Supplemental Material for Manuscript:
Assessing the Clinical Meaningfulness of the Alzheimer’s Disease Composite Score
(ADCOMS) Tool

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Supplemental Figure 1. PDF Plot of the Change in ADCOMS Score from Baseline to Month 12 by CDR-SOB for MCI Patients

Changes in ADCOMS score from Baseline to Month 12

Changes in CDR-SOB from Baseline to Month 12
- CDR-SOB No Decline, Change < 0.5 (n=995, median=-0.02, Q1=-0.06, Q3=0.01)
- CDR-SOB Decline, Change >= 0.5 (n=1006, median=0.14, Q1=0.07, Q3=0.21)

Abbreviations: ADCOMS = Alzheimer’s Disease Composite Score; CDR-SOB = Clinical Dementia Rating Scale Sum of Boxes; MCI = mild cognitive impairment; PDF = probability density function
Supplemental Figure 2. PDF Plot of the Change in ADCOMS Score from Baseline to Month 12 by CDR-SOB for Dementia Patients

Changes in ADCOMS score from Baseline to Month 12 by CDR-SOB, Dementia

Changes in CDR-SOB from Baseline to Month 12
- CDR-SOB No Decline, Change < 1 (n=603, median=0, Q1=-0.06, Q3=0.05)
- CDR-SOB Decline, Change >= 1 (n=809, median=0.26, Q1=0.16, Q3=0.43)

Abbreviations: ADCOMS = Alzheimer’s Disease Composite Score; CDR-SOB = Clinical Dementia Rating Scale Sum of Boxes; PDF = probability density function
Supplemental Table 1. ROC Analysis by APOE Status: Best Youden’s Indices

|                        | NACC       | ADNI       | Legacy Dataset     |
|------------------------|------------|------------|--------------------|
| **MCI**                |            |            |                    |
| APOE ε4 allele carrier | 0.02 - 0.03| 0.08       | 0.05, 0.06, 0.09   |
| APOE ε4 allele non-carrier | 0.02 - 0.03| 0.04       | 0.03 – 0.05        |
| **Dementia**           |            |            |                    |
| APOE ε4 allele carrier | 0.11       | 0.11       | --                 |
| APOE ε4 allele non-carrier | 0.06, 0.11| 0.13       | --                 |

Abbreviations: ADNI = Alzheimer’s Disease Neuroimaging Initiative; MCI = mild cognitive impairment; NACC = National Alzheimer’s Coordinating; ROC = receiver operating characteristic