

Supplemental Table IV. Predictive factors for recurrent ischemic stroke including low quality studies

Predictive factor	Study	Sample size, n	Variable definition	Factor prevalence	Follow-up duration	uv RR (95% CI)	mv HR (95% CI)
Clinical factors							
<i>Strong level</i>							
Prior stroke/TIA I ² =0%	Ay 2010 Bergström 2017	1458 196,765	- Prior ischemic stroke	8% 15%	90 days 1 year	3.4 (2.1-5.6)	1.3 (1.2-1.4)
	Kim 2014 Kuwashiro 2012	2378 260	Within last month Prior ischemic stroke	14% 24%	90 days 12 months	2.6 (1.9-3.4) 1.8 (1.1-3.1)	OR 2.0 (0.8-5.0)
	Soda 2004 Pooled	713	Prior stroke/TIA	27%	12 months	2.3 (1.5-3.8) 2.5 (2.1-3.1)	
Small vessel disease vs LAA I ² =82%	Ay 2010 Grau 2001 Hankey 1998	1458 5017 250	CCS TOAST Lacunar syndrome	10% 20% 10%	90 days 7 days 7 days	0.1 (0.0-0.7) 0.4 (0.3-0.6) 1.4 (0.6-3.4)	
	Nam 2017 Kim 2014 Kuwashiro 2012 Omori 2015 Soda 2004 Suanprasert 2011	959 2378 260 991 745 234	TOAST CCS TOAST Clinical subtype NINDS TOAST	31% 12% 31% 32% 26% 61%	31 months 90 days 12 months 704 days 12 months 13 months	0.1 (0.0-0.3) 0.3 (0.1-0.9) 0.5 (0.3-1.0) 1.3 (0.9-1.7) 0.8 (0.4-1.7) 1.0 (0.7-1.6)	
	Pooled					0.6 (0.3-0.9)	
<i>Moderate level</i>							
Undetermined cause vs LAA I ² =65%	Ay 2010 Grau 2001 Kim 2014 Soda 2004	1458 5017 2378 745	CCS TOAST CCS NINDS: Uncertain cause	36% 23% 12% 22%	90 days 7 days 90 days 12 months	0.4 (0.2-0.7) 0.4 (0.3-0.6) 0.2 (0.1-0.5) 1.1 (0.5-2.2)	
	Pooled					0.5 (0.3-0.8)	
Imaging factors (MRI)							
<i>Moderate level</i>							
Multiple lesions I ² =0%	Ay 2010	1458	Hyperintense on DWI and hypointense on ADC maps	40%	90 days	1.8 (1.5-2.1)	
	Nam 2017 Pooled	959	On DWI	39%	31 months	1.6 (1.3-2.0) 1.7 (1.5-2.0)	
Multiple lesions stage I ² =16%	Ay 2010	1458	Multiple infarcts of different ages on ADC/FLAIR	11%	90 days	3.5 (2.4-5.2)	
	Nam 2017 Pooled	959	On DWI	11%	31 months	4.7 (3.3-6.7) 4.1 (3.1-5.5)	6.0 (3.5-10.1)
Multiple territory lesions I ² =0%	Ay 2010	1458	(sub)acute in right and left anterior circulations or in anterior and posterior	10%	90 days	2.7 (1.7-4.4)	
	Nam 2017 Pooled	959	On DWI	6%	31 months	3.2 (1.8-5.8) 2.9 (2.0-4.2)	
Chronic infarcts I ² =0%	Ay 2010	1458	Hyperintense on FLAIR and hypo-/isointense on DWI	30%	90 days	1.4 (1.1-2.0)	
	Kim 2014 Pooled	2378	On MRI	15%	90 days	1.6 (1.1-2.3) 1.5 (1.2-1.9)	1.4 (0.9-2.3)
Isolated cortical lesion I ² =0%	Ay 2010 Nam 2017 Pooled	1458 959	- On DWI	9% 9%	90 days 31 months	2.2 (1.3-3.8) 2.1 (1.2-3.8) 2.2 (1.5-3.2)	2.5 (1.3-5.0)
<i>Limited level</i>							
White matter lesions I ² =89%	Kim 2014 Nam 2017	2378 959	FLAIR: Fazekas <2 vs ≥2 FLAIR: Fazekas ≤2 vs >2	44% 25%	90 days 31 months	1.2 (1.0-1.5) 2.0 (1.5-2.7)	1.5 (1.0-2.3) 1.9 (1.1-3.4)
	Pooled					1.5 (0.9-2.6)	

uv.: univariable, RR: risk ratio, CI: confidence interval, mv.: multivariable, HR: hazard ratio, TIA: transient ischemic attack, OR: odds ratio, LAA: large artery atherosclerosis, CCS: Causative Classification System for Ischemic Stroke, TOAST: Trial of ORG 10172 in Acute Stroke Treatment, NINDS: National Institute of Neurological Diseases and Stroke, MRI: magnetic resonance imaging, DWI: diffusion weighted imaging, ADC: apparent diffusion coefficient, FLAIR: fluid attenuation inversion recovery.