

**On-line Table 1: Patient characteristics by study**

Study	Treatment	Study Type	No. of Patients	Age (yr)	Female Sex (%)	NIHSS	ASPECTS
Mocco et al, <sup>13</sup> 2016	Asp only	Prospective	50	67	38	17	8
Park et al, <sup>10</sup> 2016	Asp only	Retrospective	32	70	44	11	NA
Eom et al, <sup>7</sup> 2014	Asp only	Retrospective	32	68	31	20	NA
Hwang et al, <sup>8</sup> 2013	Asp only	Retrospective	20	65	60	18	7
Kang et al, <sup>11</sup> 2013 (period 1)	Asp only	Retrospective	61	68	39	16	8
Delgado Almandoz et al, <sup>15</sup> 2016	ADAPT	Retrospective	45	66	38	19	9
Hungerford et al, <sup>16</sup> 2016	ADAPT	Retrospective	154	67	50	15	NA
Kabbasch et al, <sup>18</sup> 2016	ADAPT	Retrospective	30	75	50	16	NA
Kim et al, <sup>20</sup> 2016	ADAPT	Retrospective	25	71	32	15	8
Kowoll et al, <sup>21</sup> 2016	ADAPT	Retrospective	54	69	46	15	NA
Lapergue et al, <sup>22</sup> 2016	ADAPT	Retrospective	124	64	51	16	9
Mascitelli et al, <sup>27</sup> 2016	ADAPT	Retrospective	76	70	62	18	NA
Romano et al, <sup>23</sup> 2016	ADAPT	Retrospective	152	68	44	19	8
Vargas et al, <sup>26</sup> 2016	ADAPT	Retrospective	191	67	48	15	NA
Jankowitz et al, <sup>17</sup> 2015	ADAPT	Retrospective	112	66	46	17	9
Kim et al, <sup>9</sup> 2015	ADAPT	Retrospective	70	72	46	11	NA
Turk et al, <sup>24</sup> 2014a	ADAPT	Retrospective	98	66	53	17	NA
Turk et al, <sup>25</sup> 2014b	ADAPT	Retrospective	64	69	59	17	NA
Turk et al, <sup>12</sup> 2014c	ADAPT	Retrospective	37	65	NA	16	NA
Kang et al, <sup>11</sup> 2013 (period 2)	ADAPT	Retrospective	74	70	47	17	8
Kang et al, <sup>19</sup> 2011	ADAPT	Retrospective	22	59	36	18	NA

**Note:**—Asp indicates aspiration; NA, not available.

**On-line Table 2: Occlusion location and complications by study**

Study	Treatment	No. of Patients	Anterior Circulation Occlusion (%)	Posterior Circulation Occlusion (%)	90-Day Mortality (%)	sICH (%)	ENT (%)	IV-tPA (%)
Mocco et al, <sup>13</sup> 2016	Asp only	50	100	0	12	9	NA	100
Park et al, <sup>10</sup> 2016	Asp only	32	100	0	3	0	NA	94
Eom et al, <sup>7</sup> 2014	Asp only	32	0	100	25	0	0	36
Hwang et al, <sup>8</sup> 2013	Asp only	20	100	0	0	15	NA	71
Kang et al, <sup>11</sup> 2013 (period 1)	Asp only	61	100	0	NA	8	NA	53
Delgado Almandoz et al, <sup>15</sup> 2016	ADAPT	45	100	0	18	2	4	56
Hungerford et al, <sup>16</sup> 2016	ADAPT	154	100	0	10	7	NA	35
Kabbasch et al, <sup>18</sup> 2016	ADAPT	30	94	6	20	10	3	50
Kim et al, <sup>20</sup> 2016	ADAPT	25	100	0	0	4	0	52
Kowoll et al, <sup>21</sup> 2016	ADAPT	54	91	9	NA	4	6	81
Lapergue et al, <sup>22</sup> 2016	ADAPT	124	100	0	23	2	6	66
Mascitelli et al, <sup>27</sup> 2016	ADAPT	76	96	4	NA	NA	NA	50
Romano et al, <sup>23</sup> 2016	ADAPT	152	91	9	8	8	2	52
Vargas et al, <sup>26</sup> 2016	ADAPT	191	90	10	15	NA	0	37
Jankowitz et al, <sup>17</sup> 2015	ADAPT	112	89	11	31	3	4	41
Kim et al, <sup>9</sup> 2015	ADAPT	70	100	0	3	6	NA	50
Turk et al, <sup>24</sup> 2014a	ADAPT	98	95	5	19	0	0	28
Turk et al, <sup>25</sup> 2014b	ADAPT	64	90	10	NA	NA	NA	31
Turk et al, <sup>12</sup> 2014c	ADAPT	37	81	19	NA	5	0	32
Kang et al, <sup>11</sup> 2013 (period 2)	ADAPT	74	100	0	NA	5	NA	53
Kang et al, <sup>19</sup> 2011	ADAPT	22	82	18	14	9	0	34

**Note:**—Asp indicates aspiration; ENT, embolic occlusion in new territories; NA, not available; sICH, symptomatic intracerebral hemorrhage.

**On-line Table 3: Patient characteristics for ADAPT with aspiration only or ADAPT with adjuvant treatment by study**

Study	Treatment	No. of Patients	Age (yr)	Female Sex (%)	NIHSS
Kabbasch et al, <sup>18</sup> 2016	ADAPT-asp only	21	76	52	17
Kowoll et al, <sup>21</sup> 2016	ADAPT-asp only	30	72	57	14
Romano et al, <sup>23</sup> 2016	ADAPT-asp only	96	68	42	19
Vargas et al, <sup>26</sup> 2016	ADAPT-asp only	145	65	NA	15
Kabbasch et al, <sup>18</sup> 2016	ADAPT-asp+adjuvant	9	71	44	16
Kowoll et al, <sup>21</sup> 2016	ADAPT-asp+adjuvant	24	59	67	16
Romano et al, <sup>23</sup> 2016	ADAPT-asp+adjuvant	56	68	46	18
Vargas et al, <sup>26</sup> 2016	ADAPT-asp+adjuvant	43	72	NA	16
Kabbasch et al, <sup>18</sup> 2016	<i>P</i> value <sup>a</sup>		.4	1	.5
Kowoll et al, <sup>21</sup> 2016	<i>P</i> value <sup>a</sup>		.2	.1	.1
Romano et al, <sup>23</sup> 2016	<i>P</i> value <sup>a</sup>		.64	.57	.3
Vargas et al, <sup>26</sup> 2016	<i>P</i> value <sup>a</sup>		.0019	NA	.72

**Note:**—asp indicates aspiration; NA, not available.

<sup>a</sup>The *P* values represent difference between ADAPT-asp only treatment and ADAPT-asp+adjuvant treatment.

**On-line Table 4: Treatment characteristics and outcomes for ADAPT with aspiration only or ADAPT with adjuvant treatment by study**

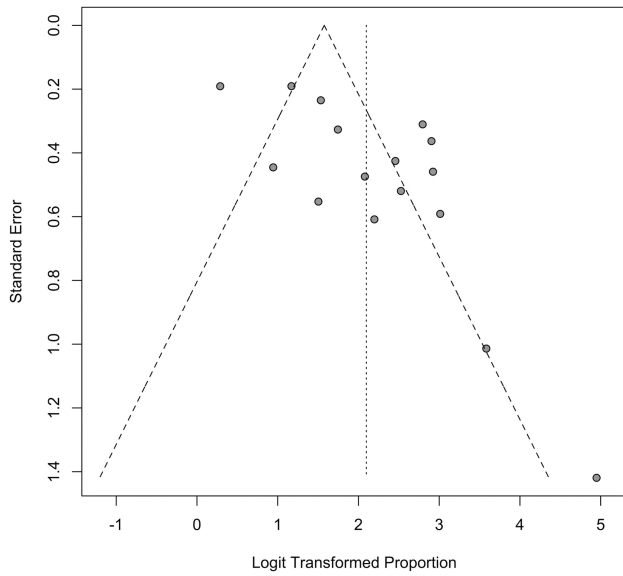
Study	Treatment	No. of Patients	IV-tPA (%)	OTP (min)	PTR (min)	Final TICl 2b/3 (%)	90-Day mRS≤2 (%)	90-Day Mortality (%)	sICH (%)	ENT (%)
Kabbasch et al, <sup>18</sup> 2016	ADAPT-asp only	21	52	194	20	95	38	19	0	5
Kowoll et al, <sup>21</sup> 2016	ADAPT-asp only	30	27	174	30	97	NA	NA	3	7
Romano et al, <sup>23</sup> 2016	ADAPT-asp only	96	51	NA	45	83	57	6	4	2
Vargas et al, <sup>26</sup> 2016	ADAPT-asp only	145	NA	483	30	97	58	14	NA	0
Kabbasch et al, <sup>18</sup> 2016	ADAPT-asp+adjuvant	9	56	176	60	78	56	22	33	0
Kowoll et al, <sup>21</sup> 2016	ADAPT-asp+adjuvant	24	92	232	65	88	NA	NA	4	4
Romano et al, <sup>23</sup> 2016	ADAPT-asp+adjuvant	56	50	NA	80	54	40	11	14	2
Vargas et al, <sup>26</sup> 2016	ADAPT-asp+adjuvant	43	NA	408	61	84	43	18	NA	0
Kabbasch et al, <sup>18</sup> 2016	<i>P</i> value <sup>a</sup>		1	0.6	<.0001	.2	.7	1	.02	1
Kowoll et al, <sup>21</sup> 2016	<i>P</i> value <sup>a</sup>		.2	NA	.0004	.3	NA	NA	1	1
Romano et al, <sup>23</sup> 2016	<i>P</i> value <sup>a</sup>		.9	NA	<.001	<.001	.026	.32	.026	NA
Vargas et al, <sup>26</sup> 2016	<i>P</i> value <sup>a</sup>		NA	.23	<.0001	NA	.12	.47	NA	NA

**Note:**—asp indicates aspiration; ENT, embolic occlusion in new territories; NA, not available; OTP, onset-to-puncture; PTR, puncture-to-recanalization; sICH, symptomatic intracerebral hemorrhage.

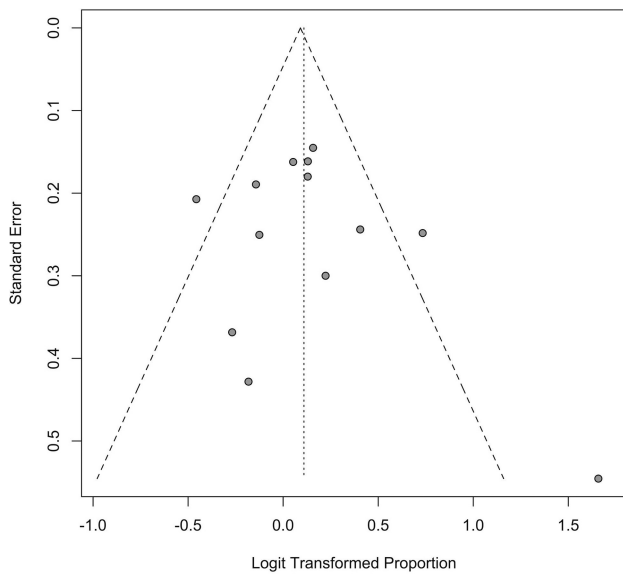
<sup>a</sup>The *P* values represent difference between ADAPT-asp only treatment and ADAPT-asp+adjuvant treatment.

**On-line Table 5: Recanalization and clinical outcomes by study**

Outcomes	ADAPT Meta-Analysis (n = 1328, 1161)	Thrombectomy Meta-Analysis <sup>28</sup> (n = 570, 633)	MR CLEAN (n = 267)	REVASCAT (n = 103)	SWIFT PRIME (n = 98)	EXTEND IA (n = 35)
TICl 2b/3 (%)	89.1	70.5	58.7	66.0	88.0	86.0
90-day mRS≤2 (%)	51.4	46.0	32.6	44.0	60.0	71.0



**ON-LINE FIG 1.** Funnel plot on publication bias for TICl 2b/3 recanalization rates across studies.



**ON-LINE FIG 2.** Funnel plot on publication bias for good clinical outcome (90-day mRS  $\leq 2$ ) across studies.