

On-line Table 1: Baseline characteristics, imaging findings, and time management

	Control Group (n = 780)	WUS (n = 128)	DUS (n = 165)	P Value ^a	P Value ^b
Demographics					
Age, mean (SD) (yr)	71.8 (12.9)	71.2 (13.8)	71.0 (14.2)	.833	NA
Male sex (No.) (%)	402 (51.5)	68 (53.1)	74 (44.8)	.250	NA
Cardiovascular risk profile (No.) (%)					
Atrial fibrillation	432 (55.4)	66 (51.6)	86 (52.1)	.591	NA
Hypertension	542 (69.5)	87 (68.0)	114 (69.1)	.930	NA
Diabetes mellitus type 2	168 (21.5)	29 (22.7)	39 (23.6)	.812	NA
Hyperlipidemia	180 (23.1)	32 (25.0)	39 (23.6)	.484	NA
Smoking	103 (13.2)	22 (17.2)	22 (13.3)	.453	NA
Coronary heart disease	190 (24.4)	30 (23.4)	42 (25.5)	.933	NA
Stroke etiology (No.) (%)					
Atherothrombotic	122 (15.6)	17 (13.3)	26 (15.8)	.959	NA
Cardioembolic	358 (45.9)	59 (46.1)	76 (46.1)		
Dissection	18 (2.3)	5 (3.9)	2 (1.2)		
ESUS	259 (33.2)	45 (35.2)	56 (33.9)		
Other etiology	23 (2.9)	2 (1.6)	5 (3.0)		
NIHSS score (baseline)					
Median (IQR)	16 (11–20)	14 (9–19)	16 (10–21)	.143	NA
Mean (SD)	16.0 (7.6)	14.9 (7.6)	16.3 (8.8)		
Imaging modality (No.) (%) ^c					(A) .001
CT	601 (77.8)	81 (63.3)	113 (68.5)	.001	(B) .019
MRI	170 (22.1)	47 (36.7)	52 (31.5)		(C) .384
Most proximal vessel occlusion (No.) (%)					
ICA	17 (2.2)	7 (5.5)	6 (3.7)	.101	NA
Intracranial carotid bifurcation	212 (27.2)	29 (22.8)	54 (32.9)		
MCA, M1	455 (58.5)	70 (55.1)	86 (52.4)		
MCA, M2	94 (12.1)	21 (16.5)	18 (11.0)		
rtPA therapy (No.) (%)	207 (26.7)	16 (12.5)	17 (10.3)	<.001	(A) <.001 (B) <.001 (C) .580
Time management (median) (IQR) (min)					
Imaging-to-groin time	138 (109–165)	144 (118–188)	149 (103–201)	.005	(A) .017 (B) .010 (C) .934
Duration of treatment	86 (50–137)	96.5 (60.5–149)	98 (59–142)	.112	NA
Thrombectomy devices (No.) (%)					
Penumbra ACE aTE	21 (2.7)	2 (1.6)	8 (4.8)	.210	NA
Medtronic Solitaire FR mTE	46 (5.9)	6 (4.7)	6 (3.6)		
phenox pREset mTE	645 (82.7)	103 (80.5)	137 (83.0)		
MicroVention SOFIA aTE	48 (6.2)	15 (11.7)	12 (7.3)		
Other	20 (2.6)	2 (1.6)	2 (1.2)		
Hemorrhagic complications (No.) (%)					
PH1	34 (4.5)	11 (9.1)	9 (5.6)	.376	NA
PH2	41 (5.4)	4 (3.3)	10 (6.3)		
SAH	56 (7.3)	6 (5.0)	14 (8.8)		
TICI 2b/3 (No.) (%)	679 (87.7)	113 (89.0)	137 (85.1)	.118	NA

Note:—IQR indicates interquartile range; PH, parenchymal hemorrhage; NA, not applicable; ESUS, embolic stroke of undetermined source (including strokes previously classified as cryptogenic or unknown).

^a P value for group comparison.

^b P value for head-to-head comparison, calculated when the P value for the group comparison was <.05: (A), control group versus WUS; (B), control group vs DUS; (C), WUS vs DUS.

^c One patient in the control group with intraoperative angiography.

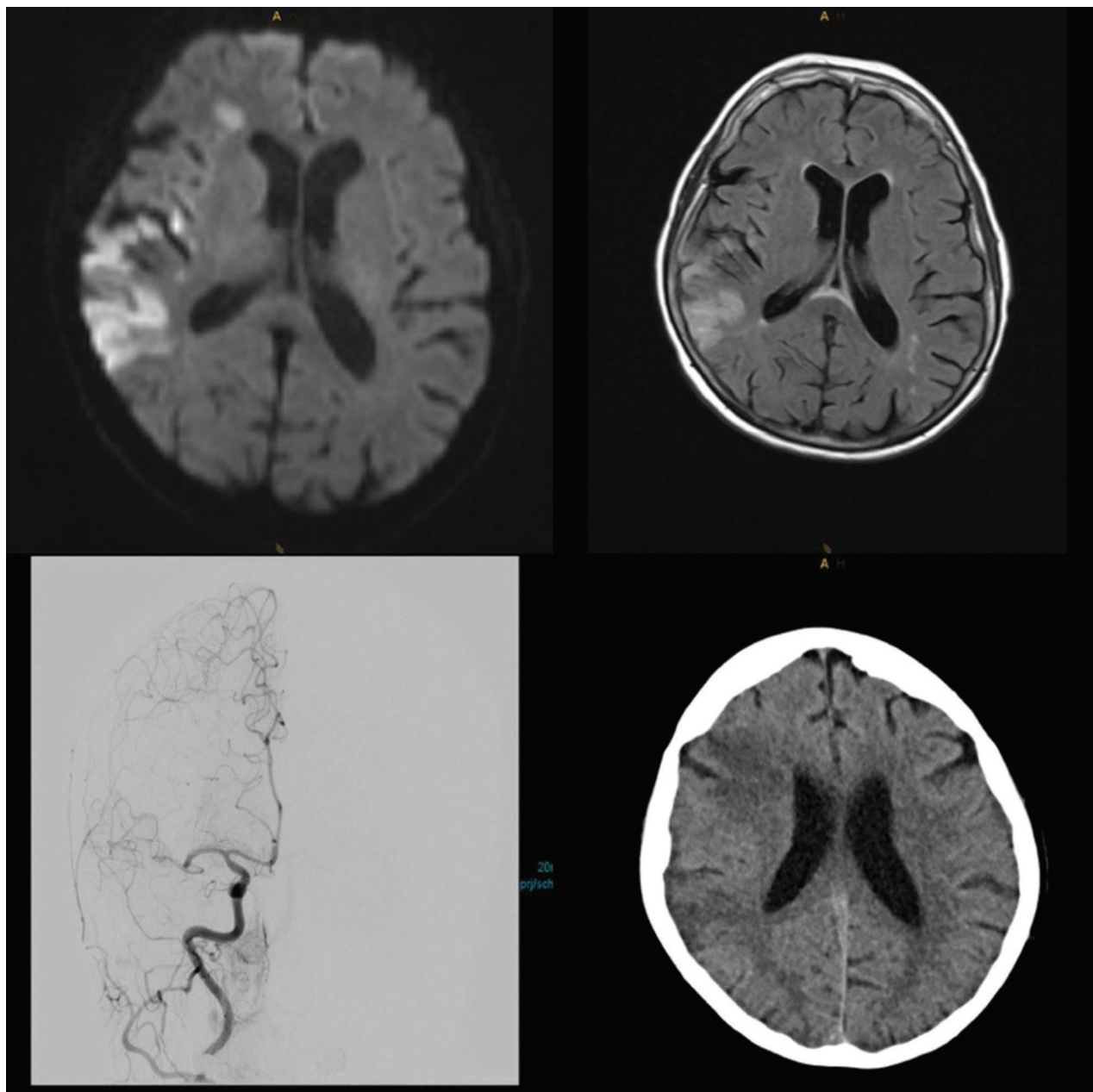
On-line Table 2: Subgroup analysis with patients selected due to mismatch in advanced imaging

	Control Group (n = 780)	WUS[advanced] (n = 68)	DUS[advanced] (n = 63)	P Value ^a	P Value ^b
A) Patient selection via CTP or MRI [advanced]					
mRS 0–2 (3 mo) (No.) (%)	299 (38.3)	32 (47.1)	23 (36.5)	.344	NA
In-hospital mortality (No.) (%)	145 (18.9)	5 (7.5)	8 (12.7)	.031	(A) .019 (B) .309 (C) .388
All-cause mortality (3 mo) (No.) (%)	207 (26.5)	11 (16.2)	13 (20.6)	.120	NA
sICH (No.) (%)	42 (5.5)	1 (1.5)	2 (3.3)	.380	NA
	Control Group (n = 780)	WUS[advanced] (n = 52)	DUS[advanced] (n = 46)		
B) Patient selection via CTP or MRI [advanced]: patients with verified mismatch					
mRS 0–2 (3 mo) (No.) (%)	299 (38.3)	27 (51.9)	18 (39.1)	.155	NA
In-hospital mortality (No.) (%)	145 (18.9)	3 (5.9)	7 (15.2)	.044	(A) .015 (B) .184 (C) .697
All-cause mortality (3 mo) (No.) (%)	207 (26.5)	8 (15.4)	10 (21.7)	.169	NA
sICH (No.) (%)	42 (5.5)	0 (0)	1 (2.2)	.176	NA
	Control Group (n = 780)	WUS[mri] (n = 47)	DUS[mri] (n = 52)		
C) Patient selection via MRI [mri]					
mRS 0–2 (3 mo) (No.) (%)	299 (38.3)	24 (51.1)	20 (38.5)	.216	NA
In-hospital mortality (No.) (%)	145 (18.9)	2 (4.3)	8 (15.4)	.024	(A) .009 (B) .713 (C) .204
All-cause mortality (3 mo) (No.) (%)	207 (26.5)	6 (12.8)	12 (23.1)	.093	NA
sICH (No.) (%)	42 (5.5)	1 (2.2)	2 (4.0)	.808	NA
	Control (mri) (n = 780)	WUS[mri] (n = 36)	DUS[mri] (n = 37)		
D) Patient selection via MRI [mri]: patients with verified mismatch					
mRS 0–2 (3 mo) (No.) (%)	299 (38.3)	19 (52.8)	16 (43.2)	.198	NA
In-hospital mortality (No.) (%)	145 (18.9)	2 (5.7)	7 (18.9)	.120	NA
All-cause mortality (3 mo) (No.) (%)	207 (26.5)	5 (13.9)	9 (24.3)	.247	NA
sICH (No.) (%)	42 (5.5)	0 (0)	1 (2.7)	.424	NA

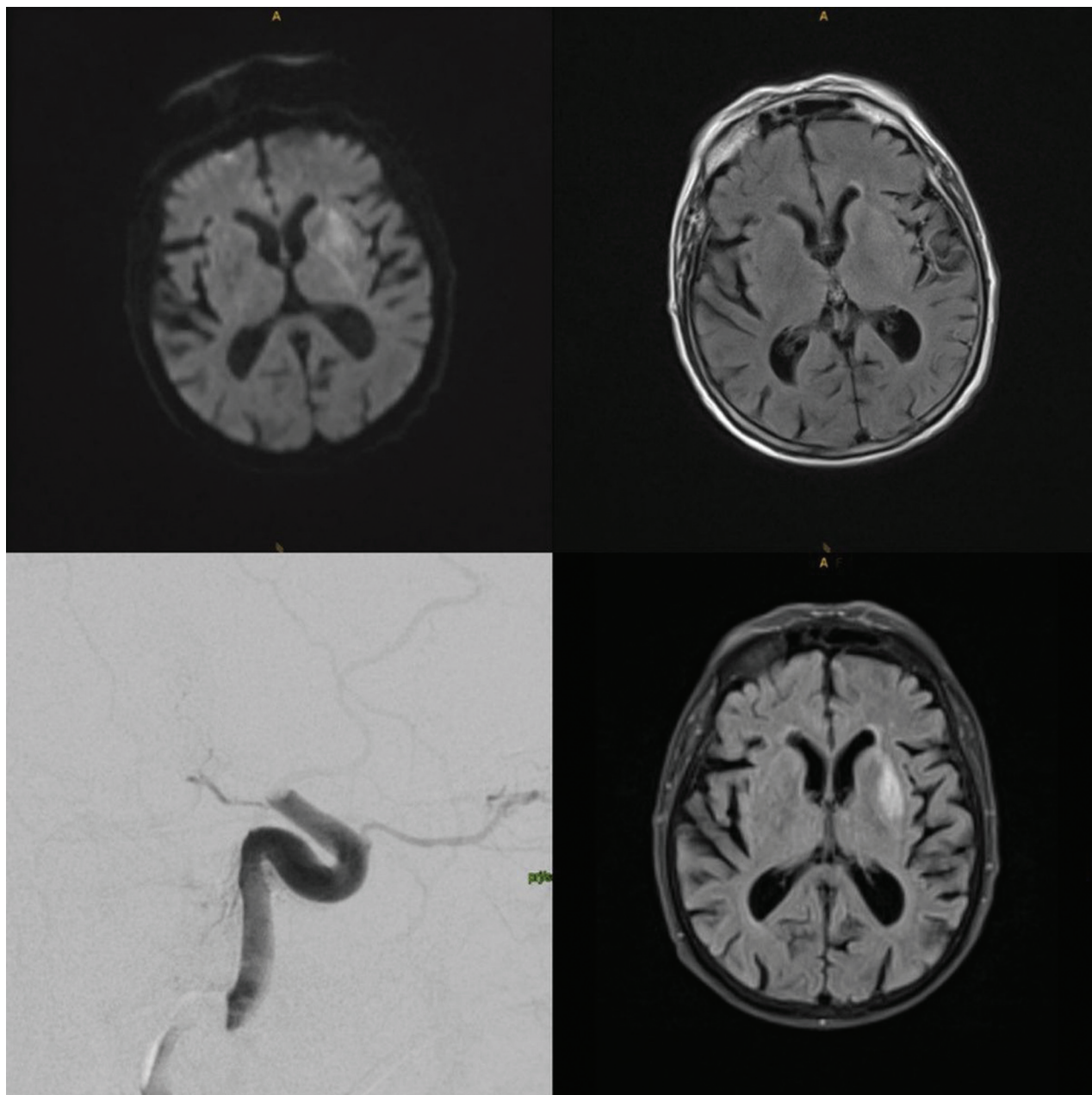
Note:—sICH indicates symptomatic intracranial hemorrhage; NA, not applicable.

^a P value for group comparison.

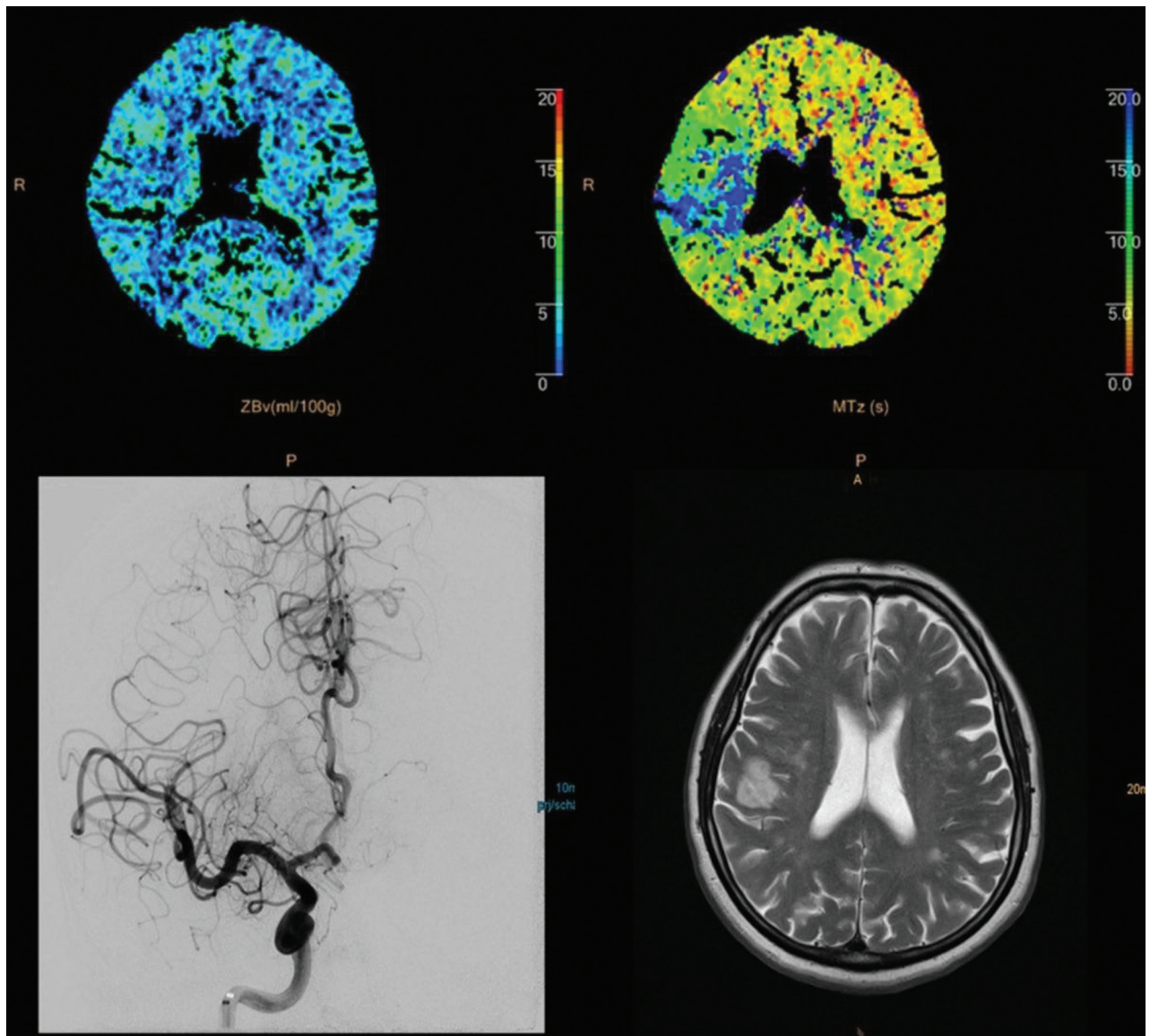
^b P value for head-to-head comparison, calculated when the P value for the group comparison was <.05: (A), control group vs WUS; (B), control group vs DUS; (C), WUS vs DUS.



ON-LINE FIG 1. An 83-year-old female patient with right-hemisphere syndrome. Wake-up stroke, NIHSS 7. MR imaging shows a DWI lesion in the right MCA territory (*upper left*) already visible in FLAIR sequences (*upper right*). There is an occlusion of the right M1 segment of the MCA (*lower left*). Follow-up CT shows a defect in the right-sided MCA territory (*lower right*). mRS at 3 months: 4 points.



ON-LINE FIG 2. An 80-year-old female patient with right-sided hemiparesis, dysarthria. Wake-up stroke, NIHSS 8, mRS at arrival: 4 points. MR imaging with a DWI lesion in the left MCA territory (*upper left*) without FLAIR demarcation (*upper right*). On DSA, here is an occlusion of the left intracranial carotid bifurcation (*lower left*). Follow-up MR imaging shows a left basal ganglia infarction (*lower right*). Follow-up mRS at 3 months: 2 points.



ON-LINE FIG 3. A 66-year-old female patient with right-hemisphere syndrome. Wake-up stroke, NIHSS 7, mRS 4. CTP shows a mismatch comparing CBV (*upper left*) with MTT (*upper right*). On DSA, there is a right-sided M2 occlusion (*lower left*). Follow-up MR imaging (T2) shows infarcted tissue in the right MCA territory (*lower right*). Follow-up mRS at 3 months: 0 points.