Table s-3: Characteristics of cohort studies included in meta-analysis

First author	Year	Country	Exposure	Exposure assessment	Mean follow-up years	Converters to dementia (% AD)	Adjusted for	Relative risk (95% CI)	e-Ref
Petersen RC	1995	USA	Older age	at day of study entry	1.5	25(-)	–	0.99 (0.92, 1.06)	16
Amieva H	2004	France	Older age	at day of study entry	2	29	age and the significant neuropsychological variables	1.09 (0.99, 1.19)	30
Aggarwal NT	2005	USA	Older age	at day of study entry	5.7	82(96)	sex	1.1 (1.06, 1.14)	33
Li L	2012	China	Older age	at day of study entry	3	86(60)	–	1.013 (0.966, 1.063)	34
Alegret M	2014	Spain	Older age	at day of study entry	4	25(100)	–	1.13 (1.02, 1.25)	35
Rozzini L	2007	Italy	Older age	at day of study entry	1	40(100)	–	1.1 (0.9, 1.2)	36
Wang P-N	2014	Taiwan	Older age	at day of study entry	3.54	74（95）	age, sex, education and MMSE scores at baseline	1.1 (1.0, 1.2)	37
Chan WC	2011	Hong Kong	Older age	at day of study entry	2	51(-)	–	1.08 (1.04, 1.13)	38
Solfrizzi V	2004	Italy	Older age	at day of study entry	3.5	–	–	0.59 (0.18, 2.25)	39
DeCarli C	2004	USA	Older age	at day of study entry	3.1	17(59)	age, education, and gender	1.00 (0.92, 1.10)	40
Geroldi C	2006	Italy	Older age	at day of study entry	1.28	11（-）	–	1.0 (0.9, 1.1)	41
Velayudhan L	2010	UK	Older age	at day of study entry	4	19(84)	stroke/TIA, age and gender	1.0 (0.9, 1.1)	42

Li L	2012	Italy	Older age	at day of study entry	1	21(100)	–	1.30 (0.74, 2.28)	50
Inzelberg R	2015	Israel	Older age	at day of study entry	⩾1	68(93)	-	1.18(1.1-1.27)	91
Alegret M	2013	Netherlands	Sex (female)	–	2	81(-)	age and gender forced into the model	1.32 (0.83, 2.1)	2
Rozzini L	2007	Italy	Sex (female)	–	1	40(100)	–	1.4 (0.3, 7.5)	36
Wang P-N	2014	Taiwan	Sex (female)	–	3.54	74（95）	age, sex, education and MMSE scores at baseline	1.8 (0.8, 3.2)	37
Chan WC	2011	Hong Kong	Sex (female)	–	2	51(-)	–	0.89 (0.37, 2.14)	38
Solfrizzi V	2004	Italy	Sex (female)	–	3.5	–	–	0.56 (0.15, 1.88)	39
DeCarli C	2004	USA	Sex (female)	–	3.1	17(59)	age, education, and gender	1.96 (0.59, 6.52)	40
Geroldi C	2006	Italy	Sex (female)	–	1.28	11（-）	–	0.7 (0.2, 2.6)	41
Velayudhan L	2010	UK	Sex (female)	–	4	19(84)	stroke/TIA, age and gender	2.3 (0.8, 7.2)	42
Vemuri P	2011	USA	Sex (female)	–	–	70(81)	age, education, and gender	1.8 (1.0, 3.0)	45

Viticchi G	2012	Italy	Sex (female)	–	1	21(100)	–	0.46 (0.15, 1.44)	50
Barnes DE	2014	USA	Sex (female)	–	–	179（100）	–	1.33 (0.96, 1.84)	51
Ye BS	2012	Republic of Korea	Higher education level	higher education (>8years)	1.43	62(100)	Age, gender, and baseline MMSE scores	2.18 (1.1, 4.32)	26
Rozzini L	2006	Italy	Higher education level	higher education (>5years)	1	39(100)	–	4.2 (1.1, 16.8)	32
Aggarwal NT	2005	USA	Higher education level	–	5.7	82(96)	sex	0.992 (0.924, 1.066)	33
Chan WC	2011	Hong Kong	Higher education level	–	2	51(-)	–	0.98 (0.87, 1.09)	38
DeCarli C	2004	USA	Higher education level	–	3.1	17(59)	age, education, and gender	0.98 (0.78, 1.24)	40
Geroldi C	2006	Italy	Higher education level	–	1.28	11（-）	–	1.1 (0.9, 1.2)	41
Velayudhan L	2010	UK	Higher education level	–	4	19(84)	Unadjusted	1.1 (0.9, 1.1)	42
Viticchi G	2012	Italy	Higher education level	–	1	21(100)	–	0.98656 (0.79457, 1.22493)	50
Xu WL	2012	Sweden	At least 1 APOEε4 allele	microsequencing method	9	118(85)	age, gender, and education.	1.06 (0.76, 1.76)	3

Blacker D	2007	USA	At least 1 APOEε4 allele	Restriction isotyping	5.6	87(79)	age, sex, and education	1.50 (0.91, 2.43)	4
Elcoroaristizabal Martin X	2012	Spain	At least 1 APOEε4 allele	a standard phenol/chloroform extraction method and PCR	3.25	21(100)	age and gender	2.55 (1.20, 5.42)	5
Viticchi G	2014	Italy	At least 1 APOEε4 allele	nucleic acid isolation system and PCR	1	30(–)	gender, basal MMSE, age, education, hypertension diabetes, dyslipidemia, and smoking	6.818 (1.894, 24.545)	6
Squitti R	2014	Italy	At least 1 APOEε4 allele	Restriction isotyping	6	42(100)	–	1.4 (0.7, 2.8)	7
Landau SM	2010	USA	At least 1 APOEε4 allele	–	3	28(100)	Age, education, and sex	1.94 (0.89, 4.21)	8
Devanand DP	2005	USA	At least 1 APOEε4 allele	Restriction isotyping	2.93	35(100)	sex, age, education, baseline MMSE score and SRT delayed recall score	2.0 (0.9, 4.4)	9

Chu LW	2012	Hong Kong	At least 1 APOEε4 allele	–	1	40(100)	–	2.51 (1.01, 6.25)	11
Forlenza OV	2010	Brazil	At least 1 APOEε4 allele	using the TaqMan® 5’-exonuclease allelic discrimination assay obtained from Applied Biosystems with primers and probes sets from inventoried assays	5	13(100)	–	2.3 (1.1, 4.8)	13
Ravaglia G	2006	Italy	At least 1 APOEε4 allele	PCR	3	48(71)	age, gender and education.	4.22 (1.32, 13.5)	14
Diniz BS	2010	Brazil	At least 1 APOEε4 allele	using the TaqMan® 5’-exonuclease allelic discrimination assay obtained from Applied Biosystems with primers and probes sets from inventoried assays	1.58	12(100)	–	4.23 (0.97, 18.42)	15
Petersen RC	1995	USA	At least 1 APOEε4 allele	a DNA extractor (Applied Biosystem 340A DNA Extractor,Applied Biosystems, Foster City, Calif) and PCR	1.5	25(-)	–	4.36 (1.41, 13.54)	16
Aggarwal NT	2005	USA	At least 1 APOEε4 allele	Restriction isotyping	5.7	82(96)	age, gender, and education	1.948 (1.196, 3.173)	33

Alegret M	2014	Spain	At least 1 APOEε4 allele	PCR	4	25(100)	age and education	4.22 (0.89, 19.84)	35
Wang P-N	2014	Taiwan	At least 1 APOEε4 allele	PCR amplification and restriction isotyping	3.54	74（95）	age, sex, education and MMSE scores at baseline	2 (1.2, 3.3)	37
Vemuri P	2011	USA	At least 1 APOEε4 allele	–	–	70(81)	age, sex, and education	1.8 (1.0, 3.1)	45
Barnes DE	2014	USA	At least 1 APOEε4 allele	–	–	179（100）	–	1.86 (1.36, 2.56)	51
Steenland K	2012	USA	At least 1 APOEε4 allele	–	2.5	950（100）	age, gender, race, education, history of hypertension, of diabetes, and of heart disease	1.68 (1.44, 1.96)	55
Xu WL	2012	Sweden	APOEε4ε4	microsequencing method	9	118(85)	age, gender, and education.	2.53 (1.01,6.48)	3
Blacker D	2007	USA	APOEε4ε4	Restriction isotyping	5.6	87(79)	age, sex, and education	1.64 (1.05, 2.57)	4

Elcoroaristizabal Martin X	2012	Spain	APOEε4ε4	a standard phenol/chloroform extraction method and PCR	3.25	21(100)	age and gender	10.34 (2.94, 36.43)	5
Ravaglia G	2006	Italy	Smoking	Smoking habit was dichotomized as never smokers versus ex-smokers and current smokers	3	48(71)	age, gender and education.	0.54 (0.22, 1.32)	14
Sepe-Monti M	2007	Italy	Smoking	Smoking:more than five cigarettes per day for at least 5 years;Not smoking: less than five cigarettes per day or stopped smoking for 10 years.	2.5	10(100)	–	0.4 (0.1, 2.2)	18
Fellows L	2008	Canada	Smoking	A standardized clinical history	5.9	50(100)	–	0.98 (0.95, 1.00)	31
Solfrizzi V	2004	Italy	Smoking	screening questionnaire	3.5	–	–	0.46 (0.08, 1.74)	39
Velayudhan L	2010	UK	Smoking	self-report	4	19(84)	Unadjusted	0.8 (0.17, 4.3)	42

Clerici F	2012	Sweden	Smoking	Smoking habit was dichotomized as never smokers versus ex-smokers and current smokers	2.3	129(68)	age, gender and education.	1.4 (0.9, 2.3)	49
Viticchi G	2012	Italy	Smoking	smoking was defined as a history of active tobacco smoking	1	21(100)	–	0.41 (0.09, 1.90)	50
Somme J	2013	Spain	Anxiety	NPI	3.5	43(-)	–	2.9 (1.2, 6.9)	22
Palmer K	2007	Sweden	Anxiety	CPRS	3	27(89)	baseline cognitive status	1.9 (1.2, 2.8)	25
Ramakers IHGB	2010	Netherlands	Anxiety	HAMD	5.4	90(88)	age, sex and education	0.58 (0.34, 1.0)	56
Somme J	2013	Spain	Apathy	NPI	3.5	43(-)	–	2.4 (1.9, 4.9)	22
Chan WC	2011	Hong Kong	Apathy	NPI	2	51(-)	–	0.31 (0.09, 1.13)	38
Richard E	2012	Netherlands	Apathy	3 apathy items of the 15-item Geriatric Depression Scale	2.7	166(100)	age, gender, education and baseline MMSE score	1.85 (1.09, 3.15)	46
Ramakers IHGB	2010	Netherlands	Apathy	HAMD	5.4	90(88)	age, sex and education	0.67 (0.40, 1.13)	56
Golimstok A	2013	Argentina	Apathy	NPI	6.3	–	–	6.5 (2, 20)	57

Chan WC	2011	Hong Kong	Depression	NPI	2	51(-)	–	2.40 (1.05, 5.46)	38
Geroldi C	2006	Italy	Depression	Center for Epidemiological Studies Depression (CES-D) scale	1.28	11（-）	–	1.1 (0.9, 1.1)	41
Velayudhan L	2010	UK	Depression	Geriatric Depression Scale (GDS)	4	19(84)	Unadjusted	1.4 (0.5, 3.9)	42
Richard E	2012	Netherlands	Depression	Geriatric Depression Scale (GDS)	2.7	166(100)	age, gender, education and baseline MMSE score	1.15 (0.72, 1.83)	46
Panza F	2008	Italy	Depression	Geriatric Depression Scale (GDS)	3.5	14(-)	–	1.42 (0.48, 4.23)	52
Modrego PJ	2004	Spain	Depression	Geriatric Depression Scale (GDS)	5.2	59(-)	–	2.6 (1.8,3.6)	53
Richard EM	2008	Italy	Depression	Center for Epidemiological Studies Depression (CES-D) scale	5.1	67(-)	age and sex	1.9 (1.0, 3.6)	54

Steenland K	2012	USA	Depression	–	2.5	950（100）	age, gender, race, education, history of stroke/TIA, history of diabetes, four cognitive tests(MMSE, logical memory, category fluency, WAIS), and FAQ	1.21 (1.00, 1.46)	55
Ramakers IHGB	2010	Netherlands	Depression	HAMD	5.4	90(88)	age, sex and education	0.61 (0.36, 1.01)	56
Ravaglia G	2006	Italy	Hypertension	Hypertension was defined as a systolic blood pressure ⩾ 140 mm Hg, a diastolic blood pressure⩾90 mm Hg	3	48(71)	age, gender and education.	1.25 (0.70, 2.45)	14
Sepe-Monti M	2007	Italy	Hypertension	history of blood pressure measurements greater than 160/95 mmHg or antihypertensive medication intake	2.5	10(100)	–	2.6 (0.4, 15.3)	18

Li L	2012	China	Hypertension	Hypertension was defined as systolic blood pressure ⩾ 140 mm Hg and/or diastolic blood pressure⩾90 mm Hg	3	86(60)	–	0.74 (0.15, 3.73)	34
Solfrizzi V	2004	Italy	Hypertension	either a self-reported diagnosis or medical treatment or a recorded mean diastolic value⩾ 90 mm Hg or a systolic value⩾ 140 mm Hg	3.5	–	–	1.74 (0.46, 9.74)	39
Clerici F	2012	Sweden	Hypertension	hypertension was defined as systolic blood pressure ⩾140 mm Hg and/or diastolic blood pressure ⩾90 mm Hg and/or use of antihypertensive medication	2.3	129(68)	age, gender and education.	1.3 (0.8, 1.9)	49
Viticchi G	2012	Italy	Hypertension	a history of high blood pressure, a systolic blood pressure⩾140 mm Hg, a diastolic blood pressure⩾90 mm Hg, or the use of an antihypertensive	1	21(100)	–	0.40 (0.11, 1.51)	50
Inzelberg R	2015	Israel	Hypertension	a systolic blood pressure⩾140 mm Hg, a diastolic blood pressure⩾90 mm Hg	⩾1	68(93)	-	1.18(1.1-1.27)	91

Ravaglia G	2006	Italy	Diabetes	medical history as provided by the patients and conirmed by clinical evaluation	3	48(71)	age, gender and education.	0.75 (0.26, 2.13)	14
Li L	2012	China	Diabetes	Diabetes was a concentration of fasting plasma glucose ⩾ 7.0 mmol/l (126 mg/dl)	3	86(60)	–	2.92 (1.12, 7.60)	34
Solfrizzi V	2004	Italy	Diabetes	self-reported diagnosis (diagnosis by a physician or medical treatment), or of a fasting plasma glucose level⩾ 7.8 mmol/L, on at least two separate days	3.5	–	–	0.54 (0.01, 3.62)	39
Velayudhan L	2010	UK	Diabetes	a report of physician diagnosis of the disorder with evidence of use of oral antidiabetic medications or insulin and information from the general practitioner	4	19(84)	stroke/TIA,age and gender	2.9 (1.1, 7.3)	42

Xu W	2010	Sweden	Diabetes	Diabetes was identified by clinical examination and through the inpatient register system, use of hypoglycemic drugs, and random blood glucose level⩾11.0 mmol/l	9	137(-)	age, sex, education, baseline MMSE score, BMI, heart disease, stroke, systolic blood pressure, diastolic blood pressure, follow-up survival status, and APOE genotype	2.83 (1.18, 6.78)	48
Clerici F	2012	Sweden	Diabetes	diabetes mellitus was defined as having a fasting venous plasma glucose level ⩾ 126 mg/dl and/or treatment for diabetes mellitus	2.3	129(68)	age, gender and education.	1.3 (0.8, 2.0)	49
Viticchi G	2012	Italy	Diabetes	diabetes mellitus was defined as a history of diabetes mellitus, a fasting serum glucose>7.0 mmol/L(1.26 g/L), or the use of an oral antihyperglycemic or insulin	1	21(100)	–	1.30 (0.36, 4.66)	50

Ma F	2014	China	Diabetes	treatment for diabetes reported in a questionnaire; a physician’s diagnosis of diabetes-related complications;or a fasting blood glucose ⩾ 126mg/dL (⩾ 7.0mmol/L) reported 2 or more times.	5	152(43)	age and gender	1.417(1.346-1.493)	90
Ravaglia G	2006	Italy	Cardiovascular disease	history of myocardial infarction, angina, peripheral vascular disease and congestive heart failure	3	48(71)	age, gender and education.	0.90 (0.44, 1.84)	14
Solfrizzi V	2004	Italy	Cardiovascular disease	coronary arteriography showing>70% obstruction of any coronary artery, or ST depression>1 mm on exercise testing	3.5	–	–	1.71 (0.32, 6.78)	39
Velayudhan L	2010	UK	Cardiovascular disease	myocardial infarction, angina and coronary artery bypass grafting	4	19(84)	Unadjusted	1.1 (0.4, 2.8)	42
Clerici F	2012	Sweden	Cardiovascular disease	history of angina, myocardial infarction, heart failure, or claudicatio intermittens	2.3	129(68)	age, gender and education.	0.6 (0.3,1.1)	49
Ravaglia G	2006	Italy	Cerebrovascular disease	history of stroke or TIA	3	48(71)	age, gender and education.	2.01 (0.69, 5.88)	14

Solfrizzi V	2004	Italy	Cerebrovascular disease	WHO criteria	3.5	–	–	4.00 (0.92, 13.87)	39
Velayudhan L	2010	UK	Cerebrovascular disease	–	4	19(84)	age and gender	2.8 (0.9, 9.3)	42
Staekenborg SS	2009	Netherlands	Cerebrovascular disease	different MRI sequences	1.99	72（78）	age and gender	1.1 (0.3, 3.8)	44
Clerici F	2012	Sweden	Cerebrovascular disease	history of stroke or transient ischemic attack	2.3	129(68)	age, gender and education.	1.0 (0.6, 1.7)	49
Ravaglia G	2006	Italy	Atrial fibrillation	medical history as provided by the patients and confirmed by clinical evaluation	3	48(71)	age, gender and education.	8.06 (3.43, 18.94)	14
Forti P	2007	Italy	Atrial fibrillation	medical history as provided by the patients and confirmed by clinical evaluation	2.8	52(71)	age, gender, education, baseline MMSE score, MCI subtype, diastolic blood pressure, BMI and serum folate	4.63 (1.72, 12.46)	17
Clerici F	2012	Sweden	Atrial fibrillation	medical history, as provided by the patients and confirmed by clinical evaluation	2.3	129(68)	age, gender and education.	0.5 (0.3, 1.2)	49

Ravaglia G	2006	Italy	Hypercholesterolemia	Serum total cholesterol was measured on fresh venous blood samples total cholesterol ⩾ 6.6 mmol/L	3	48(71)	age, gender and education.	0.29 (0.09, 0.87)	14
Sepe-Monti M	2007	Italy	Hypercholesterolemia	serum cholesterol level over 220 mg/dl or statin intake	2.5	10(100)	–	0.1 (0.1, 0.5)	18
Clerici F	2012	Sweden	Hypercholesterolemia	a fasting plasma total cholesterol level ⩾ 190 mg/dl and/or treatment for hypercholesterolemia	2.3	129(68)	age, gender and education.	1.2 (0.8, 1.9)	49
Viticchi G	2012	Italy	Hypercholesterolemia	fasting serum total cholesterol ⩾ 6.22 mmol/L (2.4 g/L) or triglycerides ⩾ 2.26 mmol/L (2 g/L), or the use of a statin or fibrate	1	21(100)	–	1.50 (0.50, 4.44)	50
Ravaglia G	2006	Italy	High body mass index	calculated as weight in kilograms divided by the square of the height in meters, cutoff: ⩾ 30.0	3	48(71)	age, gender and education.	0.62 (0.26, 1.46)	14
Chu L	2012	Hong Kong	High body mass index	calculated as weight in kilograms divided by the square of the height in meters	3	35(100)	age, sex and apolipoprotein E genotype	0.88 (0.77, 0.99)	24

Clerici F	2012	Sweden	High body mass index	calculated as weight in kilograms divided by the square of the height in meters, cutoff:⩾ 30.0	2.3	129(68)	age, gender and education.	0.9 (0.5,1.8)	49
Barnes DE	2014	USA	High body mass index	calculated as weight in kilograms divided by the square of the height in meters, cutoff:⩾ 22	–	179（100）	–	0.68 (0.47, 0.99)	51
van Rossum IA	2012	Netherlands	Hippocampal atrophy	Learning embeddings for atlas propagation(LEAP), cut off point for 5.39 cm3	2.2	109(58)	Age, gender, and education	2.2 (1.0, 5.0)	1
Landau SM	2010	USA	Hippocampal atrophy	Tructural magnetic resonance scans(1.5-T) and Freesurfer software	3	28(100)	Age, education, and sex	2.49 (1.02, 5.96)	8
Devanand DP	2007	USA	Hippocampal atrophy	GE 1.5-T Signa 5X unit	5	37	ICV(intracranial volume), sex, education, MMSE	2.89 (1.52, 5.51)	19
Jack CR	2010	USA	Hippocampal atrophy	scanned at 1.5 T with a 3D magnetization preparing rapid acquisition gradient echo imaging sequence	1.7	89(-)	total intracranial volumes	2.6 (1.8, 3.8)	20

Prins ND	2013	Netherlands	Medial temporal lobe atrophy	1.5 T scanners and included a 3-D T1-weighted gradient-echo sequence and a 2-D fast fluid attenuated inversion recovery sequence	2	81(-)	age and gender 可选择	1.87 (1.43, 2.44)	2
Geroldi C	2006	Italy	Medial temporal lobe atrophy	1.0 Tesla Philips Gyroscan(PG) in Brescia, 1.0 Tesla Siemens Impact (SI) in Verona,and 1.5 Tesla Siemens Vision (SV) in Milan and the gradient echo 3D technique	1.28	11（-）	–	8.3 (1.8, 37.3)	41
van Rossum IA	2012	Netherlands	Medial temporal lobe atrophy	1.0 Tesla scanner and included a coronal T1-weighted 3D inversion-prepared gradient echo sequence	2.42	91（100）	Age, gender, and educational level	2.2 (1.3, 3.7)	43
Staekenborg SS	2009	Netherlands	Medial temporal lobe atrophy	1.0-T machine according to a standard protocol, including coronal T1-weighted 3D magnetization prepared rapid acquisition gradient echo	1.99	72（78）	age and sex	2.9 (1.7, 5.3)	44
Devanand DP	2007	USA	Entorhinal atrophy	GE 1.5-T Signa 5X unit	5	37	ICV(intracranial volume), sex, education, MMSE	2.79 (1.75,4.47)	19

Desikan RS	2008	USA	Entorhinal atrophy	1.5T Signa scanner (GE Healthcare, Milwaukee, Wis)	5	44(100)	–	1.59 (1.10, 2.27)	29
Barnes DE	2014	USA	Entorhinal atrophy	–	–	179（100）	–	2.31 (1.30, 4.10)	51
Farias STP	2009	USA	White matter hyperintensity volume	a 1.5-TGE SignaHorizon LX Echospeed system or a 1.5-T Marconi system	2.4	28(-)	–	1.23 (1.02, 1.48)	27
DeCarli C	2004	USA	White matter hyperintensity volume	–	3.1	17(59)	age, education, and gender	0.73 (0.35, 1.54)	40
Staekenborg SS	2009	Netherlands	White matter hyperintensity volume	1.0-T machine according to a standard protocol, including coronal T1-weighted 3D magnetization prepared rapid acquisition gradient echo	1.99	72（78）	age and sex	1.2 (0.7, 2.2)	44
Vemuri P	2011	USA	White matter hyperintensity volume	15 different 1.5 Tesla GESIGNA MRI scanners using a standard transmit–receive volume head coil	–	70(81)	age, education, and gender	1.0 (0.8, 1.2)	45
Straaten EC	2008	Netherlands	White matter hyperintensity volume	A 3D T1-weighted gradient echo sequence and 2D proton density and T2-weighted spin-echo sequences with 24 transverse slices, slice thickness 5 mm	3	55	Age and education	1.03 (0.99, 1.06)	47

Kantarci K	2009	USA	Subcortical infarctions	discrete subcortical lesions>3mm in diameter with intensity that is equivalent to CSF on FLAIR images and accompanying hyperintense gliotic rim	2.1	75(-)	Age, sex and education	0.82 (0.4, 1.9)	21
Geroldi C	2006	Italy	Subcortical infarctions	MRI with the Age-Related White Matter Changes Scale total score >6, or when the beginning of confluence of lesions (score 2) was observed in at least one region	1.28	11（-）	–	2.9 (0.7, 11.4)	41
Vemuri P	2011	USA	Subcortical infarctions	15 different 1.5 Tesla GESIGNA MRI scanners using a standard transmit–receive volume head coil	–	70(81)	age, education, and gender	0.47 (0.1, 1.5)	45
Heister D	2011	USA	Abnormal CSF Aβ	using the multiplex xMAP Luminex platform with Innogenetics immunoassay kitbased reagents,cutoff points for CSF Aβ (192 pg/mL)	2.42	84(100)	Age	3.4 (1.7–6.9	12
McEvoy L	2011	USA	Abnormal CSF Aβ	cutoff: CSF Aβ (192 pg/mL)	3	142(-)	–	3.68 (1.89 ,7.92)	23

van Rossum IA	2012	Netherlands	Abnormal CSF Aβ	InnoTest sandwich ELISA, cutoff points for CSF Aβ (435 pg/ml)	2.42	91（100）	Age, gender, and educational level	0.9 (0.5,1.7)	43
van Rossum IAMD	2012	Netherlands	Abnormal CSF p-tau	InnoTest sandwich ELISA, cutoff points for CSF t-tau (375 pg/mL) and p-tau (52 pg/mL).	2.2	109(58)	Age, gender, and education	3.5 (1.3, 9.2)	1
Landau SM	2010	USA	Abnormal CSF p-tau	–	3	28(100)	Age, education, and sex	2.88 (1.09, 7.59)	8
Heister D	2011	USA	Abnormal CSF p-tau	using the multiplex xMAP Luminex platform with Innogenetics immunoassay kitbased reagents,cutoff points for CSF t-tau (93 pg/mL) and p-tau (23 pg/mL)	2.42	84(100)	Age	2.9 (1.6, 5.3)	12
van Rossum IA	2012	Netherlands	Abnormal CSF p-tau	InnoTest sandwich ELISA, cutoff points for CSF t-tau (627 pg/mL) and p-tau (88 pg/mL).	2.42	91（100）	Age, gender, and educational level	1.7 (0.9, 2.9)	43
van Rossum IAMD	2012	Netherlands	Abnormal CSF t-tau	InnoTest sandwich ELISA, cutoff points for CSF t-tau (375 pg/mL) and p-tau (52 pg/mL).	2.2	109(58)	Age, gender, and education	2.3 (1.1, 4.6)	1

Heister D	2011	USA	Abnormal CSF t-tau	using the multiplex xMAP Luminex platform with Innogenetics immunoassay kitbased reagents,cutoff points for CSF t-tau (93 pg/mL) and p-tau (23 pg/mL)	2.42	84(100)	Age	1.8 (1.1, 2.7)	12
van Rossum IA	2012	Netherlands	Abnormal CSF t-tau	InnoTest sandwich ELISA, cutoff points for CSF t-tau (627 pg/mL) and p-tau (88 pg/mL).	2.42	91（100）	Age, gender, and educational level	1.7 (1.0, 3.2)	43
Landau SM	2010	USA	Abnormal CSF tau/A-beta 1–42	–	3	28(100)	Age, education, and sex	3.99 (1.19, 13.32)	8
Heister D	2011	USA	Abnormal CSF tau/A-beta 1–42	using the multiplex xMAP Luminex platform with Innogenetics immunoassay kitbased reagents	2.42	84(100)	Age	3.8 (1.8, 8.2)	12
McEvoy L	2011	USA	Abnormal CSF tau/A-beta 1–42	cutoff:tau/Aß1-42 ratio=0.39	3	142(-)	–	3.68 (1.89, 7.92)	23
Gomar JJ	2014	USA	Abnormal CSF tau/A-beta 1–42	–	4	150(100)	age, sex and education	2.34 (1.45-3.91)	58
Ravaglia G	2006	Italy	Lower MMSE score	MMSE≤26	3	48(71)	age, gender and education.	2.68 (1.50, 4,79)	14

van Rossum IA	2012	Netherlands	Lower MMSE score	–	2.42	91（100）	Age, gender, and educational level	2.0 (1.2, 3.2)	43
Vemuri P	2011	USA	Lower MMSE score	–	–	70(81)	age, education, and gender	1.2 (1.1, 1.3)	45
Prins ND	2013	Netherlands	Higher ADAS-Cog score	–	2	81(-)	age and gender forced into the model	1.08 (1.06, 1.11)	2
Zhou B	2012	Japan	Higher ADAS-Cog score	–	4.4	164(100)	–	1.12 (1.09, 1.15)	28
Rozzini L	2006	Italy	Higher ADAS-Cog score	ADAS Cog (>13 pts)	1	39(100)	–	9.6 (1.5, 61.6)	32
Rozzini L	2007	Italy	Higher ADAS-Cog score	–	1	40(100)	–	1.4 (1.1, 1.8)	36
Barnes DE	2014	USA	Higher ADAS-Cog score	–	–	179（100）	–	2.9 (1.59, 5.27)	51
Gomar JJ	2014	USA	Higher ADAS-Cog score	–	4	150(100)	age, sex and education	1.08 (1.01-1.15)	58

Landau SM	2010	USA	AVLT score	total	–	3	28(100)	Age, education, and sex	4.30 (1.24, 14,97)	8
Zhou B	2012	Japan	AVLT score	total	–	4.4	164(100)	–	0.76 (0.66, 0.86)	28
Vemuri P	2011	USA	AVLT score	total	–	–	70(81)	age, education, and gender	1.4 (1.2, 1.6)	45
Gomar JJ	2014	USA	AVLT score	total	–	4	150(100)	age, sex and education	0.83 (0.73-0.95)	58
Gomar JJ	2011	USA	AVLT score	delay	–	2	116(100)	–	0.77 (0.64, 0.92)	10
Zhou B	2012	Japan	AVLT score	delay	–	4.4	164(100)	–	0.90 (0.83, 0.99)	28

AD, Alzheimer's disease