



About

Contact



NORMATIVE DATA

Consult the latest education and age based norms of the test, average scores for normal, mild cognitive impairment and Alzheimer’s disease. Test retest and item by item performance. Sensitivity, specificity and cut-off scores of the MoCA to detect mild cognitive impairment or Alzheimer’s disease and distinguish it from normal aging.

MOCA SCORES

	Normal Controls (NC)	Mild Cognitive Impairment (MCI)	Alzheimer's Disease (AD)
Number of subjects	90	94	93
MoCA average score	27.4	22.1	16.2
MoCA standard deviation	2.2	3.1	4.8
MoCA score range	25.2 - 29.6	19.0 - 25.2	21.0 - 11.4
Suggested cut-off score	≥26	<26	<26 *ψ

* Nasreddine et al. J Am Geriatr Soc 53:695–699, 2005.

SENSITIVITY AND SPECIFICITY (%)

MOCA AND MMSE

Cut-off	≥ 26	< 26	< 26
Group (n)	Normal Controls (90)	Mild Cognitive Impairment (94)	Alzheimer disease (93)
MoCA	87	90	100
MMSE	100	18	78

MOCA ITEMS AVERAGE SCORES

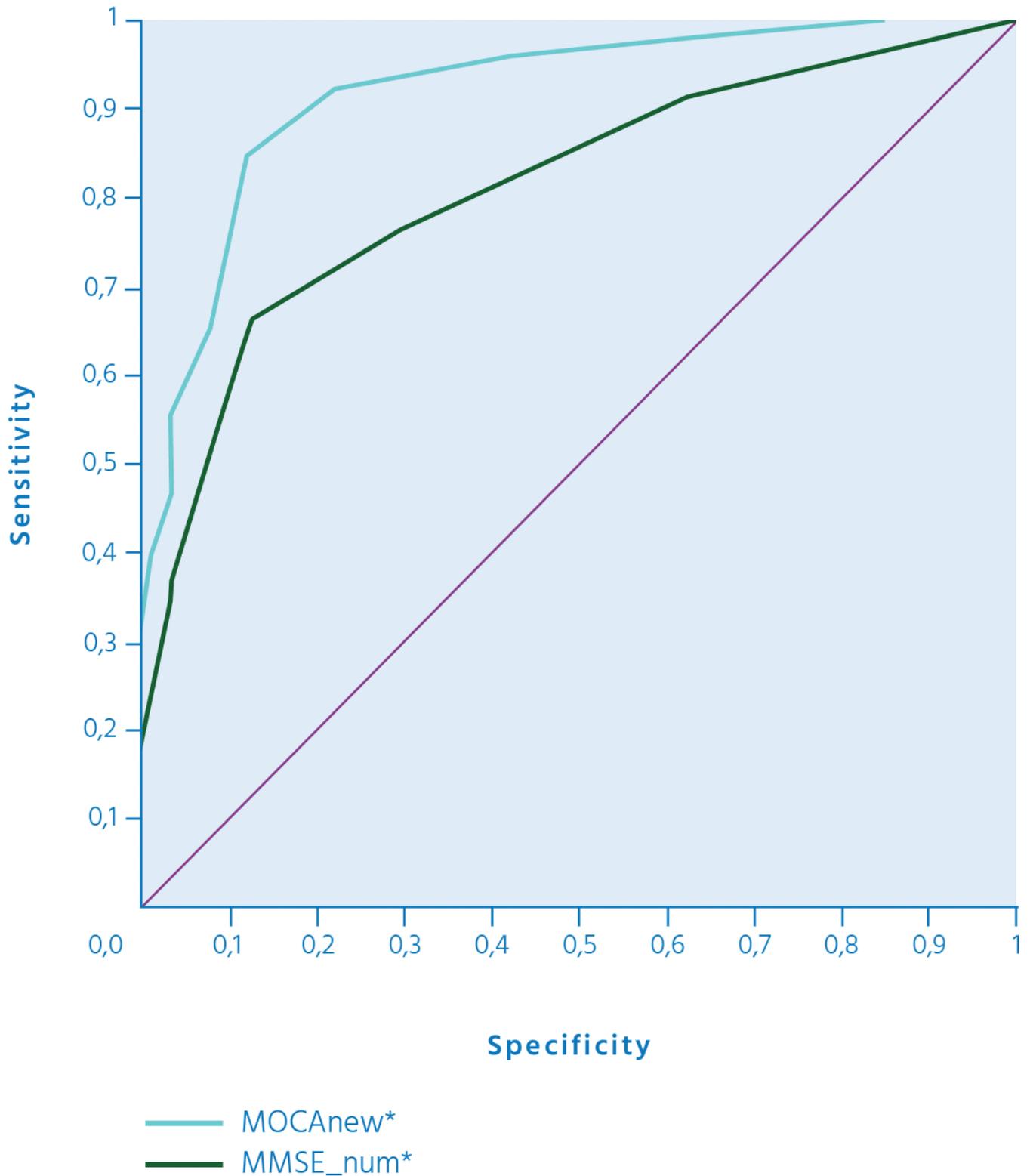
	NC		MCI		AD	
	AVG	SD	AVG	SD	AVG	SD
Trails	0.87	0.34	0.56	0.50	0.27	0.45
Cube	0.71	0.46	0.46	0.50	0.25	0.43
Clock	2.56	0.65	2.16	0.82	1.56	0.98
Naming	2.88	0.36	2.64	0.58	2.19	0.82
Memory	3.73	1.27	1.17	1.47	0.52	1.03
Digit span	1.82	0.44	1.83	0.43	1.49	0.62
Letter A	0.97	0.18	0.93	0.26	0.67	0.47
Serial 7	2.89	0.41	2.65	0.65	1.82	1.12
Sentence rep	1.83	0.37	1.49	0.71	1.37	0.80
Fluency	0.87	0.34	0.71	0.45	0.32	0.47
Abstraction	1.83	0.43	1.43	0.68	0.99	0.80
Orientation	5.99	0.11	5.52	0.84	3.92	1.73
MoCa Total*	27.37	2.20	22.12	3.11	16.16	4.81

SD = standard deviation AVG = average

* Total is adjusted for education

ROC CURVE FOR

MOCA AND MMSE



AREA UNDER THE CURVE

Test Result Variable(s): MoCA

Lower Bound Upper Bound Lower Bound

Area	Std. Error (a)	Asymptotic Sig. (b)	Asymptotic 95% Interval	
			Upper Bound	Lower Bound
.921	.020	.000	.882	.960

The test result variable(s): MOCA new has at least one tie between the positive actual state group and the negative actual state group. Statistics may be biased.

(a) Under the nonparametric assumption.

(b) Null hypothesis: true area = 0.5

AREA UNDER THE CURVE

Test Result Variable(s): MMSE

Lower Bound Upper Bound Lower Bound

Area	Std. Error (a)	Asymptotic Sig. (b)	Asymptotic 95% Interval	
			Upper Bound	Lower Bound
.814	.032	.000	.751	.876

The test result variable(s): MMSE_num has at least one tie between the positive actual state group and the negative actual state group. Statistics may be biased.

(a) Under the nonparametric assumption.

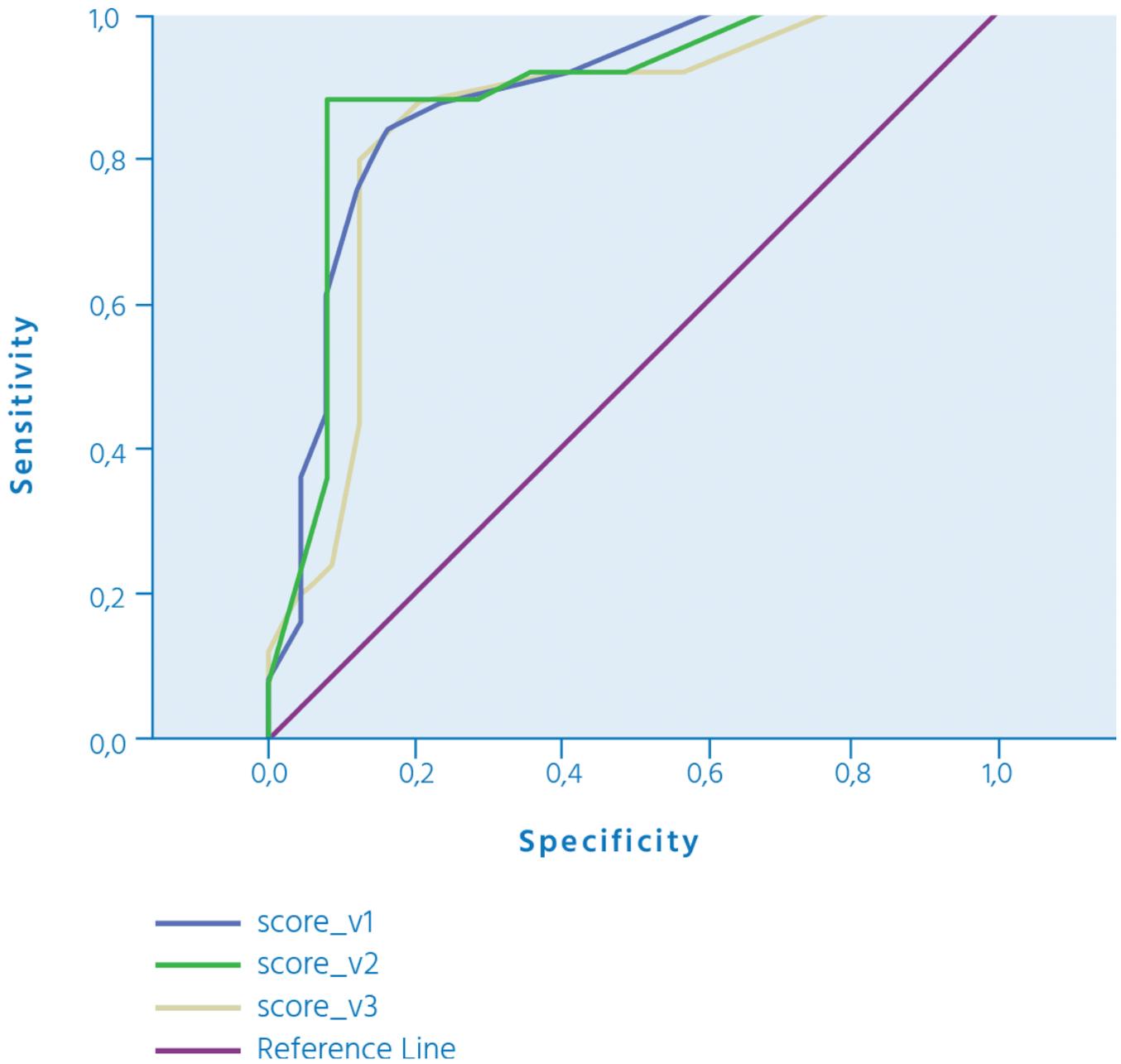
(b) Null hypothesis: true area = 0.5

FRENCH ALTERNATE VERSIONS

Group statistics

	Group	N	Mean	Std. Deviation	Std. Error Mean
score_v1	NC	25	26.48	2.931	.586
	MCI	25	21.24	3.574	.715
score_v2	NC	25	25.96	2.879	.576
	MCI	25	20.48	3.216	.643
score_v3	NC	25	25.80	3.014	.603
	MCI	25	21.44	3.216	.643

Roc curve



[Home](#)

[About](#)

[Contact](#)

[MoCA News](#)

[Privacy Policy and Terms of Use](#)

Paper Tests

Electronic Tests

Training & Certification

FAQ

Reference

Permission

Normative Data



Copyright © 2018

Z. Nasreddine MD