

ADNI Clinical Core

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ADNI Demographics

	Normal controls (n=229)	MCI (n=398)	AD (n=192)	P
Age, mean (SD)	76.4 (5.0)	75.3 (7.5)	75.8 (7.4)	0.15
Female (%)	48.0	35.4	47.4	0.002
Years of education, mean (SD)	15.6 (3.1)	16.0 (2.9)	14.7 (3.1)	<0.001
Apolipoprotein E e4: Positive (%)	26.6	53.5	65.6	<0.001

ADNI Cognitive Function

	Normal (n=229)	MCI (n=398)	AD (n=192)
Estimated premorbid verbal IQ	119.8 (9.0)	116.2 (9.7)	113.6 (9.9)
Memory			
Auditory verbal learning			
Trials 1-5 correct	43.3 (9.09)	30.7 (9.03)	23.2 (7.70)
Delayed recall (%)	65.8 (27.6)	32.1 (31.4)	11.3 (21.9)
Language			
Boston Naming	27.9 (2.3)	25.5 (4.1)	22.3 (6.2)
Category fluency total	34.6 (8.1)	26.7 (7.5)	20.3 (7.5)
Executive function			
Trail A time	36.5 (13.2)	44.8 (22.8)	68.2 (36.8)
Trail B time	89.2 (44.3)	130.5 (73.5)	199.6 (86.8)
Digit symbol correct	45.7 (10.2)	36.9 (11.1)	26.7 (12.9)
Visuospatial ability			
Clock draw: Copy	4.86 (0.43)	4.65 (0.68)	4.31 (1.00)
Attention			
Digit span: Forward	8.78 (1.99)	8.22 (2.01)	7.54 (1.94)
Digit span: Backward	7.21 (2.16)	6.17 (2.2)	4.96 (1.83)

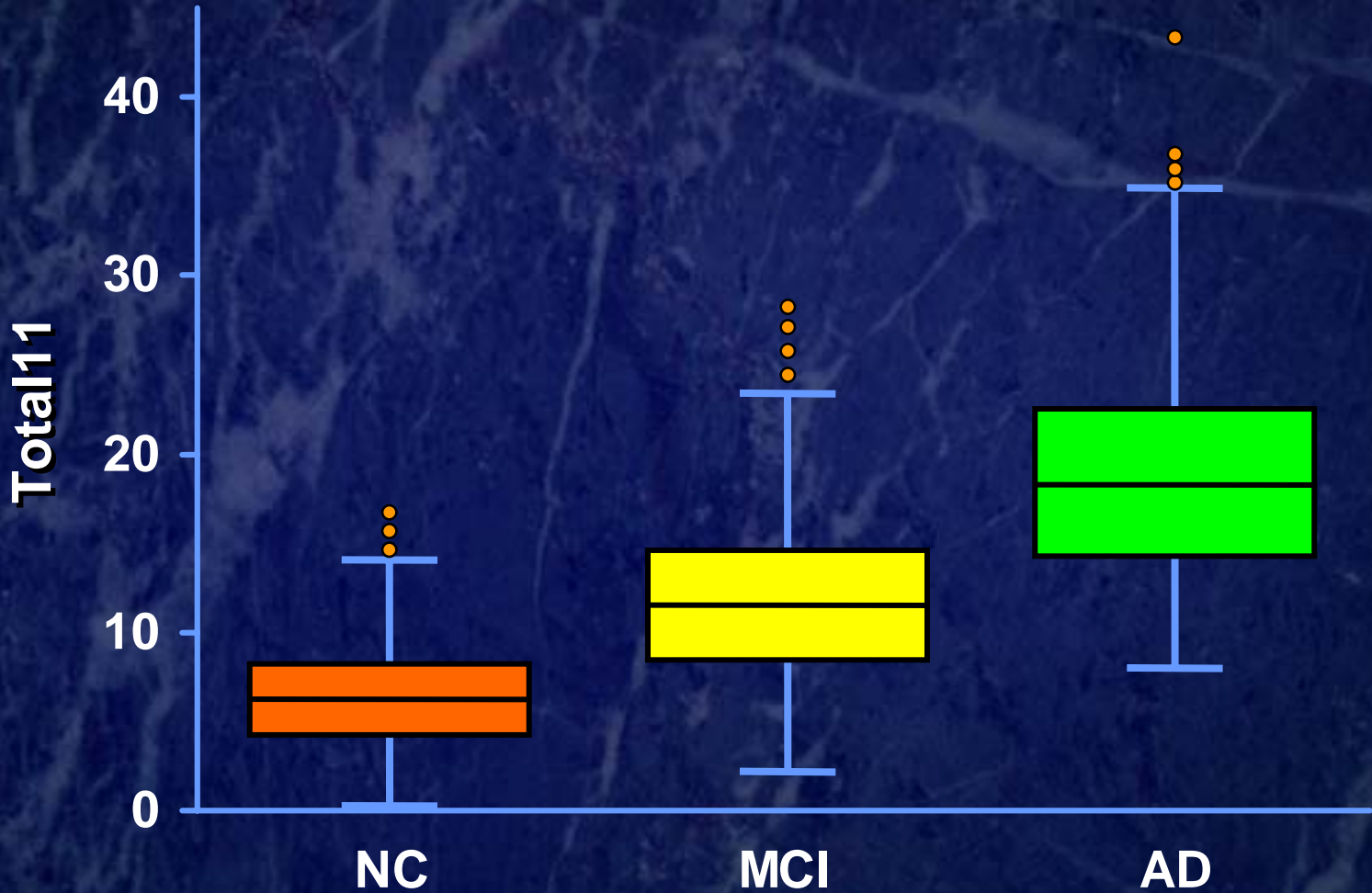
ADAS-Cog

Baseline

12 months

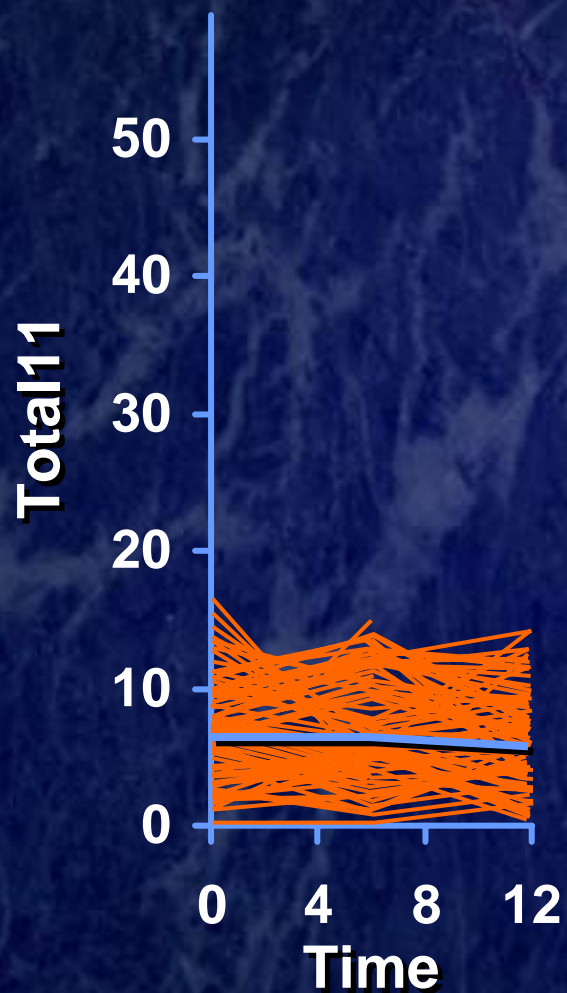
NC	Mean	6.2	5.5
	SD	2.9	2.8
MCI	Mean	11.6	12.5
	SD	4.5	6.0
AD	Mean	18.6	22.0
	SD	6.4	8.9

ADAS-Cog Baseline

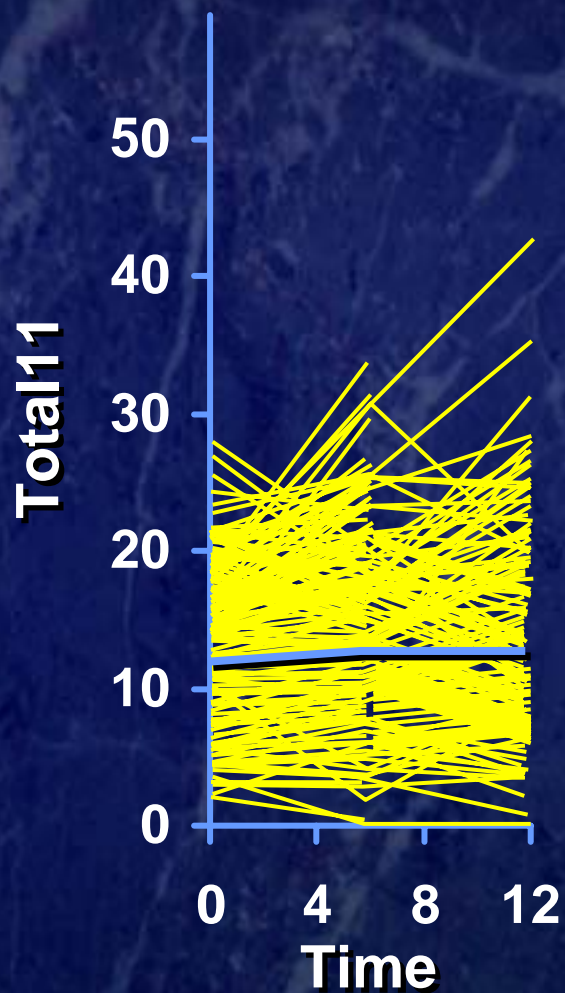


ADAS-Cog

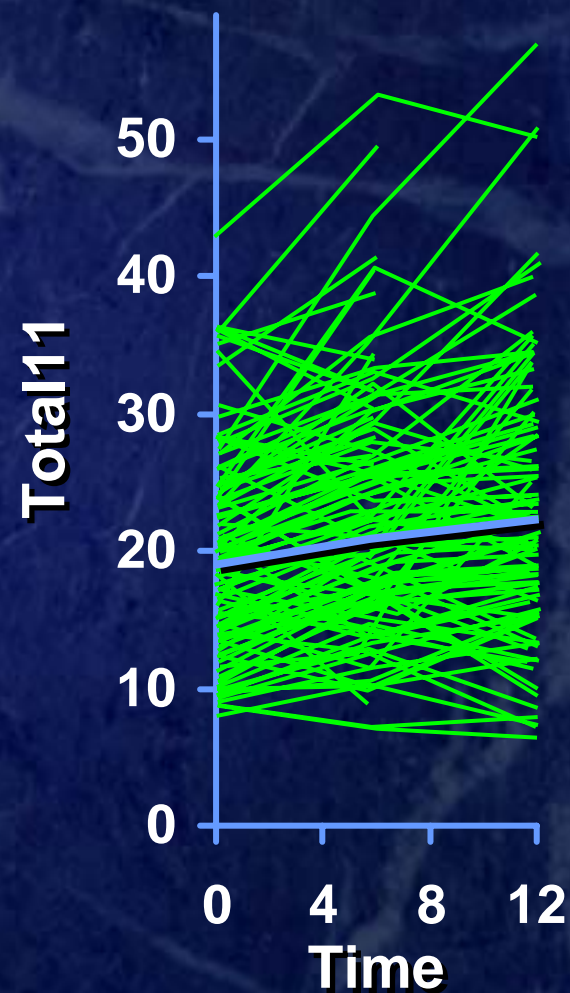
NC



MCI



AD



ADAS-Cog Annual Change

NC

MCI

AD

Mean

-0.5

1.0

4.2

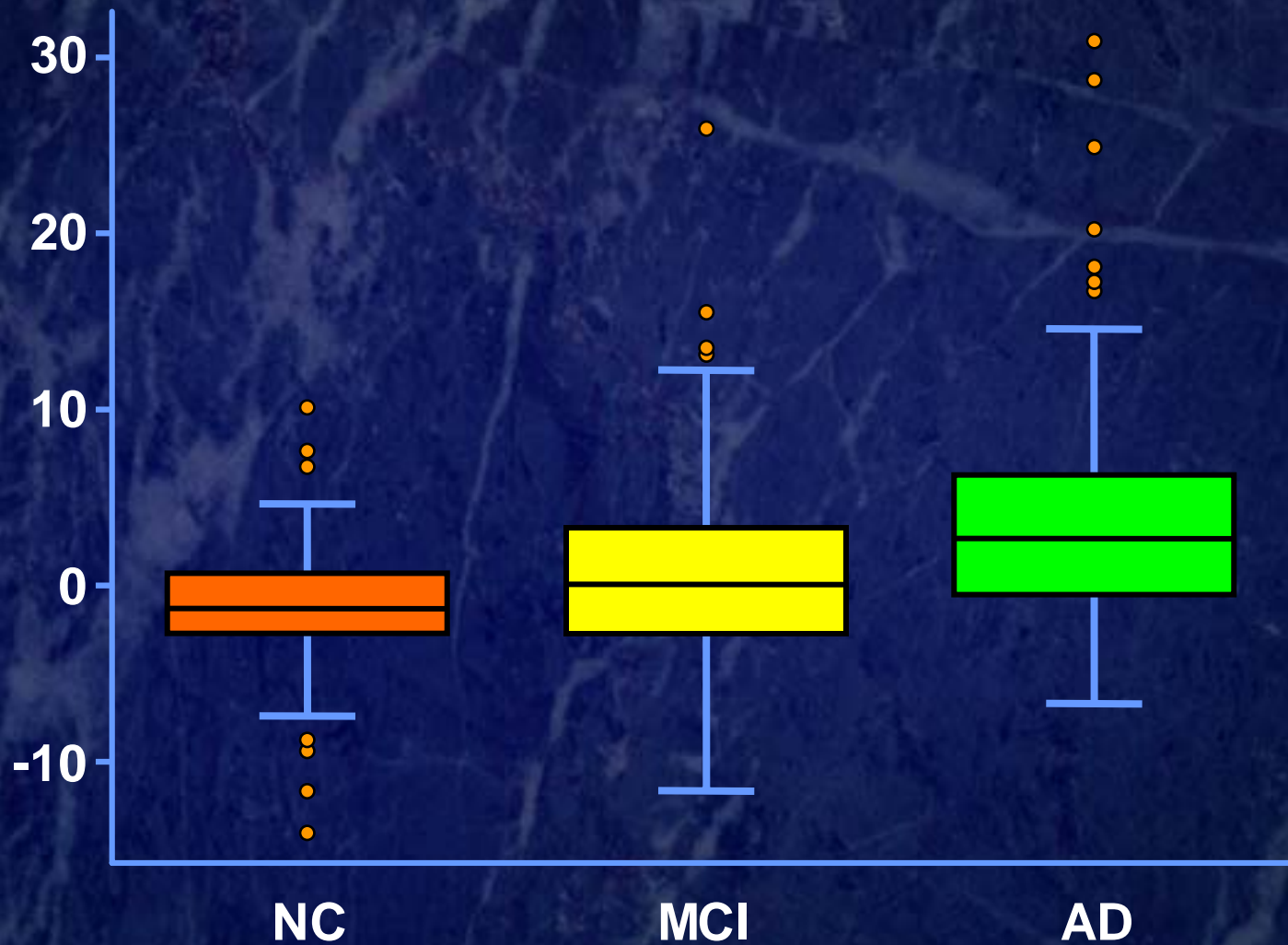
SD

3.1

4.5

6.1

ADAS-Cog Annual Change



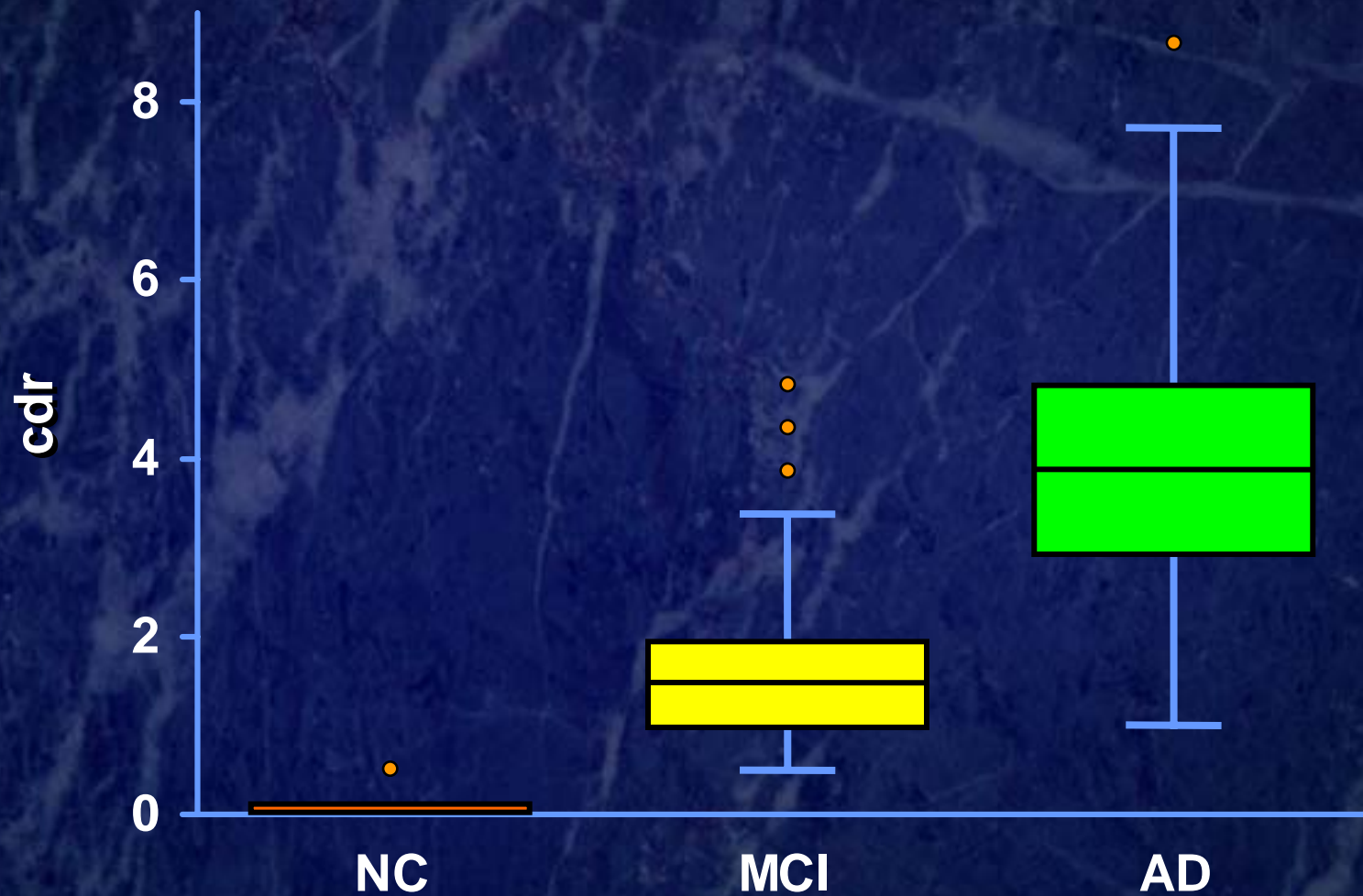
CDR Sum of Boxes

Baseline

12 months

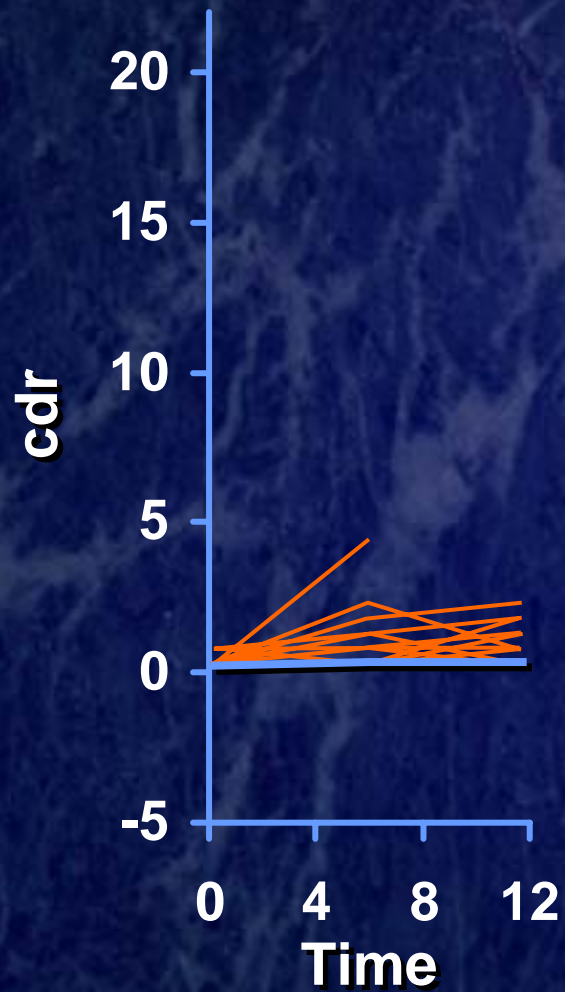
NC	Mean	0.0	0.1
	SD	0.1	0.3
MCI	Mean	1.6	2.3
	SD	0.9	1.6
AD	Mean	4.3	5.7
	SD	1.6	2.7

CDR Sum of Boxes

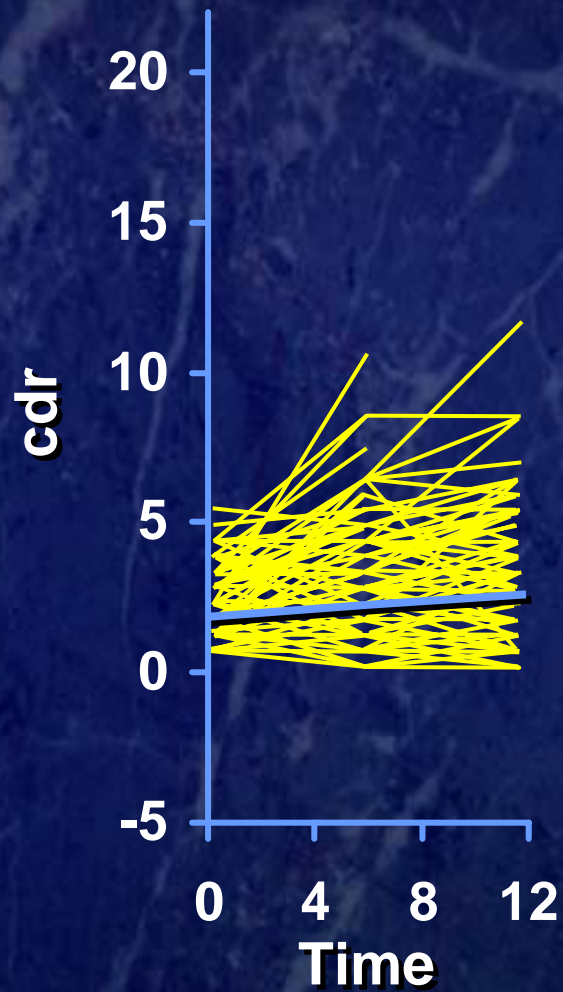


CDR Sum of Boxes

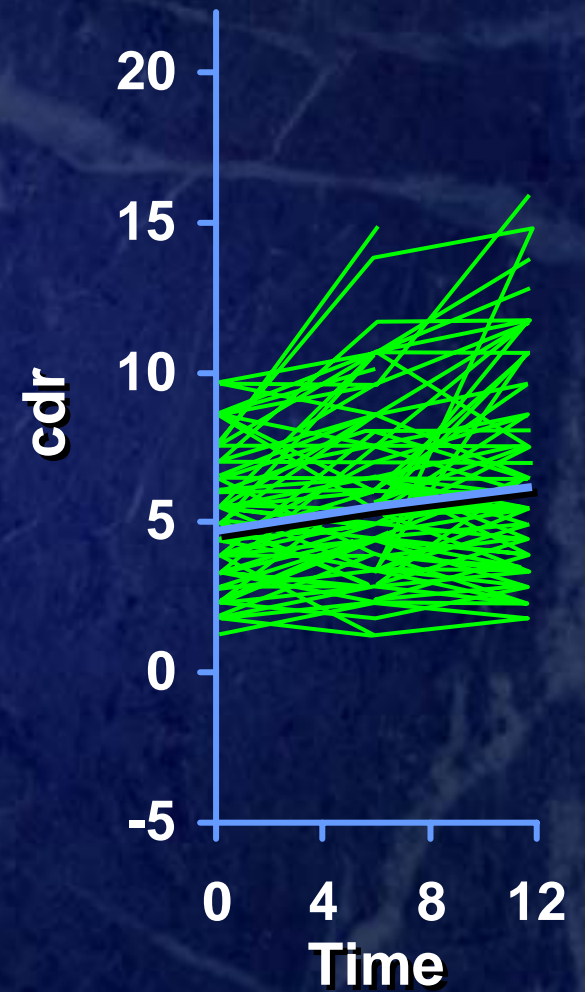
NC



MCI



AD

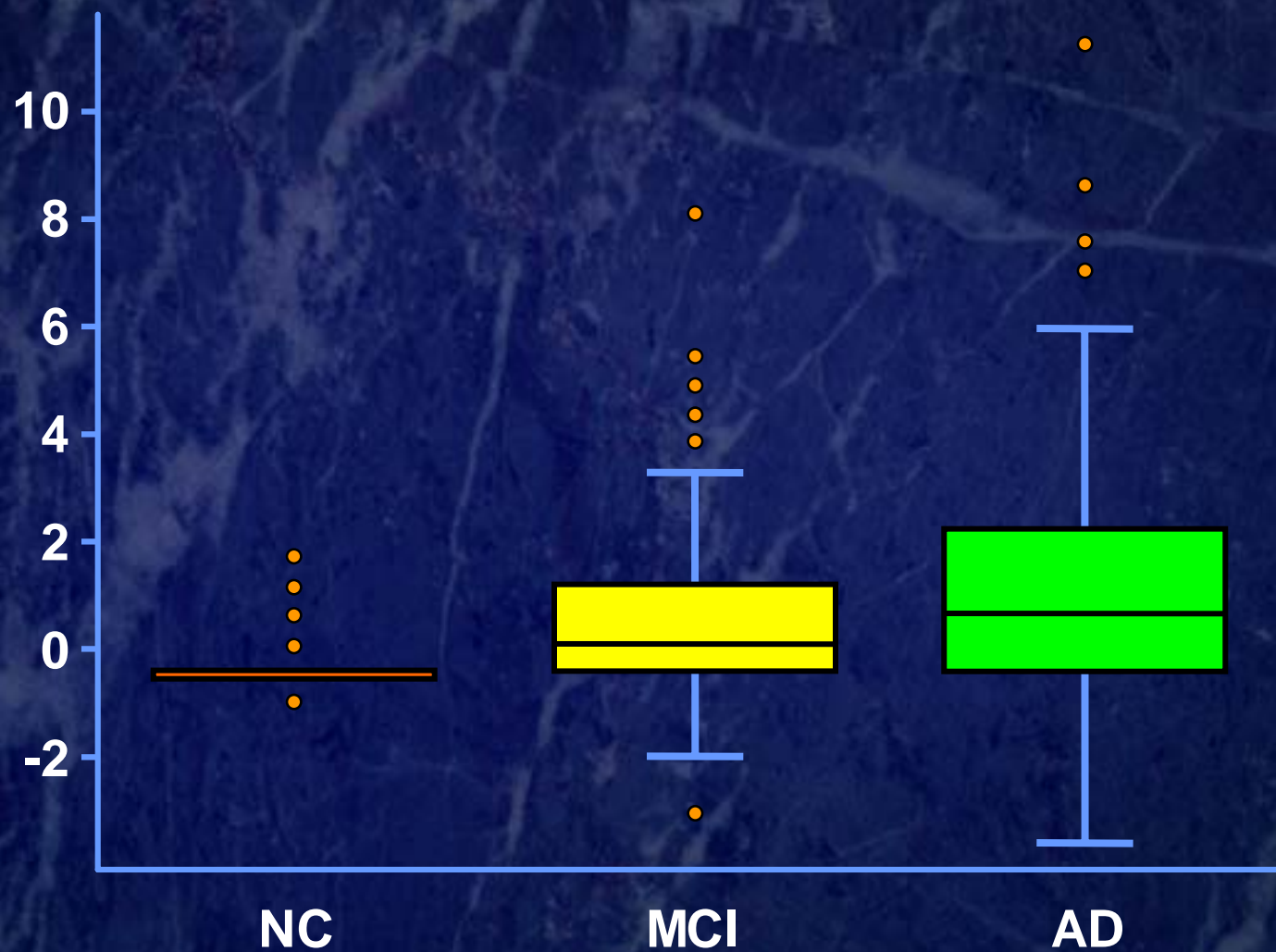


CDR Sum of Boxes

Univariate Summaries of the Annual Change by Group

	NC	MCI	AD
Mean	0.1	0.7	1.5
SD	0.3	1.3	2.1

CDR Sum of Boxes Annual Change



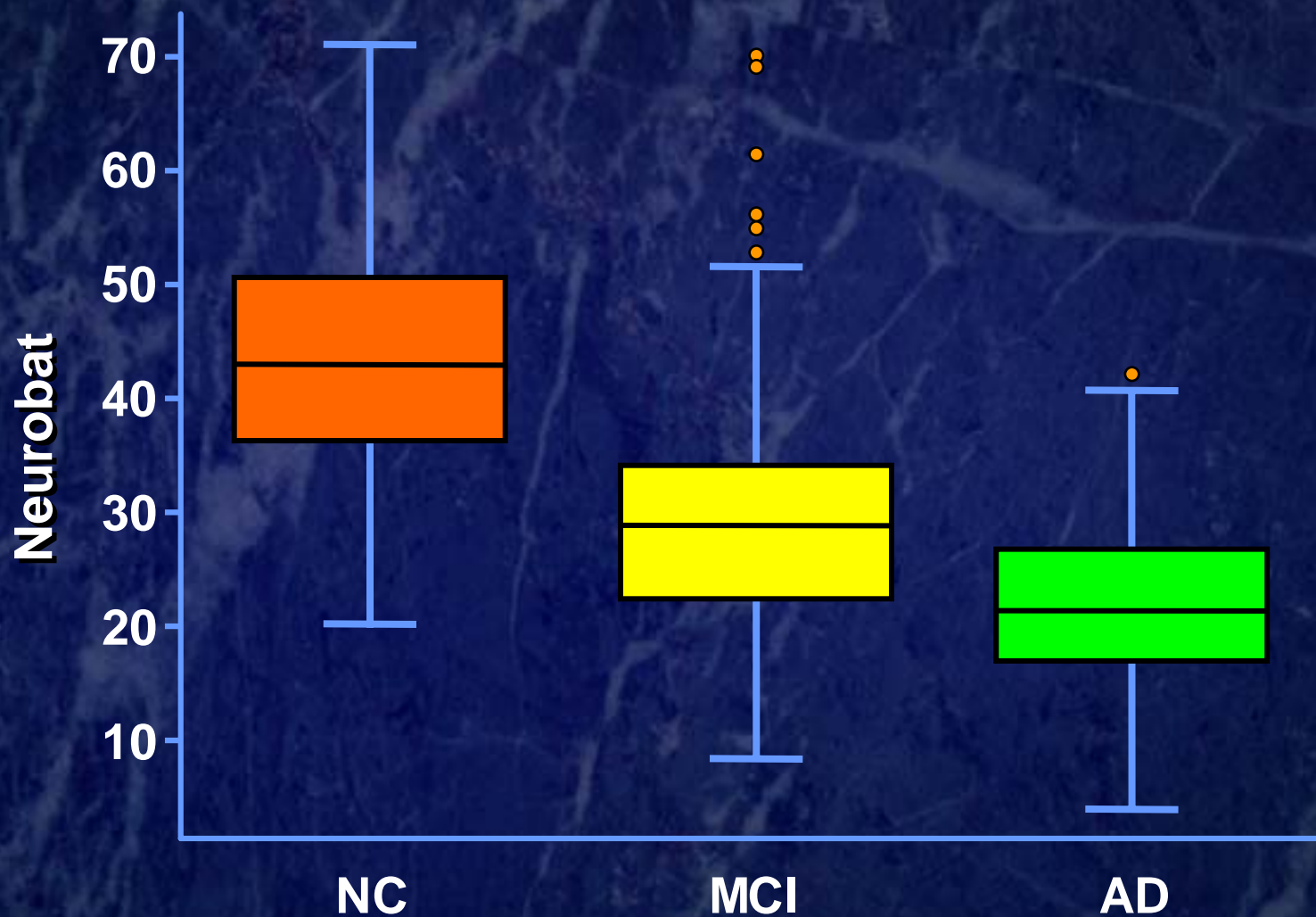
AVLT Learning Over Trials

Baseline

12 months

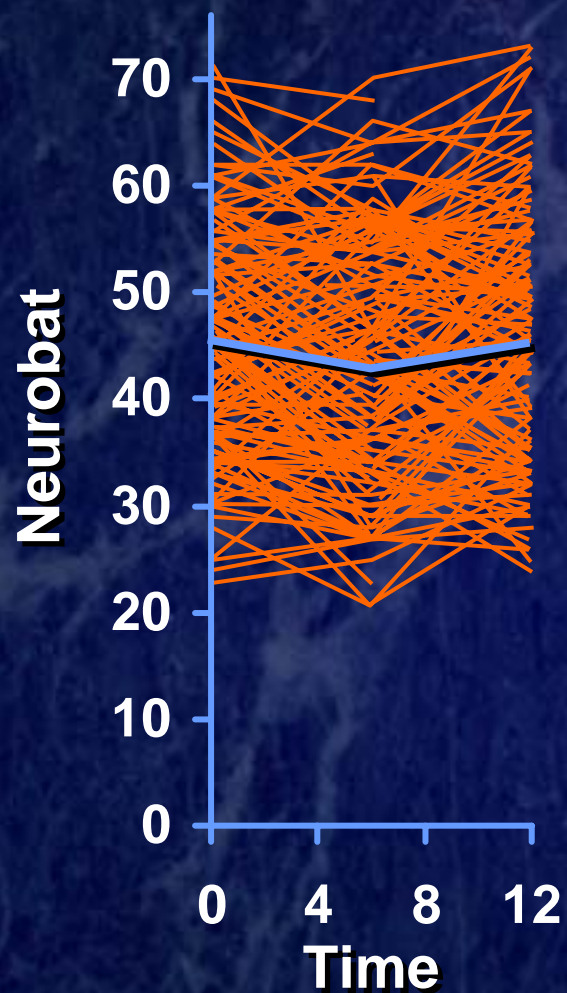
NC	Mean	43.6	43.8
	SD	8.9	10.1
MCI	Mean	30.6	29.3
	SD	9.2	9.7
AD	Mean	23.3	20.6
	SD	7.5	7.9

AVLT Learning Over Trials

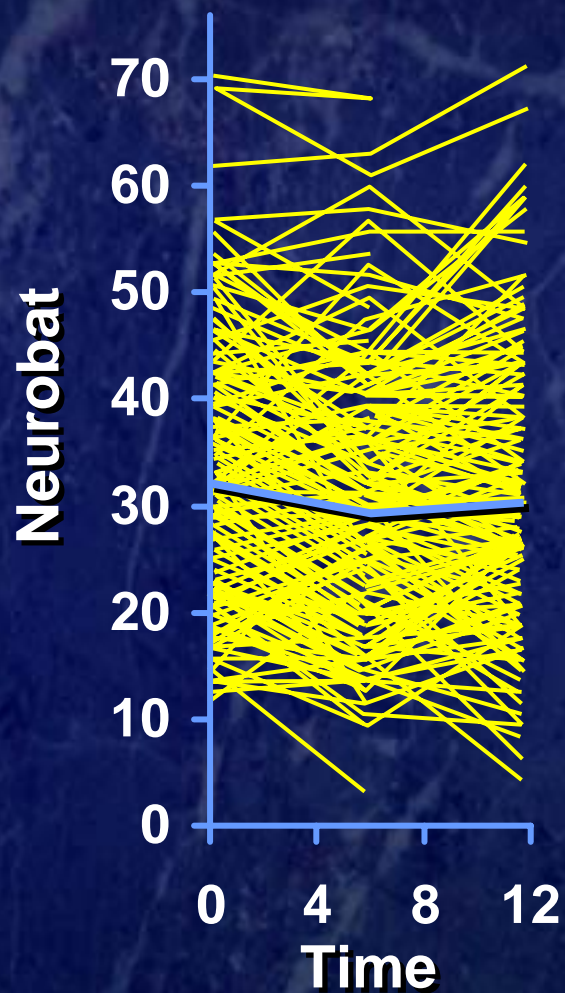


AVLT Learning Over Trials

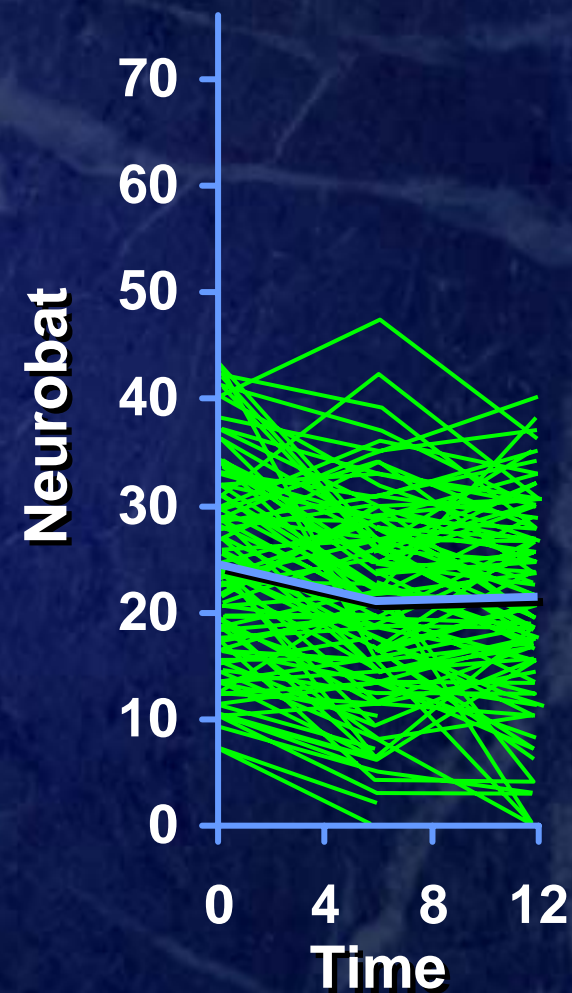
NC



MCI



AD

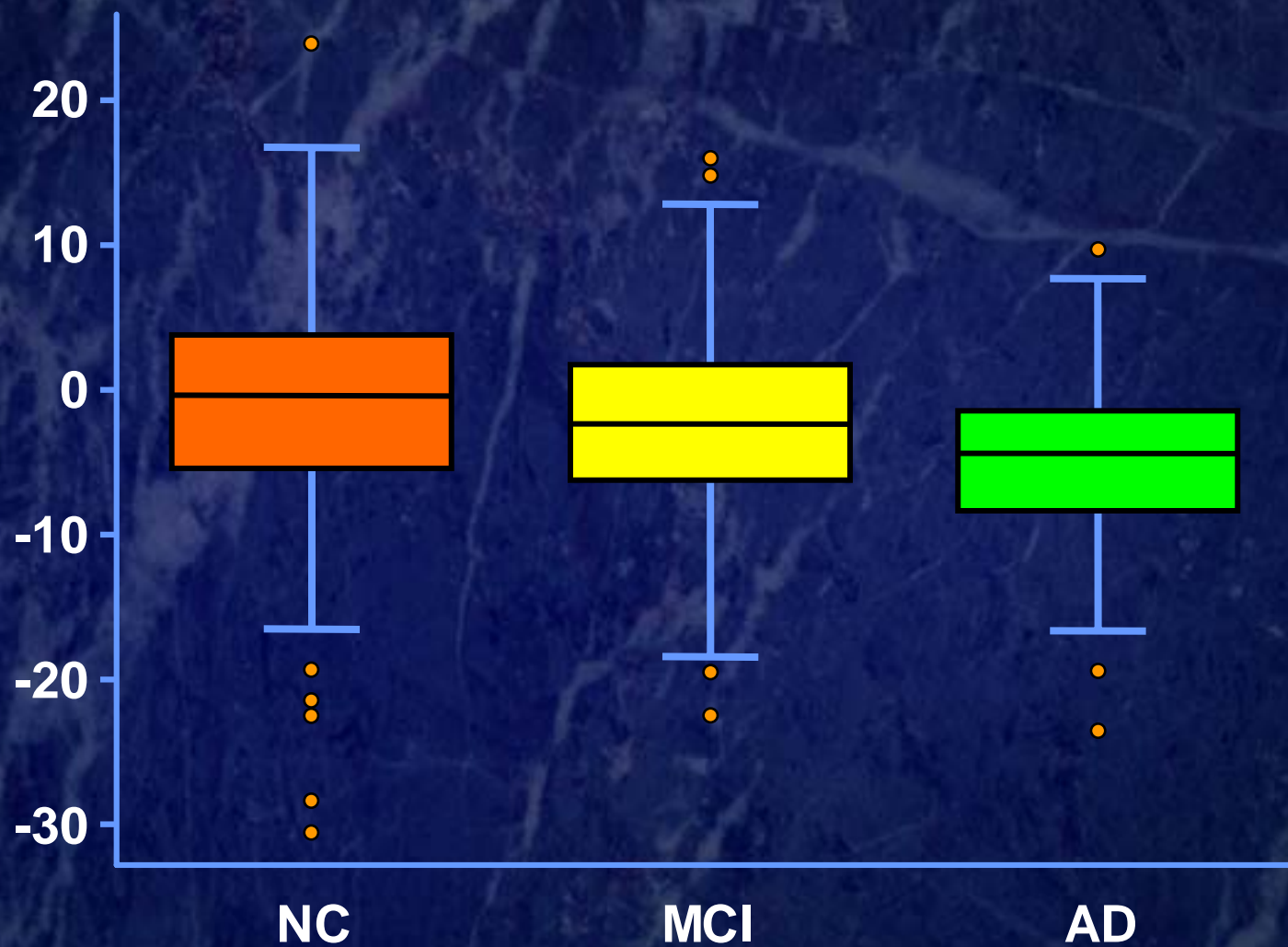


AVLT Learning Over Trials Annual Change

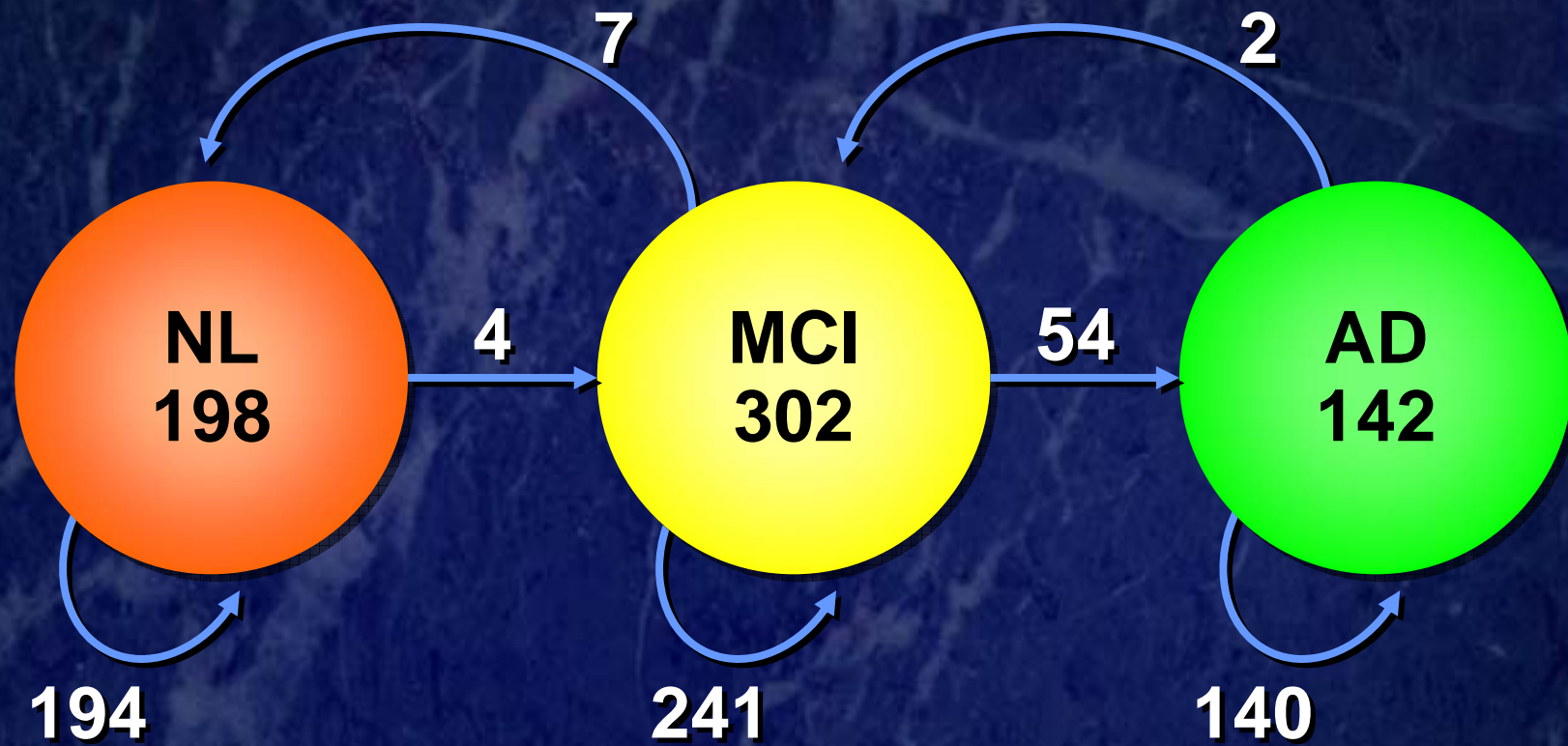
Univariate Summaries of the Annual Change by Group

	NC	MCI	AD
Mean	0.1	-1.3	-3.5
SD	8.0	6.2	5.8

AVLT Annual Change



Diagnostic Conversions



Normal → MCI 2%

MCI → AD 18%

Summary

- **Baseline set**
- **Annual changes evolving**
- **Serve as backdrop for imaging and biomarker predictors**

Clinical Core Proposal

- Continue to follow normals and MCI subjects from ADNI 1
- Recruit new MCI subjects at the milder end of the spectrum
- Recruit new normals
- Stratify the risk of the new MCI and normal subjects based on results of ADNI 1

Clinical Core Proposal Issues to be Resolved

- **Subject numbers**
- **Evaluation tools, e.g., instruments**
- **Stratification of follow-ups**
- **Development of streamlined clinical tools for recruitment**