

ADNI PET CORE



**World Wide
ADNI Update
July 11, 2014**

Total Number of FDG Scans by Group

Number of FDG Scans	Normal	SMC	EMCI	LMCI	AD	Total
1	119	104	165	158	138	684
2	133	0	141	74	25	373
3	6	0	1	18	17	42
4	13	0	0	16	58	87
5	33	0	0	41	0	74
6	15	0	0	49	0	64
7	19	0	0	29	0	48
8	5	0	0	26	0	31
9	0	0	0	1	0	1
Total	343	104	307	412	238	1404

Total Number of Florbetapir Scans by Group

Number of Florbetapir Scans	Normal	SMC	EMCI	LMCI	AD	Total
1	138	74	160	167	125	664
2	135	0	145	91	13	384
Total	273	74	305	258	138	1048

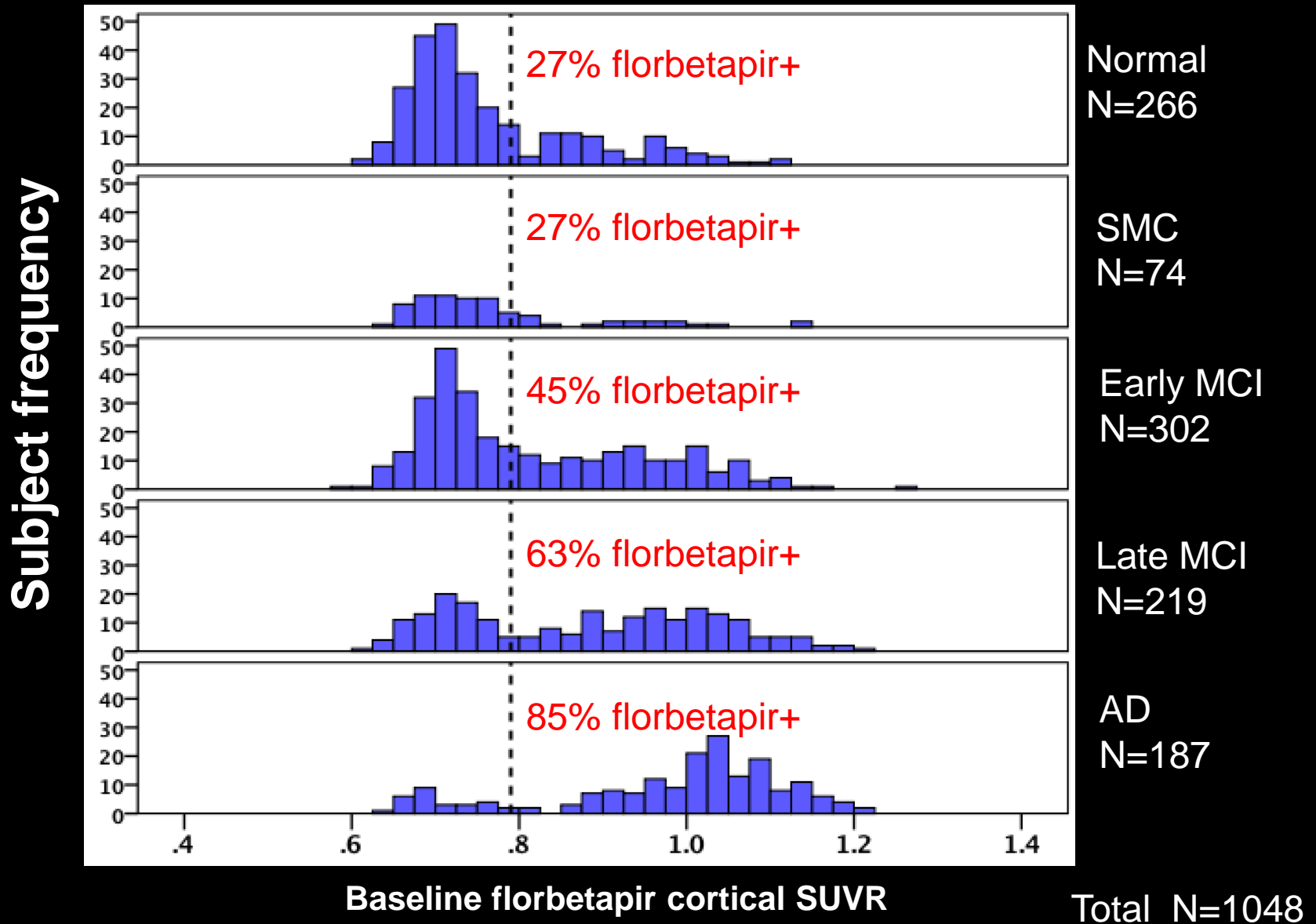
The last ADNI Subject will have his second scan by December 2015

By the end of 2014 there will be ~800 subjects with 2 scans

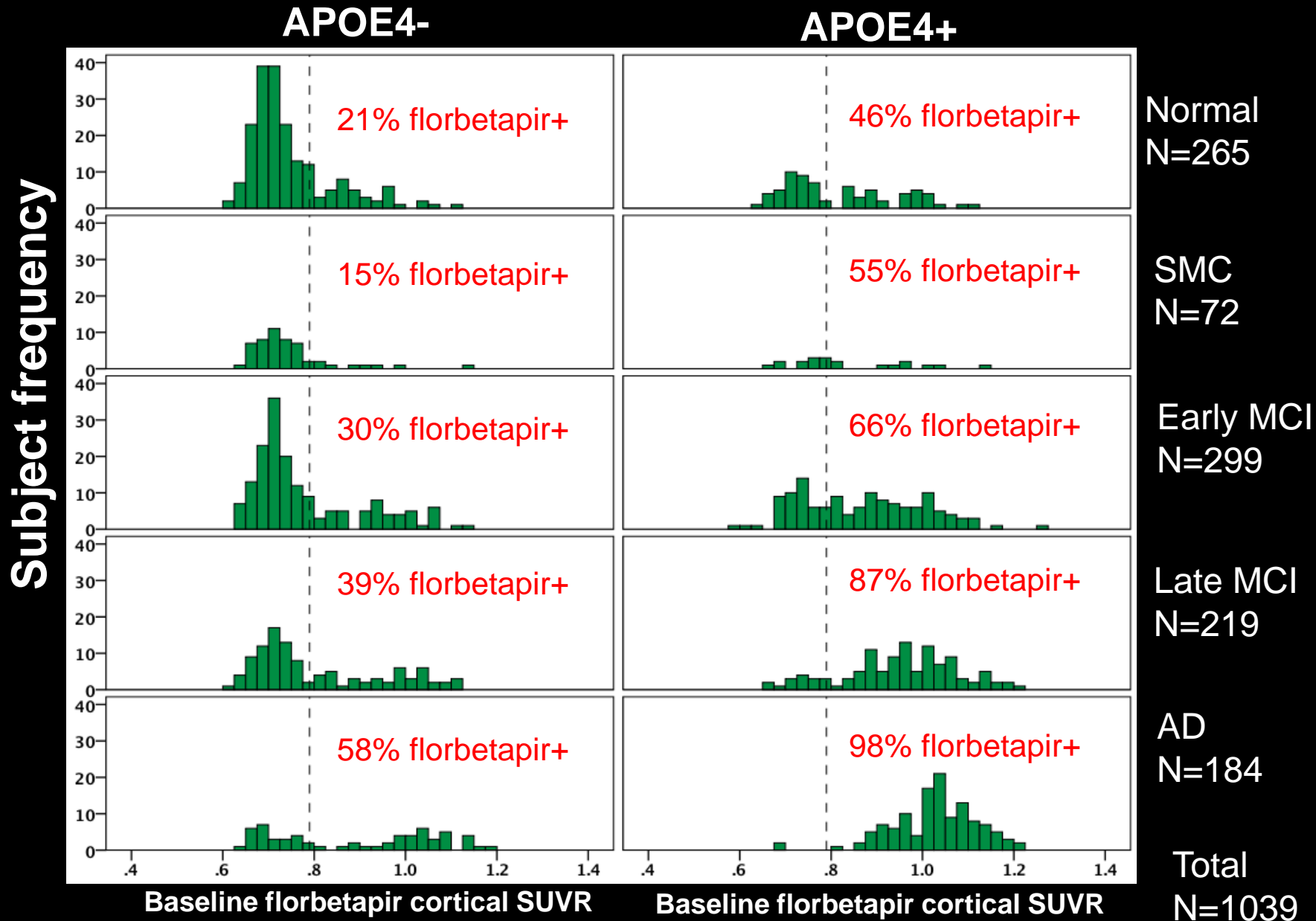
There are currently 5 subjects with 3 scans

By December 2014 there will be ~100 third scans

Florbetapir status by diagnosis

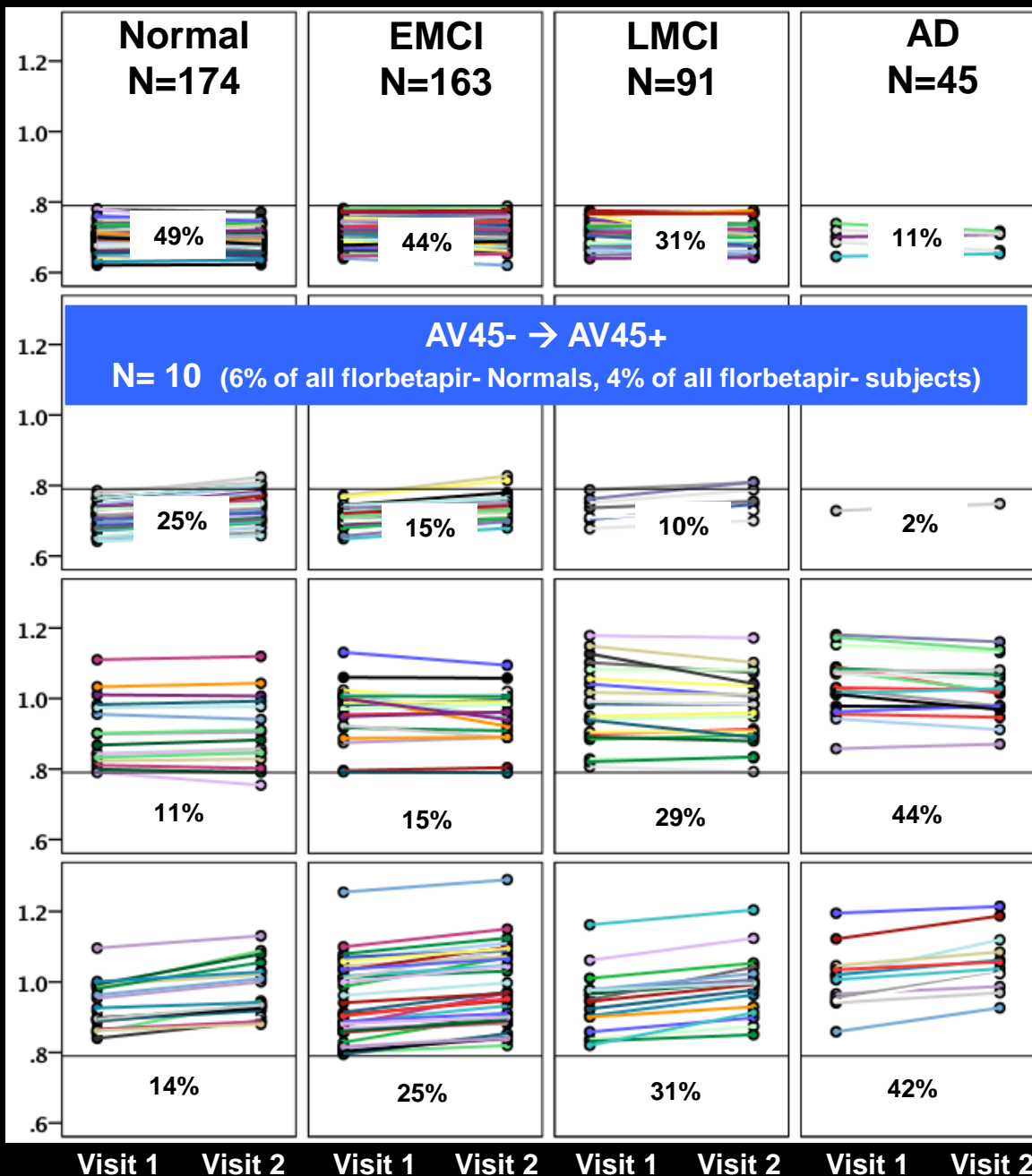


Florbetapir by APOE4 status



Florbetapir change

Florbetapir cortical SUVR



Total N=473

Florbetapir -
not increasing
N=190 (18% APOE4+)

Florbetapir -
Increasing
N=79 (24% APOE4+)

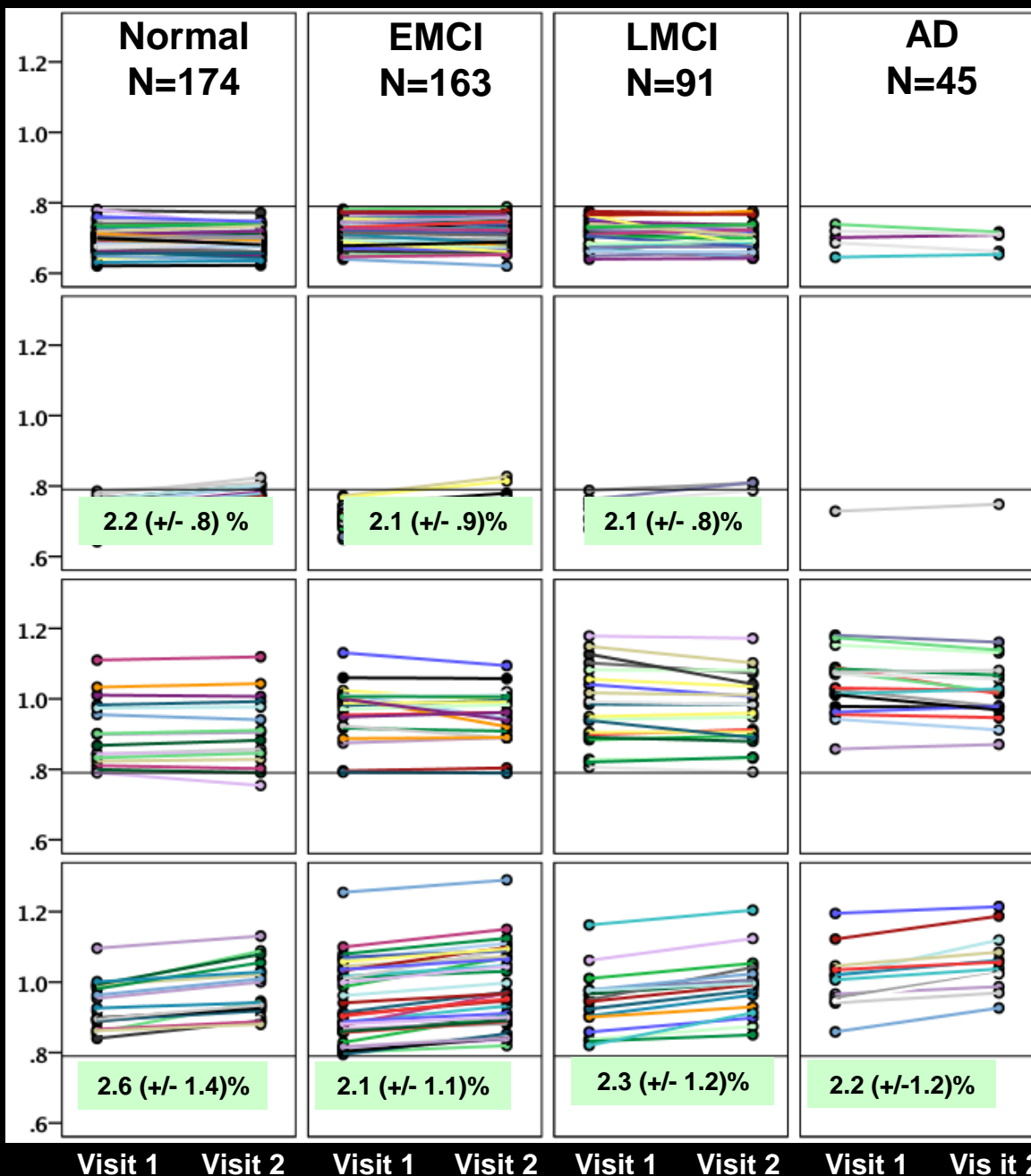
Florbetapir +
not increasing
N=91 (60% APOE4+)

Florbetapir +
Increasing
N=113 (70% APOE4+)

Florbetapir change

Annual
florbetapir
change

Florbetapir cortical SUVR



Total N=473

Florbetapir -
not increasing
N=190 (18% APOE4+)

Florbetapir -
Increasing
N=79 (24% APOE4+)

Florbetapir +
not increasing
N=91 (60% APOE4+)

Florbetapir +
Increasing
N=113 (70% APOE4+)

ADNI3: Time for Tau

Motivation:

Correlation with severity – outcome biomarker

Subject selection – “AD pathway”

Tau-targeted therapy

Currently 3 potential compounds

PBB3 with [^{11}C] label

[^{18}F]T807 (AV-1451) and [^{18}F]THK5117

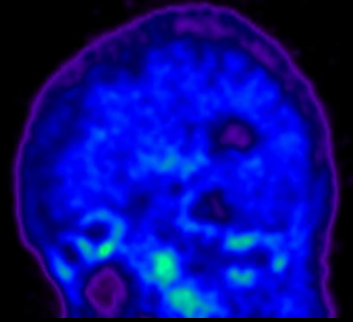
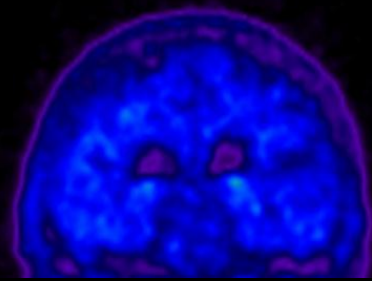
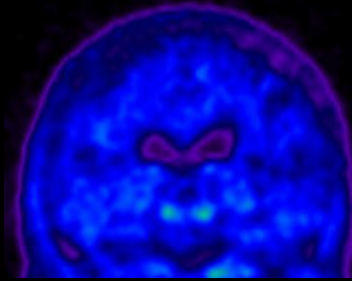
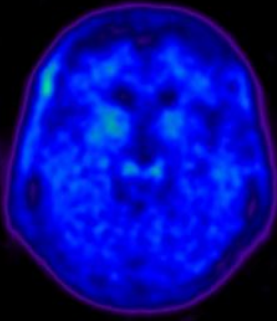
2 ADNI Pilot Grants proposing AV-1451

DOD (funded), NIA Supplement (pending)

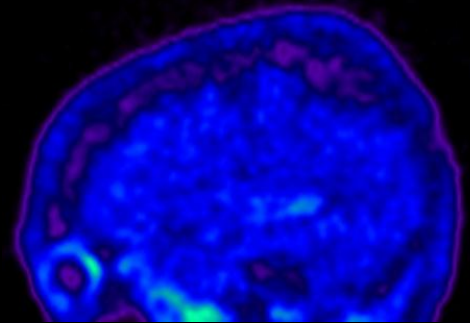
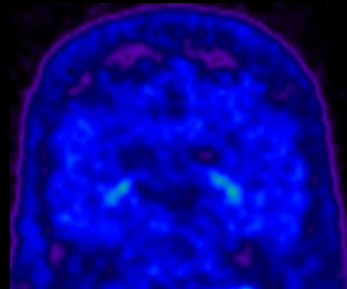
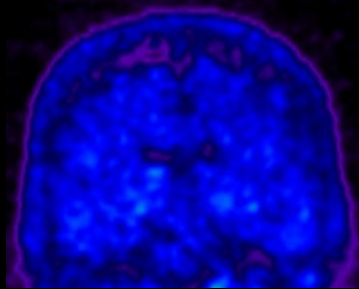
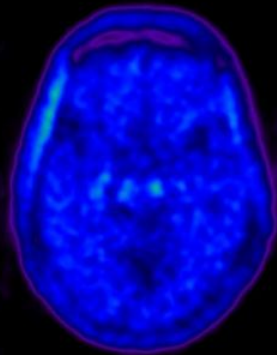
Normal Controls

[¹⁸F]-AV-1451

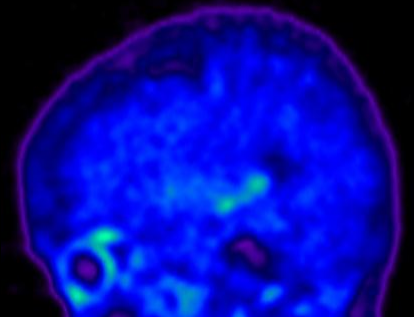
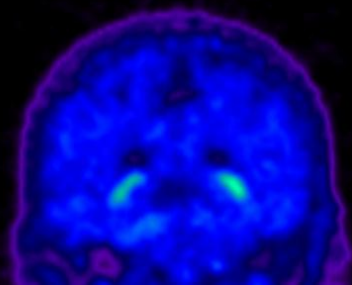
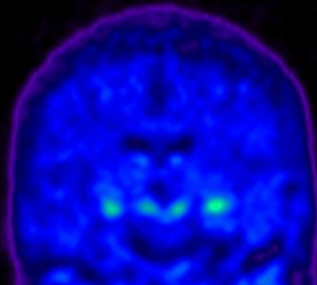
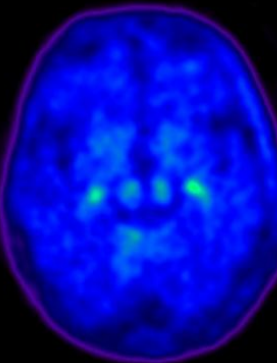
PIB DVR
1.02



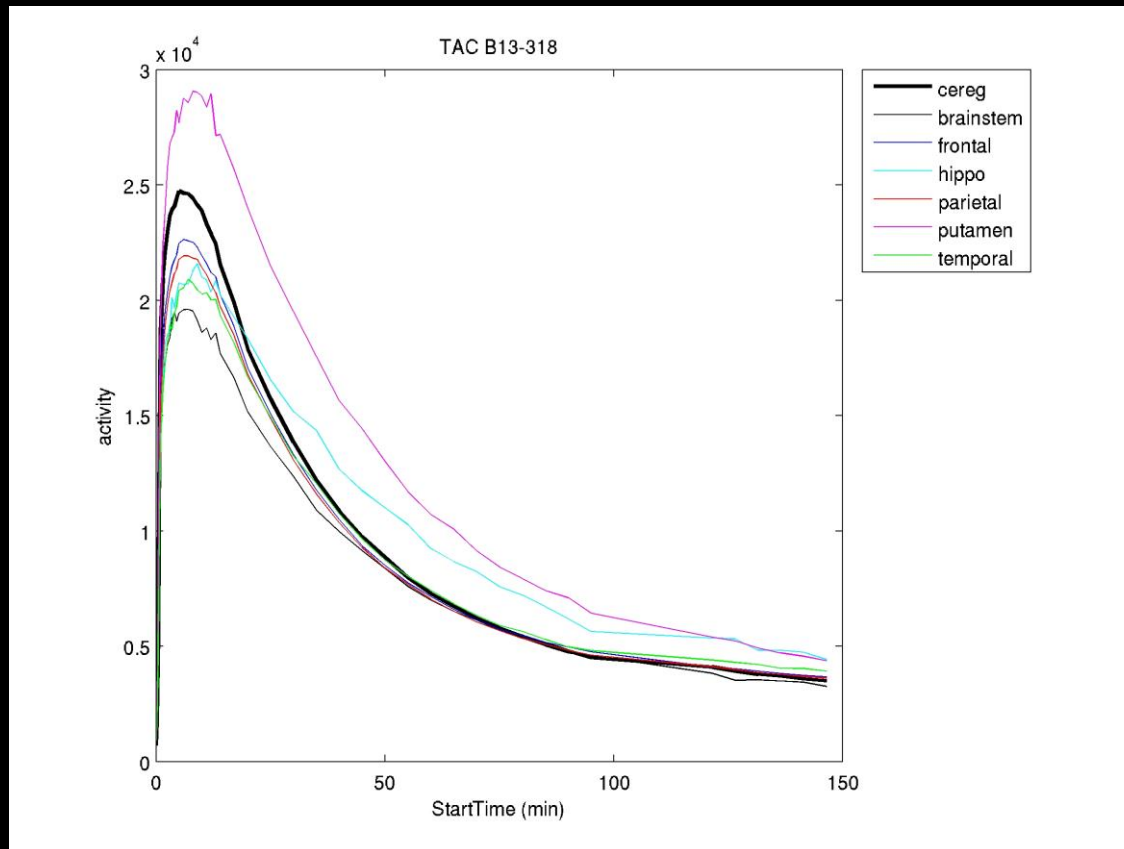
PIB DVR
1.21



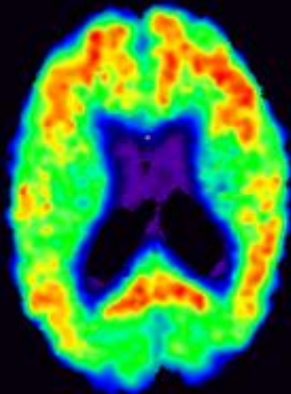
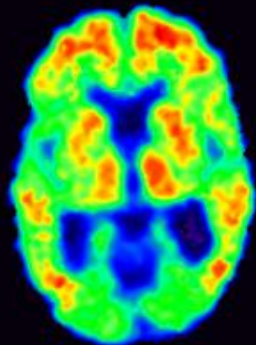
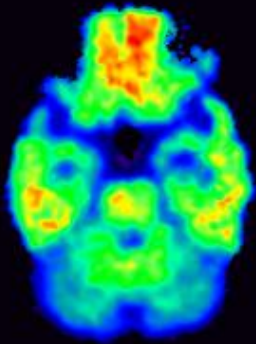
PIB DVR
1.02



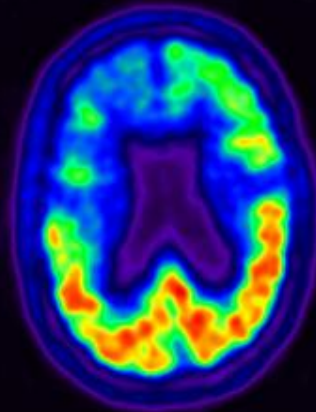
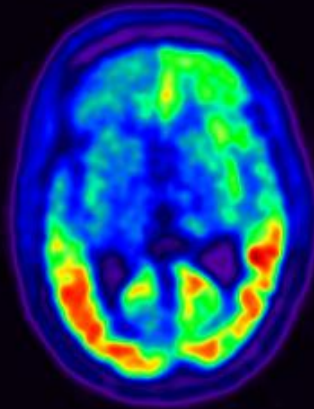
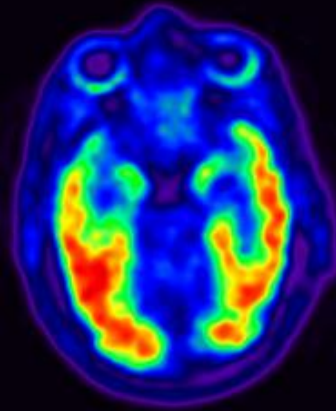
Control Time-Activity Curve



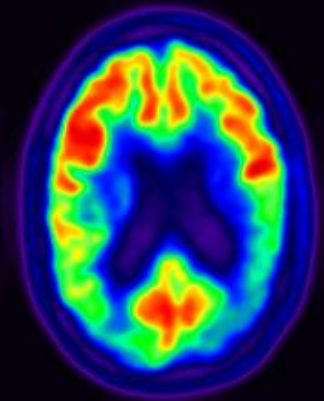
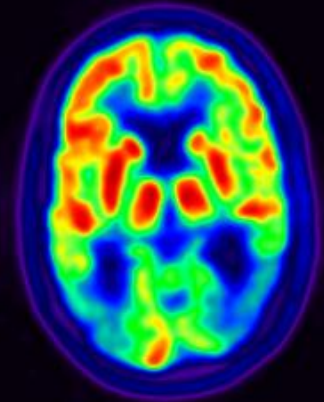
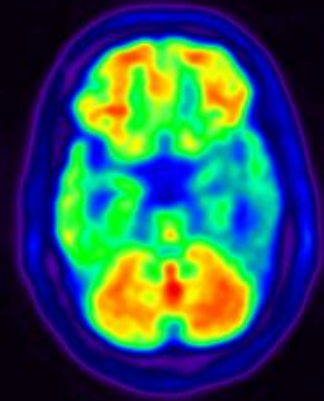
PIB



AV-1451



FDG



Acknowledgements

A night view of a city with a prominent illuminated tower in the foreground and a sunset sky in shades of orange and red. The tower is a tall, stone structure with a pointed top, illuminated from within. The city below is lit up with numerous lights, and a road with a long line of lights leads towards the center. The sky is a mix of orange, red, and purple, with some clouds. The overall scene is a beautiful night view of a city.

**Susan Landau, Allie Fero, Suzanne Baker, Bob Koeppe,
Eric Reiman, Kewei Chen, Norman Foster, Chet Mathis**

Core Leaders

Site PIs

Participants