Supplemental material

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Author	Year	Country	Patients	Type of Study	Primary Group (n)	Comparison Group (n)	Major Endpoints	Outcomes	Comments
Duffis et al.	2014	Multiple (8 Studies)	2,729	Meta-Analysis	≥ 80 years (467)	< 80 years (2,262)	90DmRS, sICH, 90Dmortality, TIMI	≥ 80 compared to <80: TIMI 2-3 OR = 0.814, p=0.364, sICH OR = 1.604 p=0.04, mortality OR = 3.695 p<0.001 <80 compared to ≥80: 90dmRS<3 OR = 2.694, p<0.001	
Parrilla et al.	2015	Spain	150	Retrospective, Single Center	≥ 80 years (34)	< 80 years (116)	TICI, sICH, PostProcedure NIHSS, 90DmRS, 90Dmortality	≥ 80: TICI ≥ 2b =88.2%, sICH = 5.9%, PostProcedureNIHSS = 9.7, 90DmRS<3 =13.8%, mortality = 35.2% < 80: TICI ≥ 2b = 93.9%, sICH = 2.6%, PostProcedureNIHSS = 6.5, 90DmRS<3 = 56.9%, mortality = 17.2%	
Hwang et al.	2015	Korea	156	Retrospective, Single Center	> 80 years +EVT (56)	> 80 years NO EVT (100)	90DmRS, 1yrmRS, sICH, 90Dmortality	EVT: 90DmRS<3 = 35.7%, 1yrmRS = 35.7%, sICH = 10.7%, mortality = 12.5% NO EVT: 90DmRS<3 = 11%, 1yrmRS = 14%, sICH = 2%, mortality = 8%	EVT patients also had reduced in-hospital morbidity, measured via infections, etc.
Goyal et al.	2016	Multiple (5 Trials)	198	Retrospective Analysis of Prospective Trial Data	≥ 80 years +EVT (107)	≥ 80 years NO EVT (91)	90DmRS, 90Dmortality	≥ 80 +EVT vs. NO EVT: mortality = 28% versus 45%, 90DmRS<2 OR = 3.68	
Khan et al.	2017	USA	193	Retrospective, Multiple (2) Centers	≥ 90 years (18)	< 90 years (175)	90DmRS	≥ 90: 90DmRS<3 = 11% < 90: 90DmRS<3 = 48%	Older age, higher initial NIHSS, and lower degree of recanalization independent predictors of poor outcome
Mohlenbruch et al.	2017	Germany	29	Retrospective, Single Center	≥ 90 years (29)	None	TICI, 90DmRS	TICI ≥ 2b = 75.9%, 90DmRS < 3 = 17.2%	Low complication rate (only 1 minor), so suggest not excluding the elderly from MT
Alawieh et al.	2018	USA	1,346	Retrospective, Multiple (7) Centers	≥ 80 years (346)	< 80 years (1,000)	TICI, sICH, 90DmRS	< 80: TICI ≥ 2b = 88%, sICH = 4%, 90DmRS<3 =44% ≥ 80: TICI > 2b = 88%, sICH = 7%, 90DmRS<3 = 21%	Age ≥ 80 independently predicted increased mortality and poor outcome, regardless of technique (ADAPT versus SOLUMBRA), location (anterior versus posterior circulation), or TICI
Hilditch et al.	2018	Multiple (17 Studies)	860	Systematic Review and Meta-Analysis	≥ 80 years (860)	None	TICI, sICH, 90DmRS < 3	TICI ≥ 2b = 78%, sICH = 8%, 90DmRS<3 = 27%	

Study	Year	Country	N	Design	Group 1	Group 2	Outcomes	Results	Notes
Wu et al.	2019	China	23	Retrospective, Multiple (2) Centers	≥ 90 years +EVT (14)	≥ 90 years NO EVT (9)	PostProcedure NIHSS, 90DmRS, 90Dmortality, sICH	EVT: PostProcedure NIHSS = 0, 90DmRS<3 = 71.4%, 90Dmortality = 28.6%, sICH = 0% NO EVT: PostProcedure NIHSS = 12, 90DmRS<3 = 44.4%, 90Dmortality = 33.3%, sICH = 33.3%	
Sussman et al.	2019	USA	108	Retrospective, Single Center	90-99 years (29)	80-89 years (79)	TICI, sICH, 90DmRS<3, 90Dmortality	>90: TICI ≥2b = 79%, 90DmRS<3 = 12.5%, sICH = 21.4%, 90Dmortality = 63% >80: TICI >2b = 79%, 90DmRS<3 = 19.7%, sICH = 6.4%, 90Dmortality = 40.9%	
Meyer et al.	2019	Germany	79	Retrospective, Multiple (3) Centers	≥ 90 years (79)	None	TICI, TTR, sICH, 90DmRS	TICI ≥ 2B = 69.6%, TTR = 39 min, sICH = 5.1%, 90DmrS < 3 = 16%	No predictors of good outcome in subgroup analysis
Kawabata et al.	2019	Japan	59	Retrospective, Single Center	≥ 80 years (19)	< 80 years (40)	TICI, 90DmRS, 90Dmortality	≥ 80: TICI ≥2b = 89.5%, 90DmRS < 3 or stable from preOP = 47.4%, 90Dmortality = 21.1% > 80: TICI >2b = 67.5%, 90DmRS < 3 or stable from preOP = 45%, 90Dmortality = 27.5%	IV tPA, TICI ≥ 2b, and out of hospital onset independent predictors of good oucome
Majidi et al.	2020	USA	113	Retrospective, Single Center	≥ 80 years (113)	None	TICI, TTR, sICH, 90DmRS<3 (Good Outcome)	TICI ≥ 2B = 89%, TTR = 53 min, sICH = 5%, 90DmRS < 3 = 22% (those with mRS < 3 baseline), and stable = 32%	Subgroup anlaysis of those with favorable outcomes at 90D (16) compared to those with unfavorable (56), only difference was baseline NIHSS (14 versus 19, p = 0.03). Anesthesia subtype did not affect outcomes
Pinto et al.	2020	Portugal	144	Retrospective, Single Center	≥ 90 years (16)	≥ 80 years, < 90 years (128)	TICI, TTR, sICH, 90DmRS<3 (Good Outcome)	> 90: TICI ≥ 2b = 81.3%, sICH = 6.3%, 90DmRS<3 = 31.3% >80: TICI ≥ 2b = 87.5%, sICH = 3.1%, 90DmRS<3 = 22.6%	No signifciant differences between 2 groups
Agarwal et al.	2020	USA	205	Retrospective, Single Center	≥ 90 years (46, 39 included in propensity)	≤ 69 years (159, 39 included in propensity)	Good discharge disposition (home, rehab), sICH, TICI	≥ 90: good discharge = 44%, sICH = 2.6%, TICI ≥ 2b = 90% ≤ 69: good discharge = 51%, sICH = 10.3%, TICI > 2b = 90%	Used propensity score matching to account for confounders. No major differences between the groups
Meyer et al.	2020	Germany	203	Retrospective, Multiple (3) Centers, Plus National Registry Data	≥ 90 years (203)	None	TICI, sICH, 90DmRS≤3 (Good Outcome)	TICI ≥ 2b = 75.9%, sICH = 3%, 90DmRS ≤ 3 = 21.6%, mortality = 27.1, 90D mortality = 48.9%	ASPECT score and NIHSS independent predictors of good outcome
Andrews et al.	2020	USA	403	Retrospective, Single Center	80-89 (86), and ≥ 90 years (14)	<80 years (303)	TICI, mortality, dischargemRS	<80: TICI ≥ 2b = 87.1%, mortality = 11.8%, sICH = 10.9%, dischargemRS≤2 =	No differences between groups

Author	Year	Location	N	Study Design	Group 1	Group 2	Outcomes	Results	Conclusions
								34.7% 80-89: TICI > 2b = 84.9%, mortality = 8.1%, sICH = 7%, dischargemRS≤2 = 18.6% ≥ 90: TICI > 2b = 100%, mortality = 7.1%, sICH = 7.7%, dischargemRS ≤2 = 28.6%	after multivariate modeling
Janssen et al.	2020	Belgium, Switzerland, Canada, Sweden	112	Retrospective, Multiple (3) Centers, Plus National Registry Data	≥ 90 years (112)	None	TICI, 90Dmortality, 90DmRS	TICI ≥ 2b = 74.6%, 90Dmortality = 62.3%, 90DmRS < 3 = 16.4%	younger age and lower pre-stroke mRS independent predictors of good clinical outcomes
Ahn et al.	2020	Korea	82	Retrospective, Single Center	≥ 80 years (82)	None	90DmRS	90DmRS≤3 = 42.7%	Subgroup analysis of patients showed higher likelihooh of poor outcomme with lower ASPECT and longer procedure time
Ospel et al.	2020	Netherlands	3,279	Retrospective anlaysis of Prospectively collected data, National Registry, Subgroup Analysis	ASPECT 6-10, ≥ 71.8 years, TICI ≥ 2b (799)	ASPECT 6-10, < 71.8 years, TICI ≥ 2b (832) ASPECT 6-10, < 71.8 years, TICI < 2b (468) ASPECT 6-10, ≥71.8 years, TICI < 2b (548) ASPECT 0-5, ≥ 71.8 years, TICI < 2b (42) ASPECT 0-5, > 71.8 years, TICI ≥ 2b (60) ASPECT 0-5, < 71.8 years, TICI < 2b (69) ASPECT 0-5, < 71.8 years, TICI ≥ 2b (70)	90DmRS	ASPECT 6-10, ≥ 71.8 years, TICI ≥ 2b (799): 90DmRS <3 = 34.8% ASPECT 6-10, < 71.8 years, TICI ≥ 2b (832): 90DmRS <3 = 67.7% ASPECT 6-10, < 71.8 years, TICI < 2b (468): 90DmRS <3 = 39.3% ASPECT 6-10, ≥71.8 years, TICI < 2b (548): 90DmRS <3 = 17.2% ASPECT 0-5, ≥ 71.8 years, TICI < 2b (42): 90DmRS <3 = 14.3% ASPECT 0-5, ≥ 71.8 years, TICI ≥ 2b (60): 90DmRS <3 = 15.1% ASPECT 0-5, < 71.8 years, TICI < 2b (69): 90DmRS <3 = 16% ASPECT 0-5, < 71.8 years, TICI ≥ 2b (70): 90DmRS <3 = 34.3%	Benefit in all groups, regardless of age or ASPECT
Zhao et al.	2020	Multiple (16 Studies)	3,954	Systematic Review and Meta-Analysis	≥ 80 years (1,059)	< 80 years (2,895)	90DmRS, 90Dmortality, sICH, TICI	≥80 compared to <80: 90DmRS<3 OR = 0.40 p <0.001, mortality OR = 2.26 p<0.001, sICH OR = 1.28 p=0.18, TICI ≥ 2b OR = 0.72 p=0.72	Better outcomes noted for studies published between 2017 and 2019 compared to earlier
Bai et al.	2021	Multiple (13 Studies)	657	Systematic Review and Meta-Analysis	≥ 90 years (657)	None	90DmRS, 90Dmortality, sICH, TICI	90DmRS<2 = 21.6%, TICI ≥2b = 80.82%, 90Dmortality = 44.38%, sICH = 3.52%	
Fujita et al.	2021	Japan	150	Retrospective Analysis of Prospective National Registry Data (46 centers)	≥ 90 years +EVT (49)	≥ 90 years NO EVT (101)	90DmRS, sICH	EVT: 90DmRS<3 or stable to prestroke = 28.6%, , sICH = 0% NO EVT: 90DmRS<3 or stable to prestroke = 6.9%, , sICH = 3.9%	EVT group had significantly higher ASPECT, shorter time to LKW, and more frequent IV tPA, all

								may have confounded analysis.