

Supplemental Table 1. The detail MR features of category B culprit plaques

Number	Location	Enhancement grade ^{&}	Stenosis grade [#]
1	LM1/LM1	2/1	3/2
2	RM1/RC7	2/1	3/1
3	RM1/RM1/RC7	1/0/0	2/1/1
4	LVA/BA	2/1	3/1
5	LV4/LV4/LPCA	2/1/1	3/1/2
6	RM1/RM1	2/1	3/1

&: grade 0, no enhancement; grade 1, mild enhancement; grade 2, significant enhancement.

#: grade1, 30%≤Stenosis<50%; grade2, 50%≤Stenosis<70%; grade3, Stenosis≥70%.

LM, left middle cerebral artery; RM, right middle cerebral artery; C7: internal carotid artery C7; VA: vertebral artery; BA, basilar artery; PCA, posterior cerebral artery.

Supplemental Table 2. The differences in the enhancement grades between culprit and non-culprit plaques.

Phase	All plaque	Culprit plaque	Non-culprit plaque	P*
Phase 1 st				
Grade 0	16(14.2%)	0 (0%)	16(19.3%)	<0.001
Grade 1	69(61.1%)	11 (36.7%)	58(69.9%)	
Grade 2	28(24.7)	19 (63.3%)	9(10.8%)	
Phase 2 nd				
Grade 0	6(5.3%)	0(0%)	6(7.2%)	<0.001
Grade 1	65(57.5%)	7(23.3%)	58(69.9%)	
Grade 2	42(37.2%)	23(76.7%)	19(22.9%)	
Phase 3 rd				
Grade 0	8(7.1%)	0(0%)	8(9.6%)	<0.001
Grade 1	57(50.4%)	3(10.0%)	54(65.1%)	
Grade 2	48(42.5%)	27(90.0%)	21(25.3%)	
Phase 4 th				
Grade 0	7(6.2%)	0	7(8.4%)	<0.001

Grade 1	52(46.0)	2(6.7%)	50(60.2%)
Grade 2	54(47.8%)	28(93.3%)	26(31.3%)

*. The differences in the enhancement grades between culprit and non-culprit plaques in different post-contrast phases.

Supplemental Table 3. The enhancement grade change of plaque during 4 post-contrast phases in culprit plaque and non-culprit plaque group.

Components	All plaque	Culprit plaque n (%)	Non-culprit plaque n (%)
From grade 0 to grade 1	12(10.6%)	0(0%)	12(14.5%)
From grade 0 to grade 2	3(2.7%)	0(0%)	3(3.6%)
From grade 1 to grade 2	25(22.1%)	9(30.0%)	16(19.3%)
From grade 1 to grade 0	6(5.3%)	0(0%)	6(7.2%)
From grade 2 to grade 1	2(1.8%)	0(0%)	2(2.4%)
Change from grade 0 to 1 then to grade 0	3(2.7%)	0(0%)	3(3.6%)
Change from grade 1 to 2 then to grade 1	1(0.9%)	0(0%)	1(1.2%)
Change from grade 0 to 1 then to grade 2	1(0.9%)	0(0%)	1(1.2%)
All plaques with changes in Grade	42(37.2%)	9(30.0%)	33(39.8%)

Supplemental Table 4. Plaque enhancement grade in different contrast-enhanced phases to differentiate culprit and non-culprit plaque.

Variables	AUC (95%CI)	Sensitivity/Specificity	P value
Grade 1 st	0.798(0.712-0.867)	89.2%/63.33%	<0.001

Grade 2 nd	0.777(0.689-0.850)	77.11%/76.67%	<0.001
Grade 3 rd	0.828(0.746-0.893)	74.70%/90.00%	<0.001
Grade 4 th	0.813(0.729-0.880)	68.67%/93.33%	<0.001
Variables	Difference between AUC area	95%CI	P value
Grade 1 st vs Grade 2 nd &	0.021±0.034	-0.047-0.088	0.551
Grade 1 st vs Grade 3 rd &	0.031±0.041	-0.049-0.110	0.452
Grade 1 st vs Grade 4 th &	0.015±0.043	-0.069-0.099	0.726
Grade 2 nd vs Grade 3 rd &	0.051±0.032	-0.011-0.113	0.107
Grade 2 nd vs Grade 4 th &	0.036±0.035	-0.034-0.105	0.318
Grade 3 rd vs Grade 4 th &	0.016±0.020	-0.024-0.055	0.440

&: Refer to comparing the ROC curves (the AUCs) between two postcontrast phases.

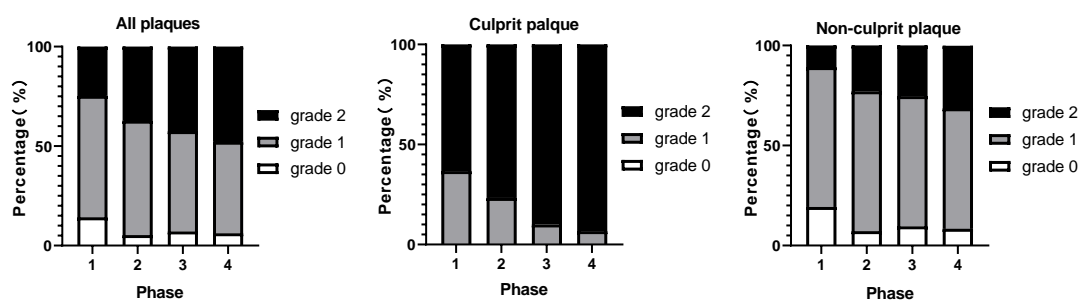
CI: Confidence Interval.

Supplemental Table 5. Inter-reader and intra-reader agreement for evaluation of

		Inter-observer	Intra-observer
Parameter		Kendall's W/ICC (95%CI)	Kappa/ICC (95%CI)
Plaque	Pre-contrast	0.983 (0.959-0.993)	0.980(0.949-0.992)
	1 st phase	0.981 (0.953-0.992)	0.976(0.942-0.990)
	2 nd phase	0.983 (0.958-0.993)	0.947(0.874-0.979)
	3 rd phase	0.980 (0.952-0.992)	0.974(0.937-0.990)
	4 th phase	0.981 (0.952-0.992)	0.978(0.938-0.991)
Cerebrospinal fluid	Pre-contrast	0.988 (0.969-0.995)	0.988(0.970-0.995)
	1 st phase	0.964 (0.912-0.986)	0.973(0.934-0.989)
	2 nd phase	0.977 (0.944-0.991)	0.921(0.812-0.968)
	3 rd phase	0.978 (0.946-0.991)	0.951(0.881-0.980)
	4 th phase	0.976 (0.940-0.990)	0.961(0.904-0.984)
Enhancement grade(1vs2)		0.824(0.645-1.000)	0.883(0.722-1.000)
Enhancement grade(0vs1)		0.902(0.673-1.000)	0.891(0.649-1.000)

plaque and reference structure signal intensity (n=20)
ICC, intra-class correlation coefficient

Supplemental Figure 1. Dynamic changes of qualitative enhancement of culprit and non-culprit plaques.



Supplemental Figure 2. The ROC of plaque enhancement grade in 4 contrast-enhanced phases for differentiating culprit and non-culprit plaques

