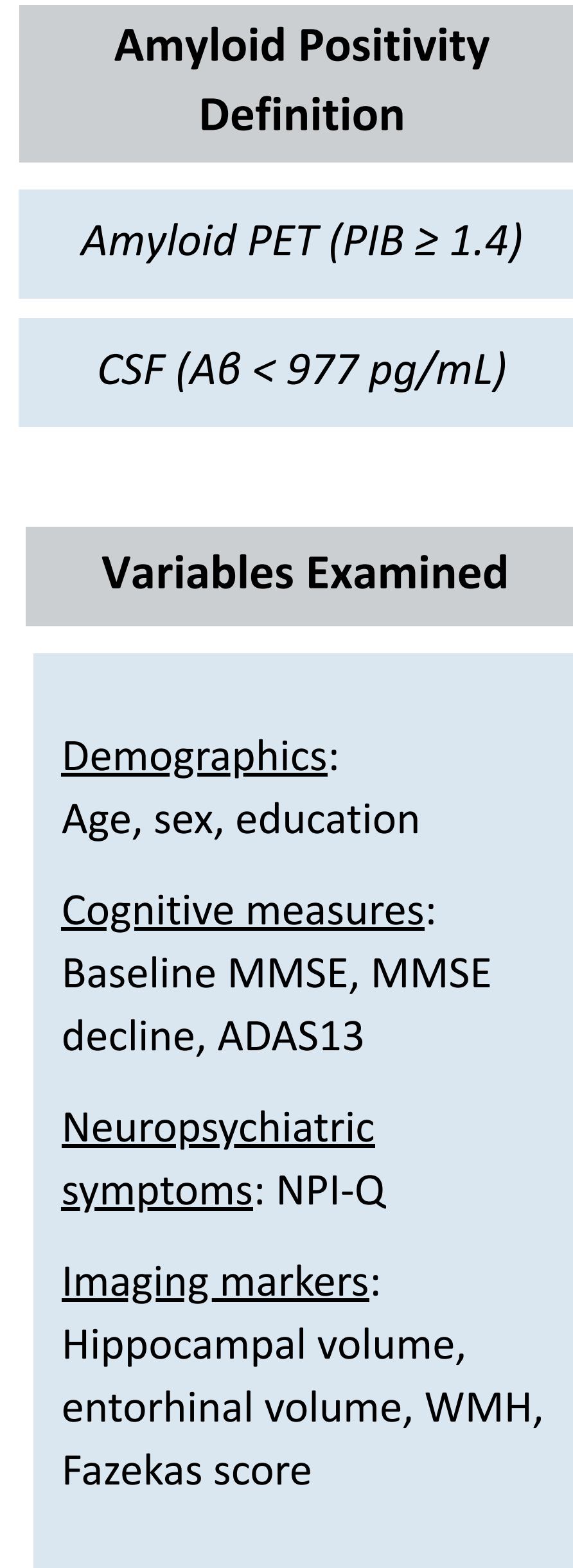




Results

- Objective:** To evaluate **clinical, cognitive, neuropsychiatric**, and **imaging predictors of amyloid positivity** and assess the performance of the **CAPS** in a large independent cohort.

ADNI Database



Univariate Analysis

- Lower baseline MMSE scores
- Greater annual MMSE decline
- Higher NPI-Q scores
- Reduced hippocampal & entorhinal volumes

Gender and education did not differ significantly between groups.

Multivariate Regression Analysis

- | Variable | OR (95% CI) | p-value |
|--------------------|------------------|-----------------|
| Age | 1.00 (0.96–1.05) | 0.879 |
| Education | 1.06 (0.96–1.16) | 0.257 |
| NPI-Q | 1.13 (1.04–1.24) | 0.005 |
| MMSE decline/year | 0.64 (0.51–0.80) | <.001 |
| WMH volume | 1.05 (0.99–1.11) | 0.132 |
| Baseline MMSE | 0.79 (0.69–0.90) | <.001 |
| Hippocampal volume | 0.72 (0.53–0.99) | 0.043 |
| Entorhinal volume | 0.79 (0.54–1.16) | 0.228 |

	Original CAPS	Modified CAPS
	Points Assigned	
NPI-Q = 0/1/2	0/1/2	0/1/2
MMSE decline < -2	+1	+1
Fazekas $\geq$ 2	+1	Removed
Cutoff	2	1

The modified CAPS demonstrated **higher sensitivity** (76.9% vs. 74.0%), slightly **lower specificity** (50.0% vs. 51.5%), and a **greater AUC** (0.682 vs 0.653).

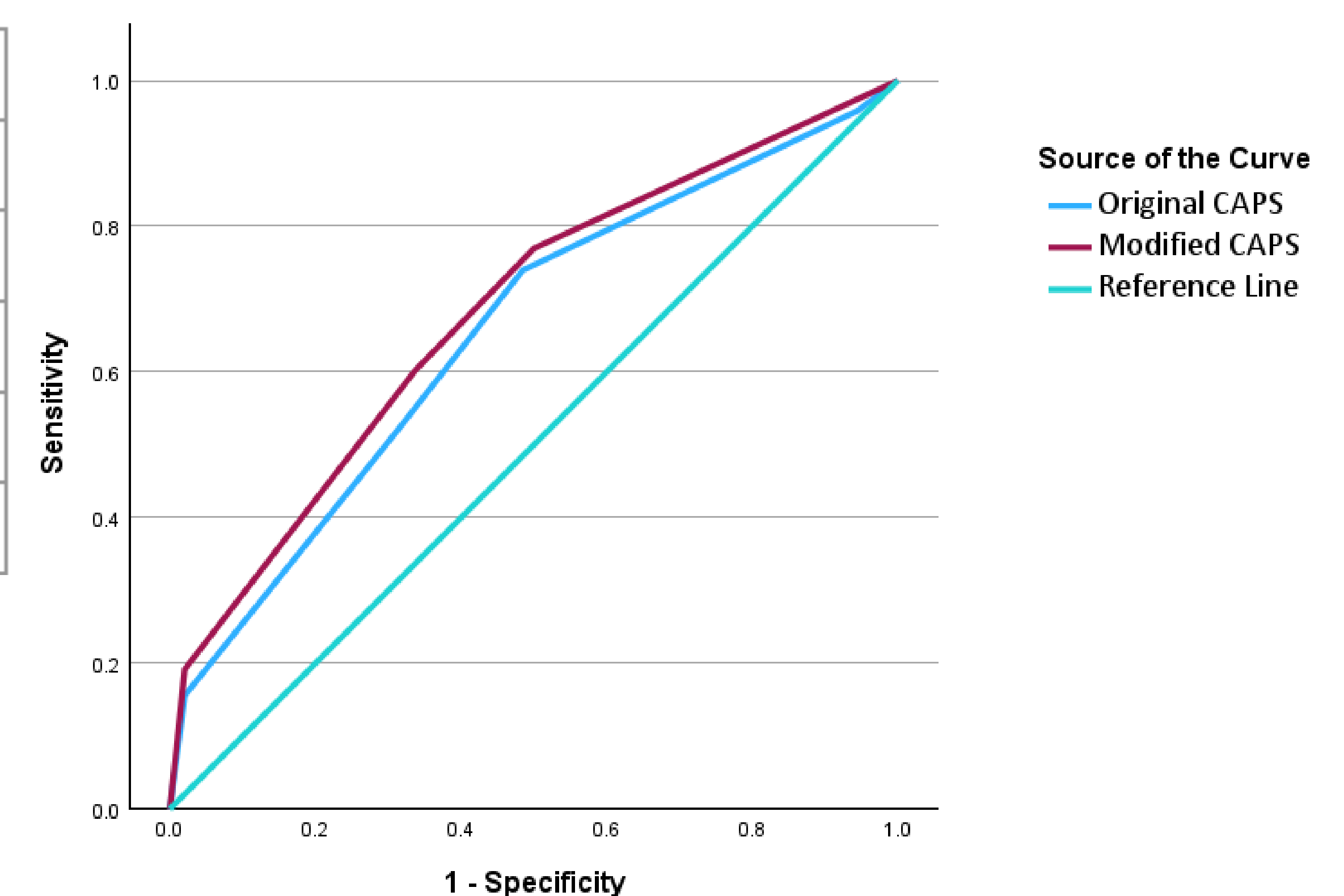


Figure 2. Receiver operating characteristic (ROC) curves evaluating the diagnostic accuracy of original and modified CAPS scores.

Conclusion

In ADNI, amyloid positivity is most strongly associated with **neuropsychiatric symptoms, cognitive decline, and hippocampal atrophy**. Accessible clinical pre-screening tools for amyloid positivity should continue to be developed and validated.

1. Lahiri D, Seixas-Lima B, Roncero C, Verhoeff NP, Freedman M, Al-Shamaa S, et al. CAPS: a simple clinical tool for β -amyloid positivity prediction in clinical Alzheimer syndrome. *Front Neurol.* 2024;15:1422681. doi:10.3389/fneur.2024.1422681 PubMed PMID: 39206291; PubMed Central PMCID: PMC11349651.