



HAI PET-tle Royale 2026

Jan 13-14 2026

Presented by:
Christopher G. Schwarz
Mayo Clinic

HAI Quizmaster, 2026

The first edition of HAI was held in:

Miami

Boston

San Juan

San Diego

The first edition of HAI was held in:

Miami



Boston ✓



San Juan



San Diego



From: https://hai.worldeventsforum.com/past_editions/

T/F: Centiloid values are always between 0 and 100

True

False

T/F: Centiloid values are always between 0 and 100

True

 11 %

False ☒

 89 %

0 and 100 CL are *mean* values of their respective anchor groups. Scans frequently have values above and below those means.

HAI Quiz 2026 (3/30)



In session 1, which of Renaud's fruits was most dodgy?

Banana 🍌

Pineapple 🍍

Coconuts 🥥

Peach 🍑

Eggplant 🍆

In session 1, which of Renaud's fruits was most dodgy?

Banana 🍌

3 %

Pineapple 🍍

2 %

Coconuts 🥥 ✓

88 %

Peach 🍑

0 %

Eggplant 🍆

7 %

In session 1, Renaud La Joie presented results from de-identified ADNI sites denoted by fruits, and some had "dodgy" scans. It was a highly memorable part of the session.

Which is the earliest name for Flortaucipir:

[18F] AV-1451

[18F] T-807

[18F] AV-45

Florzolotau

Which is the earliest name for Flortaucipir:

[18F] AV-1451



[18F] T-807 ✓



[18F] AV-45



Florzolotau



CSF or Plasma p-tau217 is most correlated with:

Tau PET

Amyloid PET

Neurodegeneration

CSF or Plasma p-tau217 is most correlated with:

Tau PET

 11 %

Amyloid PET ☒

 89 %

Neurodegeneration

 1 %

Retrospective:

This can vary depending on the cohort, but p-tau 217 is used primarily as a marker of amyloid more than tau.

From session 2, among tau PET harmonization schemes:

CenTauR is linear and Unitau is nonlinear

CenTauR is nonlinear and Unitau is linear

Both schemes are linear

Both schemes are nonlinear

From session 2, among tau PET harmonization schemes:

CenTauR is linear and Unitau is nonlinear ✓



CenTauR is nonlinear and Unitau is linear



Both schemes are linear



Both schemes are nonlinear



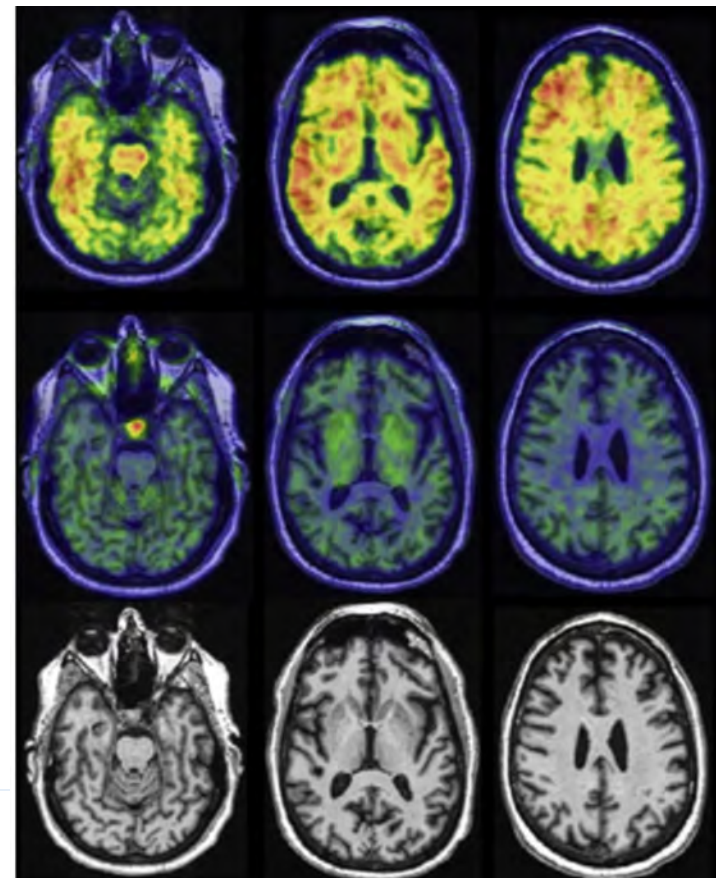
Which ATN stage is shown here?

A-T-(N)-

A+T-(N)-

A+T+(N)-

A+T+(N)+



Which ATN stage is shown here?

A-T-(N)-

6 %

A+T-(N)- ✓

76 %

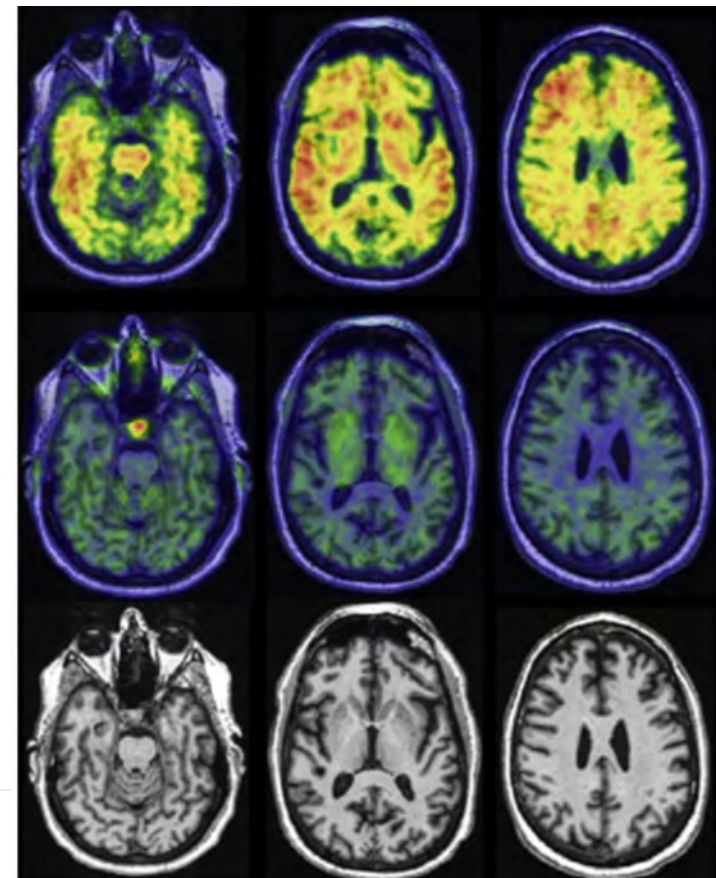
A+T+(N)-

9 %

A+T+(N)+

9 %

Image
Source



Which is not a Tau PET tracer:

AV-1451

NAV4694

MK-6240

GTP-1

PI-2620

RO-948

Which is not a Tau PET tracer:

AV-1451

☐ 3 %

NAV4694 ☒

☒ 68 %

MK-6240

☐ 0 %

GTP-1

☐ 22 %

PI-2620

☐ 3 %

RO-948

☐ 4 %

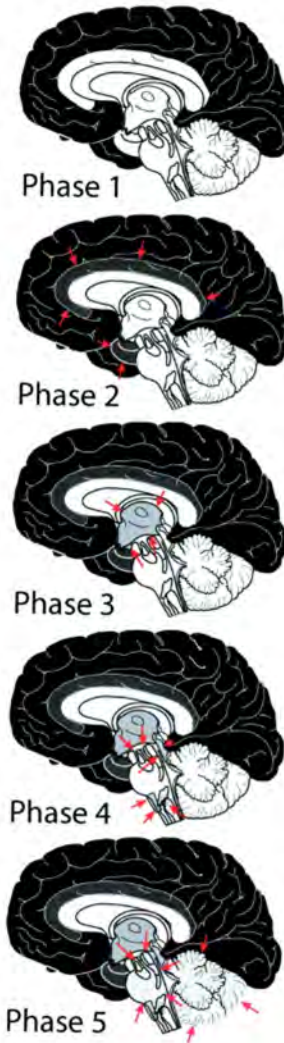
This figure depicts:

Braak staging

ATN Staging

Jack curves

Thal staging



This figure depicts:

Braak staging

16 %

ATN Staging

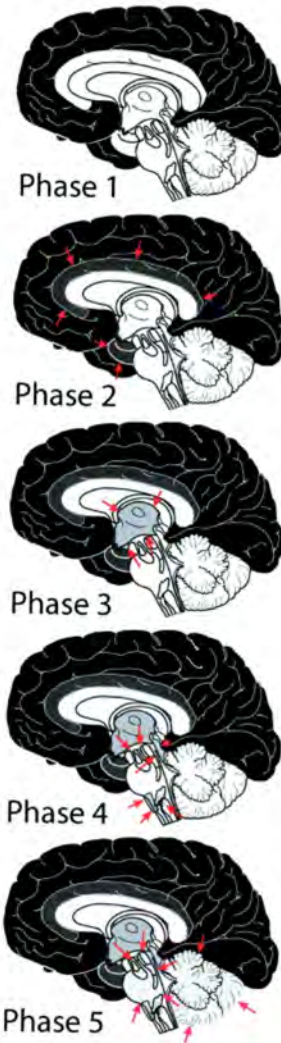
3 %

Jack curves

1 %

Thal staging ✓

80 %



Note: Dr. Thal was an HAI keynote speaker on this day, showing these images
Image source: <https://www.neurology.org/doi/full/10.1212/WNL.58.12.1791>

Alois Alzheimer wrote his doctoral thesis on:

Auguste Deter

The structure of amyloid plaques

Epilepsy

Earwax

Alois Alzheimer wrote his doctoral thesis on:

Auguste Deter



The structure of amyloid plaques



Epilepsy



Earwax ✓



Source: <https://pmc.ncbi.nlm.nih.gov/articles/PMC8095522/>

This was the "hardest" question of the quiz, with only 3 players answering correctly.

In the Alz. Assoc. AD criteria, FDG PET is a marker of:

Amyloid

Tau

Neurodegeneration

Vascular disease

In the Alz. Assoc. AD criteria, FDG PET is a marker of:

Amyloid

☐ 3 %

Tau

☐ 3 %

Neurodegeneration ☒

☒ 83 %

Vascular disease

☐ 10 %

ARIA stands for:

Alzheimer's-Related Imaging Anomaly

Amyloid-Related Imaging Abnormality

Amyloid-Related Inflammation at Autopsy

Alzheimer's-Related Inflammation Abnormality

ARIA stands for:

Alzheimer's-Related Imaging Anomaly

☐ 1 %

Amyloid-Related Imaging Abnormality ✓

☒ 96 %

Amyloid-Related Inflammation at Autopsy

☐ 1 %

Alzheimer's-Related Inflammation Abnormality

☐ 3 %

Retrospective: This was the "easiest" question of the quiz, with 96% correct.

Which is not a stage of tau tangles?

pre-tangles

young tangles 🧠

mature tangles 🧑

ghost tangles 👻

Which is not a stage of tau tangles?

pre-tangles

☐ 2 %

young tangles 🧠 ✓

☒ 85 %

mature tangles 🧠

☐ 2 %

ghost tangles 👻

☐ 11 %

HAI Quiz 2026 (14/30)

110

Which is a common acquisition time window for PIB PET:

50-70 minutes post-injection

80-120 minutes post-injection

60-90 minutes post-injection

70-90 minutes post-injection

HAI Quiz 2026 (14/30)

110

Which is a common acquisition time window for PIB PET:

50-70 minutes post-injection ✓



80-120 minutes post-injection



60-90 minutes post-injection



70-90 minutes post-injection



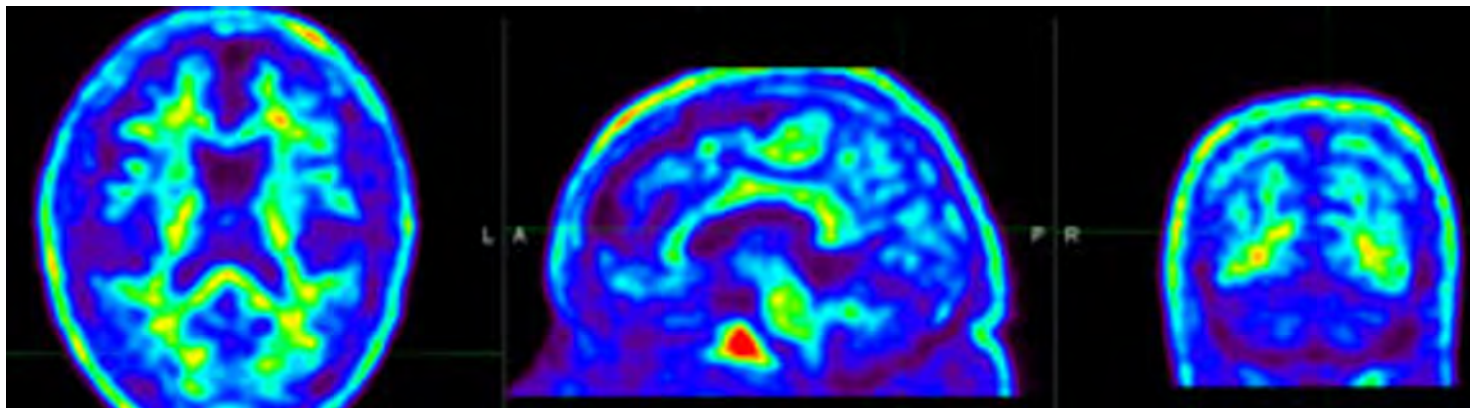
This amyloid PET scan should be read as:

Positive

Negative

unreadable: corrupted by motion

A mislabeled tau PET scan



This amyloid PET scan should be read as:

Positive

8 %

Negative ✓

72 %

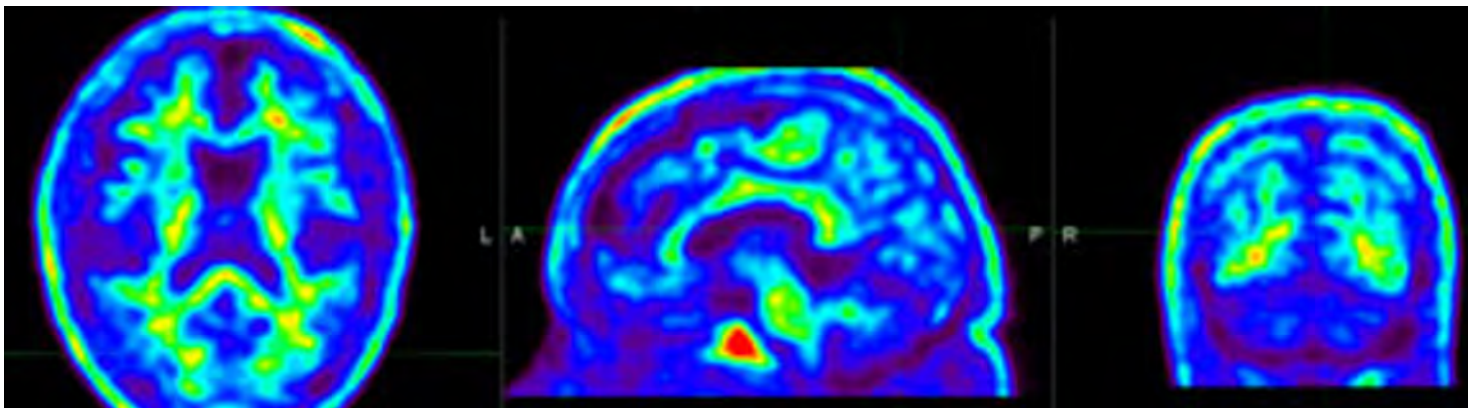
unreadable: corrupted by motion

10 %

A mislabeled tau PET scan

9 %

Image
Source



Which is a common region of off-target binding for MK-6240?

Basal ganglia

Mengines

Choroid plexus

White matter

Which is a common region of off-target binding for MK-6240?

Basal ganglia

 6 %

Mengines ☒

 68 %

Choroid plexus

 21 %

White matter

 6 %

Which is a common region of off-target binding for Flortaucipir?

meninges

cerebellum

supratentorial white matter

basal ganglia

Which is a common region of off-target binding for Flortaucipir?

meninges

 10 %

cerebellum

 4 %

supratentorial white matter

 13 %

basal ganglia ✓

 73 %

HAI Quiz 2026 (18/30)

075

Which protein has been the scourge of all tau and a-syn tracers, most often blamed for off-target binding?

TSPO

MAO-A

MAO-B

TDP-43

NfL

Which protein has been the scourge of all tau and a-syn tracers, most often blamed for off-target binding?

TSPO

 5 %

MAO-A

 7 %

MAO-B ☒

 85 %

TDP-43

 3 %

NfL

 0 %

Plasma GFAP is used as a measure of:

Neuroinflammation

Tau

Neurodegeneration

Amyloid

Plasma GFAP is used as a measure of:

Neuroinflammation ✓



93 %

Tau

1 %

Neurodegeneration

6 %

Amyloid

0 %

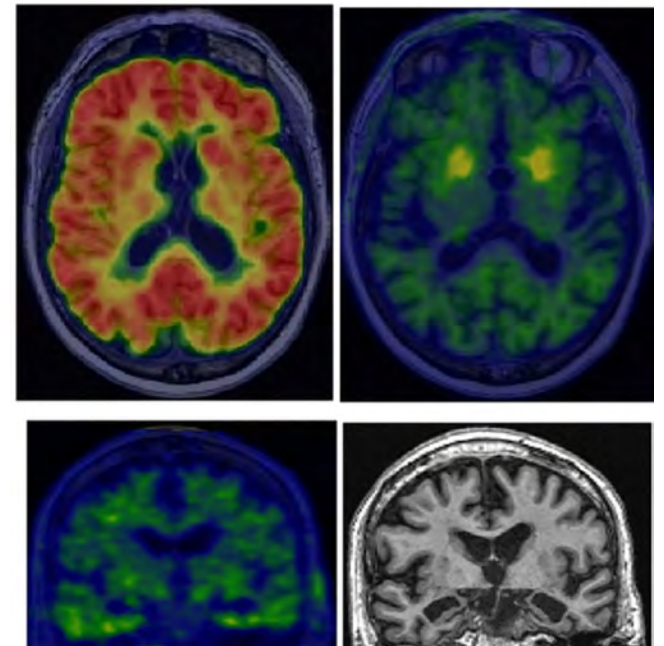
89M with progressive amnestic dementia. Most likely DX?

AD

TDP43/LATE

Vascular dementia

DLB



89M with progressive amnestic dementia. Most likely DX?

AD



TDP43/LATE ✓



Vascular dementia



DLB



Retrospective:

This person has both LATE and AD pathology, but their symptoms can be attributed primarily to TDP43/LATE. I should have worded that more clearly.

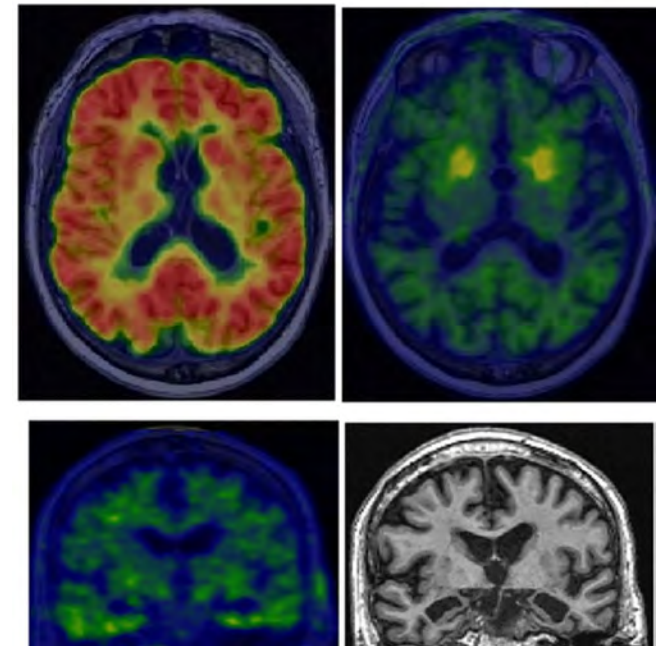


Image source

This meeting has largely agreed that PET-based Braak ROIs:

Accurately reflect Braak staging at autopsy

Are consistently more sensitive and higher than Braak staging at autopsy

Are consistently less sensitive and lower than Braak staging at autopsy

This meeting has largely agreed that PET-based Braak ROIs:

Accurately reflect Braak staging at autopsy

 8 %

Are consistently more sensitive and higher than Braak staging at autopsy

 5 %

Are consistently less sensitive and lower than Braak staging at autopsy



 87 %

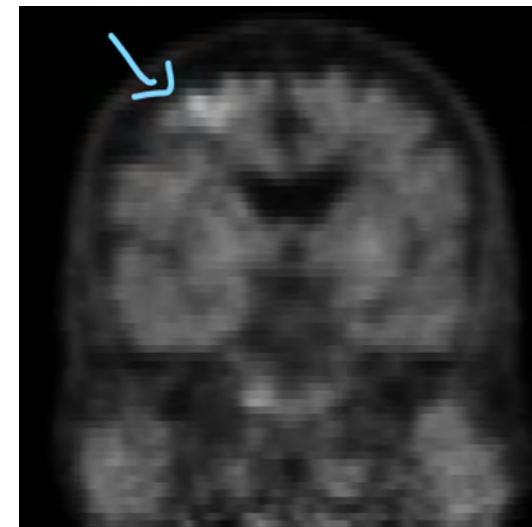
This focal FTP signal surrounding a hypointense area was caused by:

Off-target binding related to TDP-43

On-target binding to AD-related tau

Off-target binding related to a cortical infarct

Motion / attenuation correction artifact



This focal FTP signal surrounding a hypointense area was caused by:

Off-target binding related to TDP-43

5 %

On-target binding to AD-related tau

9 %

Off-target binding related to a cortical infarct ✓

79 %

Motion / attenuation correction artifact

7 %

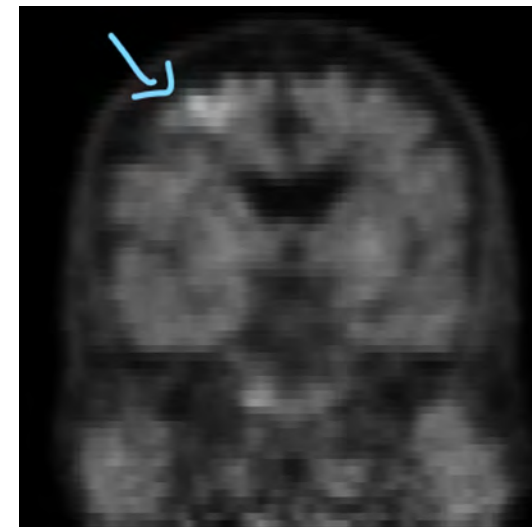


Image from
Mayo Clinic

HAI Quiz 2026 (23/30)

085

In May 2025, the FDA approved the first plasma marker for detection of amyloid plaques, based on:

A β 42/40

pTau217

pTau217/A β 42

pTau181

In May 2025, the FDA approved the first plasma marker for detection of amyloid plaques, based on:

A β 42/40



pTau217



pTau217/A β 42 ✓



pTau181



This was the second "hardest" question of the quiz, referring to the Fujirebio Lumipulse test
Source:

<https://www.fda.gov/news-events/press-announcements/fda-clears-first-blood-test-used-diagnosing-alzheimers-disease>

HAI Quiz 2026 (24/30)

0 8 1

Approved anti-amyloid therapeutics typically have what effect on MRI gray matter volume and cortical thickness?

Increase

Decrease

No change

Increase gray matter volume but reduce cortical thickness

HAI Quiz 2026 (24/30)

081

Approved anti-amyloid therapeutics typically have what effect on MRI gray matter volume and cortical thickness?

Increase



Decrease ✓



No change



Increase gray matter volume but reduce cortical thickness



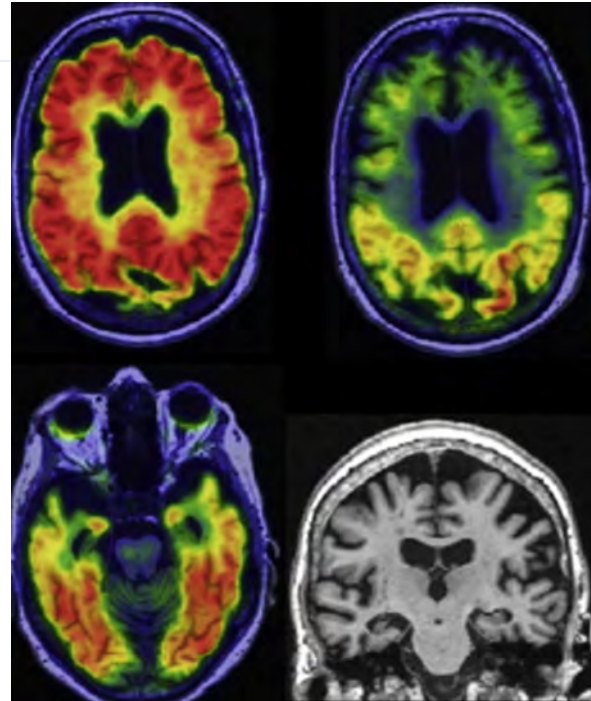
Which ATN stage is shown here?

A-T-(N)-

A+T-(N)-

A+T+(N)-

A+T+(N)+



Which ATN stage is shown here?

A-T-(N)-

☐ 0 %

A+T-(N)-

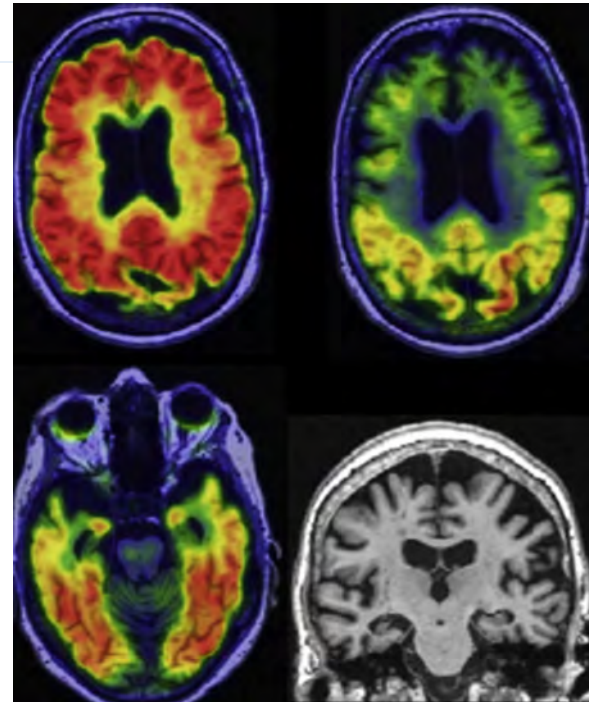
☐ 1 %

A+T+(N)-

☐ 21 %

A+T+(N)+ ☒

☐ 78 %



Source:

<https://alz-journals.onlinelibrary.wiley.com/doi/full/10.1016/j.jalz.2018.02.018>

The primary purpose of the CT scan in PET-CT is to help correct for:

Motion

Signal attenuation

Partial volume effects

Head size / TIV

The primary purpose of the CT scan in PET-CT is to help correct for:

Motion

 6 %

Signal attenuation ✓

 67 %

Partial volume effects

 15 %

Head size / TIV

 12 %

Autoradiography is a process to measure:

spatial autocorrelation of PET scans

correlation over time in dynamic scans

tracer binding in tissue samples

point spread function / scanner resolution

Autoradiography is a process to measure:

spatial autocorrelation of PET scans

 6 %

correlation over time in dynamic scans

 3 %

tracer binding in tissue samples ✓

 89 %

point spread function / scanner resolution

 3 %

In the keynote, which network architecture was considered the most recent and most advanced?

GAN

LAN

Transformer

U-Net

CNN

Decepticon

In the keynote, which network architecture was considered the most recent and most advanced?

GAN



LAN



Transformer ✓



U-Net



CNN



Decepticon



An abnormal CSF or plasma AB42/40 level associated with amyloid plaques is:

abnormally high

abnormally low

in a mid-range, neither abnormally high or low

AB42/40 is actually a nonspecific marker of neurodegeneration

An abnormal CSF or plasma AB42/40 level associated with amyloid plaques is:

abnormally high

18 %

abnormally low ✓

77 %

in a mid-range, neither abnormally high or low

3 %

AB42/40 is actually a nonspecific marker of neurodegeneration

2 %

Which is true of Flortaucipir in-vivo in non-AD pathologies, at the group level

Binds strongly in GM to all tauopathies

Weakly elevated in GM for non-AD tauopathies only

Weakly elevated in juxtacortical WM for both 4-R tau and TDP-43

Weakly elevated in juxtacortical WM for 4-R tau but not TDP-43

Which is true of Flortaucipir in-vivo in non-AD pathologies, at the group level

Binds strongly in GM to all tauopathies

 9 %

Weakly elevated in GM for non-AD tauopathies only

 38 %

Weakly elevated in juxtacortical WM for both 4-R tau and TDP-43 ✓

 45 %

Weakly elevated in juxtacortical WM for 4-R tau but not TDP-43

 9 %

Retrospective:

I did not give nearly enough time for this question, and I was still reading it when the time ended.

Top 25 Players

User Name	Rank	Score	Max Score	Milliseconds
Dexter Jagust (Renaud La Joie)	1	27	30	172072
Tobey Betthausen	2	27	30	215059
Konstantinos Chiotis	3	27	30	265058
Petrice	4	26	30	265949
Seb Roemer	5	26	30	305265
Chris Rowe	6	26	30	349886
P Lao	7	25	30	257717
Quentin Finn	8	25	30	286278
Jessie	9	25	30	303333
Nico Franzmeier	10	24	30	204766
Gemma Salvadó	11	24	30	278354
Christina Moloney	12	24	30	318790
Arnaud Charil	13	23	30	234338
Praveen Honhar	14	23	30	240640
Heidi	15	23	30	258727
Melissa Murray	16	23	30	269963
Mike Devous's Spirit	17	23	30	281280
Alexa Pichet Binette	18	23	30	298484
Blond Devil	19	23	30	338729
Karine Provost	20	22	30	221132
Samuel Lockhart	21	22	30	224259
David Soleimani-Meigooni	22	22	30	281356
Ganna Blazhenets	23	21	30	230849
Michelle Farrell	24	21	30	267757
Cashew M. Flores	25	21	30	286413