

Study or Subgroup	TTE		TEE		Weight	RR [95% CI]
	Events	Total	Events	Total		
<b>Observational adjusted</b>						
Condado 2017	12	46	17	42	13.4%	0.64 [0.35; 1.19]
Sengupta 2015	21	47	16	64	15.9%	1.79 [1.05; 3.04]
<b>Total (95% CI)</b>	<b>33</b>	<b>93</b>	<b>33</b>	<b>106</b>	<b>29.3%</b>	<b>1.09 [0.40; 2.95]</b>

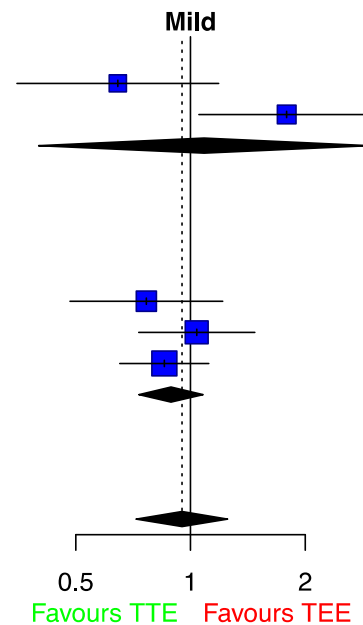
Heterogeneity:  $\tau^2 = 0.4355$ ;  $\chi^2 = 6.13$ ,  $df = 1$  ( $P = 0.01$ );  $I^2 = 84\%$   
 Test for overall effect:  $Z = 0.16$  ( $P = 0.87$ )

<b>Observational unadjusted</b>						
Jabbar 2016	18	71	48	145	18.6%	0.77 [0.48; 1.21]
Attizzani 2015	45	116	34	91	23.8%	1.04 [0.73; 1.47]
Hayek 2017	69	234	76	220	28.3%	0.85 [0.65; 1.12]
<b>Total (95% CI)</b>	<b>132</b>	<b>421</b>	<b>158</b>	<b>456</b>	<b>70.7%</b>	<b>0.89 [0.73; 1.08]</b>

Heterogeneity:  $\tau^2 = 0$ ;  $\chi^2 = 1.25$ ,  $df = 2$  ( $P = 0.54$ );  $I^2 = 0\%$   
 Test for overall effect:  $Z = -1.19$  ( $P = 0.23$ )

<b>Total (95% CI)</b>	<b>165</b>	<b>514</b>	<b>191</b>	<b>562</b>	<b>100.0%</b>	<b>0.95 [0.72; 1.25]</b>
-----------------------	------------	------------	------------	------------	---------------	--------------------------

Heterogeneity:  $\tau^2 = 0.0511$ ;  $\chi^2 = 8.67$ ,  $df = 4$  ( $P = 0.07$ );  $I^2 = 54\%$   
 Test for overall effect:  $Z = -0.37$  ( $P = 0.71$ )  
 Test for subgroup differences:  $\chi^2 = 0.15$ ,  $df = 1$  ( $P = 0.70$ )



**Supplementary Figure 2.** Forest plot for relative risk ratios of mild PVL for TTE-TAVI in comparison to TEE-TAVI with subgroups based on study type. TTE: transthoracic echocardiography; TEE: transesophageal echocardiography; RR: relative risk; CI: confidence interval; TAVI: transcatheter aortic valve replacement

Study or Subgroup	TTE		TEE		Weight	RR [95% CI]
	Events	Total	Events	Total		
<b>Observational adjusted</b>						
Sengupta 2015	3	47	0	64	2.4%	9.48 [0.50; 179.24]
<b>Total (95% CI)</b>	<b>3</b>	<b>47</b>	<b>0</b>	<b>64</b>	<b>2.4%</b>	<b>9.48 [0.50; 179.24]</b>

Heterogeneity: not applicable

Test for overall effect: Z = 1.50 (P = 0.13)

**Observational unadjusted**

Attizzani 2015	10	116	10	91	30.5%	0.78 [0.34; 1.80]
Abud 2018	8	66	6	55	21.3%	1.11 [0.41; 3.01]
Hayek 2017	5	234	7	220	16.5%	0.67 [0.22; 2.08]
Gauthier 2015	9	66	9	51	29.3%	0.77 [0.33; 1.81]
<b>Total (95% CI)</b>	<b>32</b>	<b>482</b>	<b>32</b>	<b>417</b>	<b>97.6%</b>	<b>0.82 [0.52; 1.31]</b>

Heterogeneity: Tau<sup>2</sup> = 0; Chi<sup>2</sup> = 0.51, df = 3 (P = 0.92); I<sup>2</sup> = 0%

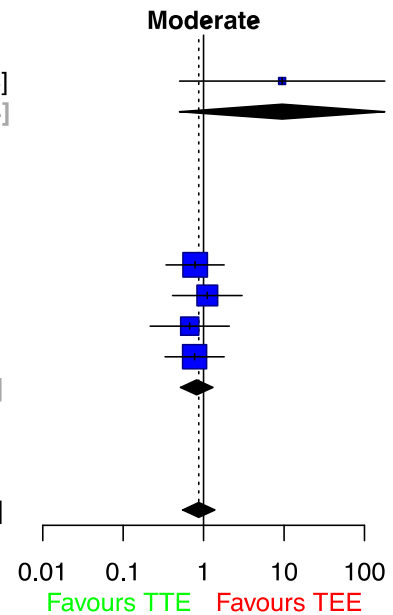
Test for overall effect: Z = -0.83 (P = 0.41)

**Total (95% CI) 35 529 32 481 100.0% 0.87 [0.55; 1.38]**

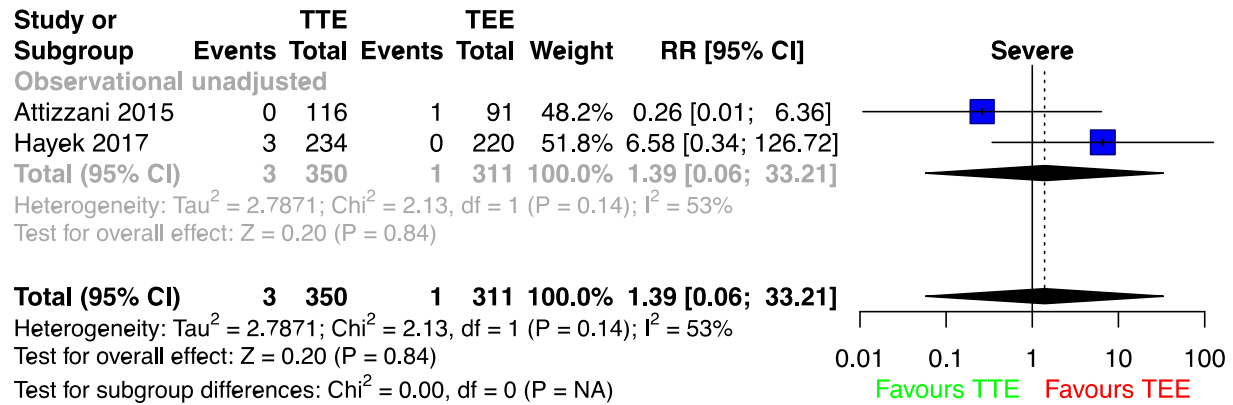
Heterogeneity: Tau<sup>2</sup> = 0; Chi<sup>2</sup> = 3.16, df = 4 (P = 0.53); I<sup>2</sup> = 0%

Test for overall effect: Z = -0.59 (P = 0.56)

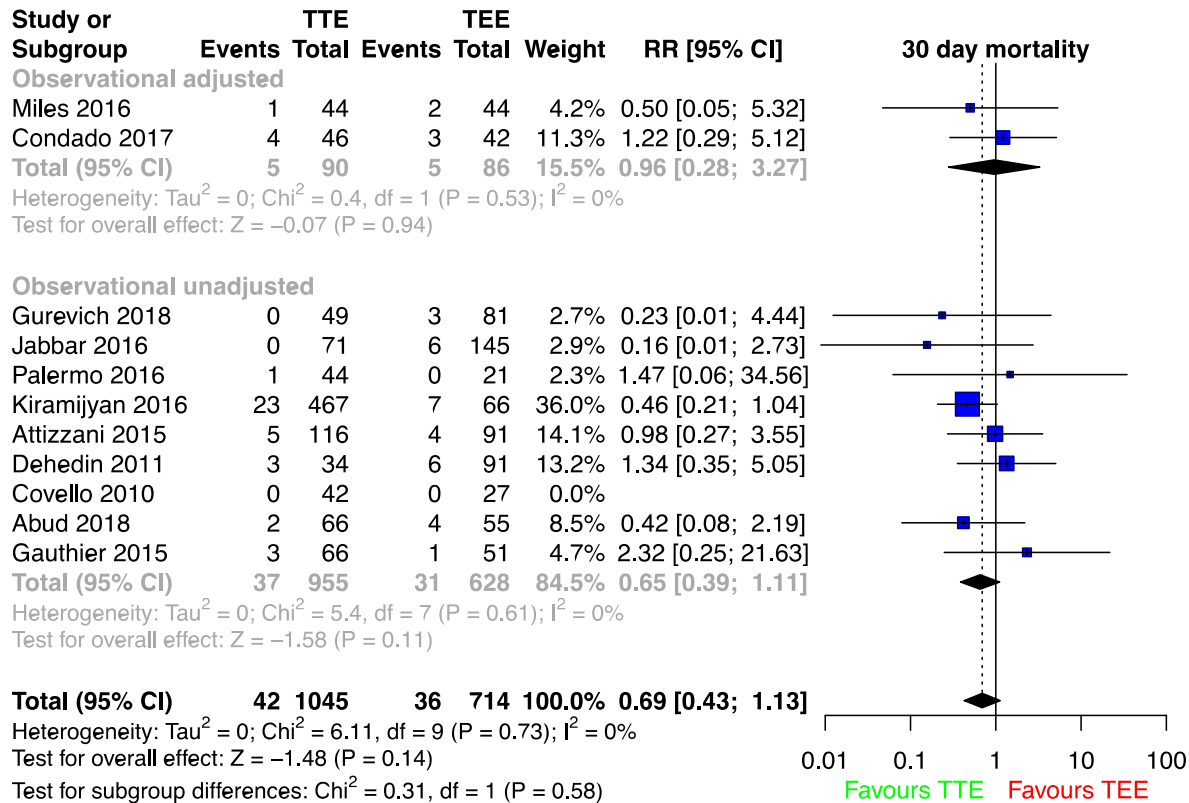
Test for subgroup differences: Chi<sup>2</sup> = 2.60, df = 1 (P = 0.11)



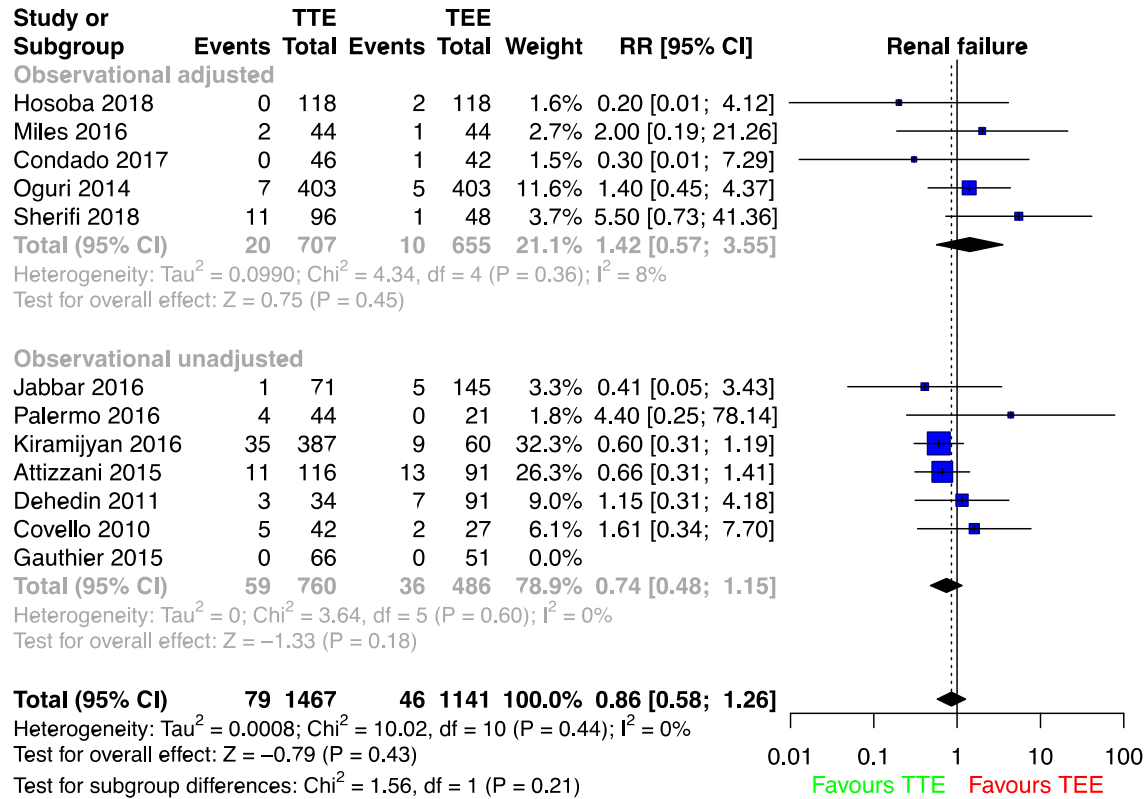
**Supplementary Figure 3.** Forest plot for relative risk ratios of moderate PVL for TTE-TAVI in comparison to TEE-TAVI with subgroups based on study type. TTE: transthoracic echocardiography; TEE: transesophageal echocardiography; RR: relative risk; CI: confidence interval; TAVI: transcatheter aortic valve replacement



**Supplementary Figure 4.** Forest plot for relative risk ratios of severe PVL for TTE-TAVI in comparison to TEE-TAVI with subgroups based on study type. TTE: transthoracic echocardiography; TEE: transesophageal echocardiography; RR: relative risk; CI: confidence interval; TAVI: transcatheter aortic valve replacement

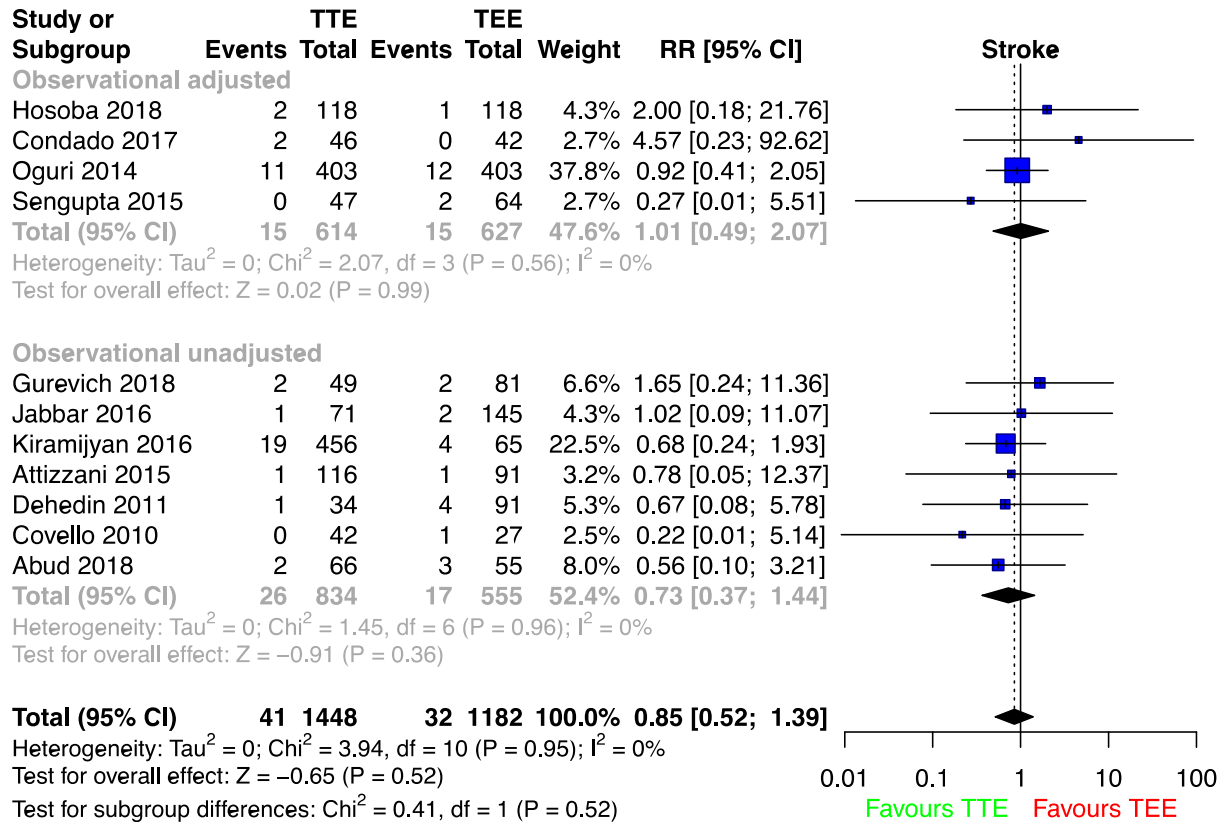


**Supplementary Figure 5.** Forest plot for relative risk ratios of 30-day mortality for TTE-TAVI in comparison to TEE-TAVI with subgroups based on study type. TTE: transthoracic echocardiography; TEE: transesophageal echocardiography; RR: relative risk; CI: confidence interval; TAVI: transcatheter aortic valve replacement

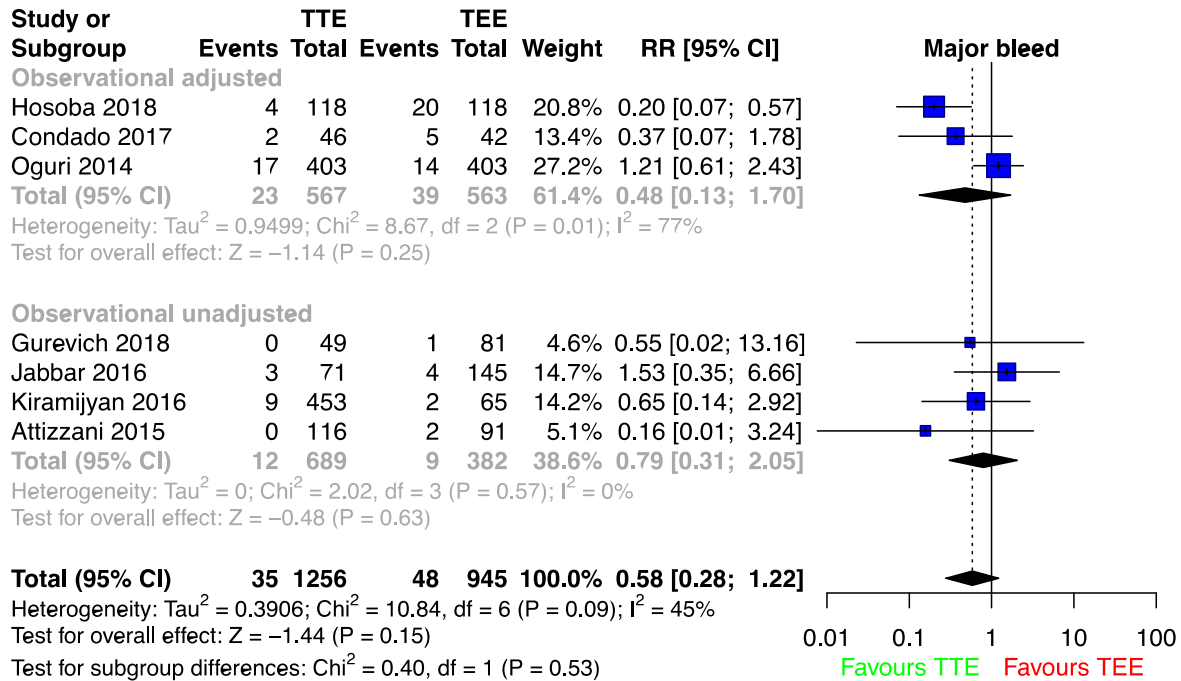


Sup

**plementary Figure 6.** Forest plot for relative risk ratios of renal failure for TTE-TAVI in comparison to TEE-TAVI with subgroups based on study type. TTE: transthoracic echocardiography; TEE: transesophageal echocardiography; RR: relative risk; CI: confidence interval; TAVI: transcatheter aortic valve replacement



**Supplementary Figure 7.** Forest plot for relative risk ratios of stroke for TTE-TAVI in comparison to TEE-TAVI with subgroups based on study type. TTE: transthoracic echocardiography; TEE: transesophageal echocardiography; RR: relative risk; CI: confidence interval; TAVI: transcatheter aortic valve replacement



**Supplementary Figure 8.** Forest plot for relative risk ratios of major bleed for TTE-TAVI in comparison to TEE-TAVI with subgroups based on study type. TTE: transthoracic echocardiography; TEE: transesophageal echocardiography; RR: relative risk; CI: confidence interval; TAVI: transcatheter aortic valve replacement