The data presented in the following reports reflect the NNTC central database as of February 01, 2024

Usage Statement

Distribution of the data contained in this report through publication or presentation should be reported to the Data Coordinating Center. Reporting usage of the NNTC resources helps to ensure continuation of this valuable resource!

The NNTC is directly funded by the NIMH, NIA, NIDA, and NINDS.

Questions regarding these data should be directed to the Data Coordinating Center
The Emmes Company
Rockville, MD
nntc@emmes.com

Table of Contents

Suppressed Cohort Overview: PWH

Click on a content link to navigate to the corresponding slide. To return to the Table of Contents from anywhere in the report, click on the NNTC logo found on each slide in the upper left corner.

01FEB2024

Suppression Cohort Overview

Suppression Cohort Overview

National NeuroHIV Tissue Consortium

Total Suppression Participants
N=204

Criteria 1
N=135

Criteria 2
N=132

At Enrollment

At Enrollment

Anatomical Gift
N=0

Autopsy in Study*
N=38

Tissue Bank

Cross Sectional Cohort
N=135

| One Visit N=0 | Longitudinal N=135 |

Currently Active
N=65

| One Visit N=0 | Longitudinal N=65 |

Inactive
N=32

Cross Sectional Cohort
N=132

| Longitudinal N=132 | One Visit N=0 |

Inactive
N=16

Currently Active
N=45

| Longitudinal N=45 | One Visit N=0 |

Anatomical Gift
N=0

Autopsy in Study^
N=71

Tissue Bank
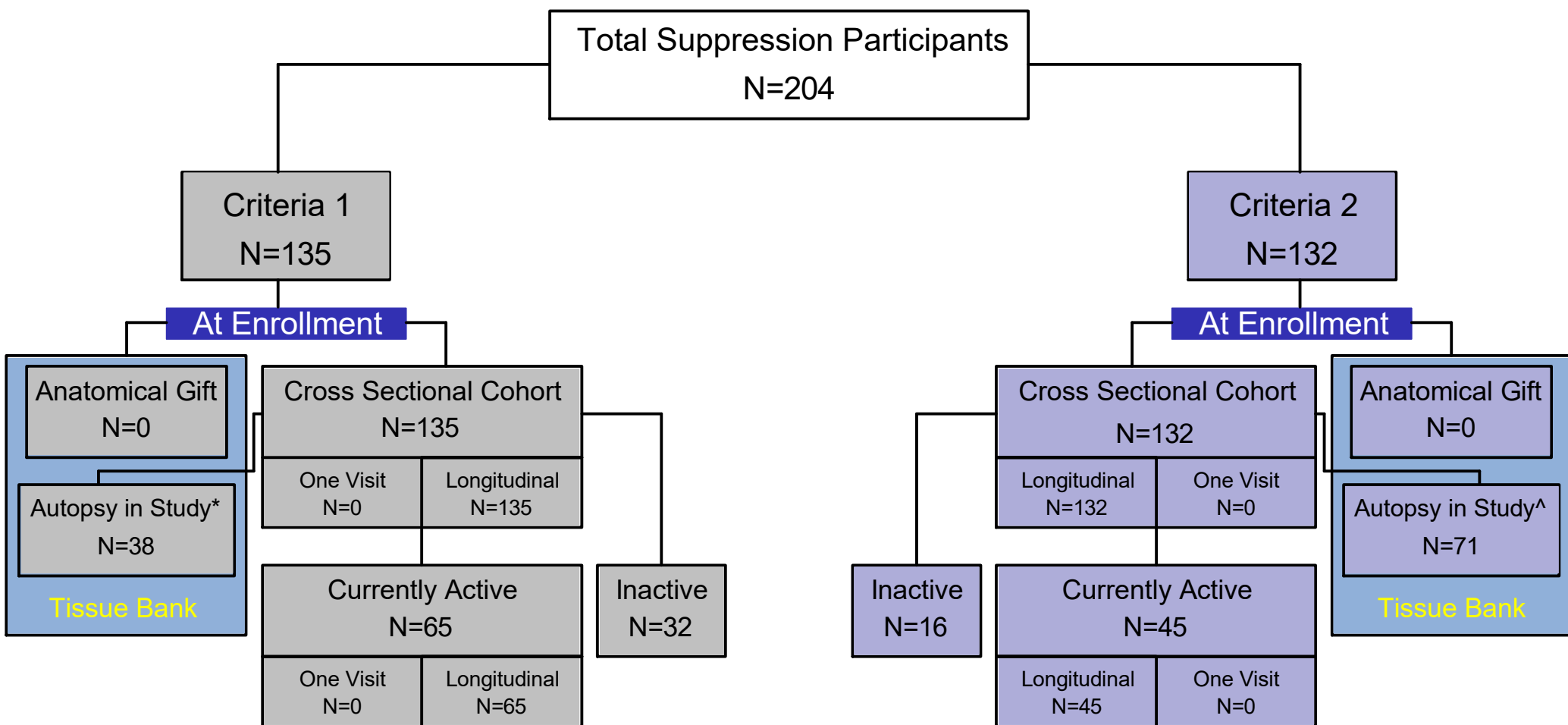
Criteria 1: Participants have been followed for at least 5 years. There must be at least 1 undetectable viral load within last 1 year, or 2 undetectable viral loads within last 2. Over last 5 year period, there must be at least 4 undetectable viral loads. Note that "blips" of detectable virus are allowed, however these must be <1000 copies/mL during this 5 year period.

Criteria 2: Participants have been followed for at least 2 years. There must be at least 1 undetectable viral load within last 6 months. Note that "blips" of detectable virus are allowed, however these must be <1000 copies/mL during this 2 year period.

Longitudinal Cohort: Participants enrolled with 2 or more study visits.

Tissue Bank: Participants deceased with autopsy.

63 cases meet both criteria. 29 autopsy cases met both criteria.

Inactive cases are either lost to follow-up/administratively censored/withdrawn (N=21) or deceased without autopsy (N=23).

* 0 autopsy cases included in Cross Sectional Cohort; 38 autopsy cases included in Longitudinal Cohort.

^ 0 autopsy cases included in Cross Sectional Cohort; 71 autopsy cases included in Longitudinal Cohort.

01FEB2024

CNS Specimens Available

Type:	PWH
Frozen Brain	75
Fixed Brain	74
Spinal Cord	72
Cerebellum*	62
Brain Stem*	61
Frontal Lobe*	57
Parietal Lobe*	57
Occipital Lobe*	57
Temporal Lobe*	57
Thalamus*	57
Basal Ganglia*	53
Dorsal Root Ganglia	51
Hippocampus*	49
Trigerminal Ganglia	25

*Several of the smaller brain categories listed were approved by the Steering Committee on 27JUN2017 to be reported centrally, and thus are currently underreported in the central inventory as sites work towards retrospectively updating specimen records. It is expected that the central inventory, including availability of these specimens, will continue to be updated prospectively.

01FEB2024

Peripheral Organ Specimens Available

Type:	PWH
Heart	73
Liver	72
Spleen	69
Kidney	68
Lung	66
Peripheral Nerve	62
Adipose Tissue	55
Muscle	55
Bone Marrow	54
Lymph Node	51
Bowel	39
Pituitary Gland	30
Testes	28
Hair	4
Thymus	1

01FEB2024

Available Fluids
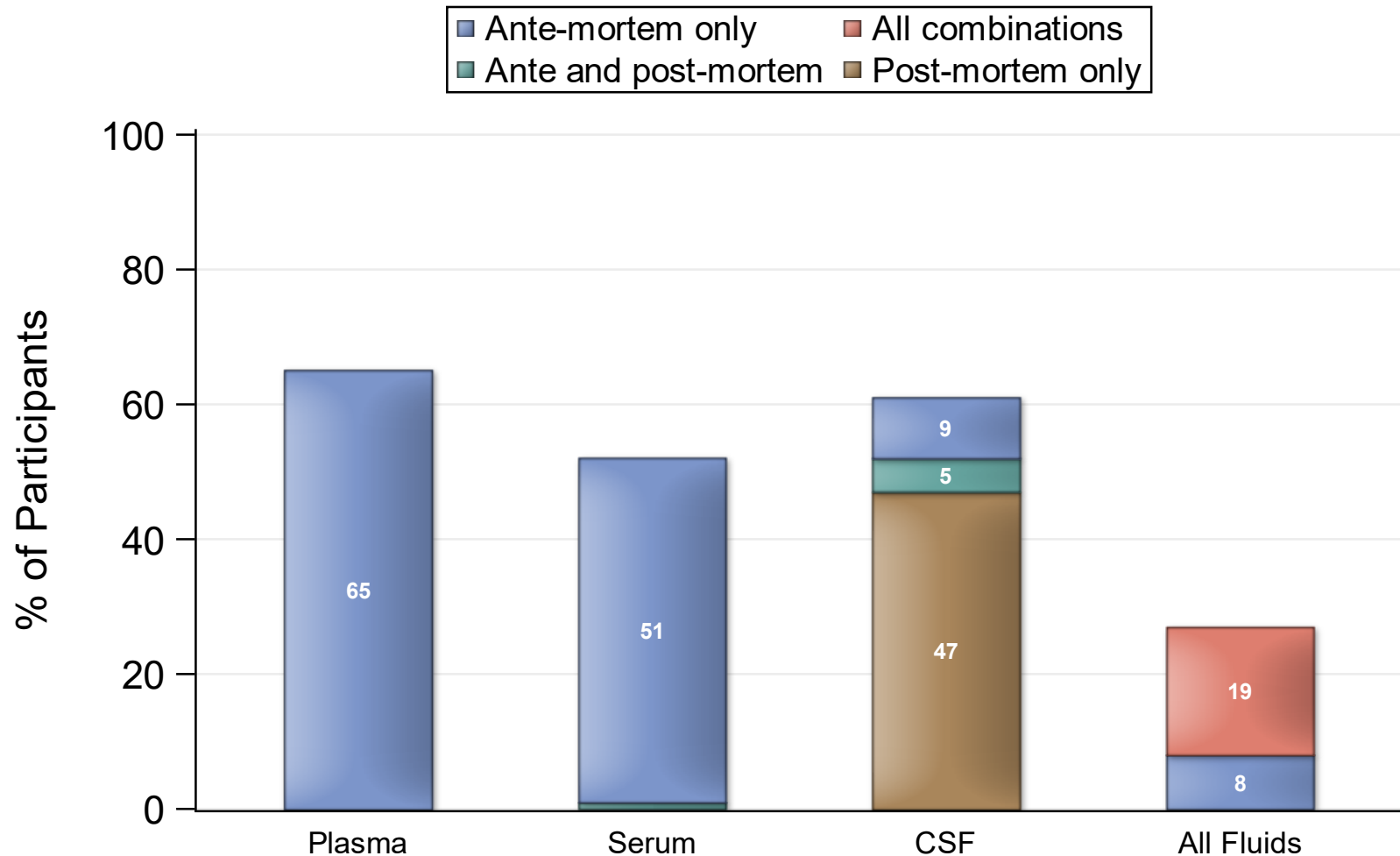
*All-combinations (e.g., one specimen might be available ante-mortem while the other two might be ante- and post-mortem or any of the other 23 combinations where all 3 specimen availabilities are not the same).

Please note the totals listed above reflect only those cases who have a fixed brain specimen available and fluids collected within 1 year of death. Percentage labels not shown are 2% or less.

01FEB2024

*Demographics**

N	**74**
Age	
Mean	60.5
SD	8.9
25th Percentile	55
Median	59
75th Percentile	66

*Cases with a fixed brain specimen available with a measurement at baseline and within 1 year of death.

Demographics cont.

	N	%
Gender		
Male	56	76
Female	18	24
Ethnicity		
Hispanic origin	21	28
Race		
White	37	50
Black	29	39
Other	8	11

*Cases with a fixed brain specimen available.

01FEB2024

Demographics cont.

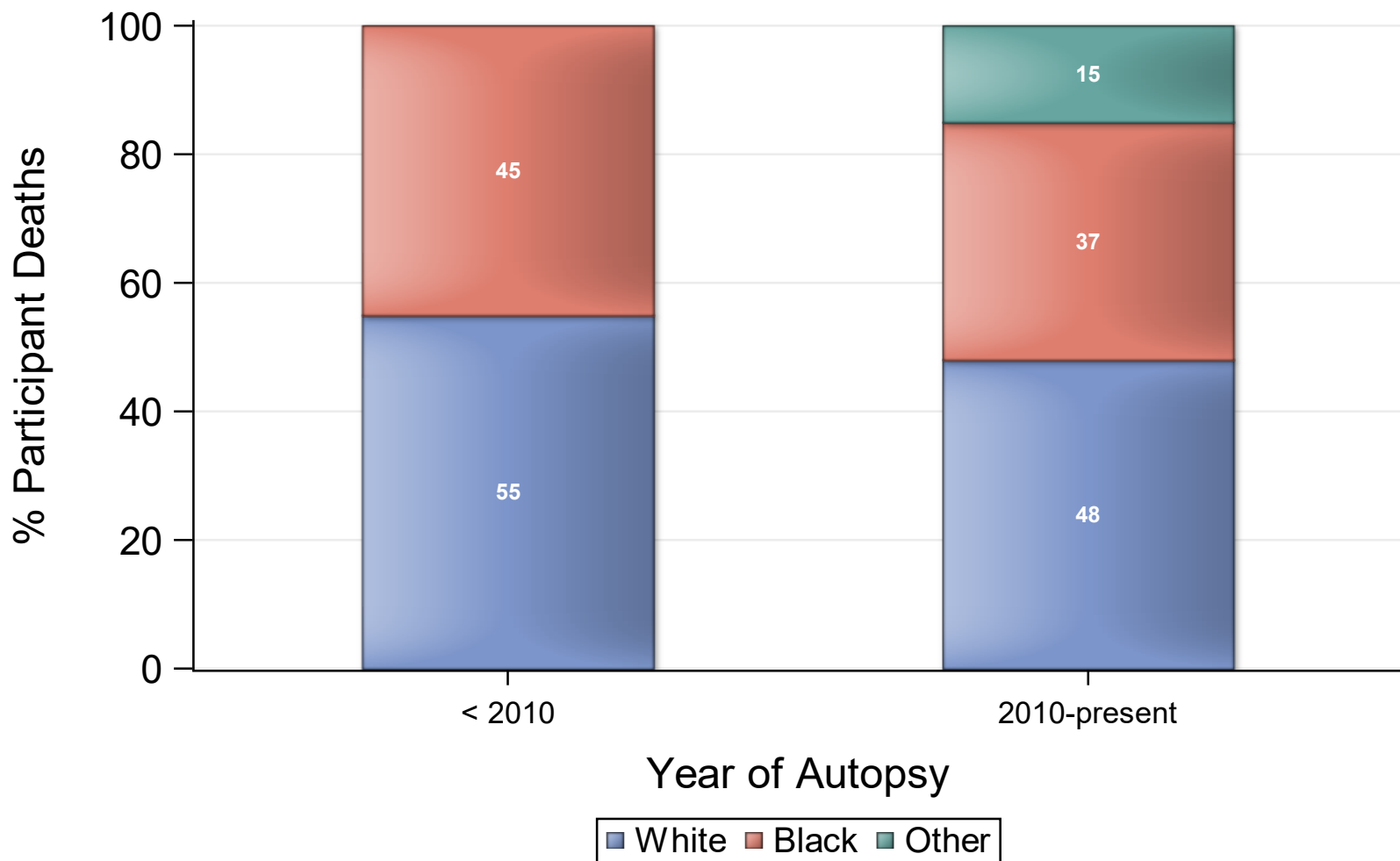|	N	%
Furthest Education		
8th grade or less	4	5
Some High School	18	24
High School Gradudate	17	23
Some College/Associate's Degree	22	30
College Graduate	5	7
Advanced Degree work	8	11

*Cases with a fixed brain specimen available.

cART Era Demographics - Gender
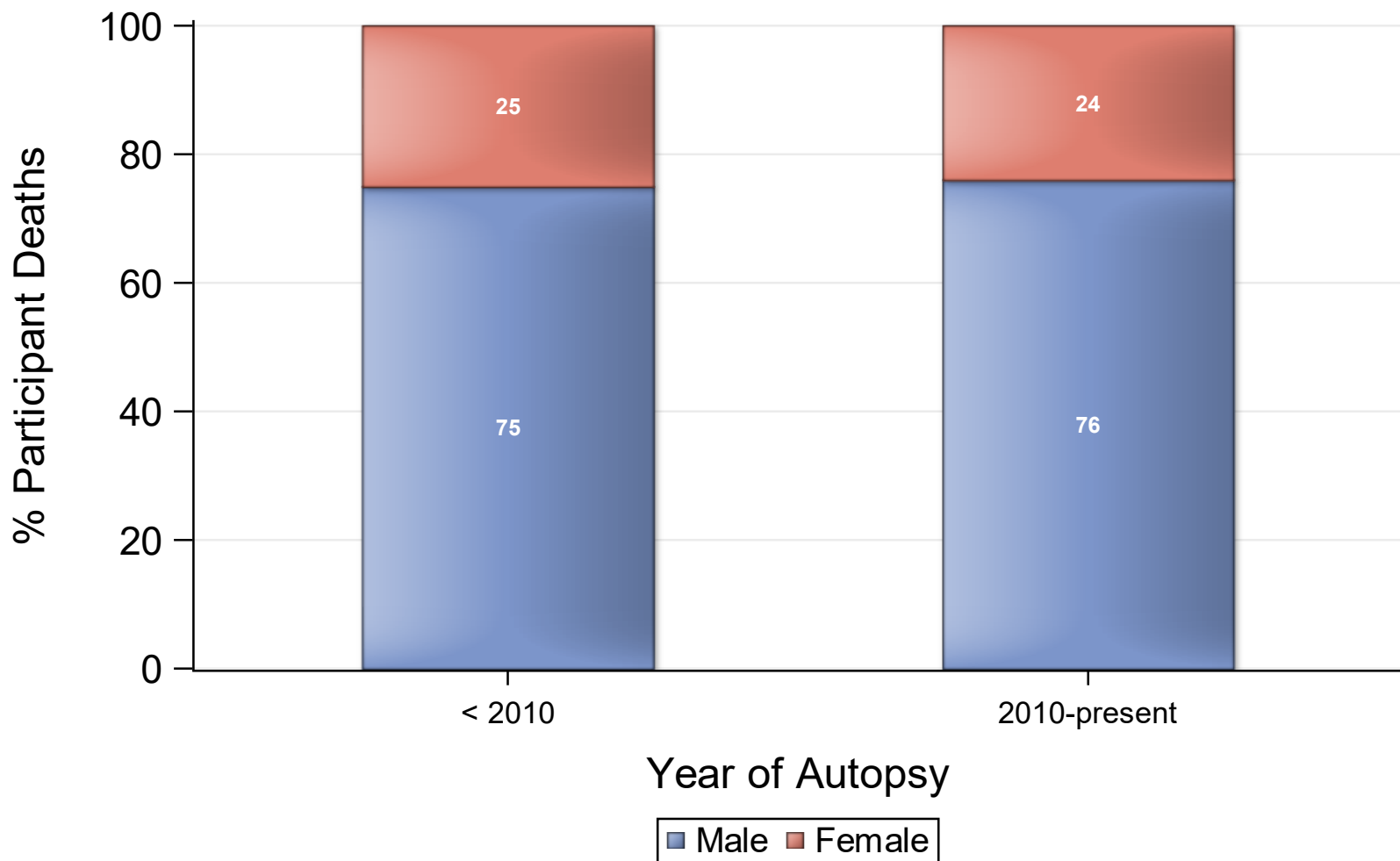
*The NNTC did not collect data before 1998.

01FEB2024

HIV Characteristics of autopsy cases

	N	%
Baseline HIV risk		
IV drug use	24	32
Male to male sex	34	46
Heterosexual sex	16	22
On ART		
at baseline	72	97
at last visit	66	89

*Cases with a fixed brain specimen available.

01FEB2024

HIV Characteristics at time of death*

CD4 Count (N=68)

25th Percentile	202.5
Median	382
75th Percentile	576

Log Plasma Viral Load** (N=67)

25th Percentile	1.60
Median	1.70
75th Percentile	1.70

*Cases with a fixed brain specimen available with a measurement at baseline and within 1 year of death.

**Among those with known ARV medication status. 5 participants had detectable VL values of 0 where a viral log could not otherwise be calculated.
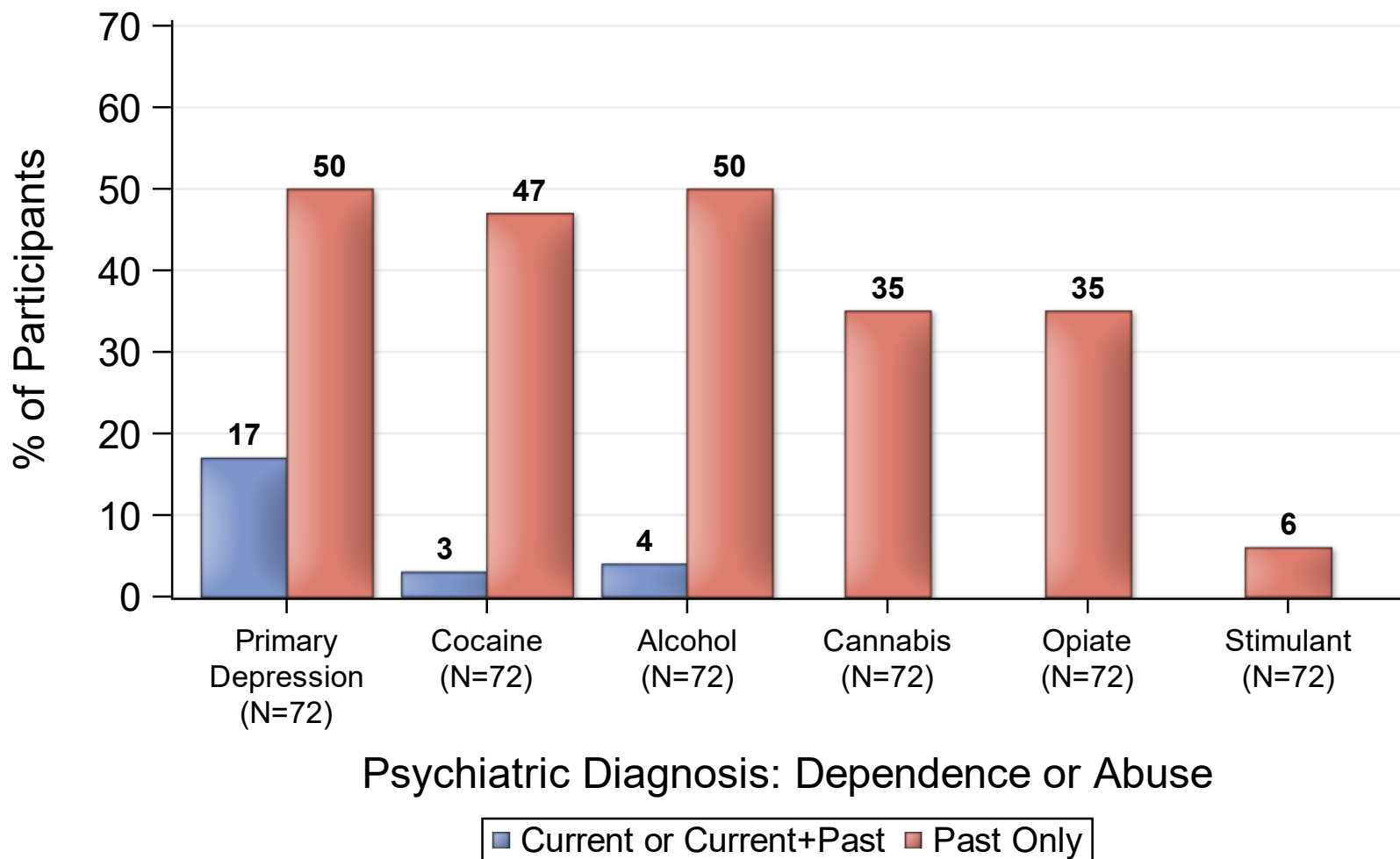
01FEB2024

cART Era Viral Load
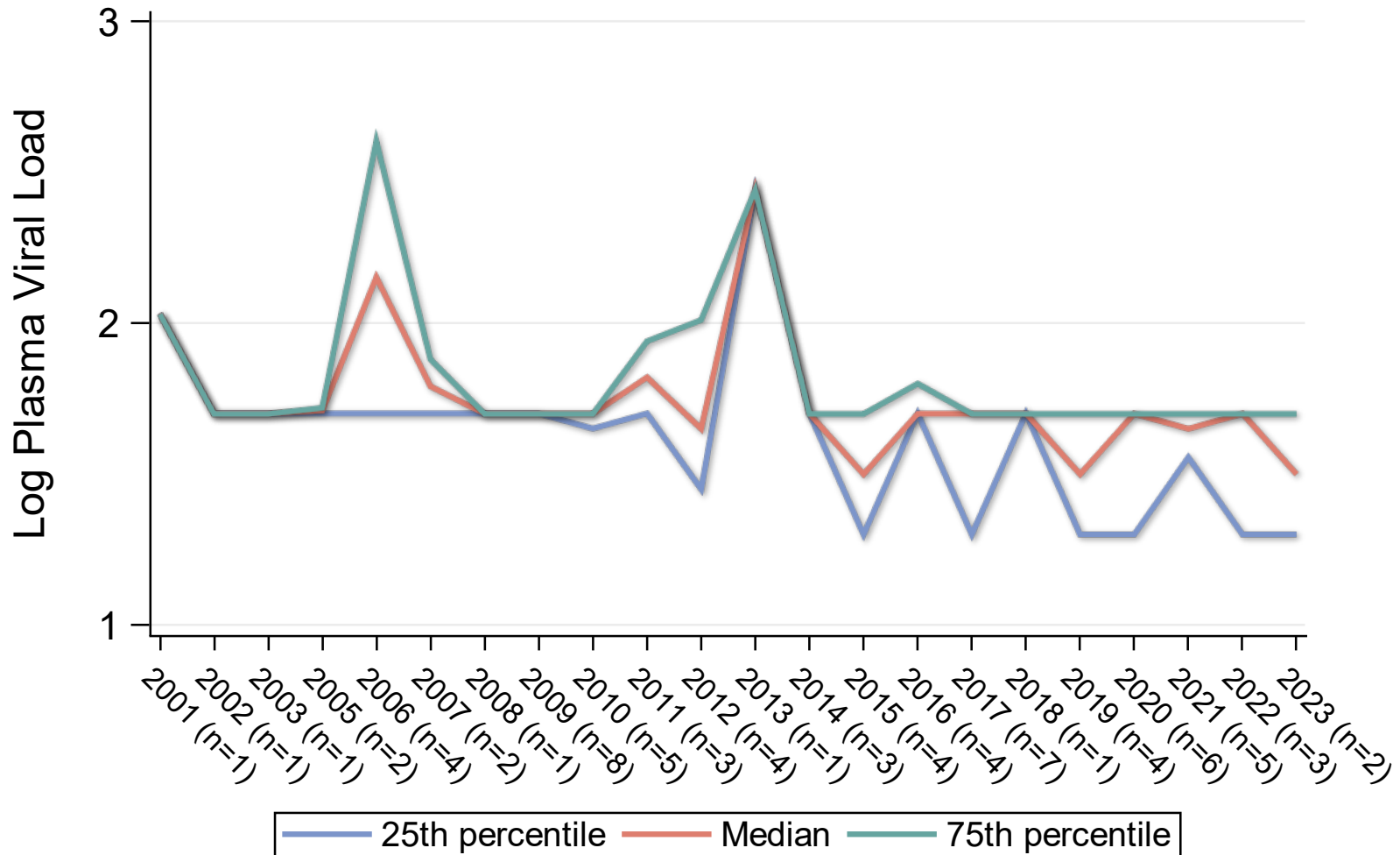
*Among those who have died during the cART era.

01FEB2024

Pathological Conditions: Year of Autopsy

Type:	Year of Autopsy		
	< 2010	2010-present	Total Cases
Total Fixed Specimens	20	54	74
Normal/minor neuropath changes	6 (30)	7 (13)	13 (18)
Other non-infectious pathology	6 (30)	28 (53)	34 (46)
Alzheimer's type 2 gliosis	1 (5)	8 (15)	9 (12)
Focal infarct	7 (35)	18 (34)	25 (34)
HIV encephalitis	1 (5)	0	1 (1)
Hypoxic/ischemic damage	4 (20)	15 (28)	19 (26)
Aseptic Leptomeningitis	2 (10)	9 (17)	11 (15)
Microglial nodule encephalitis	0	1 (2)	1 (1)
Hemorrhage-parenchymal	0	6 (11)	6 (8)
Progressive Multifocal Leukoencephalopathy	0	1 (2)	1 (1)
Other infections	0	3 (6)	3 (4)

01FEB2024

Last Psychiatric Diagnosis

Y-axis: % of Participants (0–70)

X-axis: Psychiatric Diagnosis: Dependence or Abuse

Categories and values:
- Primary Depression (N=72): Current or Current+Past = 17, Past Only = 50
- Cocaine (N=72): Current or Current+Past = 3, Past Only = 47
- Alcohol (N=72): Current or Current+Past = 4, Past Only = 50
- Cannabis (N=72): Past Only = 35
- Opiate (N=72): Past Only = 35
- Stimulant (N=72): Past Only = 6

Legend: ■ Current or Current+Past ■ Past Only
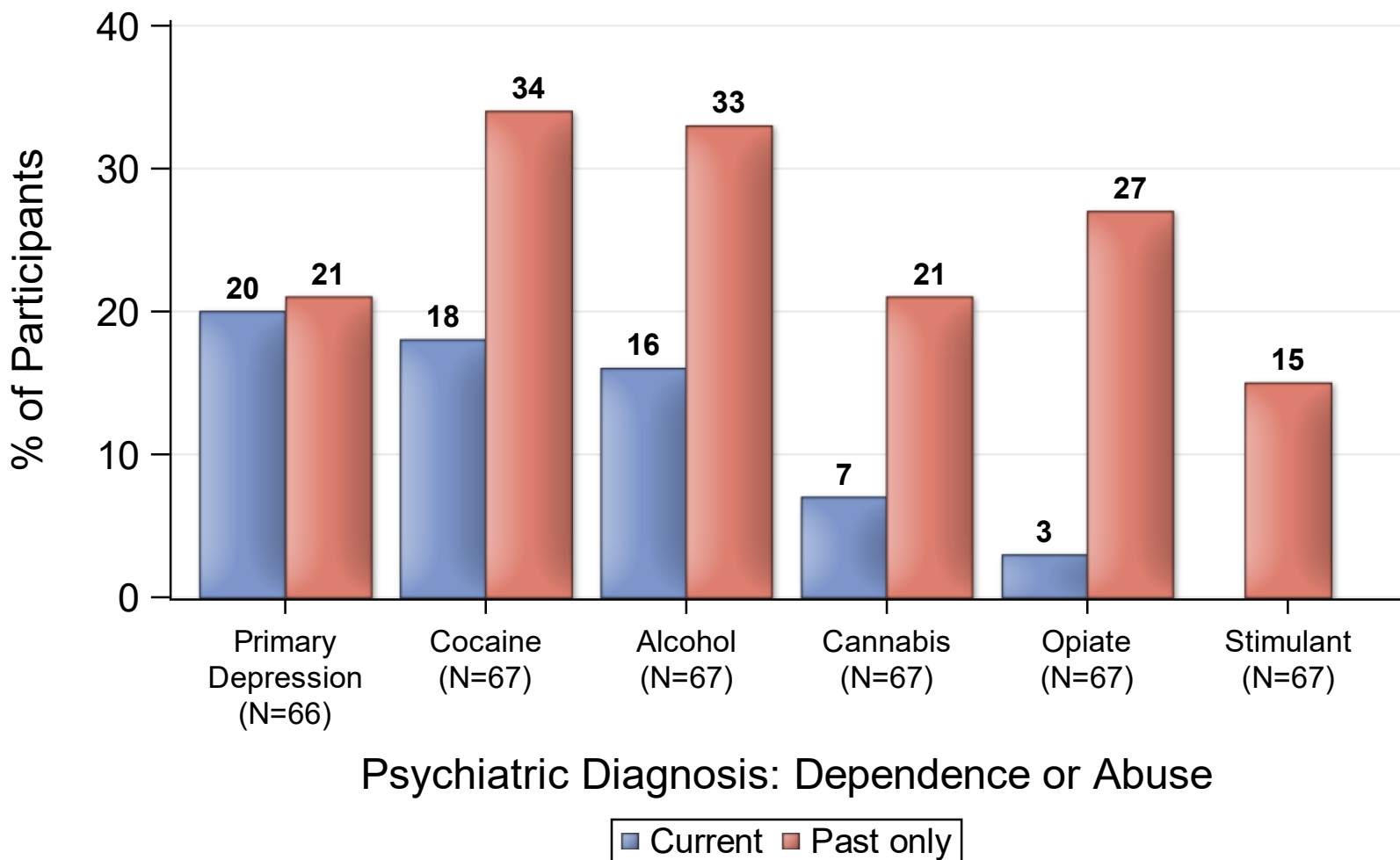
62% are Normal/Test Not Administered

*Please note the totals listed above reflect only those cases who have a fixed brain specimen available and data from the PRISM/CIDI evaluation before death.
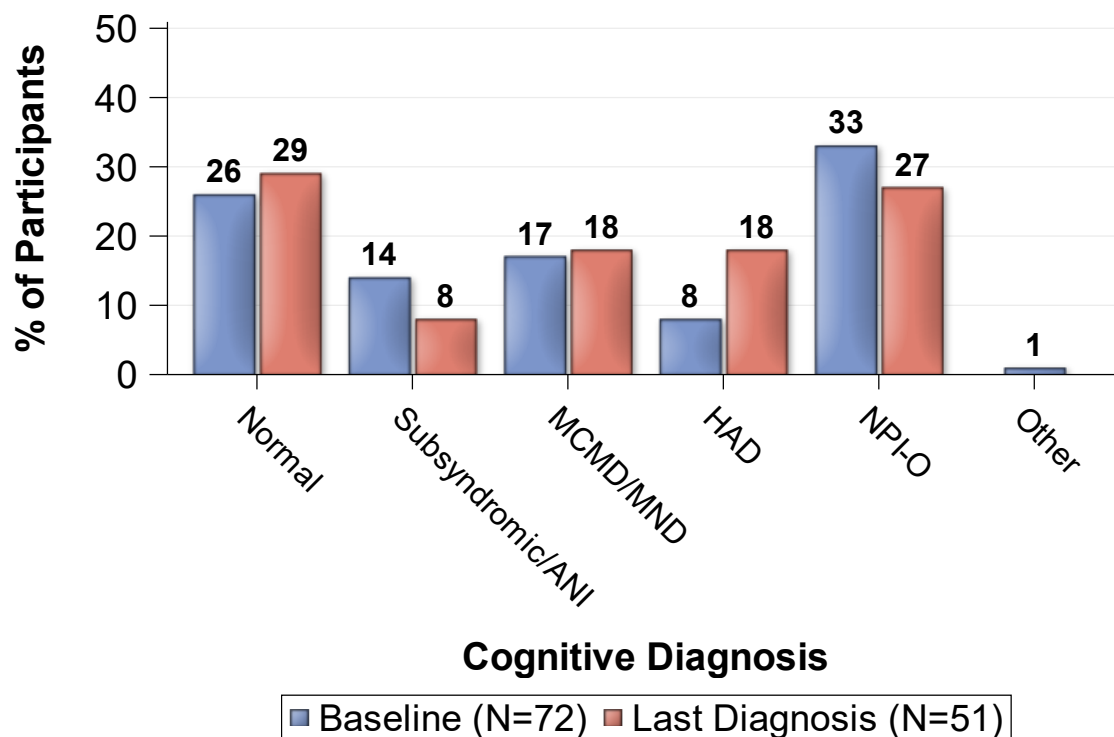
01FEB2024

Cognitive Diagnosis

*Please note the totals listed above reflect only those cases who have a fixed brain specimen available.
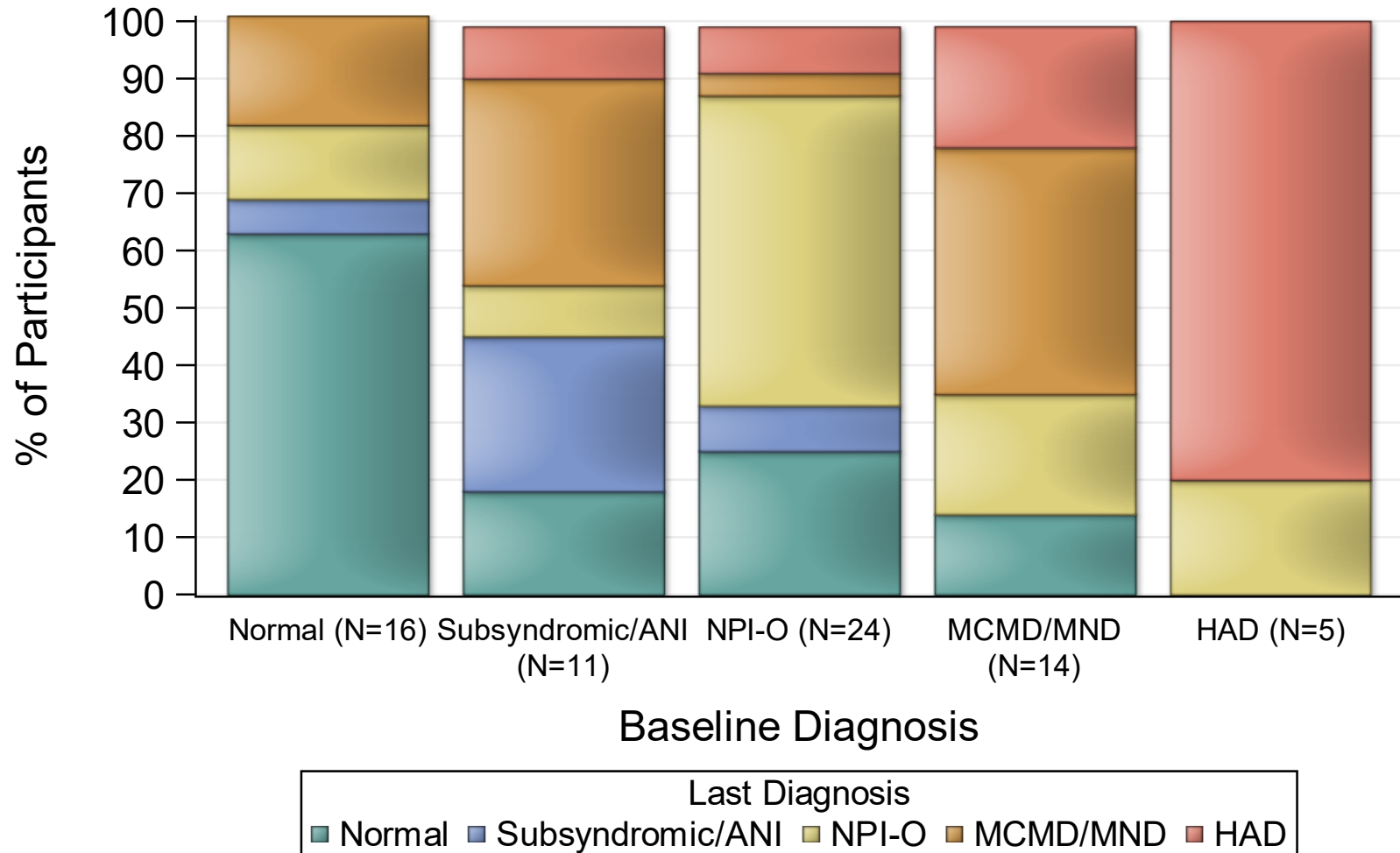
ANI = Asymptomatic Neurocognitive Impairment
MCMD = Minor Cognitive Motor Disorder
MND = Minor Neurocognitive Disorder
HAD = HIV-Associated Dementia
NPI-O = Neuropsychological Impairment - Other cause, not HIV

Neurologic Diagnoses*

	Last Dx		Baseline	
	N	**%**	**N**	**%**
Clinical Myelopathy	(N=50)		(N=73)	
HIV associated	4	8	5	7
Other	0	0	2	3
None	46	92	66	90
Neuropathy	(N=44)		(N=62)	
HIV associated DSP	31	70	29	47
HIV/nucleoside	4	9	4	6
None	9	20	29	47

*Cases with a fixed brain specimen available.

01FEB2024

Participants Reporting Concomitant Medications

Medication	# of Pts (N=73)	%
Central Nervous System Agents	69	94.5
Cardiovascular Drugs	65	89
Gastrointestinal Drugs	64	87.7
Vitamins	61	83.6
Anti-infective Agents	59	80.8
Hormones and Synthetic Substitutes	51	69.9
Electrolytic, Caloric, and Water Balance	48	65.8
Autonomic Drugs	46	63
Skin and Mucous Membrane Agents	38	52.1
Blood Formation, Coagulation, and Thrombosis Agents	36	49.3
Miscellaneous Therapeutic Agents	29	39.7
Eye, Ear, Nose, and Throat (EENT) Preparations	28	38.4
Antihistamine Drugs	27	37
Respiratory Tract Agents	20	27.4
Antineoplastic Agents	18	24.7
Pharmaceutical Aids	8	11
Local Anesthetics	7	9.6
Serums, Toxoids, and Vaccines	6	8.2
No medication use reported on at least one occasion	5	6.8
Smooth Muscle Relaxants	5	6.8

Ancillary Lab Measurements

Ancillary Lab	Total # records overall	% cohort with at least 1 measure	Total # cases with baseline measure	% cohort with baseline & one other measure
Miscellaneous Hematology				
Red blood cells	214	15	5	7
Mean Corpuscular Hemoglobin (MCH)	213	15	5	7
Mean Corpuscular Volume (MCV)	1220	70	46	62
Mean Corpuscular Hemoglobin Concentration (MCHC)	206	14	5	7
Blood Red cell Distribution Width (RDW)	197	15	3	4
Blood Rapid Plasma Reagin (RPR)	209	70	28	26
Blood Neutrophil Percent	1160	69	44	59
Blood Lymphocyte Percent	1189	69	46	62
Blood Monocyte Percent	1176	69	46	62
Blood Eosinophil Percent	1174	69	46	62
Blood Basophil Percent	1171	69	46	62
Blood Mean Platelet Volume (MPV)	154	11	3	4
Blood CD3 Percent	28	5	3	3
Blood CD3 Absolute	14	5	1	0
Miscellaneous Serology & viral loads				
Blood Hepatitis B Surface Antigens	131	69	38	30
Blood Hepatitis B Surface Antibodies	112	58	30	26
Blood Hepatitis B Core Antibodies	112	61	31	23
Blood Hepatitis B Viral Load	20	11	3	3
Blood Hepatitis C Antibodies (HCV)	173	85	47	38
Blood Hepatitis C Viral Load	81	39	12	14
Miscellaneous Serology & viral loads				
COVID-19 Test Results (qualitative)	23	11	0	0

01FEB2024

Ancillary Lab Measurements cont.

Ancillary Lab	Total # records overall	% cohort with at least 1 measure	Total # cases with baseline measure	% cohort with baseline & one other measure
Miscellaneous Blood Chemistries				
Glucose	1141	69	45	61
Hemoglobin A1c	265	64	14	16
Sodium	1096	74	45	61
Calcium	1043	68	43	58
Chloride	1070	74	43	58
Potassium	1080	74	43	58
Total Protein	913	73	41	55
Alkaline Phosphatase	912	69	41	55
AST	895	69	39	53
ALT	910	69	41	55
Total Bilirubin	958	76	45	61
Direct Bilirubin	64	8	2	3
Creatinine	1299	93	56	73
BUN	1088	73	43	58
CO2	1059	69	43	58
PT	564	62	41	55
INR	563	62	41	55
Urate	17	7	2	1
Triglycerides	390	76	27	34
Cholesterol	396	76	28	35
LDL	358	70	25	30
HDL	367	73	27	32
Phosphorus	92	11	3	3
LDH	22	7	2	1

Ancillary Lab Measurements cont.

Ancillary Lab	Total # records overall	% cohort with at least 1 measure	Total # cases with baseline measure	% cohort with baseline & one other measure
Miscellaneous CSF values				
CSF-VDRL Test	34	8	3	4
Miscellaneous Urine values				
Urinalysis: Glucose	461	61	40	51
Urinalysis: Protein	466	61	40	51
Urinalysis: pH	462	61	40	51
Urinalysis: Specific Gravity	461	61	40	51
Urinalysis: Ketones	460	59	40	51
Urinalysis: Bilirubin	461	61	40	51
Urine Toxicology; Methamphetamine	94	15	8	11
Urinalysis: Red Blood Cells	259	51	23	28
Urinalysis: White Blood Cells	255	51	23	28

01FEB2024