

Table e-1. MCI diagnosis criteria used by articles included in AAN MCI guideline

MCI diagnosis criteria used by included articles									
<i>Recent criteria not used in included studies</i>									
Article	Memory complaint	Cognitive complaint	Memory impairment	Cognitively impaired	Relatively preserved general cognition	Intact ADL	No dementia	CDR 0.5	Comment
NIA-AA workgroup 2011^{e96}	Not specifically	Yes	May include	Yes		Yes	Yes		“Individuals may be less efficient and make more errors at performing ADL and IADL than in the past.” Biomarker evidence supportive of presence of AD pathologic changes Compensatory strategies needed to help maintain independence and perform ADL
International working group 2004^{e1}	Not specifically	Yes	May include	Yes		Yes	Yes		
DSM-5^{e97}	No	Yes	May include	Yes		No (see comment)	Yes		
<i>Criteria used in included studies</i>									

Article (first author, y)	Memory complaint	Cognitive complaint	Memory impairment	Cognitively impaired	Relatively preserved general cognition	Intact ADL	No dementia	CDR 0.5	Comment
Fei, 2009^{e10}	Yes ^a	No	Not mentioned	Yes			Yes		
Ding, 2015^{e33}	Yes	Yes	Yes		Yes	Yes	Yes		Used Petersen, 2004 ^{e2}
Guaita, 2015^{e29}	Yes	Yes	Yes		Yes	Yes	Yes		Used Petersen, 2004 ^{e2}
Hilal, 2013^{e35}	No	No	May include	Yes	Yes	Yes	Yes		
Lopez, 2007^{e23}	No	No	Yes			Yes	Yes		
Bennett, 2002^{e98}	No	No	Yes	Yes ^b	Yes	Yes	Yes		
Ganguli, 2004^{e9}	Yes	Not specified	MMSE >24	Yes		Yes	Yes		
Ganguli, 2010^{e26}	Yes	Not specified	MMSE ≥21	Yes		Yes	Yes	Yes	Operationalized 1999 Petersen criteria for amnesic, 2004 criteria for expanded MCI ^{e2,e3}
Li, 2013^{e38}	Yes	Not specified	MMSE >23			Yes	Yes		
Olazaran, 2015^{e40}	No	Yes	Yes			Yes		Yes	Used Winblad et al., 2004 ^{e1}
Petersen, 2004^{e2}	Yes	Yes	Yes		Yes (MMSE >24/30)	Yes			

Roberts, 2014^{e45}	Yes	Yes	Yes		Yes (MMSE >24/30)	Yes			
Rodriguez-Sanchez, 2011^{e41}	Not specified	Yes	May include	Yes			Yes		
Salloway, 2004^{e55}	Yes	Not specified	Yes		Yes	Yes ^c	Yes		
Winblad, 2004^{e1}	Not specified	Not specified	Yes (MMSE ≤24)			Yes		Yes	
Palmer, 2002^{e99}	Yes	Not specified	Not specified	Yes		Yes	Yes		
Petersen, 2001^{e5}	Yes	Not specified	Yes	Yes	Yes	Yes	Yes		
Petersen, 1999^{e3}	Yes	Not specified	Yes	Yes	Yes	Yes	Yes		
Petersen, 1995^{e100}	Usually Not specified	Yes	Yes	Not defined	Yes	Yes	Yes	Yes	
Flicker, 1991^{e101}	Yes	Yes	Yes	Yes	No	Not specified	Yes		
Shi, 2013^{e28}	No	No	May include	Yes	No	Yes	Yes		

a “Must be embarrassing to patient themselves”

b Cognitively impaired by the neuropsychologist but not demented by the examining physician.

c Summed score 1.5 on the 3 functional CDR domains (home and hobbies, community affairs, personal care) Cognitive screening MMSE or short test of mental status normal range, on memory tests or memory components of other cognitive tests performance tended to fall more than 1.5 SD below age-appropriate norms.

Abbreviations: AD = Alzheimer disease; ADL = activities of daily living; CDR = Clinical Dementia Rating scale; DSM5 = *Diagnostic Manual of Statistical and Mental Disorders*, 5th ed.; IADL = Instrumental activity of daily living; MCI = mild cognitive impairment; MMSE = Mini-Mental State Examination; NIA-AA = National Institute on Aging – Alzheimer’s Association.

References cited here found in the full-length guideline (data supplement).

Table e-2. Effect of stringency of MCI diagnosis used on frequency of MCI in population studies: Narrow vs broad definition

Study (first author, y)	Narrow	Broad	Frequency of MCI	Comment
Anstey, 2008^{e12}	+	-	4.2%	
Fei, 2009^{e10}	+	-	9.7%	
Hanninen, 2002^{e14}	+	-	5.3%	
Purser, 2006^{e16}	+	-	25.0%	Did not require subjective memory complaint in MCI definition but required memory impairment
Busse, 2006^{e20}	+	-	19.3%	4 different MCI definitions used
Das, 2007^{e21}	+	-	6.04%	
Lobo, 2008^{e22}	+	-	20.8%	
Petersen, 2010^{e24}	+	-	16.0%	
Ganguli, 2004^{e9}	+	-	3.2%	
Artero, 2008^{e18}	-	+	42.0%	
Di Carlo, 2007^{e13}	-	+	25.6%	
Louis, 2005^{e15}	-	+	27.3%	
Schonknecht, 2005^{e17}	-	+	13.4%	
Artero, 2008^{e18}	-	+	16.6%	
Boyle, 2006^{e19}	-	+	26.4%	
Lopez, 2007^{e23}	-	+	21.7%	
Wilson, 2007^{e25}	-	+	24.3%	
Lopez, 2003^{e27}	-	+	18.8%	

Abbreviation: MCI = mild cognitive impairment.

References cited here found in the full-length guideline (data supplement).

Table e-3. MCI guideline meta-analysis results: Prevalence of MCI by age group (random-effects model)

Age group	Prevalence
60–64 y	6.7% (95% CI 3.4%–12.7%) $I^2 = 11.0$
65–69 y	8.4% (95% CI 5.2%–13.4%) $I^2 = 0$
70–74 y	10.1% (95% CI 7.5%–13.5%) $I^2 = 5.2$
75–79 y	14.8% (95% CI 10.1%–21.1%) $I^2 = 60.7$
80–84 y	25.2% (95% CI 16.5%–36.5%) $I^2 = 0$
60+ y	All studies 15.8% (95% CI 11.8%–20.9%) $I^2 = 0$
65+y	All studies 16.6% (95% CI 11.5%–23.5%) $I^2 = 13.3$
75+y	All studies 19.4% (95% CI 15.7%–23.7%) $I^2 = 29.7$
80+y	All studies 28.6% (95% CI 20.5%–38.4%) $I^2 = 27.5$
85+y	All studies 37.6% (95% CI 28.1%–48.0%) $I^2 = 24.8$

Abbreviation: MCI = mild cognitive impairment.