



EXTERNAL VALIDATION OF THE NOVEL ALBA COGNITIVE SCREENING TEST IN A SLOVENIAN COHORT

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BACKGROUND

The Amnesia Light and Brief Assessment (ALBA) is an ultra-brief cognitive screening test that recently demonstrated high diagnostic accuracy in a Czech validation cohort.

Before implementing ALBA in Slovenia, we conducted an independent standardisation and validation study in routine clinical settings.



METHODS

We examined 80 patients with Alzheimer-range cognitive impairment and 63 cognitively unimpaired individuals, matched for age and education.



We compared ALBA total scores between groups and evaluated diagnostic accuracy using ROC analysis.

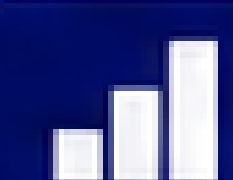


We assessed the independent effects of age, education, and sex on ALBA performance using analysis of covariance.



KEY TAKE-HOME MESSAGE

ALBA is a quick, simple and accurate tool for identifying cognitive impairment in routine clinical practice.



RESULTS

PARTICIPANTS



Cognitive impairment
(Alzheimer-range)

n = 80



Cognitively
unimpaired controls

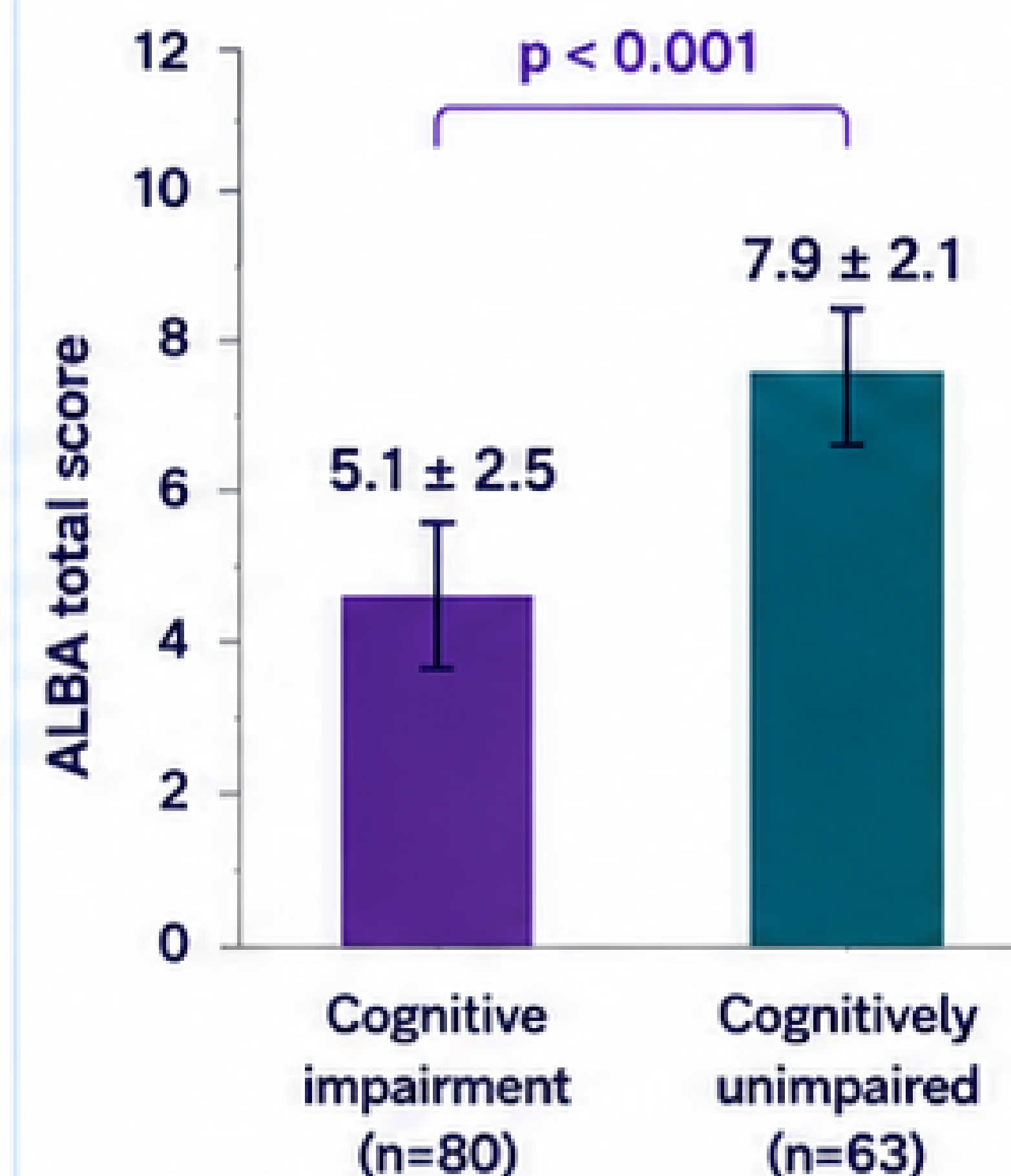
n = 63

Groups were matched
for age and education.



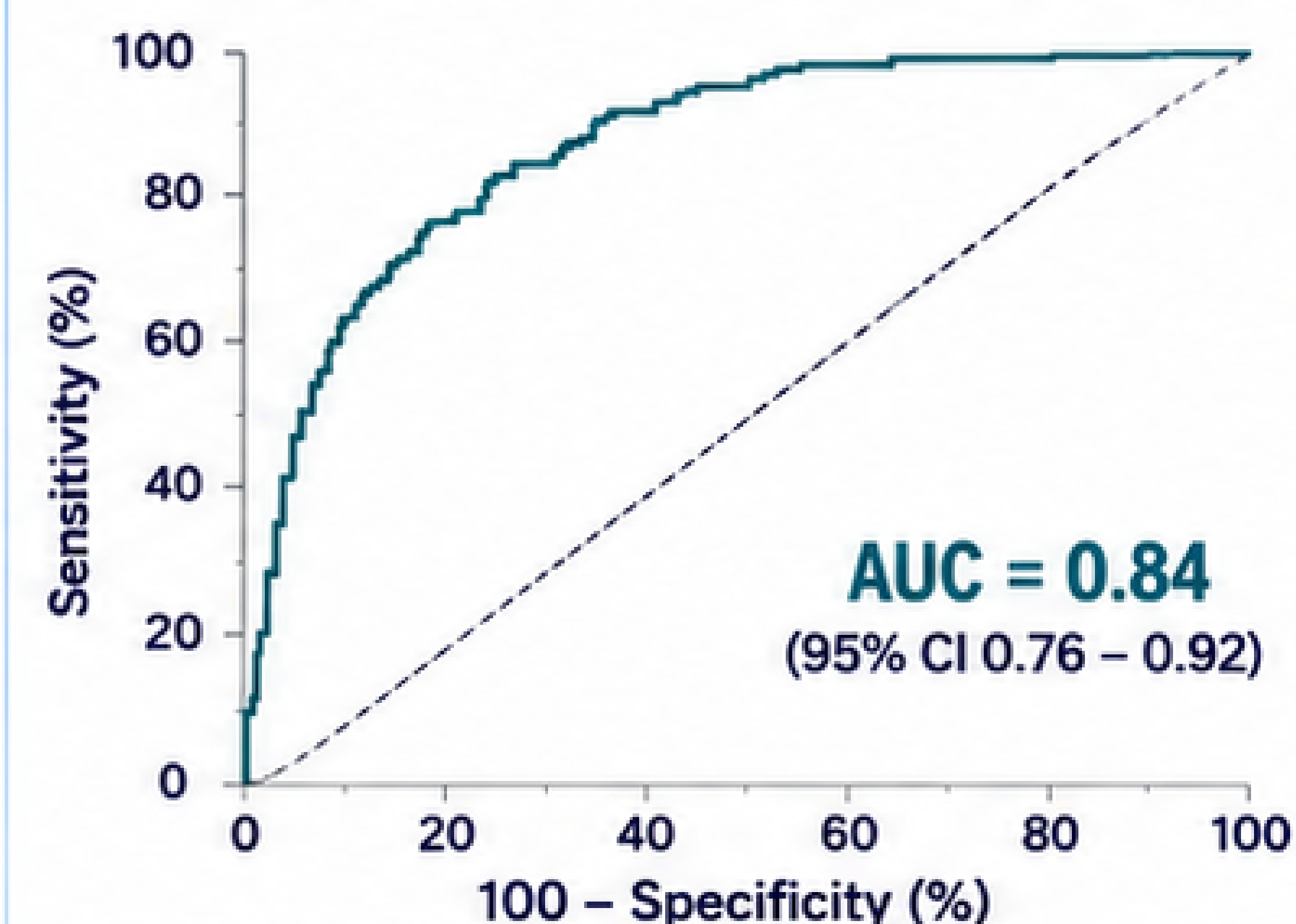
Participants with cognitive impairment scored significantly lower on ALBA than cognitively unimpaired controls (5.1 ± 2.5 vs 7.9 ± 2.1 ; $p < 0.001$).

ALBA TOTAL SCORES



DIAGNOSTIC ACCURACY (ROC ANALYSIS)

Cognitive impairment vs. cognitively unimpaired



OPTIMAL ALBA CUT-OFF (SLOVENIAN COHORT)

≤ 5 points (Slovenian cohort)		≤ 8 points (Original Czech study)
Sensitivity	70%	(For comparison)
Specificity	86%	



In the Slovenian cohort, an ALBA cut-off of ≤5 points—lower than the cut-off reported in the original Czech study (≤8 points)—yielded a sensitivity of 70% and a specificity of 86%.

INDEPENDENT EFFECTS (ANCOVA RESULTS)

Factor	F value	p value
 Cognitive status (impaired vs. unimpaired)	46.4	<0.001
 Age (per year)	0.60	0.44
 Education (per year)	0.58	0.44
 Sex (male vs. female)	1.12	0.29



After adjustment for age, education, and sex, cognitive status remained the primary determinant of ALBA performance ($F=46.4$, $p<0.001$). Age, education, and sex showed no independent associations.



CONCLUSION

Our Slovenian standardisation and validation study confirms that ALBA reliably discriminates cognitively impaired from cognitively unimpaired older adults. Differences in optimal cut-off values between cohorts highlight the need for population-specific validation before clinicians implement ultra-brief cognitive screening instruments in practice.

