WERF EPHect Standard Operating Procedures: Collection, processing, and storage of blood specimen

	Standard collection	Required minimum
Specimen	Timing: before pre-med.	 Record whether sample is collected before or
collection		after pre-med/after anaesthesia.
	 Fasting ≥ 10 hours. 	 Record the time of fasting.
	 Label collection tubes with 2D barcode and 	Label collection tubes with human readable
	human readable labels.	labels.
	8-10 gentle inversions of the tube then place	8-10 gentle inversions of the tube then place
	upright in a rack.	upright in a rack.
Specimen	Temp: Within 1 hr → keep at room temperature.	• Temp: Within 2 hr→ keep at room temperature.
processing	1hr- max. 4hr→ keep on wet ice/in	2hr- max.4hr→ keep on wet ice/in
	refrigerator.	refrigerator
	• Prioritize <i>EDTA</i> then <i>SST</i> collection then others.	No priority given.
	Centrifuge: 10 min.* 2500g * 4°C	Centrifuge: 10 min.* 2500g * RT.
Storage	Within max. 1 hour at LN₂ freezer	Within max. 4 hours at -80°C freezer
	<i>Plasma/serum</i> \rightarrow Gently aspirate the supernatant.	<i>Plasma/serum</i> \rightarrow Gently aspirate the supernatant.
	 Use screw-top gasket vials. 	Use screw-top gasket vials.
	 Aliquot on wet ice in upright position. 	Aliquot at room temp in upright position
	• Aliquot volume: 100-500μl.	• Aliquot volume: 100-500μl.
	WBCs → Gently aspirate the buffy coat.	WBCs → Gently aspirate the buffy coat.
	Follow the same steps as for the supernatant.	Follow the same steps as for the supernatant.
	RBCs → Gently mix RBCs then aspirate	RBCs → Gently mix RBCs then aspirate
	• Follow aliquoting steps as for the supernatant.	• Follow aliquoting steps as for the supernatant.
Labelling	Tonow unquoting steps as for the supernature.	Tollow disquoting steps as for the supermutant.
	Centre:	Centre:
	Participant ID: Aliquot ID:	Participant ID:
	Sampling date:	Aliquot ID:
	Sample type:	Sampling date: Sample type:
		- F - W -
	11.0.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	
Freezer	Store sample aliquots in separate freezers.	
check	Alarm system setup on all freezers.	
<u> </u>	Biweekly human check.	Biweekly human check.
Sample	Record any freeze-thaw cycles.	
Long-term	• Track change in sample location or consumption.	
log	Track new samples from original aliquots.	
Check list	Time of last eating/drinking except plain water.	
data	Date/time of sample collection. Start time of sample responsible.	
recording	Start time of sample processing.	
	Number/volume/type of aliquots. Data/time aliquot starage.	
	Date/time aliquot storage.	
	Record variations or deviations of the sample char	racter.
	Log of any freeze-thaw of aliquots. Diversity log of freezer shock.	
	Biweekly log of freezer check.	

WERF EPHect Standard Operating Procedures: Collection, processing, and storage of urine specimen

	Standard collection	Required minimum
Specimen	A clean catch mid-stream first morning void	A clean catch spot urine sample from the
collection	urine when they get out of bed in a sterile	patient in the clinic or at the patient's home in a
	container.	sterile container.
	 Put in a refrigerator and deliver in an ice pack 	Put in refigerator and deliver in an ice pack, if
	to the clinic (4°C).	collected in clinic directly put on wet ice (4°C).
	Record the time of fasting	Record the time of fasting
	Record time of first morning void and whether	Record time of spot urine collection.
	the participant urinated during the night.	
	Label collection tubes with 2D barcode and	Label collection tubes with human readable
	human readable labels.	labels.
Specimen	• Within 2 hours.	• Within a maximum of 48 hours.
processing	Discard the sample if there is blood in it.	Discard the sample if there is blood in it.
	• Mix the sample.	• Mix the sample.
	Perform dipstick urinalysis for specific gravity.	Perform dipstick urinalysis for specific gravity.
	Centrifuge at 1000-3000g at 4°C for 5 minutes.	Centrifuge at 1000-3000g at 4°C for 5 minutes.
Storage	Within max. 2 hour at LN ₂ freezer	Within max. 48 hours at -80°C freezer
	 Unprocessed sample → store in LN₂ freezer. 	• Unprocessed sample → store at -80°C freezer.
	 Processed sample → place the sample on wet 	 Processed sample → place the sample on wet
	ice and aspirate the supernatant into required	ice and aspirate the supernatant into required
Labelling	number of aliquots \rightarrow store in LN ₂ freezer.	number of aliquots → store at -80°C freezer.
Labelling	Centre:	Control
	Participant ID:	Centre: Participant ID:
	Aliquot ID: Sampling date:	Aliquot ID:
	Sample type:	Sampling date:
		Sample type:
Freezer	Store sample aliquots in separate freezers.	
check	 Alarm system setup on all freezers. 	
	Biweekly human check.	Biweekly human check.
Sample	Record any freeze-thaw cycles.	
Long-term	 Track change in sample location or consumption. 	
log	 Track new samples from original aliquots. 	
Charletter		
Check list data	• Time of last eating/drinking except plain water.	
recording	Date/time of sample collection. Start time of sample processing.	
recording	Start time of sample processing. Passard the results of directick for specific gravity.	
	Record the results of dipstick for specific gravity. Number (volume / type of aliquets)	
	Number/volume/type of aliquots. Data/time aliquot storage.	
	Date/time aliquot storage. Passard variations or deviations of the sample shall.	proctor
	Record variations or deviations of the sample characters of any fragraphs with a log of any fragraphs.	diacter.
	Log of any freeze-thaw of aliquots. Piyookly log of freezer shock	
	Biweekly log of freezer check.	

WERF EPHect Standard Operating Procedures: Collection, processing, and storage of saliva specimen

	Standard collection	Required minimum
Specimen	• Fasting ≥6 hours.	Brushing tooth/eating meal >1 hours.
collection		Alcohol drink >12 hours.
		 Citric/sugary food >20 minutes.
	Rinse mouth.	Rinse mouth.
	 Drooling NOT spitting. 	Spitting/drooling.
	 No salivary stimulants. 	No salivary stimulants.
	 2ml Saliva (avoid bubbles). 	• 1ml Saliva (avoid bubbles).
	 Label collection tubes with 2D barcode and 	Label collection tubes with human readable
	human readable labels.	labels.
Specimen	 Temp: Within 1 hr→ keep at RT. 	 Temp: Within 1 hr→ keep at room temperature.
processing	>1hr→ keep on wet ice/refrigerator.	>1hr→ keep on wet ice/refrigerator.
	Centrifuge: 2 min.* 1000g * 4°C	Centrifuge: 2 min.* 1000g * 4°C
Storage	Within max. 4 hour in LN₂ freezer	Stored at -80°C freezer.
	Unprocessed sample \rightarrow store in LN ₂ freezer.	Unprocessed sample → store at -80°C freezer.
	Gently aspirate the supernatant	Gently aspirate the supernatant.
	 Use screw-top gasket. 	Use screw-top gasket.
	 Aliquoting on wet ice in upright position. 	 Aliquot at room temperature in upright position.
	Saliva for RNA extraction:	Saliva for RNA extraction:
	 Use RNA-stabilised aliquots and proceed as 	Use RNAstabilised aliquots and proceed as
	described in the product manual.	described in the product manual.
		Record time from sample collection to storage.
Labelling	Centre:	Control
	Participant ID:	Centre: Participant ID:
	Aliquot ID:	Aliquot ID:
	Sampling date: Sample type:	Sampling date:
		Sample type:
Freezer	Split samples on two separate freezers.	
check	 Alarm system setup on all freezers. 	
	Biweekly human check.	Biweekly human check.
Sample	Record any freeze-thaw cycles.	
Long-term	 Track change in sample location or consumpt 	ion.
log	 Track new samples from original aliquots. 	
Check list	Time of last eating/drinking except plain water	er.
data	 Record last tooth brushing/citrus or sugary for 	
recording	Date/time of sample collection.	
	• Start time of sample processing.	
	 Number/volume/type of aliquots. 	
	 Date/time aliquot storage. 	
	Record variations or deviations of the sample character.	
	Log of any freeze-thaw of aliquots.	
	Biweekly log of freezer check.	

WERF EPHect Standard Operating Procedures: Collection, processing, and storage of endometrial fluid specimen

	Standard collection	Required minimum
Specimen collection	Timing: before pre-med.	 Record whether sample is collected before or after pre-med/anaesthesia.
	Use embryo catheter/Pipelle.	Use embryo catheter/Pipelle.
	Label collection tubes with 2D barcode	Label collection tubes with human readable
	and human readable labels.	labels.
Specimen	Centrifuge at 4°C for your Lab adapted	Centrifuge at room temperature for your
processing	SOP.	Lab adapted SOP.
Storage	Store at LN₂ freezer	Store at -80°C freezer
	Unprocessed sample \rightarrow store in LN ₂ freezer.	Unprocessed sample → store at -80°C freezer.
	The supernatant → gently aspirate:	The supernatant → gently aspirate:
	Use screw-top gasket	Use screw-top gasket
	Aliquot on wet ice and in upright position	 Aliquot at room temperature and in upright position
	The pellet→ use screw-top Gasket	The pellet→ use screw-top Gasket
Freezer check	Centre: Participant ID: Aliquot ID: Sampling date: Sample type: ###################################	Centre: Participant ID: Aliquot ID: Sampling date: Sample type: • Biweekly human check.
Sample	Record any freeze-thaw cycles.	Biweekiy naman eneek.
Long-term	Track change in sample location or consum	nption.
log	 Track new samples from original aliquots. 	
Check list	Time of last eating/drinking except plain w	ater.
data	Date/time of sample collection.	
recording	 Start time of sample processing. 	
	Number/volume/type of aliquots.	
	Date/time aliquot storage.	
	Record variations or deviations of the sample character.	
	Log of any freeze-thaw of aliquots.	
	Biweekly log of freezer check.	

WERF EPHect Standard Operating Procedures: Collection, processing, and storage of peritoneal fluid specimen

	Standard collection	Required minimum	
Specimen	Timing: after anaesthesia.		
collection	Sample collection is performed by 20ml suction devices /laparoscopic needle.		
	 If no PF→ peritoneal lavage with 20ml normal saline (use the pellet, discard the supernatant). 		
	 Labelling → Standard: Human readable and 2D barcode labels 		
	→ Minimum: Human readable label		
Specimen	 Transfer to the lab within 30 minutes. 	Transfer to the lab as soon as possible.	
processing	 Centrifuge at 4°C. 	Centrifuge at room temperature.	
Storage	Store at LN ₂ freezer	Store at -80°C freezer	
	The supernatant \rightarrow gently aspirate:	The supernatant → gently aspirate:	
	 Use screw-top gasket 	 Use screw-top gasket 	
	Aliquot on wet ice and in upright position.	 Aliquot at room temperature and in upright position 	
	Discard the supernatant if peritoneal lavage!	Discard the supernatant if peritoneal lavage!	
	The pellet→ use screw-top gasket	The pellet→ use screw-top gasket	
Labelling			
	Centre: Participant ID: Aliquot ID: Sampling date: Sample type:	Centre: Participant ID: Aliquot ID: Sampling date: Sample type:	
Freezer	Store aliquots in separate freezers.		
check	 Alarm system setup on all freezers. 		
	Biweekly human check.	Biweekly human check.	
Sample	Record any freeze-thaw cycles.		
Long-term	Track change in sample location or consumption	ption.	
log	Track new samples from original aliquots.		
Check list	Time of last eating/drinking except plain water.		
data 	1	Date/time of sample collection.	
recording	 Start time of sample processing. 		
	Number/volume/type of aliquots.		
		 Date/time aliquot storage. 	
	 Record variations or deviations of the sample character. 		
	Log of any freeze-thaw of aliquots.		
	Biweekly log of freezer check.		

WERF EPHect Standard Operation Procedures: Collection, processing, and storage of menstrual effluent (blood) specimen

	Standard collection	Required minimum
Specimen	Collect menstrual effluent sample with a dis-	aphragm or mixing cannula.
collection	 Labelling → Standard: Human readable and 	l 2D barcode labels
	→ Minimum: Human readable label	
Specimen	Within 1 hour on wet ice.	Within 1 hour at room temperature
processing	 For plasma → use EDTA tubes on wet ice. 	• For plasma → use EDTA tubes on wet ice.
	 For cells → use heparin tubes on wet ice. 	 For cells → use heparin tubes on wet ice.
	Centrifuge: 10 min.* 2500g * 4°C	Centrifuge: 10 min.* 2500g * 4°C
Storage	Within max. 1 hour	Within max. 1 hour
	Unprocessed sample \rightarrow store in LN ₂ freezer.	Unprocessed sample \rightarrow store at -80°C freezer.
	For Plasma/serum → gently aspirate the	For Plasma/serum → gently aspirate the
	supernatant	supernatant
	Use screw-top gasket	Use screw-top gasket
	Aliquot on wet ice and in upright position	Aliquot on wet ice and in upright position
	For cells→ collect at the interphase for	For cells→ collect at the interphase for culture
	culture or flow cytometry.	or flow cytometry.
Labelling		
	Centre: Participant ID:	Centre:
	Aliquot ID:	Participant ID:
	Sampling date:	Aliquot ID: Sampling date:
	Sample type:	Sample type:
Freezer	Store aliquots in separate freezers.	
check	 Alarm system setup on all freezers. 	
	Biweekly human check.	Biweekly human check.
Sample	Record any freeze-thaw cycles.	
Long-term	Track change in sample location or consum	ption.
log	Track new samples from original aliquots.	
Check list	Time of last eating/drinking except plain was	ater.
data	 Date/time of sample collection. 	
recording	 Start time of sample processing. 	
	Number/volume/type of aliquots.	
	Date/time aliquot storage.	
	Record variations or deviations of the sample character.	
	 Log of any freeze-thaw of aliquots. 	
	Biweekly log of freezer check.	