

**Supplementary Table 8.** Overview of the study characteristics and reported prevalence of strictly lobar microbleeds in patients with AD

Author	Year	Country	Area	Definition domain	Study acronym/ name of cohort	n	Age: mean (SD) or median (range)	Female (%)	Hypertension (%)	MRI parameters (field strength [T]/sequence/ slice thickness)	Prevalence MBs strictly lobar/strictly deep/mixed (%)	QA
Benedictus <sup>143</sup>	2013	The Netherlands	West	Probable AD (NINCDS-ADRDA)	ADC	371	69 (9)	55.0	34.8	3/T2*/3	18/3/5	0
Boyano <sup>144</sup>	2018	Spain	West	AD (NINCDS-ADRDA)	ACRSF	152	81	NR	NR	3/T2*/2.4	15/13/16	1
Chang <sup>124</sup>	2021	China	East Asia	Probable AD (NINCDS-ADRDA)	Chinese PLA General Hospital	15	76	40.0	60.0	NR/SWI/1.2	53/NR/NR	5
Charidimou <sup>145</sup>	2016	USA	West	Clinically diagnosed AD	Memory clinic, MGH	86	NR	NR	NR	3/NR/5	29/NR/NR	3
Chiang <sup>125</sup>	2015	USA	West	Probable AD (NINCDS-ADRDA)	ADNI-2 and ADNI-GO	86	NR	NR	NR	3/T2*/4	35/3/3	1
Chiu <sup>146</sup>	2020	Taiwan	East Asia	Mild to moderate AD (DSM-IV) no comorbidities (such as obvious vascular insults, vitamin B12/folate deficiency, and metabolic disorders)	Shuang Ho Hospital	112	76 (8)	70.5	32.1	1.5 or 3/T2*/2.4 (1.5 T) or 2 (3 T)	6/5/17	6.5
De Kort <sup>147</sup>	2021	The Netherlands	West	Probable AD (NINCDS-ADRDA)	Radboud University Medical Center	17	74	NR	NR	1.5 or 3.0/either T2* or SWI/NR	18/NR/NR	8.5
Donaghys <sup>126</sup>	2020	UK	West	Probable AD (NINCDS-ADRDA)	Secondary care services in the North of England	18	75.8 (7.1)	11.1	61.1	3/SWI/3	44/0/6	4
Ikeda <sup>148</sup>	2021	Japan	East Asia	Probable AD (NINCDS-ADRDA)	Gunma University Hospital, Geriatrics Research Institute and Hospital, Maebashi Red Cross Hospital	85	69.8 (8.4)	57.6	21.2	1.5 or 3/T2*/5 or 5.5	31/NR/NR	11.5
Inoue <sup>149</sup>	2016	Japan	East Asia	AD (NINCDS-ADRDA)	Kumamoto University Hospital	162	75 (9)	65.4	41.4	3/combined T2* and SWI/2	25/3/19	1
Kuroda <sup>150</sup>	2020	Japan	East Asia	Probable AD (NINCDS-ADRDA)	Showa University School of Medicine, Japan	40	78.9 (7.9)	55.0	NR	1.5/T2*/6	50/NR/NR	4.5
Mendes <sup>151</sup>	2020	Switzerland	West	Probable/Possible AD (NINCDS-ADRDA)	Geneva University Hospitals	114	82	67.5	57.0	3/T2*/NR	9/NR/NR	2.5
Nagasawa <sup>152</sup>	2014	Japan	East Asia	AD (NINCDS-ADRDA)	Toho University Hospital	559	78.4 (7.7)	57.4	36.0	1.5/T2*/5	13/11/0	0
Nakata-Kudo <sup>134</sup>	2006	Japan	East Asia	32 Probable AD, 10 Possible AD (NINCDS-ADRDA). 42 AD patients without CVD and 8 with CVD	Kyoto University Hospital	50	74.5	66.0	48.0	1.5/T2*/5	16/0/0	1
Noguchi-Shinohara <sup>153</sup>	2017	Japan	East Asia	Probable AD (NINCDS-ADRDA)	Kanazawa University Hospital	88	68 (8.3)	42.0	38.6	1.5/T2*/6	17/18/3	2.5
Shams <sup>154</sup>	2016	Sweden	West	AD (ICD-10 classification)	KIDS	423	68 (8)	45.2	35.7	1.5/NR/NR	16/4/NR	3
Sparacia <sup>155</sup>	2017	Italy	West	Probable AD (NINCDS-ADRDA)	University Hospital Palermo	54	76.8 (5.2)	63.0	NR	1.5/SWI/1.2	70/24/6	1
van der Vlies <sup>156</sup>	2012	Netherlands	West	Probable AD (NINCDS-ADRDA)	VUMC memory clinic	221	68 (9)	49.3	30.8	NR/T2*/5	10/3/5	3

**Supplementary Table 8.** Continued

Author	Year	Country	Area	Definition domain	Study acronym/ name of cohort	n	Age: mean (SD) or median (range)			Female (%)	Hypertension (%)	MRI parameters (field strength [T]/sequence/ slice thickness)	Prevalence MBs strictly lobar/strictly deep/mixed (%)	QA
Zhang <sup>157</sup>	2016	China	East Asia	Probable AD (NINCDS-ADRDA)	Weihai Municipal Hospital, China	146	72.1 (7.4)	56.8	26.7	3/SWI/1.2	20/4/8	0		

Prevalence of microbleeds shows the prevalence of (1) strictly lobar microbleeds, (2) strictly deep microbleeds, and (3) mixed microbleeds.

ACRSF, Alzheimer's Center Reina Sofia Foundation-CIEN Foundation; ADC, Amsterdam Dementia Cohort; ADNI-2, Alzheimer's Disease Neuroimaging Initiative-2; ADNI-GO, Alzheimer's Disease Neuroimaging Initiative-GO; CMBs, cerebral microbleeds; KIDS, Karolinska Imaging Dementia Study; MGH, Massachusetts General Hospital; VUMC, Vrije Universiteit Medisch Centrum, Amsterdam, the Netherlands; AD, Alzheimer's disease; CAA, cerebral amyloid angiopathy; CDR, clinical dementia rating; CMBs, cerebral microbleeds; CVD, cerebrovascular disease; ICD-10, International Statistical Classification of Diseases and Related Health Problems-10; MBs, microbleeds; MRI, magnetic resonance imaging; NR, not reported; NINCDS-ARDRA, neurological and communicative disorders and stroke Alzheimer disease and related disorders association; QA, total score of quality assessment; SWI, susceptibility-weighted imaging; USA, United States of America.

**Supplementary Table 9.** Overview of the study characteristics and reported prevalence of strictly lobar microbleeds in patients with intracerebral hemorrhage

Author	Year	Country	Area	Definition domain	Study acronym/ name of cohort	n	Age: mean (SD) or median (range)	Female (%)	Hypertension (%)	MRI parameters (field strength [T]/sequence/ slice thickness)	Prevalence MBs strictly lobar/strictly deep/mixed (%)	QA
Biffi <sup>158</sup>	2016	USA	West	Spontaneous ICH	MGH ICH LS	522	NR	NR	NR	NR/NR/NR	26/25/10	2.5
Fazekas <sup>92</sup>	1999	Austria	West	Fatal ICH	University Hospital Graz	11	72	45.5	63.6	1.5/T2*/5	18/9/36	1
Ghelmez <sup>159</sup>	2013	Romania	West	ICH, not further specified	NINND, Bucharest	24	NR	NR	NR	NR/combined T2* and SWI/ NR	17/13/21	10.5
Haussen <sup>160</sup>	2012	USA	West	Spontaneous ICH	BIDMC, Boston	163	68.4 (15.2)	40.5	66.3	NR/T2*/NR	24/13/15	0
Jolink <sup>161</sup>	2020	The Netherlands	West	Spontaneous ICH	FETCH	31	60 (12)	29.0	61.3	7/T2*/0.35	16/NR/NR	5
Laible <sup>162</sup>	2015	Germany	West	Spontaneous ICH	University Hospital Heidelberg	97	65.9 (13.9)	44.3	76.3	3/SWI/NR	19/9/30	3
Marti-Fabregas <sup>163</sup>	2013	Spain	West	Spontaneous supratentorial ICH	6 University hospitals in Spain	44	68.9 (11.1)	29.5	63.6	NR/T2*/NR	39/32/30	4
Schwarz <sup>164</sup>	2022	UK	West	Spontaneous non-cerebellar ICH	CROMIS-2 ICH	153	69	38.6	56.2	NR/either T2* or SWI/NR	30/NR/NR	6
Tsai <sup>165</sup>	2017	Taiwan	East Asia	Spontaneous ICH	National Taiwan University Hospital	57	65.7 (13.4)	43.9	NR	3/SWI/1.6	14/19/49	0
Wang <sup>166</sup>	2019	China	East Asia	Spontaneous ICH	Beijing Tiantan Hospital	306	56 (13.3)	28.4	73.2	3/SWI/1.6	4/21/NR	0
Xu <sup>167</sup>	2019	China	East Asia	Spontaneous ICH (first-ever [139] or recurrent [45])	West China Hospital	184	61 (12.5)	24.5	66.3	3/SWI/NR	15/24/34	2.5

Prevalence of microbleeds shows the prevalence of (1) strictly lobar microbleeds, (2) strictly deep microbleeds, and (3) mixed microbleeds.

ATACH-2, Antihypertensive Treatment of Acute Cerebral Haemorrhage 2; BIDMC, Beth Israel Deaconess Medical Center; CMBs, cerebral microbleeds; DECI-PHER, DiffErenCes in the Imaging of Primary Haemorrhage based on Ethnicity or Race; MGH ICH LS, Massachusetts General Hospital Intracerebral Haemorrhage Longitudinal Study; NINND, National Institute of Neurology and Neurovascular Diseases; BOMBS, Brain Observer MicroBleed Scale; ICH, intracerebral hemorrhage; MBs, microbleeds; MRI, magnetic resonance imaging; NR, not reported; QA, total score of quality assessment; SWI, susceptibility-weighted imaging; SBP, Systolic Blood Pressure; T, tesla; USA, United States of America.