

**Supplemental Material for:**

**Spatial Distribution of Intracranial Vessel Wall Enhancement in Hypertension and Primary Angiitis of the CNS**

Authors: Jae W Song<sup>1</sup>, Haochang Shou<sup>2</sup>, Emmanuel C Obusez<sup>3</sup>, Scott B Raymond<sup>3†</sup>, Samuel D Rafla<sup>3</sup>, G. Abbas Kharal<sup>4††</sup>, Pamela W Schaefer<sup>3</sup>, Javier M Romero<sup>3</sup>

Affiliations:

<sup>1</sup>Department of Radiology, Division of Neuroradiology, Hospital of the University of Pennsylvania

<sup>2</sup>Department of Biostatistics, Epidemiology and Informatics, University of Pennsylvania Perelman School of Medicine

<sup>3</sup>Division of Neuroradiology, Massachusetts General Hospital, Harvard Medical School

<sup>4</sup>Department of Neurology, Massachusetts General Hospital, Harvard Medical School

Present positions:

<sup>†</sup>Department of Radiology, University of Vermont College of Medicine

<sup>††</sup> Department of Neurology, Cleveland Clinic

Supplemental Table 1: Inter-rater Agreement

Unweighted Cohen's kappa ( $\kappa$ )	
Internal Carotid Artery Terminus	$\kappa=0.39$ , (95% CI, 0.16-0.61)
Anterior Cerebral Artery	$\kappa=0.38$ , (95% CI, 0.23-0.52)
Middle Cerebral Artery	$\kappa=0.45$ , (95% CI, 0.34-0.55)
Posterior Cerebral Artery	$\kappa=0.18$ , (95% CI, 0.08-0.27)
Vertebral Artery (V4 segment)	$\kappa=0.48$ , (95% CI, 0.35-0.61)
Basilar Artery	$\kappa=0.28$ , (95% CI, 0.004-0.56)

Supplemental Table 2: Median Number of Enhancing Vessel Segments

	All patients	Primary angiitis of the CNS	Hypertension	Primary angiitis of the CNS and Hypertension
All vessel segments	4.0 [1.0, 9.0]	11.0 [3.0, 17.0]	6.0 [3.0, 11]	15 [6.75, 18.25]
Primary <sup>#</sup>	2.0 [0, 6.0]	6 [0.5, 9.75]	5 [0.5, 7.0]	8.00 [3.75, 10.25]
Secondary <sup>**</sup>	0 [0, 2.0]	2.5 [0.25, 4.75]	1.0 [0, 3.0]	4.00 [0.75, 5.00]
Tertiary <sup>††</sup>	0 [0, 1.0]	3.00 [1.25, 3.75]	0 [0, 1.5]	3.00 [0.75, 4.50]

\*Presented as median and interquartile ranges [IQR]

# Basilar artery and bilateral A1, M1, P1, V4, ICA terminus (11 segments)

\*\*Bilateral A2, M2, P2 (6 segments)

†† Bilateral A3, M3, P3 (6 segments)