

Supplementary Tables.

Table S1. Additional descriptive characteristics of the cohort.

ASM, antiseizure medication, CMO, comfort measures only, CSF, cerebrospinal fluid, GCS, Glasgow Coma Scale, HH, Hunt & Hess grade, ICD9, International Classification of Diseases Ninth Revision, ICU, intensive care unit, mFG, modified Fisher Grade, MRS, modified Rankin scale, RRT, Renal replacement therapy, SAH, subarachnoid hemorrhage, SMD, standardized mean difference, WFNS, World Federation of Neurological Surgery

	No ASM (N=105)	Early ASM (N=148)	SMD	p-Value
HH				
I	21 (20.0)	25 (16.9)	0.08	0.641
II	36 (34.3)	57 (38.5)	-0.09	0.579
III	19 (18.1)	32 (21.6)	-0.09	0.596
IV	7 (6.7)	11 (7.4)	-0.03	1
V	21 (20.0)	23 (15.5)	0.12	0.451
Unknown	1 (0.9)	0 (0.0)	0.14	0.863
mF				
I	33 (31.4)	28 (18.9)	0.29	0.032
II	7 (6.7)	29 (19.6)	-0.39	0.007
III	14 (13.3)	23 (15.5)	-0.06	0.757
IV	49 (46.7)	68 (45.9)	0.01	1
Unknown	2 (1.9)	0 (0.0)	0.12	0.334
MRS				
I	18 (17.1)	32 (21.6)	-0.11	0.471
II	5 (4.8)	15 (10.1)	-0.21	0.185
III	10 (9.5)	23 (15.5)	-0.18	0.226
IV	5 (4.8)	13 (8.8)	-0.16	0.328
V	1 (0.9)	9 (6.1)	-0.28	0.083
VI	31 (29.5)	23 (15.5)	0.34	0.012
Unknown	35 (33.3)	33 (22.3)	0.25	0.071
WFNS				
I	56 (53.3)	67 (45.3)	0.16	0.256
II	6 (5.7)	18 (12.2)	-0.23	0.132
III	4 (3.8)	12 (8.1)	-0.18	0.262
IV	11 (10.5)	18 (12.2)	-0.05	0.83
V	22 (20.9)	28 (18.9)	0.05	0.81
Unknown	6 (5.7)	5 (3.4)	0.11	0.559
Sodium (lowest), median [Quartiles]	138 [134-141]	138 [134-137]	-0.16	0.592
Sodium (highest), median [Quartiles]	140 [139-141]	142 [140-144]	-0.49	0.077
Creatinine (lowest), median [Quartiles]	0.9 [0.7-1.35]	0.6 [0.5-0.8]	1.02	0.001
Creatinine (highest), median [Quartiles]	0.9 [0.8-1.5]	0.8 [0.7-0.97]	0.82	0.016
CMO	11 (12.5)	8 (6.1)	0.20	0.223
Length of Stay (Hospital), median [Quartiles]	13 [7-22]	17.5 [10.5-25]	-0.23	0.411
Length of Stay (ICU), median [Quartiles]	5 [10-16]	12 [7-21]	-0.22	0.408

Table S2. Comorbidities

AIDS, acquired immunodeficiency syndrome, ASM, antiseizure medication, CMO, comfort measures only, CHF, congestive heart failure, SMD, standardized mean difference

	No ASM (N=105)	Early ASM (N=148)	SMD	p-Value
CHF	14 (13.3)	16 (10.8)	0.08	0.679
Cardiac Arrhythmias	16 (15.2)	25 (16.9)	-0.04	0.858
Valvular Disease	3 (2.9)	3 (2.0)	0.05	0.993
Pulmonary Circulation	1 (0.95)	5 (3.4)	-0.17	0.406
Peripheral Vascular	14 (13.3)	10 (6.8)	0.22	0.123
Hypertension	64 (60.9)	77 (52.0)	0.18	0.201
Paralysis	4 (3.8)	6 (4.1)	-0.01	1
Other Neurological	9 (8.6)	29 (19.6)	-0.32	0.025
Chronic Pulmonary	13 (12.4)	13 (8.8)	0.12	0.473
Diabetes Uncomplicated	9 (8.6)	15 (10.1)	-0.05	0.841
Diabetes Complicated	0 (0)	1 (0.7)	-0.12	1
Hypothyroidism	6 (5.7)	7 (4.7)	0.04	0.952
Renal Failure	0 (0)	1 (0.7)	-0.12	1
Liver Disease	6 (5.7)	8 (5.4)	0.01	1
Peptic ulcer	0 (0)	1 (0.7)	-0.12	1
AIDS	2 (1.9)	2 (1.4)	0.04	1
Lymphoma	0 (0)	1 (0.7)	-0.12	1
Metastatic Cancer	1 (0.95)	0 (0)	0.14	0.863
Solid Tumor	0 (0)	0 (0)		0.007
Rheumatoid Arthritis	5 (4.8)	2 (1.4)	0.20	0.215
Coagulopathy	1 (0.95)	7 (4.7)	-0.23	0.184
Obesity	2 (1.9)	4 (2.7)	-0.05	1
Weight Loss	5 (4.8)	7 (4.7)	0.001	1
Fluid Electrolyte	26 (24.8)	45 (30.4)	-0.13	0.4
Blood Loss Anemia	1 (0.95)	1 (0.7)	0.03	1
Deficiency Anemias	0 (0.0)	1 (0.7)	-0.12	1
Alcohol Abuse	3 (2.9)	9 (6.1)	-0.16	0.374
Drug Abuse	4 (3.8)	7 (4.7)	-0.05	0.967
Psychoses	0 (0)	1 (0.7)	-0.12	1
Depression	7 (6.7)	5 (3.4)	0.15	0.362
Total Comorbidities, median [Quartiles]	2 [1-3]	2 [1-3]	-0.02	0.95

Table S3. Numerical information regarding the models included in Figure 2. We provide OR and 95% CI for Model 1, Model 2 and DR-IPSW models. Unadjusted ORs are provided in Table 2.

GCS, Glasgow Coma Scale, HH, Hunt & Hess grade, mFG, modified Fisher Grade, OR, odds ratio

	Model 1	Model 2	DR-IPW
GCS 15-14			
Seizure	18.0 (2.2 to 144.0)	19.7 (2.4 to 162.7)	19.9 (2.4 to 162.9)
Death	0.45 (0.17 to 1.2)	0.61 (0.18 to 2.1)	0.59 (0.16 to 2.1)
Composite	1.25 (0.56 to 2.8)	1.6 (0.62 to 3.9)	1.6 (0.62 to 4.0)
GCS 3-13			
Seizure	1.6 (0.24 to 10.0)	1.45 (0.21 to 9.9)	1.36 (0.36 to 11.4)
Death	0.35 (0.07 to 0.89)	0.02 (0.00 to 0.37)	0.01 (0.00 to 0.65)
Composite	0.42 (0.16 to 1.2)	0.39 (0.13 to 1.2)	0.36 (0.10 to 1.3)
HH: I, II			
Seizure	5.1 (0.97 to 26.3)	5.2 (0.94 to 29.4)	4.8 (0.68 to 33.4)
Death	0.75 (0.03 to 17.6)	No informative	No informative
Composite	3.2 (0.78 to 13.2)	3.4 (0.77 to 15.3)	3.0 (0.59 to 15.3)
HH: III, IV, V			
Seizure	10.6 (1.3 to 88.1)	11.7 (1.3 to 105.5)	11.9 (1.0 to 140.7)
Death	0.20 (0.08 to 0.49)	0.22 (0.08 to 0.64)	0.22 (0.07 to 0.72)
Composite	0.41 (0.19 to 0.90)	0.49 (0.21 to 1.1)	0.88 (0.35 to 2.2)
mFG: I, II, III			
Seizure	9.5 (1.2 to 77.1)	9.8 (1.2 to 81.8)	9.5 (1.1 to 78.1)
Death	0.62 (0.12 to 3.2)	No informative	No informative
Composite	2.0 (0.66 to 6.0)	2.5 (0.70 to 9.1)	2.7 (0.72 to 10.2)
mFG: IV			
Seizure	4.8 (0.75 to 30.4)	5.2 (0.73 to 37.4)	4.7 (0.64 to 34.1)
Death	0.25 (0.10 to 0.60)	0.19 (0.06 to 0.55)	0.16 (0.05 to 0.54)
Composite	0.42 (0.19 to 0.95)	0.34 (0.14 to 0.85)	0.31 (0.11 to 0.86)

Model 1: Unadjusted + Gender + Age + Race (White)

Model 2: Model 1 + Elixhauser + Mechanical ventilation + [GCS] + [HH] + [mFG].

DR-IPSW: PS based on Model 2 variables + same adjustment

Table S4. Regression models and adjusted odds ratios at 7-days for outcomes: seizure, death, and composite for location of aneurysm.

OR, odds ratio

	Seizure				Death				Composite			
	OR	[95% CI]		p-Value	OR	[95% CI]		p-Value	OR	[95% CI]		p-Value
Anterior Circulation	0.94	0.40	2.24	0.897	0.78	0.37	1.64	0.51	0.72	0.38	1.36	0.309
Posterior Circulation	1.16	0.47	2.88	0.749	1.10	0.49	2.47	0.826	1.27	0.64	2.50	0.496