

**Supplementary Table.** Characteristics of cases with venous predominant arteriovenous malformations

Case	Age	Sex	Clinical presentation	Size (mm)	Location	Venous drainage	SWI	ASL signal	nCBF <sup>a</sup>	TP (sec) <sup>b</sup>	TCV (sec) <sup>c</sup>	ASL-DSA interval
1	49	M	Thalamus ICH, 3 <sup>rd</sup> nerve palsy, hemipareis	15	Thalamus	Basal v.	High	+	3.84	0.75	-2.5	0 days
				55	Cerebellum	Cortical v.	Dark <sup>d</sup>	+	2.13	1.5	-2.0	
2	43	M	Headache	30	Parietal	Cortical v.	High	+	3.45	1.0	-2.0	2 months
3	41	F	IVH, headache	20	Occipital	Basal v.	High	+	1.82	1.0	-2.5	1 day
4	31	M	Dizziness	40	Frontal	Cortical v.	Dark <sup>d</sup>	+	5.20	1.0	-3.0	13 months
5	57	M	Dizziness	30	Basal ganglia	Basal v.	Dark	+	2.51	2.0	-2.5	1 month
6	34	F	Headache	25	Parietal	Cortical v.	Dark	+	1.88	2.5	0.0	6 months
				25	Parietal	Cortical v.	Dark	+	1.13	3.5	1.0	
7	20	M	Syncope	30	Basal ganglia	Basal v.	Dark	-	0.50	3.75	1.0	0 day
8	70	M	Co-morbidity	25	Frontal	Cortical v.	Dark	-	0.63	4.25	1.0	0 day
9	56	F	Co-morbidity	30	Parietal	Int. cerebral v.	Dark	+	1.27	3.5	1.0	3 years
10	42	F	Co-morbidity	20	Frontal	Cortical v.	Dark	-	1.08	4.5	2.5	2 months
11	29	M	Co-morbidity	25	Frontal	Int. cerebral v.	Dark	-	0.94	10.0	5.5	0 days
12	72	F	Co-morbidity	20	Frontal	Cortical v.	Dark	-	0.56	10.0	6.0	1 month
13	59	F	Co-morbidity	30	Frontal	Int. cerebral v.	Dark	-	0.57	11.25	6.0	3 months

<sup>a</sup> Normalized cerebral blood flow =  $CBF_{\text{lesion}} / CBF_{\text{gray}}$

<sup>b</sup> Temporal phase of the lesion on DSA: Time frame of appearance of the lesion - Time frame of intracranial artery visualization

<sup>c</sup> Temporal phase in regard to cortical vein on DSA: Temporal phase in regard to cortical vein = Time frame of appearance of the lesion - Time

frame of first cortical vein visualization

<sup>d</sup> Although medullary veins showed dark signal, stem veins showed iso- to high signal intensity

ASL=arterial spin labeling; DSA=digital subtraction angiography; ICH=intracerebral hemorrhage; IVH=intraventricular hemorrhage;