

## SUPPLEMENTAL MATERIAL

Table I: Regression coefficients (with standard errors) on the individual and multivariable associations with the cube root infarct growth and cube root penumbra salvage with ordinal collateral score

<i>Variable</i>	Infarct growth Estimate (SE)		Penumbra Salvage Estimate (SE)	
	<i>Individual effect</i>	<i>Multivariable effect</i>	<i>Individual effect</i>	<i>Multivariable effect</i>
Age (per year)	0.01 (0.01)	-0.001 (0.01)	-0.002 (0.01)	-0.001 (0.01)
Gender (female)	0.70 (0.40)	0.74 (0.42)	-0.12 (0.35)	-0.49 (0.39)
NIHSS	0.11 (0.02) *	0.07 (0.03) *	-0.04 (0.02)	-0.01 (0.03)
Recanalization	0.47 (0.45)	-0.01 (0.43)	-0.28 (0.42)	-0.26 (0.53)
Large vessel occlusion	1.21 (0.40) *	-0.15 (0.54)	0.51 (0.36)	1.47 (0.50) *
Collateral score (per point)	-0.93 (0.19) *	-0.77 (0.26) *	0.50 (0.17) *	1.04 (0.24) *
Time from onset to baseline imaging	-0.07 (0.04)	-0.01 (0.05)	0.01 (0.04)	-0.01 (0.04)

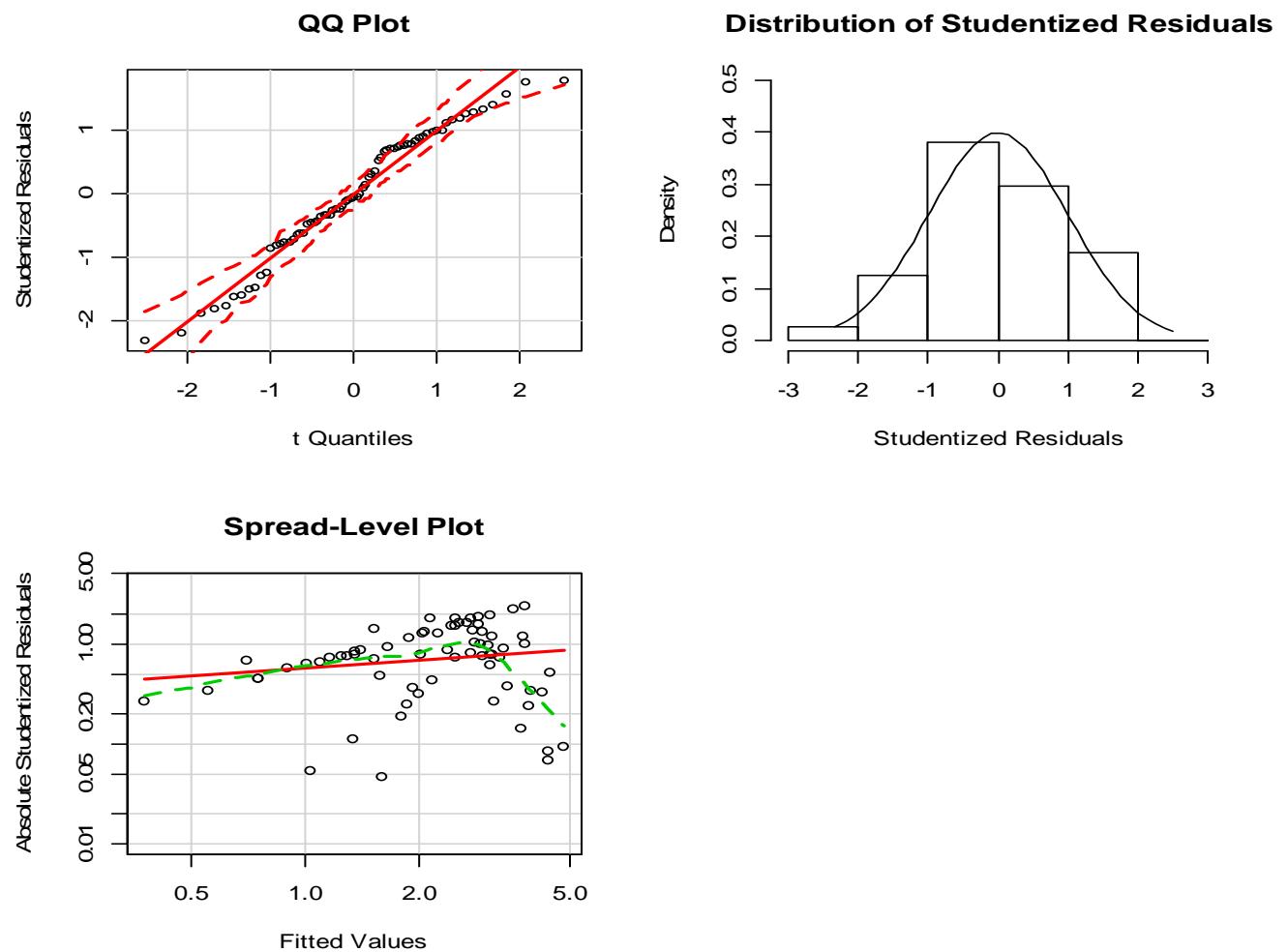
\*p-value<0.05

Table II: Time from baseline to image added to the multivariable models

<i>Variable</i>	Infarct growth Estimate (SE)		Penumbra Salvage Estimate (SE)	
	<i>Multivariable effect</i>	<i>Multivariable effect</i>	<i>Multivariable effect</i>	<i>Multivariable effect</i>
Age (per year)	0.004 (0.01)		-0.001 (0.01)	
Gender (female)	0.80 (0.45)		-0.73 (0.43)	
NIHSS	0.08 (0.03) *		-0.01 (0.03)	
Recanalization	-0.33 (0.45)		-0.14 (0.43)	
Large vessel occlusion	0.04 (0.55)		1.20 (0.53) *	
Poor collateral score (poor vs good)	1.29 (0.48) *		-1.68 (0.46) *	
Time from onset to baseline imaging	-0.01 (0.05)		-0.02 (0.05)	
Time from baseline and final imaging	0.01 (0.02)		-0.01 (0.02)	

\*p-value<0.05

Figure I: Diagnostic plots for infarct growth multivariable model



Multivariable model

Figure II: Diagnostic plots for penumbral salvage multivariable model

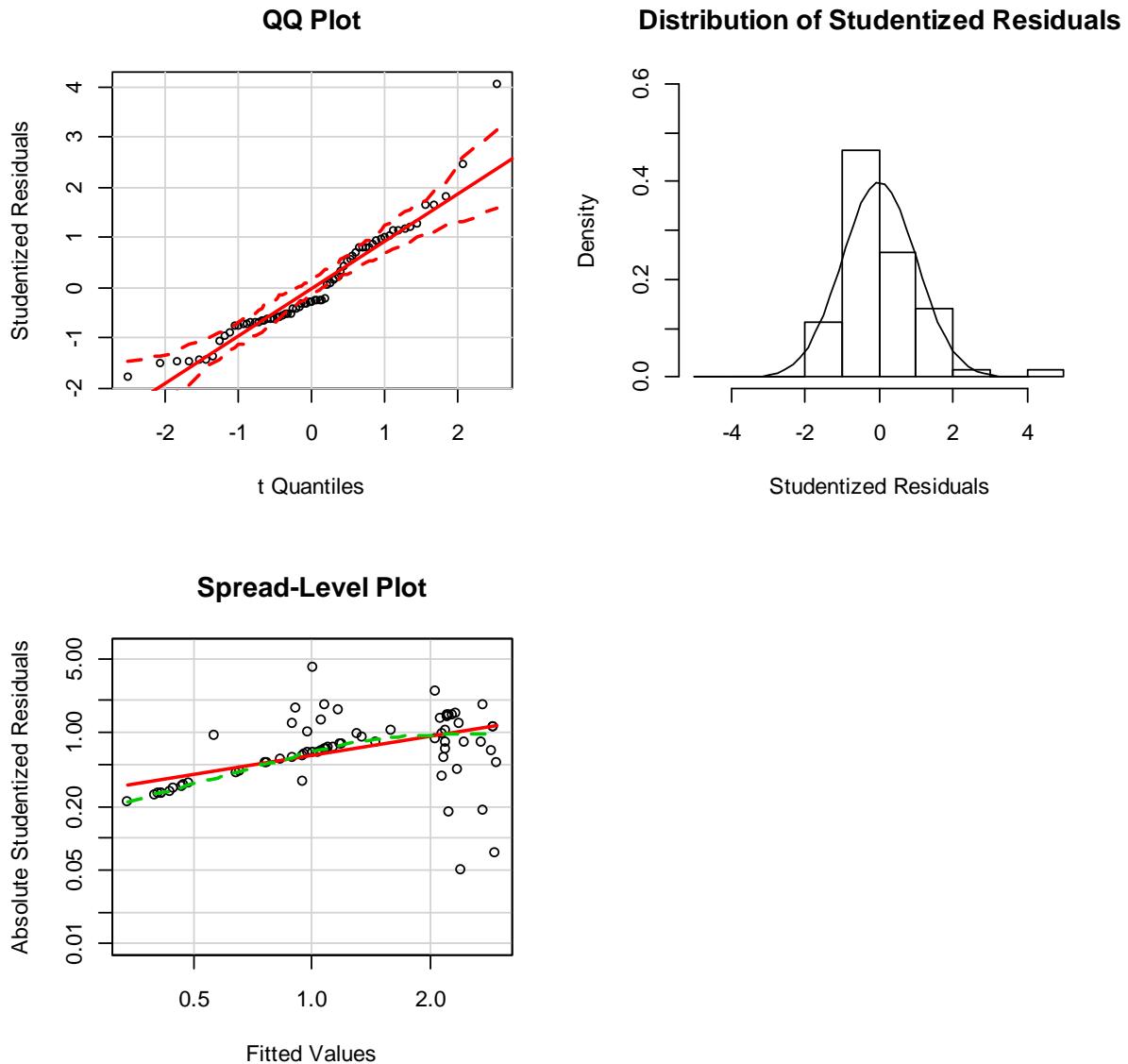


Figure III: Boxplot of infarct growth (Panel A) and penumbral salvage (Panel B) by collateral grade

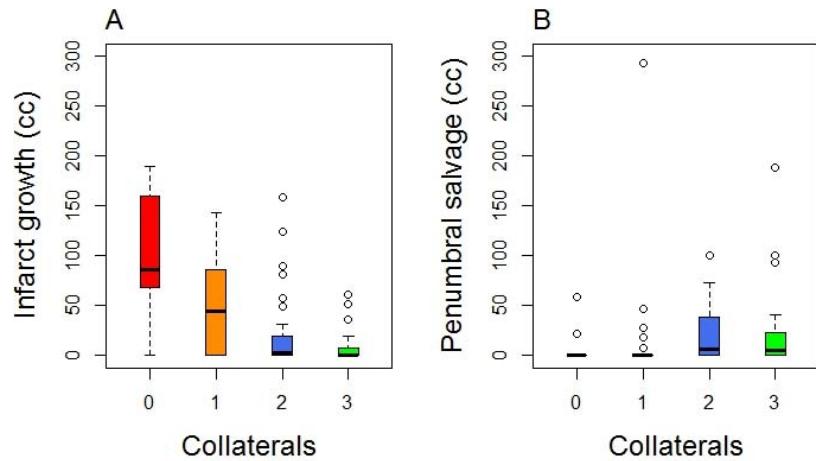


Figure IV: Collateral clock stratified by collateral grade incorporating individual subject data for infarct growth (Panel A) and penumbral salvage (Panel B)

