

Table A1. Relative risk of death by mRS [1]

mRS score	RR
mRS 0	1.00
mRS 1	1.00
mRS 2	1.12
mRS 3	1.66
mRS 4	1.92
mRS 5	2.57

Table A2. Lifetable Spain by age and gender [2]

Other-cause mortality		
Age	Male	Female
0	0.276%	0.245%
1	0.023%	0.018%
2	0.013%	0.008%
3	0.012%	0.009%
4	0.014%	0.007%
5	0.010%	0.009%
6	0.007%	0.006%
7	0.007%	0.005%
8	0.009%	0.007%
9	0.007%	0.004%
10	0.007%	0.006%
11	0.008%	0.007%
12	0.007%	0.007%
13	0.010%	0.005%
14	0.008%	0.013%
15	0.013%	0.011%
16	0.021%	0.011%
17	0.016%	0.015%
18	0.030%	0.014%
19	0.026%	0.010%
20	0.029%	0.014%
21	0.034%	0.015%
22	0.030%	0.014%
23	0.037%	0.014%
24	0.039%	0.019%
25	0.032%	0.019%
26	0.048%	0.015%

27	0.036%	0.014%
28	0.049%	0.018%
29	0.055%	0.018%
30	0.046%	0.028%
31	0.054%	0.022%
32	0.048%	0.022%
33	0.052%	0.025%
34	0.062%	0.031%
35	0.062%	0.034%
36	0.066%	0.033%
37	0.065%	0.036%
38	0.071%	0.042%
39	0.082%	0.044%
40	0.091%	0.052%
41	0.098%	0.059%
42	0.107%	0.059%
43	0.123%	0.073%
44	0.120%	0.069%
45	0.143%	0.087%
46	0.169%	0.095%
47	0.191%	0.112%
48	0.228%	0.110%
49	0.244%	0.143%
50	0.289%	0.149%
51	0.325%	0.162%
52	0.349%	0.173%
53	0.388%	0.211%
54	0.473%	0.220%
55	0.517%	0.233%
56	0.557%	0.259%
57	0.601%	0.286%
58	0.675%	0.312%
59	0.720%	0.339%
60	0.803%	0.364%
61	0.895%	0.384%
62	0.977%	0.420%
63	1.055%	0.451%
64	1.116%	0.496%
65	1.219%	0.504%
66	1.318%	0.574%
67	1.436%	0.616%
68	1.514%	0.620%

69	1.700%	0.720%
70	1.911%	0.787%
71	1.990%	0.849%
72	2.215%	0.937%
73	2.370%	1.051%
74	2.627%	1.233%
75	2.872%	1.403%
76	3.074%	1.570%
77	3.492%	1.763%
78	4.139%	2.142%
79	4.500%	2.474%
80	5.153%	2.928%
81	5.708%	3.368%
82	6.436%	3.838%
83	7.209%	4.440%
84	8.410%	5.257%
85	9.184%	6.197%
86	10.539%	7.184%
87	11.846%	8.422%
88	13.304%	9.728%
89	15.057%	11.340%
90	16.914%	13.272%
91	19.683%	14.947%
92	20.636%	16.507%
93	23.300%	18.967%
94	25.526%	21.541%
95	27.536%	23.666%
96	29.487%	26.675%
97	31.265%	28.241%
98	32.711%	29.794%
99	26.429%	30.496%
100	48.238%	46.382%

Table A3. Recurrent Stroke Rates [3]

Year	Recurrent Stroke Rate
Year 1	4.91%
Year 2 onwards	2.01%

Table A4. Health States Utilities [4]

mRS	Utility
mRS 0	0.936
mRS 1	0.817
mRS 2	0.681
mRS 3	0.558
mRS 4	0.265
mRS 5	-0.054
mRS 6	0

Table A5. Unit costs, consumption and total management costs for each group of patients [5] [6]

AIS diagnosis + IV-tPA (tPA 30% of patients)			
Item	Unit cost (€)	Units	Total cost (€)
Neurologist	36.19	1.0	36.19
Neuroradiologist	36.19	0.5	18.09
Resident Doctor	12.56	1.0	12.56
Nurse 1	22.01	0.5	11.01
Nurse 2	22.01	0.5	11.01
Technician	17.54	0.5	8.77
Cranial CT scan	84.83	1.0	84.83
Blood test	46.10	1.0	46.10
Electrocardiogram	40.26	1.0	40.26
Chest Radiograph	26.58	0.5	13.29
Computerized tomography angiography	279.25	1.0	279.25
Perfusion computerized tomography	252.17	0.5	126.08
Nursing Assistant 1	13.07	0.5	4.71
Orderly	13.07	0.5	6.53
Alteplase (0,9 mg/kg; average patient weight 75 kg), (30% of the patients)	9.85	67.5	199.67
MRI (0.5% of the patients)	204.48	0.05	3.07
Costs group "FIRST PASS"			
Stent retriever	3.388	1.0	3.388
Intracranial catheter	2.178	1.0	2.178
Ballon guide catheter/ Long Sheath	786.5	1.0	786,5
Guide/Microguide (0.35/0.12/0.14)	484	1.0	484
Microcatheter	605	1.0	605
Introducer	15.73	1.0	15.73
Procedure pack + gloves	32.05	1.0	32.05
Vascular closure device	187.67	1.0	187.67
Diagnosis catheter + contrast	50.05	1.0	50.05

PTA balloon catheter	250.23	0.3	75.07
Carotid stent	1,376.25	0.15	206.44
Anesthetist	36.19	3.0	108.56
Neurologist	36.19	0.2	7.24
Neuroradiologist	36.19	3.0	108.56
Orderly	13.07	0.5	6.53
Nurse	22.01	6.0	132.07
Cranial computerized tomography scan	84.83	1.0	84.83
Costs group "Non-FIRST PASS"			
Stent retriever	3,388	1.20	4,065.60
Intracranial catheter	2,178	1.20	2,613.60
Balloon guide catheter/ Long Sheath	786.5	1.00	786.50
Guide/Microguide (0.35/0.12/0.14)	484	1.20	580.80
Microcatheter	605	1.10	665.50
Introducer	15.73	1.00	15.73
Procedure pack + gloves	32.05	1.00	32.05
Vascular closure device	187.67	1.00	187.67
Diagnosis catheter + contrast	50.05	1.00	48,40
PTA balloon catheter	250.23	0.30	75.07
Carotid stent	1,376.25	0.15	206.44
Anesthetist	36.19	4.00	144.75
Neurologist	36.19	0.20	7.24
Neuroradiologist	36.19	4.00	144.75
Orderly	13.07	0.5	6.53
Nurse	22.01	8.00	176.09
Cranial computerized tomography scan	84.83	1.00	84.83

Table A6 – Subject Demographics and Baseline Characteristics (Base-case Population) [7]

Characteristic	FPE (N=304)	Non FPE (N=350)	P value (FPE vs. non FPE)
Age (years)	69.9±14.93(304) 72.0(61-80)	66.7±14.70(350) 68.0(58-79)	0.7771
Sex (Male)	162/304(53.3%)	189/350(54.0%)	0.8558
Pre-stroke mRS			0.0152
0	220/304(72.4%)	280/350(80.0%)	
1	72/304(23.7%)	63/350(18.0%)	
2*	12/304(3.9%)	7/350(2.0%)	
Initial Qualifying NIHSS Score (Baseline NIHSS)	17.0±5.41(304) 17.0(13-21)	17.3±5.54(350) 18.0(12-21)	0.6769
Total ASPECTS Score	8.3±1.53(266) 9.0(8-9)	8.1±1.59(303) 8.0(8-9)	0.4737
IV tPA administered	181/304(59.5%)	237/350(67.7%)	0.0299
IA-tPA used	29/303(9.6%)	63/348(18.1%)	0.0018
General Anesthesia Used (Site-Reported)	78/303(25.7%)	109/348(31.3%)	0.1166
Stroke onset to puncture (min)	226.6±99.90(301) 215.0(150-295)	217.4±99.33(349) 194.0(143-278)	0.9172

Summary statistics: Mean±SD(n), Median (IQR) for continuous and n/N (%) for categorical variables.

*Patients with Pre-mRS of 2 are enrolled under Rev B protocol.

Each P-value was based on T test (2-sided) for the mean difference and Z test (2-sided) for the proportion difference between FPE and non FPE; mRS scores between FPE and Non-FPE are compared using Mantel-Haenszel Chi-square test.

Table A7 – Subject Demographics and Baseline Characteristics (Alternative scenario Population) [7]

Characteristic	FPE (N=317)	Non FPE (N=431)	P value (FPE vs. non FPE)
Age (years)	69.7±14.85(317) 72.0(61-80)	67.1±14.61(431) 68.0(58-79)	0.7459
Sex (Male)	170/317(53.6%)	225/431(52.2%)	0.6999
Pre-stroke mRS			0.0380
0	230/317(72.6%)	340/431(78.9%)	
1	75/317(23.7%)	81/431(18.8%)	
2*	12/317(3.8%)	10/431(2.3%)	
Initial Qualifying NIHSS Score (Baseline NIHSS)	17.1±5.41(317) 17.0(13-21)	17.3±5.54(431) 18.0(12-21)	0.6550
Total ASPECTS Score	8.3±1.51(275) 9.0(8-9)	8.1±1.65(378) 8.0(7-9)	0.1184
IV tPA administered	193/317(60.9%)	285/431(66.1%)	0.1402
IA-tPA used	31/316(9.8%)	79/428(18.5%)	0.0010
General Anesthesia Used (Site-Reported)	80/316(25.3%)	138/428(32.2%)	0.0402
Stroke onset to puncture (min)	227.2±100.86(314) 213.5(150-295)	222.9±101.11(428) 199.5(146-290)	0.9660

Summary statistics: Mean±SD(n), Median (IQR) for continuous and n/N (%) for categorical variables.

*Patients with Pre-mRS of 2 are enrolled under Rev B protocol.

Each P-value was based on T test (2-sided) for the mean difference and Z test (2-sided) for the proportion difference between FPE and non FPE; mRS scores between FPE and Non-FPE are compared using Mantel-Haenszel Chi-square test.

Table A8 – Medical and Neurological History (Base-case Population) [7]

	FPE (N=304)	Non FPE (N=350)	P value (FPE vs. non FPE)
Atrial flutter/Atrial fibrillation	128/304(42.1%)	120/350(34.3%)	0.0398
Systemic Hypertension	217/304(71.4%)	262/350(74.9%)	0.3166
Diabetes mellitus	91/304(29.9%)	93/350(26.6%)	0.3401
Myocardial disease/Coronary artery disease	95/304(31.3%)	85/350(24.3%)	0.0467
Hyperlipidemia	129/304(42.4%)	155/350(44.3%)	0.6337
Peripheral artery disease	13/304(4.3%)	13/350(3.7%)	0.7137
Carotid artery disease	33/304(10.9%)	17/350(4.9%)	0.0040
Current or former tobacco use	137/304(45.1%)	162/350(46.3%)	0.7548
Neurological history			
Previous ischemic stroke	43/304(14.1%)	34/350(9.7%)	0.0795
Previous hemorrhagic stroke	3/304(1.0%)	3/350(0.9%)	0.8622
Previous TIA	20/304(6.6%)	17/350(4.9%)	0.3418
Brain aneurysm	3/304(1.0%)	1/350(0.3%)	0.2514

Summary Statistics for categorical: n/N (%)

Each P-value was based on Z test (2-sided) for the proportion difference between FPE and non-FPE

Table A9 – Medical and Neurological History (Alternative scenario Population) [7]

	FPE (N=317)	Non FPE (N=431)	P value (FPE vs. non FPE)
Atrial flutter/Atrial fibrillation	134/317(42.3%)	152/431(35.3%)	0.0514
Systemic Hypertension	223/317(70.3%)	327/431(75.9%)	0.0907
Diabetes mellitus	91/317(28.7%)	111/431(25.8%)	0.3688
Myocardial disease/Coronary artery disease	96/317(30.3%)	112/431(26.0%)	0.1948
Hyperlipidemia	132/317(41.6%)	192/431(44.5%)	0.4278
Peripheral artery disease	13/317(4.1%)	16/431(3.7%)	0.7856
Carotid artery disease	35/317(11.0%)	27/431(6.3%)	0.0192
Current or former tobacco use	143/317(45.1%)	202/431(46.9%)	0.6338
Neurological history			
Previous ischemic stroke	46/317(14.5%)	43/431(10.0%)	0.0584
Previous hemorrhagic stroke	3/317(0.9%)	4/431(0.9%)	0.9795
Previous TIA	20/317(6.3%)	22/431(5.1%)	0.4794
Brain aneurysm	4/317(1.3%)	3/431(0.7%)	0.4271

Summary Statistics for categorical: n/N (%)

Each P-value was based on Z test (2-sided) for the proportion difference between FPE and non-FPE

Table A10. Adverse events Base-Case and alternative scenario

Patient group Base case	symptomatic intracranial hemorrhage*	malignant cerebral edema
FPE	0.7%	1%
Non-FPE	2.3%	1.4%
P-values are obtained from Fisher's exact test	0.1154	0.7303
Patient group Alternative Scenario	symptomatic intracranial hemorrhage	malignant cerebral edema
FPE	0.6%	0.9%
Non-FPE	2.1%	1.4%
P-values are obtained from Fisher's exact test.	0.1297	0.7403
*sICH is defined as any PH1, PH2, RIH, IVH or SAH per imaging core lab and associated with \geq 4 points worsening on the NIHSS scale within 24 hours.		

References:

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