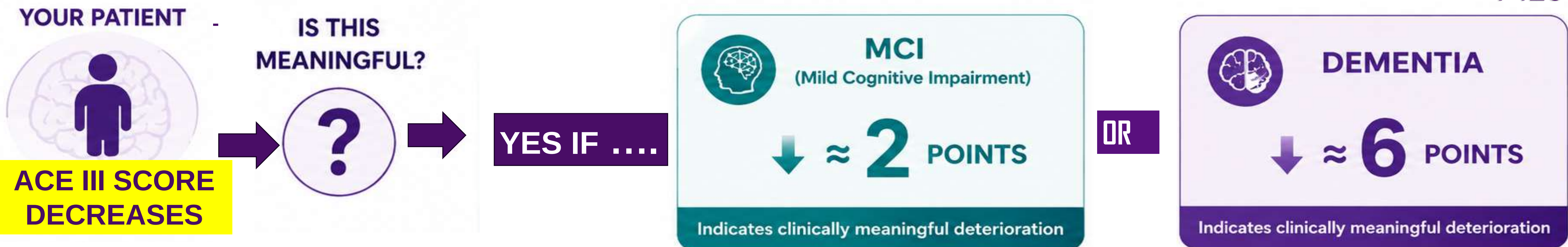


Anchor-Based Estimation of Minimal Clinically Important Decline on ACE-III in MCI and Dementia

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KEY TAKEAWAY



Introduction

- Dementia causes progressive cognitive decline.
- Monitoring cognitive decline is essential for evaluating disease progression in MCI and dementia.
- ACE-III is commonly used to assess longitudinal cognitive change.
- ? Clinically meaningful thresholds for interpreting ACE-III decline have not been established.

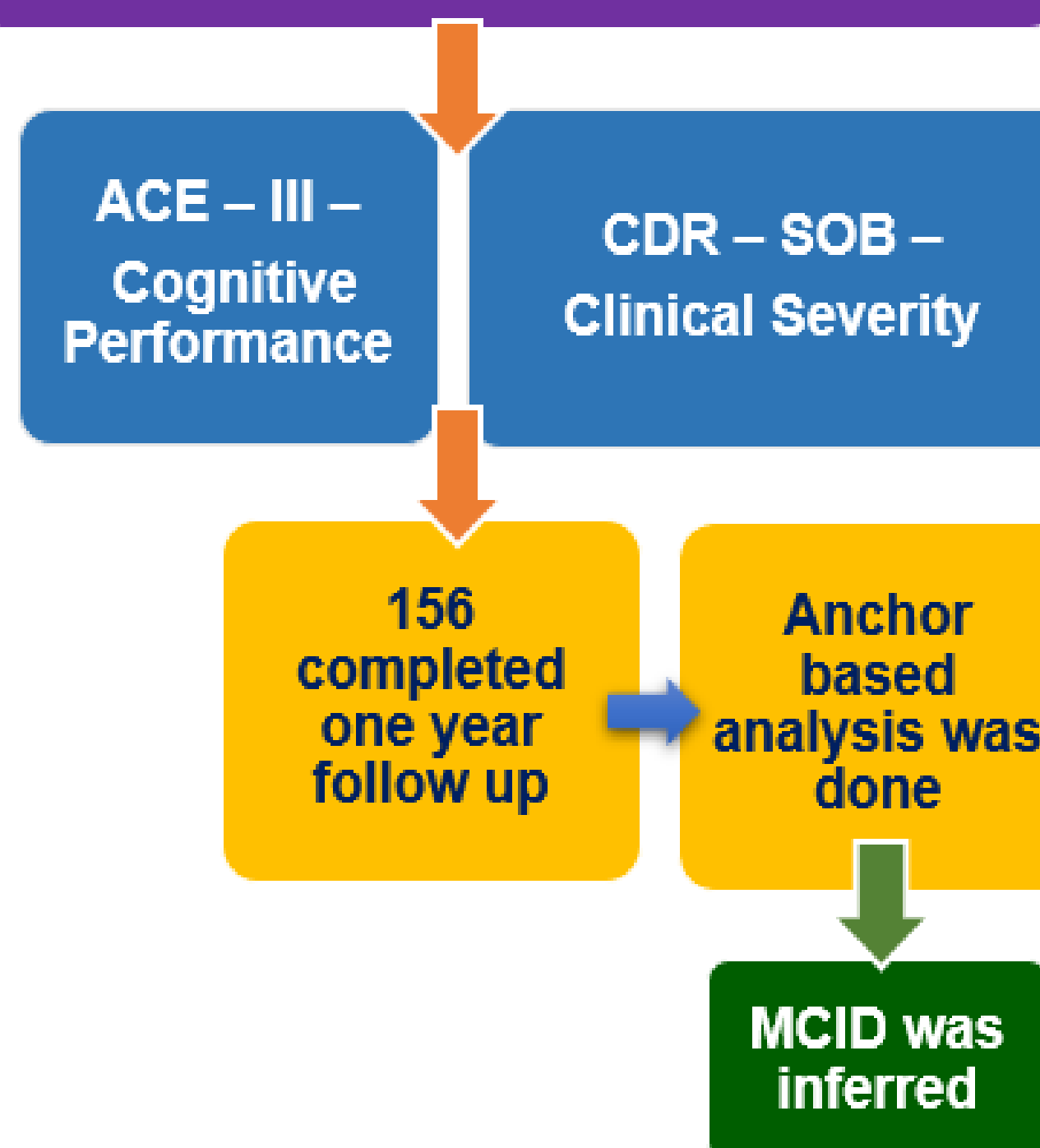
Objective

To estimate anchor-based MCIDs for ACE-III in MCI and dementia using CDR-SOB change.

Methodology

Longitudinal ongoing study of 4 years. Patients with severe dementia (CDR-global ≥ 3) at baseline were excluded.

375 Participants Enrolled - Detailed Neuropsychological Assessment was conducted (Risk factors, global cognition, Neuropsychiatric Symptoms, functional outcomes, sleep quality)



Results

Chart 1 - Distribution of participants based on CDR-SOB severity stages from baseline to Follow up of duration 1.2 years

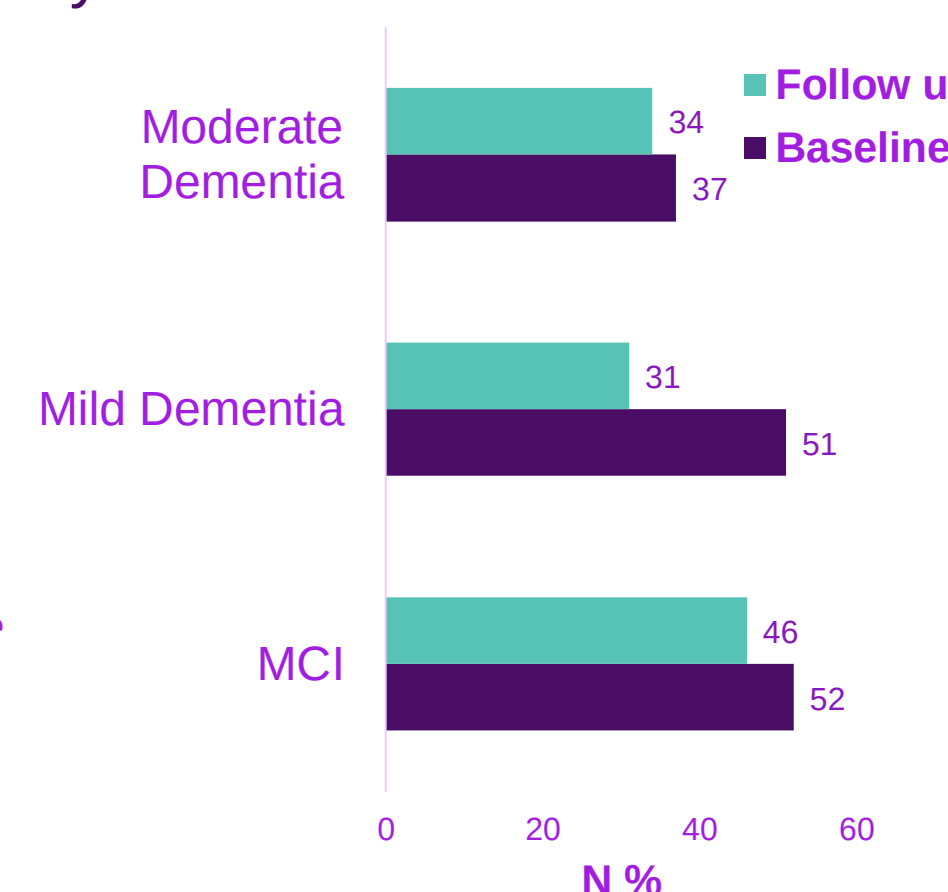
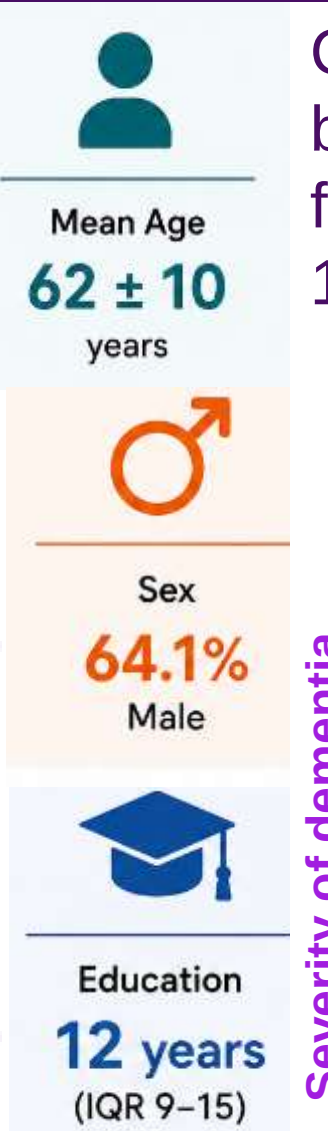


Chart 2: Anchor based analysis: Change in from baseline to follow up with CDR - SOB change score responder group

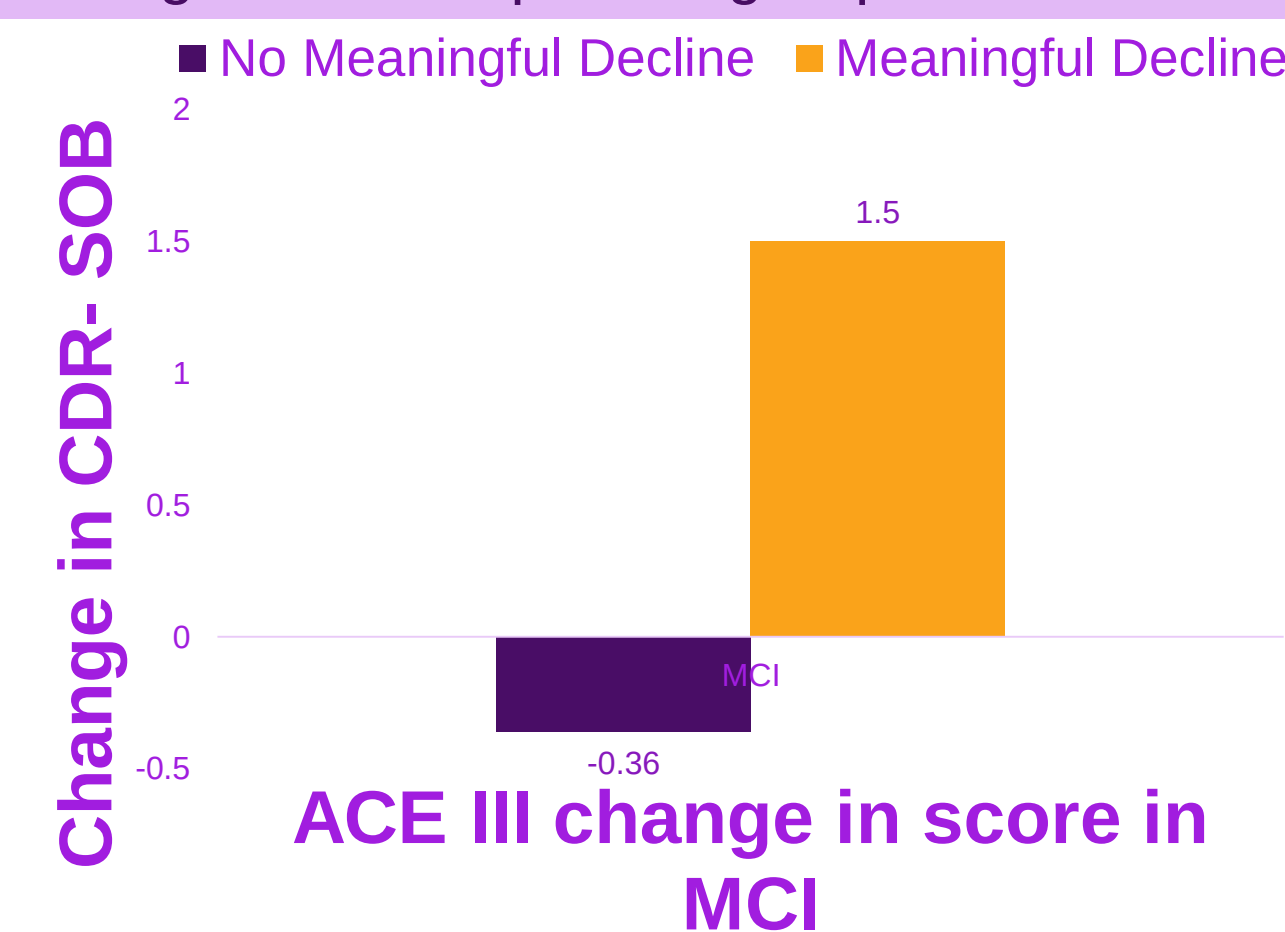
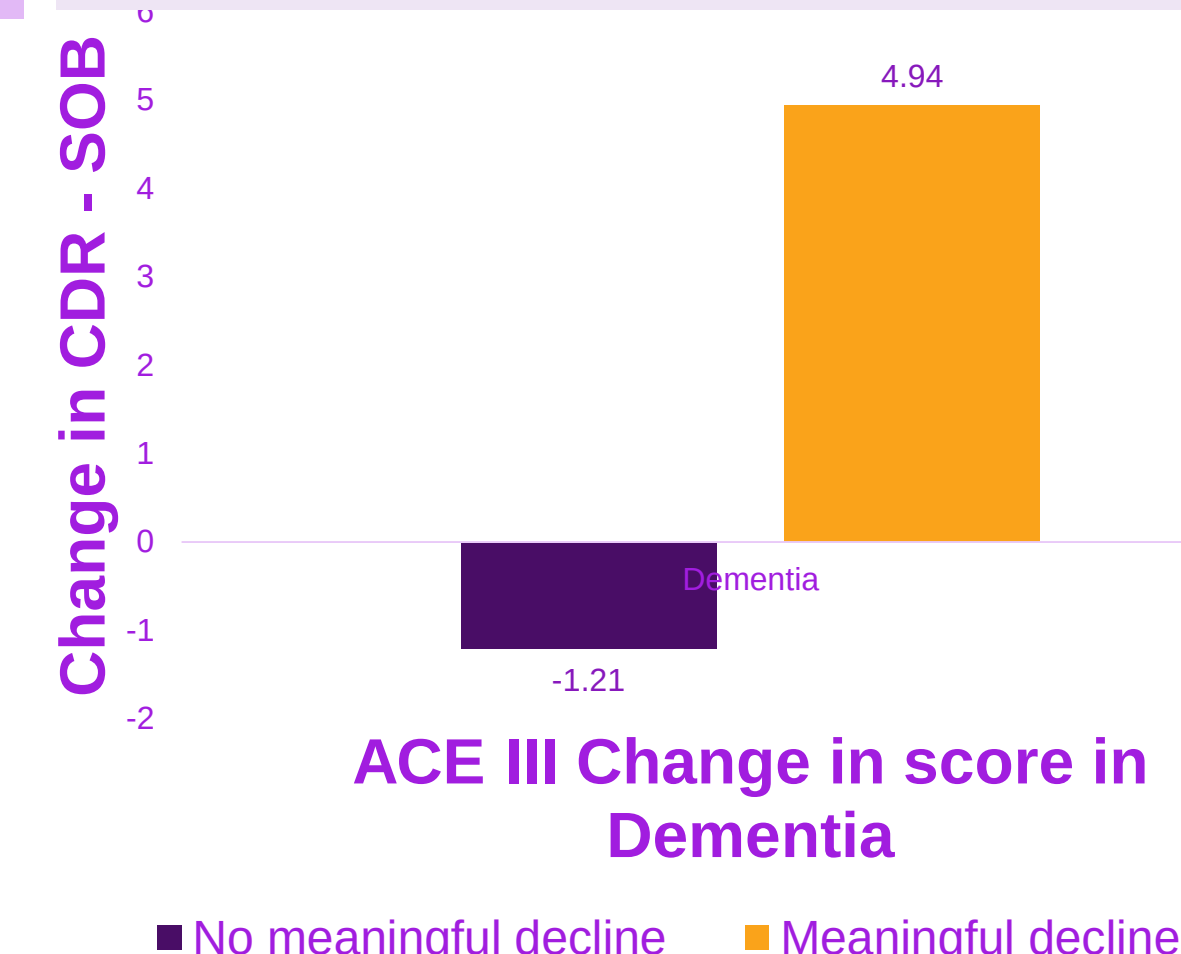


Table 1 - Cognitive and Clinical test scores from baseline to follow up

	BASELINE		FOLLOW-UP
ACE-III Total Score (Cognitive Performance)	n = 98		n = 98
	Median (IQR) 59 (30, 76)	Decline 7 points	Median (IQR) 52 (16, 72)
CDR-SOB (Clinical Dementia Rating Scale - Sum of Boxes)	n = 156		n = 156
	Median (IQR) 7.5 (3, 11)	Increase 2.5 points	Median (IQR) 10 (3, 16)

Chart 3: Anchor based analysis: Change in from baseline to follow up with CDR - SOB change score responder group in Dementia



Conclusion

- Stage-specific MCIDs for ACE-III were identified using an anchor-based approach.
- ≈2-point decline (MCI) and ≈6-point decline (dementia) indicate clinically meaningful deterioration.
- These thresholds may enhance interpretation of longitudinal cognitive change in clinical care and therapeutic trials.

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