

Multimedia Appendix 2: Details on the costs used in the model

No	Parameter	Base-case value	Calculation/ Assumption/ Source	Distribution	Alpha	Beta
1	After mimic	\$5 351 (€4 027)	Values taken from UZ Brussel Stroke	Gamma	169	24
	<i>Favourable</i>	\$33 333 (€25 082)	Registry linked with individual hospital	Gamma	400	63
	<i>Unfavourable Death</i>	\$12 517 (€9 419)	claims data	Gamma	29	319
2	After TIA	\$7 042 (€5 299)	Values taken from UZ Brussel Stroke	Gamma	324	16
	<i>Favourable</i>	\$20 660 (€15 546)	Registry linked with individual hospital	Gamma	73	214
	<i>Unfavourable Death</i>	\$8 265 (€6 219)	claims data	Gamma	24	255
3	After Isch & Cons	\$13 690 (€10 301)	Values taken from UZ Brussel Stroke	Gamma	318	32
	<i>Favourable</i>	\$39 435 (€29 673)	Registry linked with individual hospital	Gamma	827	36
	<i>Unfavourable Death</i>	\$19 409 (€14 604)	claims data	Gamma	132	110
4	After Isch & IVT	\$18 797 (€14 144)	Values taken from Stroke UZ Brussel	Gamma	86	164
	<i>Favourable</i>	\$45 862 (€34 509)	Stroke Registry linked with individual	Gamma	301	115
	<i>Unfavourable Death</i>	\$18 311 (€13 778)	hospital claims data	Gamma	49	283
5	After Isch & EVT	\$24 823 (€18 678)	(4) + (6)	Gamma	400	46
	<i>Favourable</i>	\$53 197 (€40 028)		Gamma	400	100
	<i>Unfavourable Death</i>	\$24 606 (€18 515)		Gamma	400	46
6	Mean costs of Materials used in the operative room for EVT	\$6 025 (€4 534)	Bing 2013 [1]	NA	NA	NA
	<i>Favourable</i>	\$7 334 (€5 519)		NA	NA	NA
	<i>Unfavourable Death</i>	\$6 295 (€4 737)		NA	NA	NA
7	Additional cost of IVT	\$561 (€422)	Cost of 50 ml Alteplase in Belgium – assume every patient is administered 50 ml	NA	NA	NA
8	After Haem & Cons	\$29 545 (€22 231)	Values taken from UZ Brussel Stroke	Gamma	64	346
	<i>Favourable</i>	\$48 003 (€36 120)	Registry l linked with individual hospital	Gamma	329	110
	<i>Unfavourable Death</i>	\$10 927 (€8 222)	claims data	Gamma	39	208

9	Costs of one year cycle (Markov Model)					
	Favourable	\$4 115 (€3 096)	Health care utilization based on CERISE	Gamma	400	8
	Unfavourable	\$19 188 (€14 438)	database[2] and UZ Brussel Stroke Registry	Gamma	400	36
			More information in Multimedia Appendix 3			
10	Costs of Hospitalization recurrent stroke (Markov Model)	\$8 789 (€6 613)	Values taken from UZ Brussel Stroke Registry linked with individual hospital claims data	Gamma	1913	4
11	After Isch & IVT & Inatel		Weighted average between the cost for IVT (4) and the cost for conservative care (3) for each new patient receiving IVT summed with the additional cost of IVT (7) for each new patient.			
	<i>Favourable</i>	\$16 812 (€12 650)		Gamma	400	32
	<i>Unfavourable</i>	\$43 558 (€32 775)		Gamma	400	82
	<i>Death</i>	\$19 010 (€14 304)		Gamma	400	36
12	After Isch & EVT & Inatel		Weighted average between the cost for EVT (5) and the cost for conservative care (3) for each new patient receiving EVT summed with the additional cost of EVT (6) for each new patient.			
	<i>Favourable</i>	\$21 984 (€16 542)		Gamma	400	32
	<i>Unfavourable</i>	\$50 131 (€37 721)		Gamma	400	82
	<i>Death</i>	\$24 967 (€18 786)		Gamma	400	36

SE = Stander Error, rpbl = rapid blood pressure lowering, Favourable = favourable outcome (mRS0-2), Unfavourable = unfavourable outcome (mRS3-5), TIA = transient ischemic attack, Isch = ischemic stroke, Haem = haemorrhagic stroke, cons = conservative treatment, OTT = onset to treatment, IVT= intravenous administration of tissue Plasminogen Activator, EVT = endovascular treatment, NA= Non Applicable, Inatel = In-ambulance telemedicine

1. Bing F, Jacquin G, Poppe A, Roy D, Raymond J, Weill A. The cost of materials for intra-arterial thrombectomy. *Interv Neuroradiol.* 2013 Mar;19(1):83-6. PMID: 23472729.
2. Putman K, De Wit L, Schupp W, Baert I, Brinkmann N, Dejaeger E, et al. Variations in follow-up services after inpatient stroke rehabilitation: a multicentre study. *Journal of rehabilitation medicine.* 2009 Jul;41(8):646-53. PMID: 19565159. doi: 10.2340/16501977-0385.