

Small vessel disease burden in acute ischemic stroke: the role of physical activity and vascular risk factors

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We aimed to investigate the interaction of physical activity and cardio-vascular risk factors on the development of small vessel disease (SVD)



Cross-sectional, pooled study on patients with acute ischemic stroke admitted between 2013-2022



Physical activity 7 days before stroke was recorded on admission

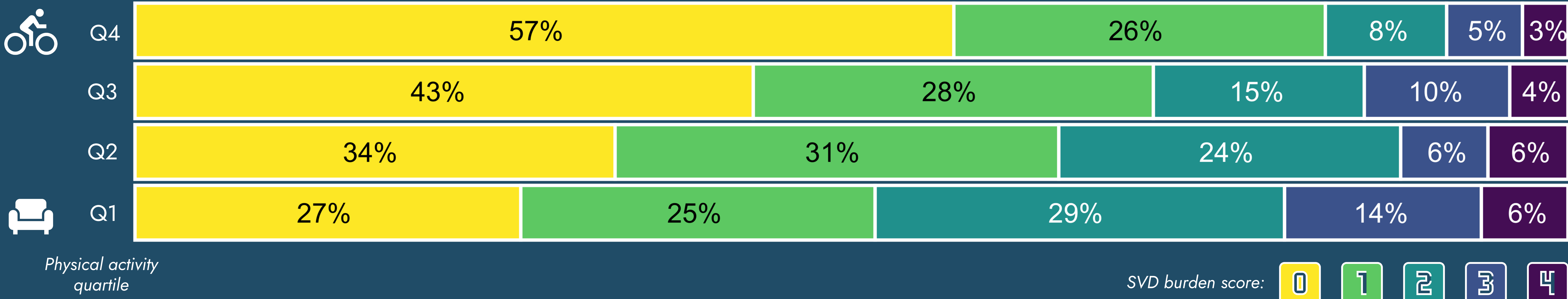


T2*/SWI and FLAIR sequences from acute MRI scans were assessed by 2 independent, blinded assessors

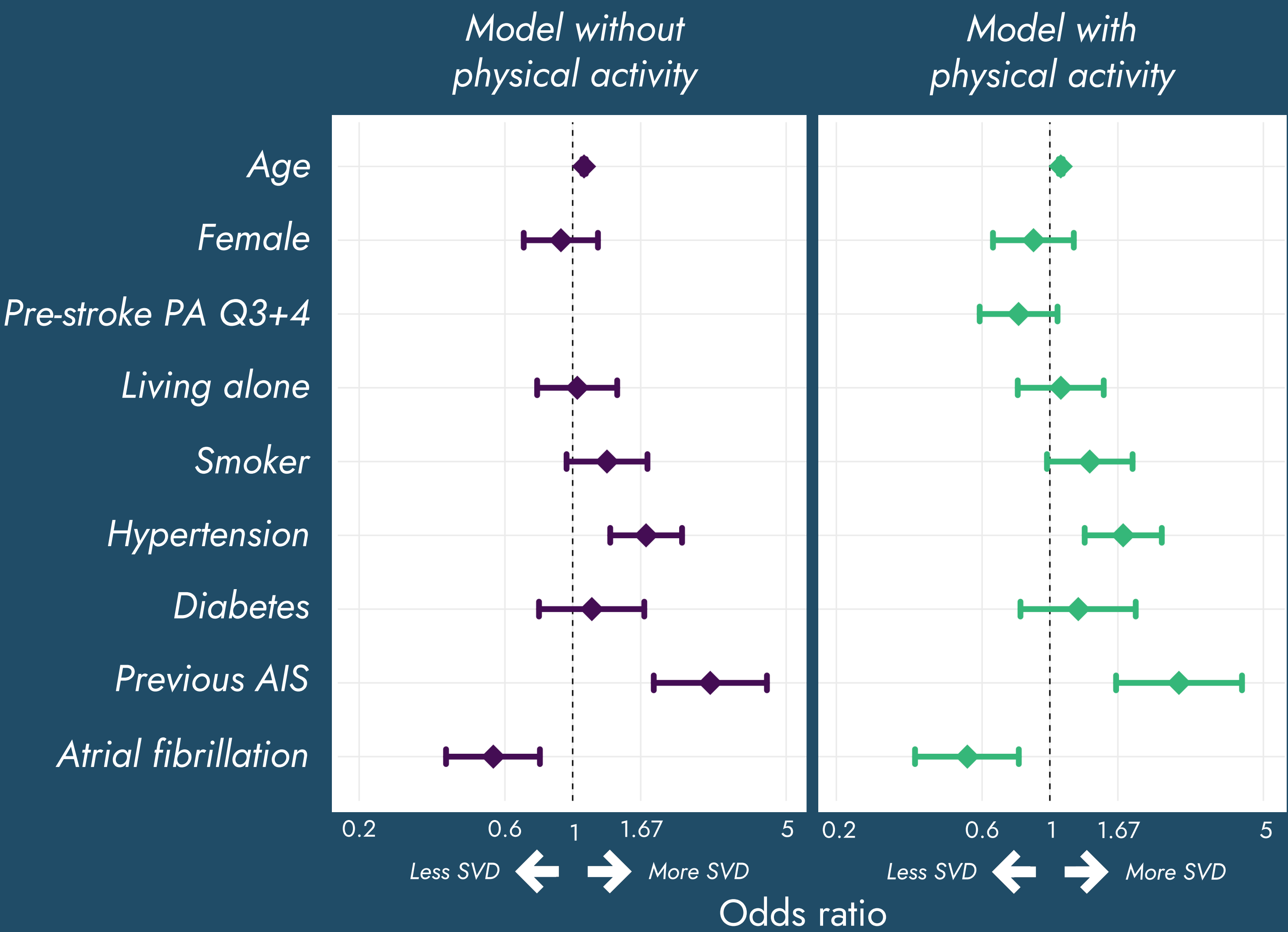


764 included: 279 (37%) females; NIHSS 4 [2;7]; age 71 [62; 79]

SMALL VESSEL DISEASE BURDEN BY PHYSICAL ACTIVITY QUARTILE



MULTIVARIATE ORDINAL LOGISTIC REGRESSION OF SVD BURDEN



Higher level of physical activity correlates to lower SVD burden, but modification of vascular risk factors is to be further investigated

SVD burden score		
FEATURE	ANNOTATION	SCORE
Microbleeds	0	0
	1	1
	2-4	
	5-10	
	>10	
Lacunes	0	0
	1	1
	2	
	3-5	
	>5	
Deep white matter hyperintensity	Absent	0
	Punctate foci	1
	Beginning confluence	
Atrophy (GCA)	Large confluent areas	1
	No	
	Mild	0
	Moderate	1
	Severe	

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