Yoonjung Heo and Dong Hun Kim: Meta-analysis of temporary abdominal closure techniques in trauma

# (a) Skin-only closure

Study	Events Total		Proportion	95%-CI Weight		
Smith, 1992	0 8		0.00	[0.00; 0.37] 48.0%		
Hu, 2018	45 138		0.33	[0.25; 0.41] 52.0%		
Random effects model			- 0.17	[0.00; 0.49] 100.0%	)	
Heterogeneity: $I^2 = 93\%$ , $\tau^2 = 0.0495$ , $p < 0.01$ I I I I I I I I I I I I I I I I I I I						

### (b) Patch closure

Study	Events Total		Proportion	95%-CI Weight			
Vertrees, 2006	1	29 -	•	0.03	[0.00; 0.18]	19.2%	
Vertrees, 2008	21	83	<u> </u>	0.25	[0.16; 0.36]	18.1%	
Mayberry, 2004	7	140	+	0.05	[0.02; 0.10]	20.0%	
Sánchez-Lozada, 2004	3	12	-	- 0.25	[0.05; 0.57]	10.9%	
Hu, 2018	24	60	<del></del>	0.40	[0.28; 0.53]	16.7%	
Aprahamian, 1990	3	20		0.15	[0.03; 0.38]	15.1%	
Random effects mode	I	344	$\langle \rangle$	0.18	[0.06; 0.30] 1	. <b>00.0</b> %	
Heterogeneity: $I^2 = 89\%$ , $\tau^2 = 0.0181$ , $p < 0.01$ 0.1 0.2 0.3 0.4 0.5							

### (c) Vacuum closure

Study	Events Total		P	roportion	95%-CI Weight	
Barker, 2000	5	112 🕂		0.04	[0.01; 0.10]	7.6%
Johnson, 2001	3	21 —		0.14	[0.03; 0.36]	5.2%
Chavarria-Aguilar, 2004	6	29 —		0.21	[0.08; 0.40]	5.2%
Diaz, 2004	3	75 +		0.04	[0.01; 0.11]	7.5%
Jiang, 2006	3	13 —		0.23	[0.05; 0.54]	3.5%
Smith, 2017	2	103 +		0.02	[0.00; 0.07]	7.7%
Suliburk, 2003	0	29		0.00	[0.00; 0.12]	7.5%
Miller, 2004	0	45 <b></b>		0.00	[0.00; 0.08]	7.7%
Stone, 2004	5	48 —•	_	0.10	[0.03; 0.23]	6.7%
Labler, 2005	2	18 —		0.11	[0.01; 0.35]	5.3%
Burlew, 2012	8	22		0.36	[0.17; 0.59]	4.1%
Dubose, 2013	113	572	-	0.20	[0.17; 0.23]	7.6%
Hu, 2018	12	41		0.29	[0.16; 0.46]	5.4%
Edwards, 2022	32	120		0.27	[0.19; 0.36]	6.8%
Burlew, 2012	9	29		0.31	[0.15; 0.51]	4.7%
Dennis, 2013	0	32 ⊢		0.00	[0.00; 0.11]	7.5%
Random effects model 1309 🗢 0.13 [0.07; 0.18] 100.0						00.0%
Heterogeneity: $I^2 = 91\%$ , $\tau^2 = 0.0113$ , $p < 0.01$						

**Supplementary Fig. 6.** Forest plots of weighted proportions for peritoneal abscess by temporary abdominal closure technique category. CI, confidence interval.

### (d) Static therapy

Study	Events	Total		Proportion	95%-CI V	Veight
Smith, 1992	0	8 ——		0.00	[0.00; 0.37]	4.1%
Hu, 2018	45	138	<b>—</b>	0.33	[0.25; 0.41]	5.2%
Vertrees, 2006	1	29	_	0.03	[0.00; 0.18]	5.4%
Vertrees, 2008	21	83		0.25	[0.16; 0.36]	5.0%
Mayberry, 2004	7	140 —		0.05	[0.02; 0.10]	5.7%
Sánchez-Lozada, 2004	3	12 —	-	0.25	[0.05; 0.57]	2.8%
Hu, 2018	24	60	—— <b>—</b> —	0.40	[0.28; 0.53]	4.5%
Barker, 2000	5	112 —		0.04	[0.01; 0.10]	5.7%
Johnson, 2001	3	21		0.14	[0.03; 0.36]	4.1%
Chavarria-Aguilar, 2004	6	29 —		0.21	[0.08; 0.40]	4.1%
Diaz, 2004	3	75 —		0.04	[0.01; 0.11]	5.6%
Jiang, 2006	3	13 —		0.23	[0.05; 0.54]	2.9%
Smith, 2017	2	103		0.02	[0.00; 0.07]	5.7%
Suliburk, 2003	0	29 ⊢		0.00	[0.00; 0.12]	5.6%
Miller, 2004	0	45 ⊢—		0.00	[0.00; 0.08]	5.7%
Stone, 2004	5	48		0.10	[0.03; 0.23]	5.1%
Labler, 2005	2	18 — +		0.11	[0.01; 0.35]	4.2%
Burlew, 2012	8	22		- 0.36	[0.17; 0.59]	3.3%
Dubose, 2013	113	572	<b></b>	0.20	[0.17; 0.23]	5.7%
Hu, 2018	12	41		0.29	[0.16; 0.46]	4.3%
Edwards, 2022	32	120	— <u>I</u>	0.27	[0.19; 0.36]	5.2%

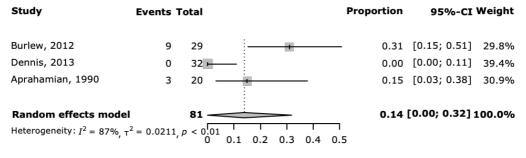
Random effects model

0.15 [0.09; 0.20] 100.0%

Heterogeneity:  $I^2 = 92\%$ ,  $\tau^2 = 0.0140$ , p < 0.010 0.1 0.2 0.3 0.4 0.5

1718

## (e) Dynamic therapy



Supplementary Fig. 6. Continued.