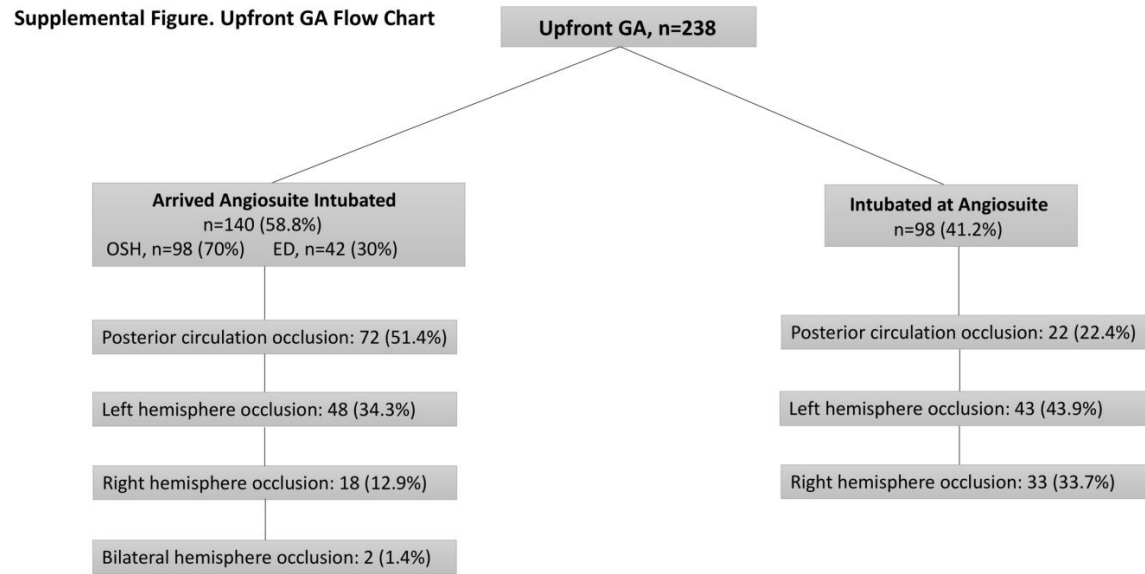


Online Data Supplement

Supplemental Figure. Upfront use of general anesthesia flow chart



Abbreviations; GA: general anesthesia, OSH: outside hospital, ED: emergency department

Tables I. Patients' demographics, clinical characteristics and outcome among upfront MAC vs. GA in the overall sample

	MAC N = 1681	GA N =238	P value
Demographic and clinical characteristics n (%)			
Age years, median [IQR]	65 [55-76]	64 [52.75-74]	0.04
Female	813 (48.4)	99 (41.6)	0.05
Ethnic background			
White	752 (44.7)	108 (45.4)	
Black/African American	697 (41.5)	100 (42)	
Hispanic	61 (3.6)	9 (3.8)	
Asian	38 (2.3)	6 (2.5)	
Other	133 (7.9)	15 (6.3)	0.94
BMI(kg/m ²), median [IQR]	27.82 [24.18-32.28]	28.80 [24.37-33.45]	0.08
BMI (kg/m ²)	n=1483	n=208	
>30	526 (35.5)	89 (42.8)	
≤30	957 (64.5)	119 (57.2)	0.04
Hypertension	1242 (73.9)	186 (78.2)	0.16
Diabetes Mellitus	573 (34.1)	91 (38.2)	0.21
Smoking	348/1648 (21.1)	47/232 (20.3)	0.76
Hypercholesterolemia	568 (33.8)	86 (36.1)	0.48
Atrial fibrillation	548 (32.6)	64 (26.9)	0.08
Ejection fraction (%), median [IQR]	(n=1574) 55 [50-60]	(n=217) 57.5 [50-60]	0.56
White blood cells count (x10 ⁹ /L), median [IQR]	8.4 [6.5-10.8]	10 [7.7-13]	<0.001
Baseline NIHSS score, median [IQR]	16 [11-21]	22 [17-29]	<0.001
Baseline NIHSS score	n=1670	n=226	
>15	902 (54)	192 (85)	
≤15	768 (46)	34 (15)	<0.001
Site of occlusion			
Cervical ICA	72 (4.3)	5 (2.1)	
Intracranial ICA	249 (14.8)	35 (14.7)	
MCA-M1/M2	1213 (72.2)	97 (40.8)	
MCA-M3	42 (2.5)	3 (1.3)	
ACA	43 (2.6)	4 (1.7)	
Posterior circulation	62 (3.7)	94 (39.5)	<0.001
Stroke side			
Left	859 (51.1)	91 (38.2)	
Right	756 (45)	51 (21.4)	
Bilateral	4 (0.2)	2 (0.8)	
Posterior circulation	62 (3.7)	94 (39.5)	<0.001
Site of occlusion			
Anterior circulation	1619 (96.3)	144 (60.5)	
Posterior circulation	62 (3.7)	94 (39.5)	<0.001
ASPECTS median [IQR]	8 [7-10]	8 [7-10]	0.91
rCBF <30% ml, median [IQR]	(n=1248) 6 [0-22.2]	(n=109) 6.3 [0-25.9]	0.60
Tandem occlusion	170 (10.1)	14 (5.9)	0.038
Last known well to Puncture (min), median [IQR]	369.5 [225-684.25]	421 [267.75-661.5]	0.05
Procedure duration (min), median [IQR]	53 [34-81]	57 [35-93]	0.07
IV-tPA	585 (34.8)	79 (33.2)	0.63
Outcome n (%)			
Successful reperfusion (mTICI2b-3)	1606 (95.5)	231 (97.1)	0.28
sICH	65 (3.9)	18 (21.7)	0.009
90-day mRS0-2	669/1305 (51.3)	52/195 (26.7)	<0.001
90-day mortality	239/1305 (18.3)	85/195 (43.6)	<0.001

Abbreviations: BMI: body mass index, NIHSS score: National Institute of Health Stroke Scale score, ICA: internal carotid artery, MCA: middle cerebral artery, ACA: anterior cerebral artery, rCBF: relative cerebral blood flow, ASPECTS, Alberta Stroke Program Early CT Score, IV-tPA: intravenous tissue plasminogen activator, sICH: symptomatic intracranial hemorrhage, mRS: modified Rankin Scale

Tables II. Predictors of upfront GA in the overall sample

	OR	95% CI	P value
NIHSS score (continuous)	1.160	1.124-1.198	<0.001
Posterior circulation occlusion	15.577	9.174-26.447	<0.001
WBCs	1.037	1.013-1.062	0.003
BMI (continuous)	1.027	1.001-1.055	0.045
Age	0.995	0.981-1.009	0.47
Female	0.943	0.631-1.409	0.78
Last know well to Puncture time	1.000	1.000-1.000	0.87
Atrial fibrillation	0.703	0.443-1.115	0.14

Tables III. Patients' demographics, clinical characteristics and outcome among upfront MAC vs. GA in patients with anterior circulation (left and right hemisphere occlusions)

	MAC N = 1615	GA N = 142	P value
Demographic and clinical characteristics n (%)			
Age years, median [IQR]	65 [55-76]	66 [53-76]	0.26
Female	791 (49)	70 (49.3)	0.94
Ethnic background			
White	725 (44.9)	63 (44.4)	
Black/African American	672 (41.6)	65 (45.8)	
Hispanic	59 (3.7)	7 (4.9)	
Asian	34 (2.1)	3 (2.1)	
Other	125 (7.7)	4 (2.8)	0.18
BMI(kg/m ²), median [IQR]	27.83 [24.18-32.29]	29.30 [24.77-34.35]	0.02
BMI (kg/m ²)	n=1421	n=126	
>30	504 (35.5)	58 (46)	
≤30	917 (64.5)	68 (54)	0.018
Hypertension	1192 (73.8)	112 (78.9)	0.19
Diabetes Mellitus	543 (33.6)	49 (34.5)	0.83
Smoking	333/1583 (21)	25/139 (18)	0.40
Hypercholesterolemia	545 (33.7)	49 (34.5)	0.85
Atrial fibrillation	529 (32.8)	45 (31.7)	0.80
Ejection fraction (%), median [IQR]	(n=1517) 55 [50-60]	(n=135) 57 [42.5-60]	0.52
White blood cells count (x10 ⁹ /L), median [IQR]	(n=1465) 8.3 [6.5-10.8]	(n=138) 9.2 [7.4-12.3]	0.001
Baseline NIHSS score, median [IQR]	16 [12-20]	21 [16-25]	<0.001
Baseline NIHSS score	n=1604	n=134	
>15	874 (54.5)	110 (82.1)	
≤15	730 (45.5)	24 (17.9)	<0.001
Site of occlusion			
Cervical ICA	72 (4.5)	5 (3.5)	
Intracranial ICA	284 (16.2)	35 (24.6)	
MCA-M1/M2	1305 (74.3)	95 (66.9)	
MCA-M3	45 (2.6)	3 (2.1)	
ACA	46 (2.6)	4 (2.8)	0.10
Stroke side			
Left	859 (53.2)	91 (64.1)	
Right	756 (46.8)	51 (35.9)	0.01
ASPECTS median [IQR]	(n=1439) 8 [7-9]	(n=123) 8 [7-9]	0.006
rCBF <30% ml, median [IQR]	(n=1225) 6 [0-22.9]	(n=94) 8.8 [0-27.2]	0.15
Tandem occlusion	169 (10.5)	12 (8.5)	0.45
Last known well to Puncture (min), median [IQR]	362 [224-673]	352 [252-556]	0.90
Procedure duration (min), median [IQR]	53 [34-81]	57 [38-90]	0.10
IV-tPA	573 (35.5)	58 (40.8)	0.20
Outcome n (%)			
Successful reperfusion (mTICI2b-3)	1545 (95.7)	137 (96.5)	0.65
sICH	63 (3.9)	13 (9.2)	0.003
90-day mRS0-2	651/1258 (51.7)	38/118 (32.2)	<0.001
90-day mortality	224/1258 (17.8)	36/118 (30.5)	0.001

Abbreviations: BMI: body mass index, NIHSS score: National Institute of Health Stroke Scale score, ICA: internal carotid artery, MCA: middle cerebral artery, ACA: anterior cerebral artery, rCBF: relative cerebral blood flow, ASPECTS, Alberta Stroke Program Early CT Score, IV-tPA: intravenous tissue plasminogen activator, sICH: symptomatic intracranial hemorrhage, mRS: modified Rankin Scale

Tables IV. Predictors of upfront GA in patients with anterior circulation occlusion

	OR	95% CI	P value
Baseline NIHSS score (continuous)	1.149	1.105-1.194	<0.001
BMI (continuous)	1.037	1.008-1.066	0.01
WBCs	1.032	1.006-1.160	0.018
ASPECTS	0.948	0.843-1.066	0.37
Left hemisphere occlusion	0.888	0.571-1.382	0.60