

SUPPLEMENTAL MATERIAL

Table I: Summary of mRS outcomes from five randomised control trials.

Trial:	Intervention group	mRS 0-2	mRS 3-5	mRS 6	Total	Haemorrhage rate (%)	References
MR CLEAN	Thrombectomy	76	108	49	233	7.7	7
	tPA	51	157	59	267	6.4	7
ESCAPE	Thrombectomy	87	60	17	164	3.6	8
	tPA	43	76	28	147	2.7	8
EXTEND 1A	Thrombectomy	25	7	3	35	0	9
	tPA	14	14	7	35	6	9
SWIFT-PRIME	Thrombectomy	59	30	9	98	0	10
	tPA	33	53	12	98	3	10
REVASCAT	Thrombectomy	45	39	19	103	4.9	11
	tPA	29	58	16	103	1.9	11
Total number of patients	Thrombectomy	292	244	97	633	29	
	tPA	170	358	122	650	25	
mean figures	Thrombectomy	46%	39%	15%	100%	4.6	
	tPA	26%	55%	19%	100%	3.8	

Table II: Detailed breakdown costs for iv TPA and iv Thrombectomy

Cost of IV-tPA	Cost (US \$ 2014)	Reference
	\$	
Cost of Alteplase	950.40	31
Staff time		
5 min additional nurse time	14.01	29,33
190 min registrar time	378.02	29,33
50 min consultant time	194.76	29,33
5 min routine observation by senior nurse	2.66	29,33
12 additional set of observation at 5 min each	233.71	29,33
5 hours 1:1 Senior nurse care	1,168.54	29,33
10 min overnight senior nurse care	11.49	29,33
Total cost of administration	2,003.19	
Total cost IV-tPA	2,953.59	
Cost of Thrombectomy	Cost (US \$ 2014)	Reference
Cost of material		
device	7,566.08	36-37
guidecatheter	159.73	36-37
guidewire	168.14	36-37
microcatheter	672.54	36-37
stent thrombectomy	3,154.21	36-37
aspiration catheter	840.68	36-37
Total cost of material	12,561.37	

Cost of surgery		
	Cost (US \$ 2014)	Reference
surgery staff		
surgeon	411.93	29, 36-37
radiographer	108.87	29, 36-37
instrument nurse	64.73	29, 36-37
circulating nurse	61.79	29, 36-37
circulating nurse	61.79	29, 36-37
anaesthetist	411.93	29, 36-37
anaesthetic nurse	120.64	29, 36-37
<i>Total cost of surgery</i>	1,241.68	
Total cost of Thrombectomy	13,803.04	

Table III: Probabilistic sensitivity analysis results: Expected values per 1,000 patients. Costs are based on 2013-14 prices The Net Monetary Benefit is calculated at the lower and upper limits of the willingness to pay for a QALY, which in the UK are \$33,000 (£20,000) and \$49,500 (£30,000) respectively.

	IV-tPA	M. Thrombectomy	Difference
Costs (95% CI)	\$ 52,849,215 (\$ 51,073,057- \$ 53,837,494)	\$ 64,887,437 (\$ 63,546,387 - \$ 65,957,721)	\$ 12,038,222 (\$ 10,462,678 -\$ 14,155,764)
QALYs (95% CI)	3,723 (3,590-3,988)	4,677 (4,617-5,068)	954 (753-1352)
ICER (95% CI)			\$ 12,614 (\$9,043 - \$15,988)
Net Monetary Benefit			
<i>Lower</i>	\$ 70,002,953	\$ 89,457,959	
<i>Upper</i>	\$ 131,429,037	\$ 166,630,656	