

Detailed recommendations for core biospecimen and biomarker data elements for TBI research and best practice guidelines for standardizing collection, storage and shipping of these specimens have been presented by the Common Data Elements Biospecimens and Biomarkers Working Group:

Common Data Elements for Traumatic Brain Injury: Recommendations From The Biospecimens and Biomarkers Working Group

Geoffrey T. Manley, Ramon Diaz-Arrastia, Mary Brophy, Doortje Engel, Clay Goodman, Katrina Gwinn, Timothy D. Veenstra, Geoffrey Ling, Andrew K. Ottens, Frank Tortella, Ronald L. Hayes
Archives of Physical Medicine and Rehabilitation 1 November 2010 (volume 91 issue 11 Pages 1667-1672 DOI: 10.1016/j.apmr.2010.05.018)

For detailed information and guidance we refer to this publication. Below we present a simple overview of standard laboratory investigations in serum, relevant to TBI (for reasons of safety, injury markers, risk factors for lesion progression and prognosis) and present examples of these values may be entered into a database format. We emphasize the need to specify and - where possible - to standardize the units used.

LABORATORY

Date of lab test:

<input type="text"/>	<input type="text"/>	-	<input type="text"/>	<input type="text"/>	<input type="text"/>	-	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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Day

Month

Year

BLOOD CHEMISTRY

HAEMATOLOGY

	Not done	Results	Preferred units	Other units	Please specify
Glucose	<input type="radio"/>		mmol/L	<input type="radio"/>	
Urea	<input type="radio"/>		mmol/L	<input type="radio"/>	
Creatinine	<input type="radio"/>		µmol/L	<input type="radio"/>	
Amylase	<input type="radio"/>		U/L	<input type="radio"/>	
ASAT/SGOT*	<input type="radio"/>		U/L	<input type="radio"/>	
ALAT/SGPT**	<input type="radio"/>		U/L	<input type="radio"/>	
LDH***	<input type="radio"/>		U/L	<input type="radio"/>	
Alkaline Phosphatase	<input type="radio"/>		U/L	<input type="radio"/>	
Total Bilirubin	<input type="radio"/>		µmol/L	<input type="radio"/>	
Sodium	<input type="radio"/>		mmol/L	<input type="radio"/>	
Potassium	<input type="radio"/>		mmol/L	<input type="radio"/>	

	Not done	Results	Preferred units	Other units	Please specify
Hemoglobin	<input type="radio"/>		mmol/L	<input type="radio"/>	
Hematocrit	<input type="radio"/>		%	<input type="radio"/>	
White blood cell	<input type="radio"/>		X10 ⁵ /L	<input type="radio"/>	
White blood cell differential count:					
Neutrophils	<input type="radio"/>		%	<input type="radio"/>	
Lymphocytes	<input type="radio"/>		%	<input type="radio"/>	
Eosinophils	<input type="radio"/>		%	<input type="radio"/>	
Others	<input type="radio"/>		%	<input type="radio"/>	
Platelet	<input type="radio"/>		X10 ⁹ /L	<input type="radio"/>	
Prothrombine Time (PTT)	<input type="radio"/>		sec.	<input type="radio"/>	
INR	<input type="radio"/>			<input type="radio"/>	

* Aspartate Aminotrasferase

** Alanine Aminotrasferase

*** Lactate Dehydrogenase

Pregnancy test

Date:

<input type="text"/>	<input type="text"/>	-	<input type="text"/>	<input type="text"/>	<input type="text"/>	-	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
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Day

Month

Year

Type of sample: Serum Urine N/A

If N/A please specify: Post Menopausal

Surgically sterile

Male

Not done

Result: Negative Positive

LABORATORY

Date of lab test:

<input type="text"/>	<input type="text"/>	-	<input type="text"/>	<input type="text"/>	<input type="text"/>	-	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Day		Month			Year					

BLOOD CHEMISTRY

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Potassium	<input type="radio"/>		mmol/L	<input type="radio"/>	
Magnesium	<input type="radio"/>		mmol/L	<input type="radio"/>	
Calcium	<input type="radio"/>		mmol/L	<input type="radio"/>	

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**** Activated thromboplastine time

HAEMATOLOGY

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Others	<input type="radio"/>		%	<input type="radio"/>	
Platelet	<input type="radio"/>		X10 ⁹ /L	<input type="radio"/>	
Prothrombine Time (PTT)	<input type="radio"/>		sec.	<input type="radio"/>	
INR	<input type="radio"/>			<input type="radio"/>	
aPTT****	<input type="radio"/>		sec.	<input type="radio"/>	
Fibrinogen	<input type="radio"/>		Mg/L	<input type="radio"/>	

Pregnancy test

Date: - -

Day Month Year

Type of sample: Serum Urine N/A

If N/A please specify: Post Menopausal

Surgically sterile

Male

Not done

Result: Negative Positive

Blood alcohol Level mg/100 ml blood

Toxic Drug Screen

Type of sample: Serum Urine

Result: Negative Positive

If positive: Amphetamines Methadone

Barbiturates Methaqualone

Benzodiazepines Opiates

Cannabinoids Phencyclidine

Cocaine Other, specify: _____

LABORATORY

Date of lab test:

<input type="text"/>	<input type="text"/>	-	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	-	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Day		Month				Year						

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Sodium	<input type="radio"/>		mmol/L	<input type="radio"/>	
Potassium	<input type="radio"/>		mmol/L	<input type="radio"/>	
Magnesium	<input type="radio"/>		mmol/L	<input type="radio"/>	
Calcium	<input type="radio"/>		mmol/L	<input type="radio"/>	

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Others	<input type="radio"/>		%	<input type="radio"/>	
Platelet	<input type="radio"/>		X10 ⁹ /L	<input type="radio"/>	
Prothrombine Time (PTT)	<input type="radio"/>		sec.	<input type="radio"/>	
INR	<input type="radio"/>			<input type="radio"/>	
aPTT****	<input type="radio"/>		sec.	<input type="radio"/>	
Fibrinogen	<input type="radio"/>		Mg/L	<input type="radio"/>	
D-dimers	<input type="radio"/>		µg/ml	<input type="radio"/>	
FDP*****	<input type="radio"/>		µg/ml	<input type="radio"/>	

Pregnancy test

Date: - -

Day Month Year

Type of sample: Serum Urine N/A

- If N/A please specify:
- Post Menopausal
 - Surgically sterile
 - Male
 - Not done

Result: Negative Positive

Blood alcohol Level mg/100 ml blood

Toxic Drug Screen

Type of sample: Serum Urine

Result: Negative Positive

- If positive:
- Amphetamines
 - Barbiturates
 - Benzodiazepines
 - Cannabinoids
 - Cocaine
 - Methadone
 - Methaqualone
 - Opiates
 - Phencyclidine
 - Other, specify: _____