for storage (IDRL)	Vortex and divide remaining CSF into 3x2ml cryovials (min. 200µl each) and store at -80°C (IDRL)  General CSF storage: Unspun sample	Store isolate once grown in 2 Microbank vials (MEDMICRO) and keep at -80°C (IDRL) Store at -80°C
	EDTA (4ml) x 2	Monitoring Tube 1: FBC (UZ-CTRC)	After FBC, spin at 800 <sup>x</sup> g for 15min and store remaining plasma as below	Storage at IDRL
		Study tube 1: Spin tube at 3500rpm/ 800 <sup>x</sup> g for 15min and remove plasma (IDRL)	Divide plasma into 2x2ml cryovials. Remove buffy coat and put into 1 x 2ml cryovial	Store at -80°C
	Yellow/Red Top Tube (4ml)	Monitoring Tube 1: ALT, urea, creatinine, and electrolytes (UZ-CTRC)	Spin and store remaining serum.	Storage at IDRL
Day 10	Yellow/Red Top Tube (4ml)	Urea, creatinine and electrolytes (UZ-CTRC)	Spin and store remaining serum.	Storage at IDRL



Day 12	Yellow/Red Top Tube (4ml)	Monitoring Tube 1: Urea, creatinine and electrolytes (UZ-CTRC)	Spin and store remaining serum.	Storage at IDRL
Day 14	CSF (5ml) x 2	Study Tube 1: Perform quantitative cryptococcal culture in duplicates (MEDMICRO)	Vortex and divide remaining CSF into 3x2ml cryovials (min. 200μl each) and store at -80°C	Store isolate once grown in 2 Microbank vials (MEDMICRO) and keep at -80°C (IDRL)
		Study Tube 2: Sample for storage (IDRL)	General CSF storage: Unspun sample	Store at -80°C
	EDTA (4ml) x 2	Monitoring Tube 1: FBC (UZ-CTRC)	After FBC, spin at 800 <sup>x</sup> g for 15min and store remaining plasma as below	Storage at IDRL
		Study Tube 1: Spin tube at 800 <sup>x</sup> g for 15min and remove plasma (IDRL)	Divide plasma into 2x2ml cryovials. Remove buffy coat and put into 1 x 2ml cryovial	Store at -80°C
	Yellow/Red Top Tube (4ml)	Monitoring Tube 1: ALT, urea, creatinine, and electrolytes (UZ-CTRC)	Spin and store remaining serum.	Storage at IDRL
Day 28	EDTA (4ml)	Monitoring Tube 1: FBC (UZ-CTRC)	After FBC, spin at 800 <sup>x</sup> g for 15min and store remaining plasma at -80°C	Storage at IDRL
	Yellow/Red Top Tube (4ml)	Monitoring Tube 1: ALT, urea, creatinine, and electrolytes (UZ-CTRC)	Spin and store remaining serum at - 80°C.	Storage at IDRL

## Table 4: Shipments

Specimen	Destination	Shipment Date	Special Notes
CSF (neat)			
Crypto Isolates			
Plasma			
Serum			
Buffy Coat			
Whole Blood			
CSF and Blood PAXgene tubes			

#### **Training**

Each staff member receives or has direct access to applicable Working Practice Documents (WPDs).

Each staff member reviews the applicable WPDs once a year.

All WPD training is documented and tracked in the training log located in the Investigator Site File (ISF)

New staff is trained on applicable WPDs within 30 days of employment and all WPDs within 90 days of employment.

Staff members whose duties fall within this WPD scope are retrained within 14 days of the approval of each WPD revision.

Staff signatures: (signing below indicates that you have read this SOP and understand the material contained in it)

Date	Name (Please print)	Signature