

A Phase 2 Randomized Double-Blind Placebo-Controlled Trial to Evaluate the Efficacy and Safety of BHV-4157 in Patients with Mild to Moderate Alzheimer's Disease (T2 PROTECT AD)

&

The National Centralized Repository for Alzheimer's Disease and Related Dementias (NCRAD)

Biofluids Collection Training Slides

Training Overview

- GUIDs
- Specimen Collection Schedule
- Kit Request Module
- Specimen Labels
- Handling/Processing Study Specimens
- Sample Shipping
- NCRAD Website
- Questions

Contact Information

Questions?

Please contact NCRAD Coordinators at:

Phone: 317-278-1228 or 1-800-526-2839

• E-mail: <u>mipetkov@iu.edu</u> or <u>alzstudy@iu.edu</u>

Website: www.ncrad.org



Globally Unique Identifier (GUID)

- The GUID is a subject ID that allows researchers to share data specific to a study participant, without exposing personally identifiable information
- A GUID is made up of random alpha-numeric characters and does not include any PHI in the identifier

Globally Unique Identifier (GUID)

- 1. Create an account: https://bricsguid.nia.nih.gov/portal/jsp/login.jsp
- 2. Once you have an account, go to the GUID Tool Create GUID
- To open the 'Launch GUID Tool' you will need to have Java installed on your device
- 4. When the GUID Tool is open, you will need all of the following information
 - Complete legal given (first)name of participant at birth
 - The participant's middle name, if applicable
 - Complete legal family (last) name of subject at birth
 - Day of birth
 - Month of birth
 - Year of birth
 - Name of city/municipality in which subject was born
 - Country of birth

Specimen Collection Schedule

Visit	Collection Container	Specimen Type	Container Received
Screening	15 ml Sterile Conical tube(s)	CSF	2.0 ml Cryovials
Baseline	6 ml Serum (Red-Top) Blood Collection Tube	Serum	2.0 ml Cryovials
	6 ml EDTA (Lavender-Top) Blood Collection Tube	Plasma-PK	2.0 ml Cryovials
	10 ml EDTA (Lavender-Top) Blood Collection Tube	Plasma	2.0 ml Cryovials
		Buffy Coat	2.0 ml Cryovials
Weeks 4, 8, & 12	6 ml EDTA (Lavender-Top)Blood Collection Tube	Plasma-PK	2.0 ml Cryovials
Week 24	6 ml Serum (Red-Top) Blood Collection Tube	Serum	2.0 ml Cryovials
	6 ml EDTA (Lavender-Top)Blood Collection Tube	Plasma-PK	2.0 ml Cryovials
	Sterile Containers	CSF	2.0ml Cryovials

Specimen Collection Schedule, cont'd

Visit	Collection Container	Specimen Type	Container Received
Week 48	6 ml Serum (Red-Top) Blood Collection Tube	Serum	2.0 ml Cryovials
	6 ml EDTA (Lavender-Top)Blood Collection Tube	Plasma-PK	2.0 ml Cryovials
	10 ml EDTA (Lavender-Top) Blood Collection Tube	Plasma	2.0 ml Cryovials
		Buffy Coat	2.0 ml Cryovials
	15 ml Sterile Conical Tubes	CSF	2.0 ml Cryovials

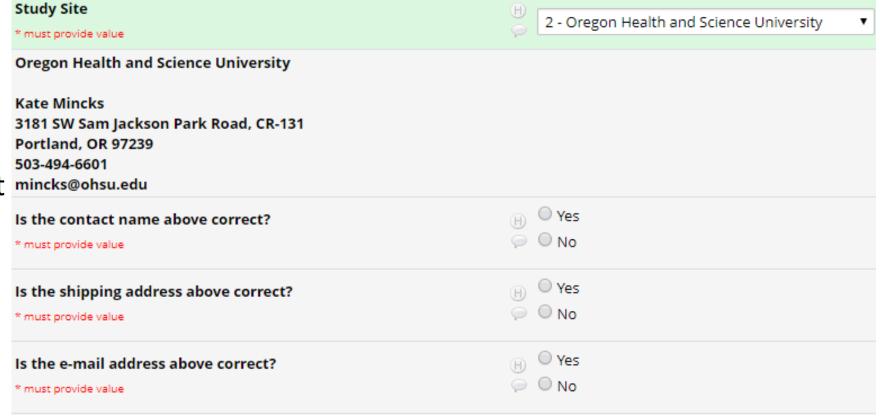
http://kits.iu.edu/t2



- An initial stock of kits will be delivered prior to the designated site specific start date.
- Kits and individual supplies available to order:
 - Blood Collection Kits:
 - Baseline, Week 4, Week 8, Week 12, Week 24, Week 48
 - CSF Kit
 - LP 22 Gauge Kit
 - LP 24 Gauge Kit
 - Blood Supplemental Kit
 - CSF Supplemental Kit
 - Frozen Shipping Kit
 - Individual Supplies

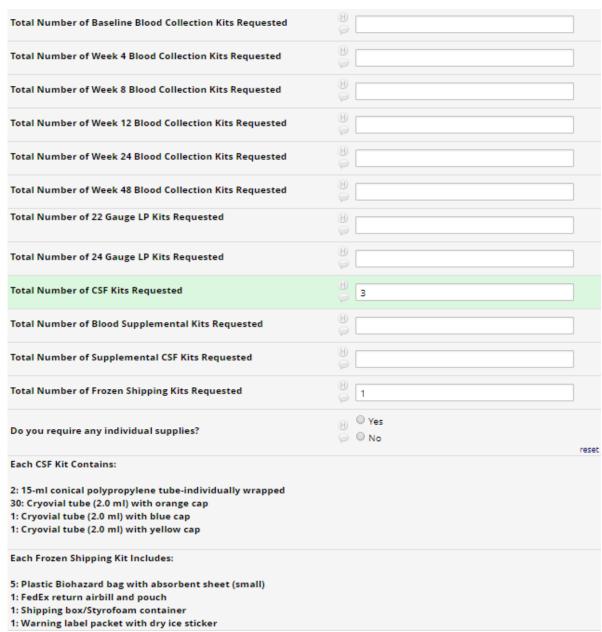
- 1. Choose your site from the drop down list.
- 2. The coordinator
 name and contact
 information will
 populate.

 Portland, OR 97239
 503-494-6601
 mincks@ohsu.edu
 sthe contact nam
 *must provide value
- 3. Verify that this information is correct.



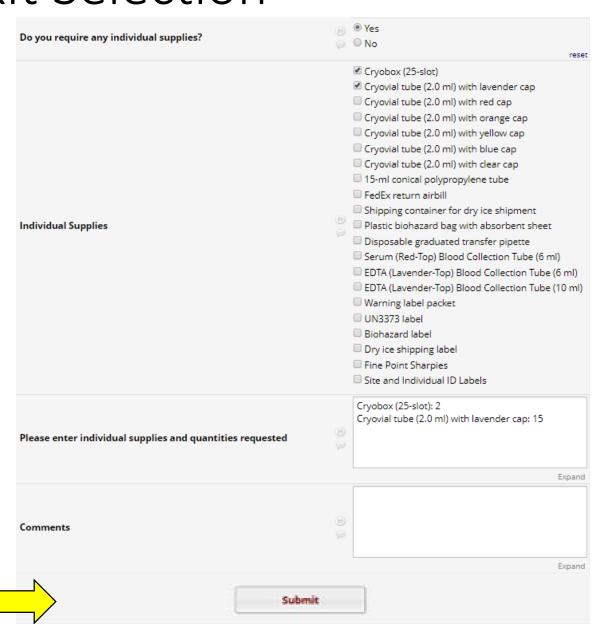
Kit Request Module: Kit Selection

- Indicate the quantity needed of each kit.
- Once selected, kit components of the chosen kit will appear at the bottom of the screen (Pictured)
- **Note: You can order more than one type of kit in a single kit request**



Kit Request Module: Kit Selection

- For individual supplies, select the ones needed and specify quantities below.
- Click "Submit" to turn in your request.
- The IU staff will notify you that your request has been received and address any issues.



• Each site is responsible for ordering kits and maintaining supplies on site for their scheduled participants.

 To order kits, sites will use the Indiana University online kit ordering module: http://www.kits.iu.edu/t2

Allow around 2 weeks for your order to be processed and delivered.

Specimen Labels



Specimen Labels

- Label type summary:
 - Kit Number Labels
 - Site and ADCS ID Labels
 - Collection and Aliquot Tube Labels
 - Differ by specimen type

All labels are provided in the kits

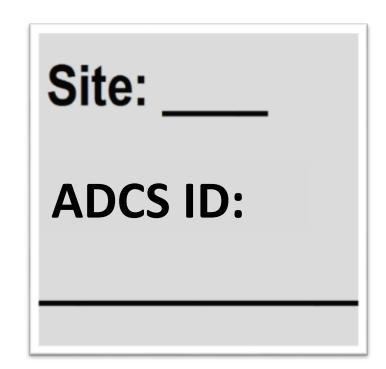
Specimen Labels: Kit Number Labels

- Used to track patient samples and provide quality assurance
- Will be placed on:
 - Biological Sample and Shipment Notification Form
 - CSF Sample and Shipment Notification Form
 - CSF samples will have a different kit number than blood samples
 - Outside of cryobox(es) that houses aliquot tubes during storage and shipment

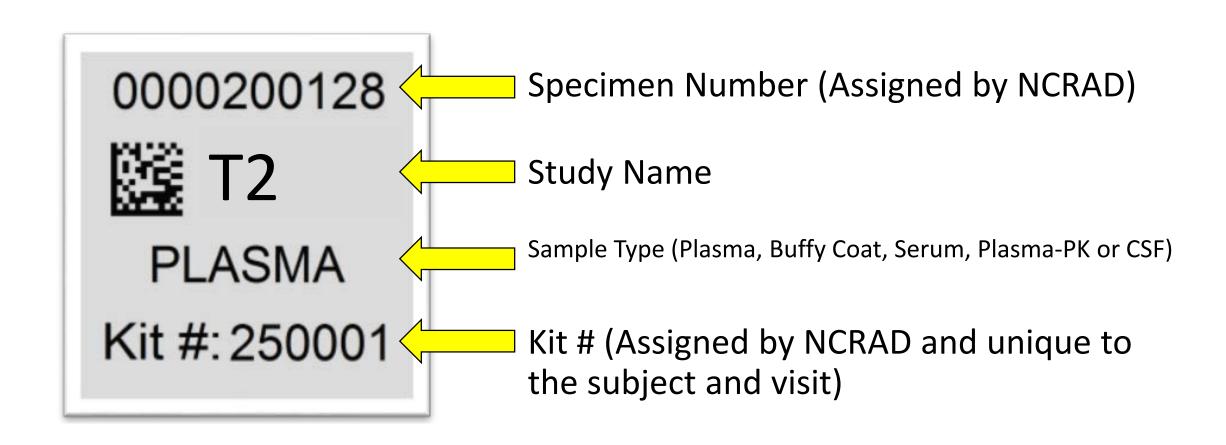


Specimen Labels: Site and ADCS ID Labels

- Subjects will be identified by their site ID and ADCS ID
- Sites will be responsible for handwriting the IDs on the provided labels
 - Fill in labels prior to adhering to tubes
 - Must use fine-point marker
 - Each site will receive a 4-pack of markers in initial kit supply
- Labels will be placed on all collection tubes:
 - Serum Red Top Tube (6 ml)
 - EDTA Lavender Top Tube (6 ml)
 - EDTA Lavender Top Tube (10 ml)

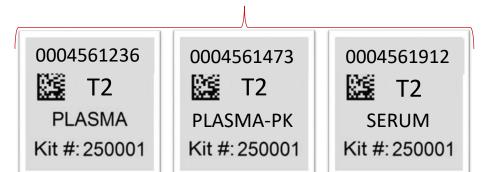


Specimen Labels: Collection & Aliquot Tube Labels



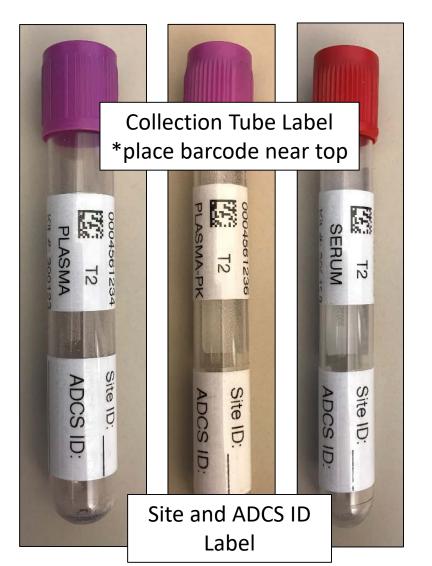
Specimen Labels: Blood Collection Tubes

- All collection tubes will have two labels:
 - Aliquot and Collection Tube Label
 - Site and ADCS ID Label
 Label 1:

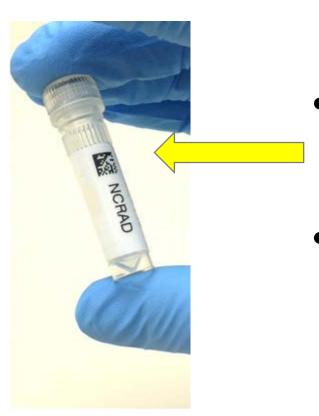


Label 2:

Site:	
ADCS ID:	



Specimen Labels: Aliquot Tube Labels (Plasma, Buffy Coat, Serum, Plasma-PK, and CSF)

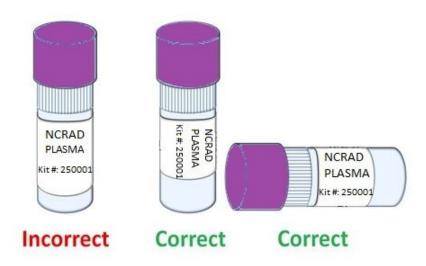


 Use only the Collection and Aliquot Tube label

Place barcode near the cap

Specimen Labels: Labeling Biologic Samples

- Label all collection and aliquot tubes <u>before</u> cooling, collecting, processing or freezing samples.
- Label only <u>1</u> subject's tubes at a time to avoid mix-ups.
- Wrap the label around the tube <u>horizontally</u>.
 Label position is important for <u>all</u> tube types.
- Make sure the label is completely adhered by rolling between your fingers.



Handling/Processing Study Specimens



Site Required Equipment

- Blood Collection/Safety
 Equipment:
- Personal Protective Equipment (PPE)
 - Lab Coat, Safety Glasses
- 2. Tourniquet
- Alcohol Prep Pad
- Gauze Pad
- 5. Butterfly Needles
- 6. Bandage
- 7. Sharps Bin and Lid

- Processing/Storage Equipment:
- Centrifuge capable of ≥2000 rcf with refrigeration to 4^oC
- 2. -80°C Freezer
- 3. Wet Ice Bucket

Blood Collection & Processing: Sample Collection Tube

Tube Type	Number of Tubes Drawn (per visit)	Tube Image
Serum (Red-Top) Tube (6 ml)	1	SE STATE OF THE PROPERTY OF TH
EDTA (Lavender-Top) Tube (6 ml)	1	September of the control of the cont
EDTA (Lavender-Top) Tube (10 ml)	1	13-66643 IN-(C2) IN-(C

Blood Collection & Processing: Draw Order

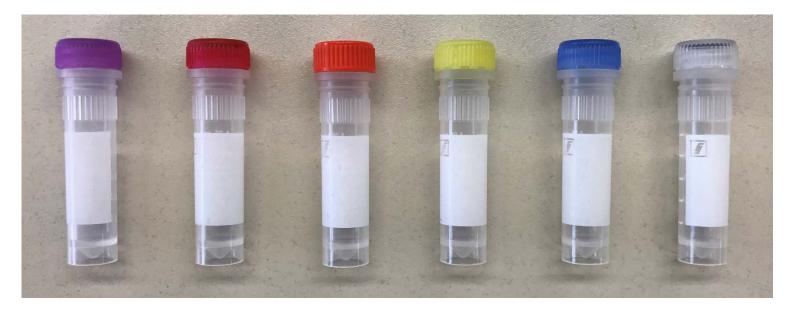
Important Note

In order to ensure the highest quality samples are collected, processed, and stored, it is essential to follow the specific collection, processing, and shipment procedures detailed in the following pages. Please read the following instructions first before collecting any specimens. Have all your supplies and equipment out and prepared prior to drawing blood. Please note that the centrifuge may take 30 minutes to cool, so please plan accordingly. Draw blood in the following order:

- 1. Plain Red Top Serum Blood Collection Tube (6 ml)
- 2. EDTA (Lavender-Top) Blood Collection Tube (6 ml) for PK Analysis
- 3. EDTA (Lavender-Top) Blood Collection Tube (10 ml) for Buffy Coat and Plasma

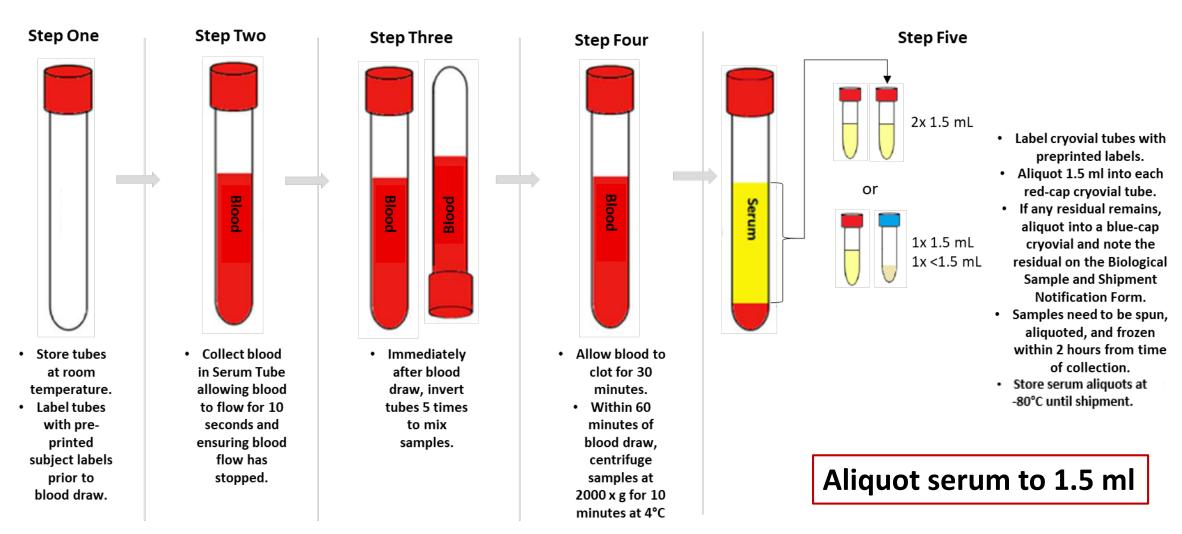
Blood Collection & Processing: Aliquot Cryovials & Cap Colors

Cap Color	Sample Type	
Lavender Cap	Plasma	
Red Cap	Serum	
Orange Cap	CSF	
Yellow Cap	CSF to Local Lab	
Blue Cap	Residual	
Clear Cap	Buffy Coat	

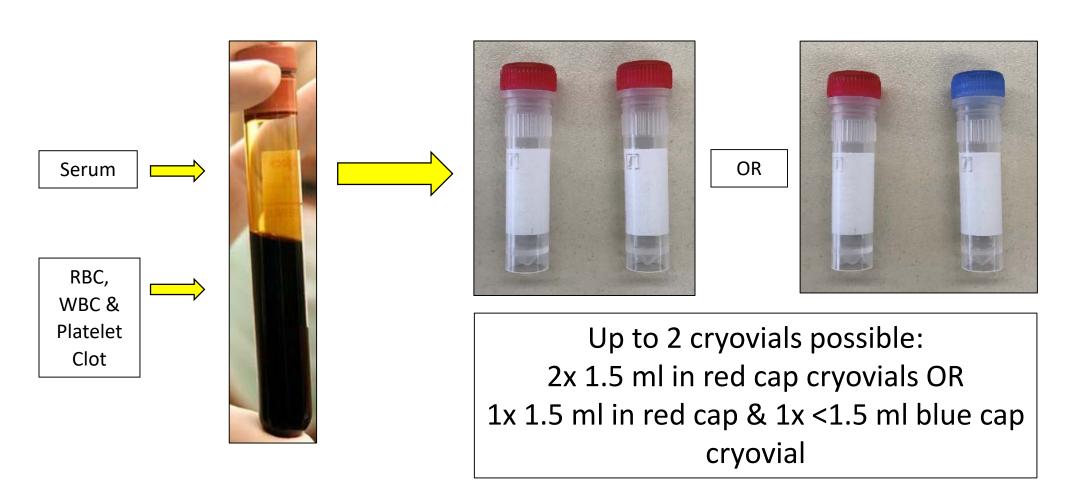


Serum Preparation (6ml Red Top Tube)

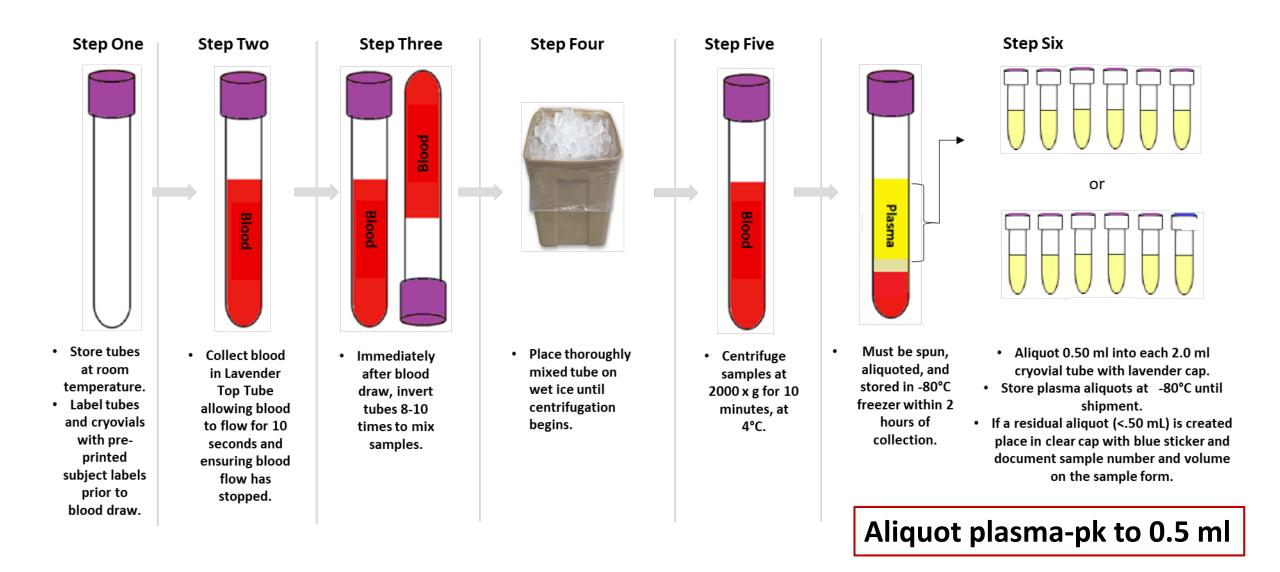




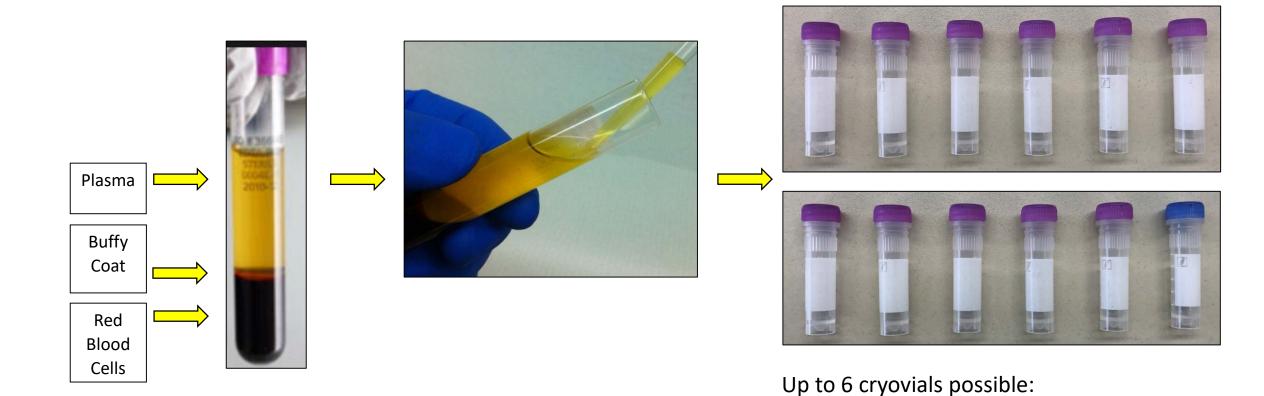
Serum Tube - Serum Collection



Plasma-PK (6ml Lavender Top Tube)



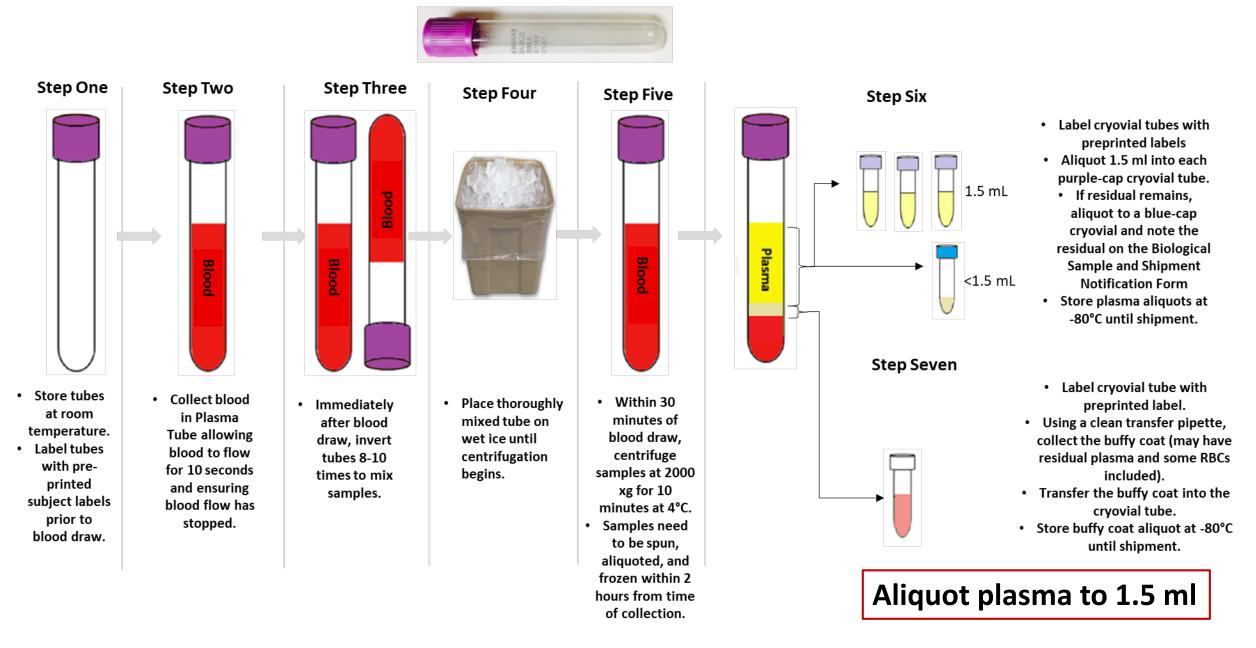
EDTA Tube (6 ml) - Plasma PK Collection



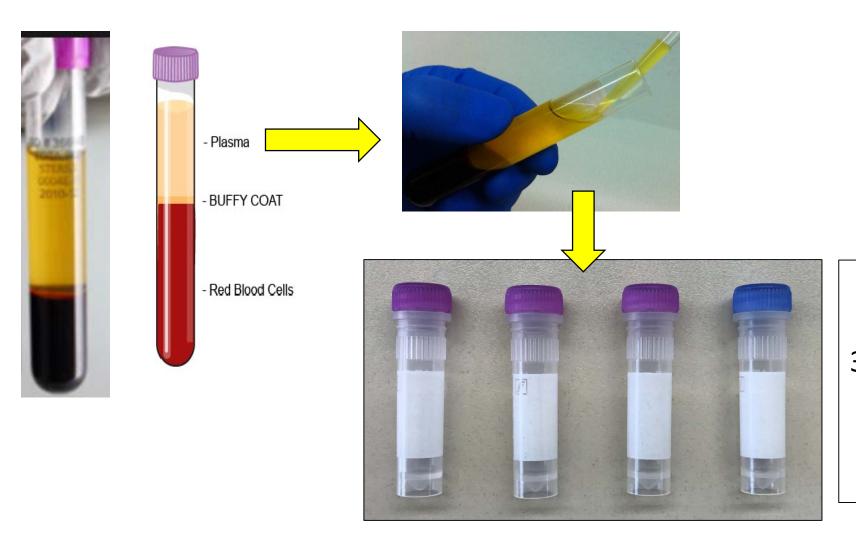
6x 0.5 ml Lavender Top OR

5x 0.5 ml Lavender Top and 1x < 0.5 ml Blue Top

Plasma and Buffy Coat Preparation (10ml Lavender-Top Tube)

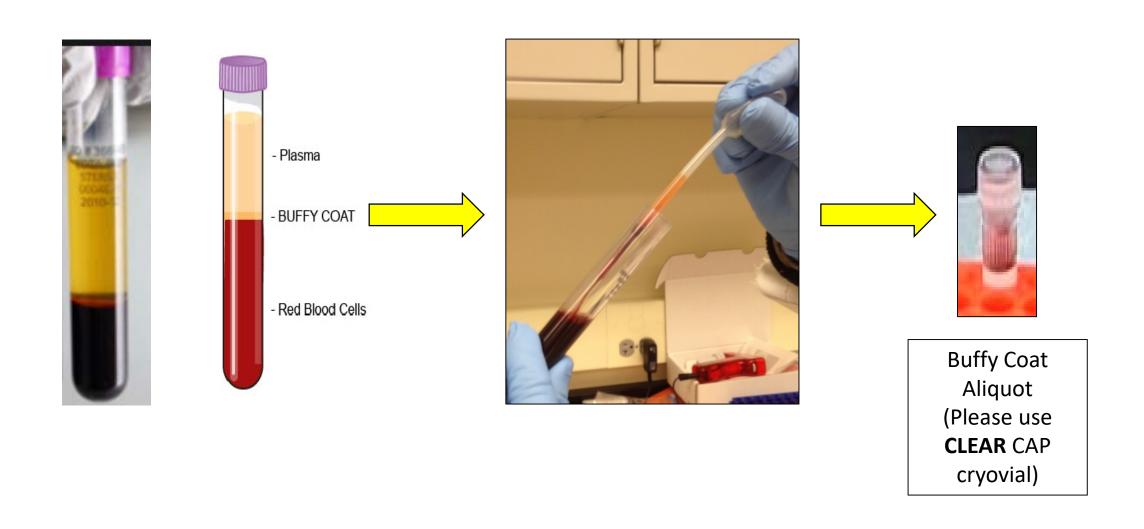


EDTA Tube (10 ml) – Plasma Collection



Up to 4 cryovials
possible:
3x 1.5 ml in lavender cap
cryovials
1x <1.5 ml blue cap
cryovial

EDTA Tube (10 ml) – Buffy Coat Collection



CSF Collection and Processing

Important Note

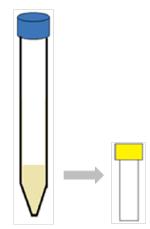
Fasting prior to the lumbar puncture is at the discretion of the site's PI. However, efforts should be made to keep the conditions under which an LP is performed (fasting, time of day, etc.) consistent for each LP performed on a participant.



CSF Preparation

Step One Label tubes with preprinted subject labels prior to collection. Pre-chill all cryovials on wet ice.

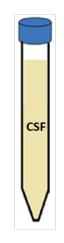
Step Two



- Collect initial

 1-2 ml (if
 bloody, collect
 CSF until
 cleared of
 blood) into 15
 ml conical
 tube.
- If not bloody, transfer 1-2 ml into the yellow-cap cryovial.
- Send to local lab for testing.

Step Three



Collect

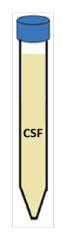
 another 15 ml
 CSF into a new
 15 ml sterile
 conical tube.

Step Four



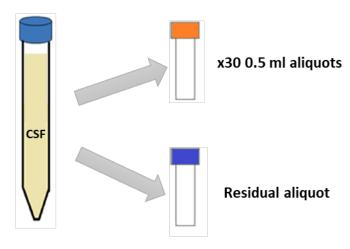
 Place sample upright on wet ice until centrifugation begins.

Step Five



Within 15
minutes of
collection,
centrifuge
sample at 4°C
for 10 minutes
(no brake).

Step Six



- Using a clean transfer pipette, aliquot 0.5 ml into the orange-cap cryovials, leaving debris at the bottom of the conical tube.
- If a residual aliquot is created, aliquot into blue-cap cryovial. Document specimen number and volume on CSF Sample Notification Form.
- Store CSF aliquots at -80°C until shipment.

Aliquot CSF to 0.5 ml

Sample Shipping



Frozen Shipping: Guidelines

Ship Monday-Wednesday Only

- Hold packaged samples in a -80°C freezer until pickup.
- Batch Samples together
 - 5 Cryoboxes
 - Batch shipping should be performed every 3 months or as a full shipment of specimens accumulates, whichever is sooner.

Sample Shipment Summary

Sample Type	Processing/Aliquoting	Tubes to NCRAD	Ship	
Whole blood (Red-Top Serum Tube) for Serum Isolation	1.5 ml aliquots per 2.0 ml cryovials	Up to 2	Frozen (Monday- Wednesday)	
Whole blood (Lavender-Top EDTA 6 ml Tube) for Plasma-PK Analysis	0.5 ml aliquots per 2.0 ml cryovials	Up to 6	Frozen (Monday- Wednesday)	
Whole blood (Lavender-Top EDTA tube) for isolation of plasma and buffy coat	Plasma: 1.5 ml plasma aliquots per 2.0 ml cryovials	Up to 4	Frozen (Monday- Wednesday)	
	Buffy Coat: 0.75 ml buffy coat aliquot per 2.0 ml cryovial	1	Frozen (Monday- Wednesday)	
CSF	0.5 ml CSF aliquots per 2.0 ml cryovials	Up to 30	Frozen (Monday- Wednesday)	

Visits: Screening CSF, Baseline Blood



Labels:

1: SC CSF

Plasma-PK

Include only one subject per box.

CSF Aliquot tube for local lab (label not provided) *not shipped to NCRAD

Visits: Week 4 Blood, Week 8 Blood, Week 12 Blood

Labels:

1: Week 4

Plasma- PK

2: Week 8

Plasma-PK

3: Week 12

Plasma-PK



Include only one subject per box.

Visits: Week 24 CSF & Blood



Labels:

1: W24 CSF

2: W24 Serum

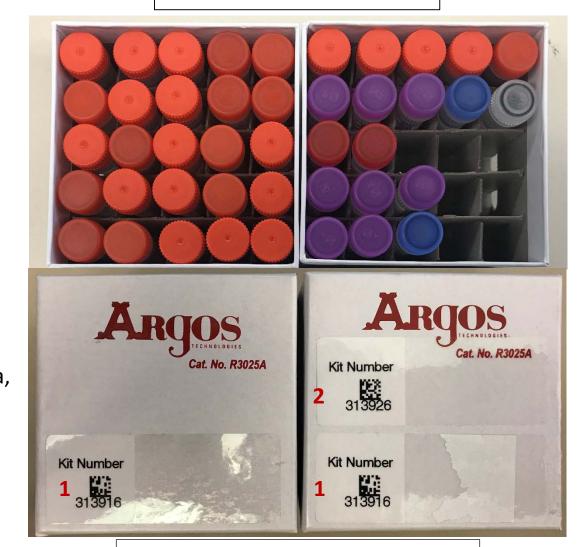
& Plasma-PK

Include only one subject per box.



CSF Aliquot tube for local lab (label not provided)
*not shipped to NCRAD

Visit: Week 48 CSF & Blood



Include only one subject per box.



CSF Aliquot tube for local lab (label not provided)
*not shipped to NCRAD

Labels:

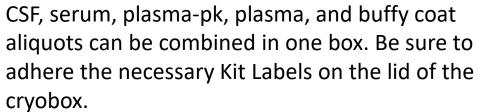
1: W48 CSF

2: W48 Plasma,

BC, Serum,

Plasma-PK









Place cryobox in one Biohazard Bag.

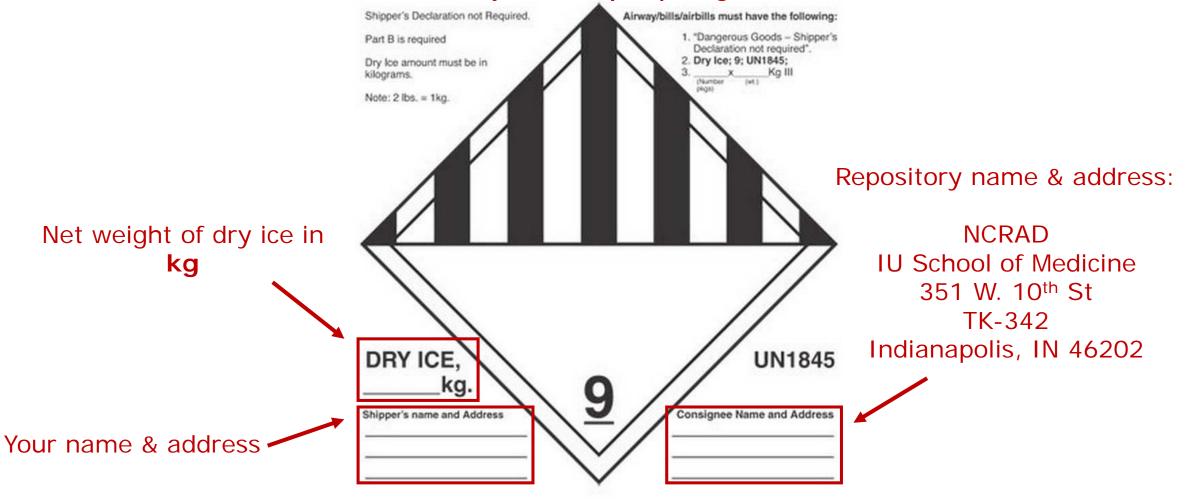
Frozen Shipping: Dry Ice Requirements

- Fully cover the cryoboxes with about 2 inches of dry ice in the provided shipper.
- Each Styrofoam shipper can hold up to 5 cryoboxes
- Each Styrofoam shipper must be completely filled and will contain about 45 lbs (20 kg) of dry ice.



Frozen Shipping: Dry Ice Requirements

Class 9 Dry Ice label should not be covered with other stickers and must be completed or the shipping carrier will reject/return your package!



Shipping Frozen Samples

- Schedule FedEx
- Send Biological Sample and Shipment Notification Form to IU <u>ahead of shipment</u>
 - *Email: alzstudy@iu.edu* or
 - Fax: 317-321-2003

Shipping Regulations and Training

PLEASE NOTE:

- All study personnel responsible for shipping should be certified in biospecimen shipping.
- It is the responsibility of each site to ensure that the appropriate training has been provided and conducted in regards to IATA shipping.

Please see following slides for resources.

Federal Regulations/Training

- Sites are responsible for ensuring proper training is obtained.
- Current federal and international regulations require anyone directly involved with the shipment of potentially infectious materials and other regulated biological materials (including biological specimens and cultures) be properly trained on pertinent shipping requirements.
 - International Air Transport Association (IATA) Training

DGI Training Center 800-338-2291 DGItraining.com Provides IATA Certified Air Seminars and online courses	IATA Training Schools North America 1(514)390-6726 Europe, Africa & Middle East 41 (22) 799 2751 Asia, Australia & the Pacific 65 239 7232 www.iata.org Training schools located in 30 countries
Saf-T Pak Inc. www.saftpak.com Provides dangerous goods training via CD or on-site instruction for North America and Europe	Aiconsult Email: Airconsult@wanadoo.fr www.airconsult-bf.com

Bureau of Dangerous Goods LTD., TIANJIN

Addr.: No.3 Yingshui road, Nankai district, Tianjin China Tel: 022-23495890 83326960 83326854 / Fax: 022-83326959

Email: cdmin@bdg-china.com.cn

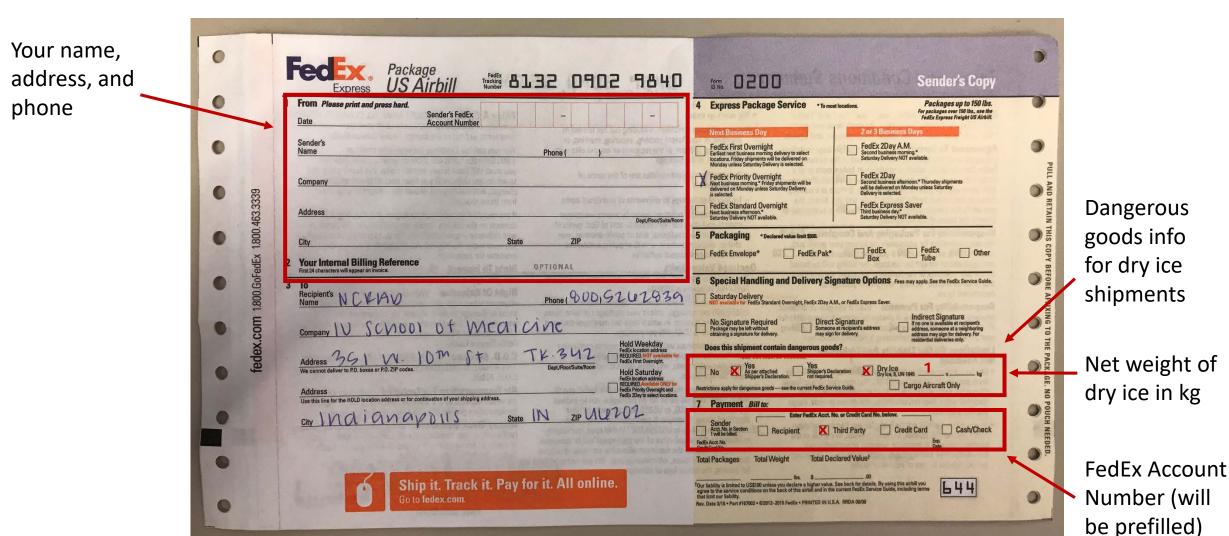
www.bdg-china.com.cn

UN3373 Biological Substance, Category B Training

- Biological Substance, Category B are specimens being transported for "investigational purposes"
- Recommend: investigator sites document training of category B/dangerous goods
- We recommend establishing a record of your staff's training and date of instruction
- The training records must be made available upon request by the appropriate national authority
 - Additional information from the Department of Transportation (DOT) can be found on their website http://hazmat.dot.gov

Frozen Shipping: FedEx Airbill

Airbill must be completed or the shipping carrier will reject/return your package!



Sample shipment to NCRAD will be paid for by the T2 grant at UCSD.

Biological Sample and Shipment Notification Forms

- A copy of the sample form must be emailed or faxed to NCRAD prior to the date of sample arrival.
- Please include sample forms in all shipments of frozen samples.
- Email: <u>alzstudy@iu.edu</u>
- Fax: 317-321-2003



Biological Sample and Shipment Notification

Form: Blood

- Blood Collection for:
 - Serum
 - Plasma-PK
 - Plasma
 - Buffy Coat

 Send by E-mail or fax prior to shipment, and include a copy in each shipment

Biological Sample and Shipment Notification Form

To: Kelley Faber Email:			the date of shipment. 7-321-2003 Phone: 1-	800-526-2	2839
General Information:	FedEx tr	acking	# :		
		·			
From:		Date:			
Phone:		Email:			
			Γ		
Study: T2 PROTECT AD GUID:		Kit #:			
Visit: Baseline Week: 4 8	12 24 48		KIT BA	ARCODE	
Site ID: ADCS INI	D #:				
Sex: M F Year of E	Sirth:		CSF Collected?	Yes N	No
Blood Collection:					
1. Date Drawn:	[MMDDYY]	2.	Time of Draw:		[HHMM]
3. Last time subject ate:	[MMDDYY]	4.	Last time subject ate:		[HHMM]
Blood Processing:					
Serum (Red-top) Tube (6			sma & Buffy Coat (Lave	nder-top)	. , ,
Time spin started:	[HHMM]		pin started:		[HHMM]
Duration of centrifuge:	Minutes		on of centrifuge:		Minutes
	entrifuge: x g		of Centrifuge: °C	Rate of ce	
Original volume drawn (1 x 6 mL tube):	mL		al volume drawn (1 x 10 ml	_tube):	mL
Time aliquoted:	[HHMM]		liquoted:		[HHMM]
Number of 1.5 mL serum aliquots			er of 1.5 mL plasma aliquot	IS	
created (red cap): If applicable, volume of residual serum	mL		d (lavender cap): cable, volume of residual p	alaema	mL
aliquot (less than 1.5 mL in blue cap):			t (less than 1.5 mL in blue of		
If applicable, specimen number of			cable, specimen number o		
residual serum aliquot (last four digits):			al plasma aliquot (last four		
Time aliquots placed in freezer:	[HHMM]		liquots placed in freezer:		[HHMM]
Storage temperature in freezer:	°C	Storag	e temperature in freezer:		°C
		Buffy o	oat aliquot created (clear	сар,	mL
		one pe	r 10 mL EDTA tube)		
	Plasma-PK (Lavend	ler-top)	Tube (6 ml)		
Time spin started:	[HHMM]	Origina	al volume drawn (1 x 6 mL	tube):	mL
Duration of centrifuge:	Minutes	Numbe	er of 0.5 mL plasma-pk aliq	uots:	
Temp of Centrifuge: °C Rate of c	entrifuge: x g		cable, volume of residual p		mL
	-	~~~	uot (blue cap) & last 4 digi	ts:	
Time aliquoted:	[HHMM]	Time a	liquots placed in freezer:		[HHMM]
		Storag	e temperature in freezer:		°€
Notes:					

Biological Sample and Shipment Notification

Form: CSF

Send by E-mail or Fax prior to shipment, and include a copy in each shipment

CSF Sample and Shipment Notification Form

Please email or fax the form on or prior to the date of shipment.

To: Kelley Faber Email: alzstudy@iu.edu		7-321-2003 Phone: 1-800-526-2839	
10. Kelley Faber Ellian. aizstady@id.eda	177. 31	7 321 2003 THORE. 1 000 320 2033	
General Information: FedEx tr	acking #	#:	
From:	Date:		
From:	Date:		
Phone:	Email:		
Study: T2 PROTECT AD GUID:	Kit #:	KIT BARCODE	
Visit: Screening Week 24 Week 48			
City ID. ADCC IND #		Course and desired for LDs 22C	246
Site ID: ADCS IND #:		Gauge needle used for LP: 22G	24G
Sex: M F Year of Birth:		CSF Collected? Yes	No
CSF Collection:			
5. Date of collection: [MMDDYY]	6.		HMM]
7. Last time subject ate: [MMDDYY]		,	HMM]
9. Collection process: Gravity Method	Aspiration	on	
055.0			
CSF Processing: Time spin started:		THI THI	HMM]
Duration of centrifuge:			linutes
Temp of Centrifuge: °C		Rate of centrifuge: x g	
Total amount of CSF collected:		m	L
Time aliquoted:		[HI	HMM]
Number of 0.5 mL CSF aliquots created (orange cap):		x 0.	.5 mL
If			
If applicable, volume of residual CSF aliquot (less than 0.5 mL in	n blue ca	p):mL	
If applicable, specimen number of residual serum aliquot (last	four digit	s):	
Time frozen:		(HF	HMM]
Storage temperature in freezer:		°C	
Notes:			

NCRAD Website

- Helpful Pages:
 - https://ncrad.org/holiday_closures.html



Date	Holiday
January 1	New Year's Day
3 rd Monday in January	Martin Luther King, Jr Day
4 th Monday in May	Memorial Day
July 4	Independence Day (observed)
1 st Monday in September	Labor Day
4 th Thursday in November	Thanksgiving
4 th Friday in November	Friday after Thanksgiving
December 25	Christmas

NCRAD Website: T2 Protect AD Active Study Page





Welcome T2 Study staff, coordinators, and PI's.

This section encompasses study specific tools and videos for your reference. If you have any questions, comments, or new ideas, please contact NCRAD by email or phone 800-526-2839 or 317-278-1228.

https://ncrad.org/resource_t2protect.html

T2 Specimen Collection Overview

	Screening	Baseline	Week 4	Week 8	Week 12	Week 24	Week 48
Serum		~				~	~
Plasma		~					~
Buffy Coat		~					~
Plasma- PK		~	~	~	~	~	V
CSF	~					~	~

Study Resources

Kit Request Module		
Study Specific Sample Notifica	tion Forms	
T2 Manual of Procedures		
Study Related Video Tutorials		
T2 Training Slides		

*Training videos, manual of procedures, and sample forms are available for reference on the T2 Protect AD Active Study Page.

Contact Information

• Questions?

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• E-mail: <u>alzstudy@iu.edu</u> or <u>mipetkov@iu.edu</u>

Website: www.ncrad.org

