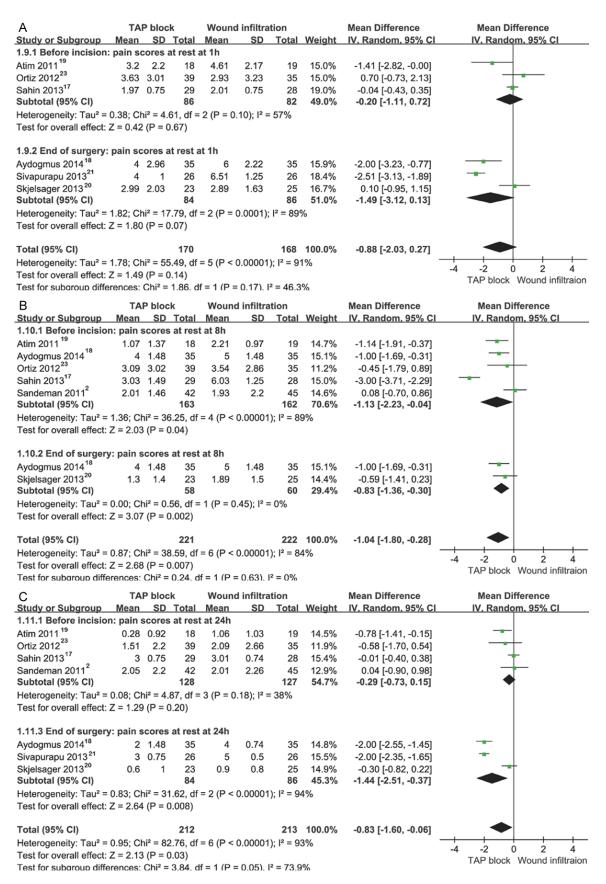
A		P bloc			d infiltra		141-1-1-1	Mean Difference	Mean Difference
Study or Subgroup				Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
1.3.1 Adults: Pain sc						100 AP			
Atim 2011 ¹⁹	3.2		18	4.61	2.17	19	13.0%	-1.41 [-2.82, -0.00]	
Aydogmus 2014 ¹⁸		2.96	35	6	2.22	35	13.8%	-2.00 [-3.23, -0.77]	
Ortiz 2012 23	3.63	3.01	39	2.93	3.23	35	12.9%	0.70 [-0.73, 2.13]	
Sivapurapu 2013 ²¹	4	1	26	6.51	1.25	26	16.1%	-2.51 [-3.13, -1.89]	
Skjelsager 2013 ²⁰	2.99	2.03	23	2.89	1.63	25	14.5%	0.10 [-0.95, 1.15]	
Tolchard 2012 ²²	3.1	1.76	21	4.41	2.76	22	13.1%	-1.31 [-2.69, 0.07]	
Subtotal (95% CI)			162			162	83.3%	-1.12 [-2.21, -0.02]	
Heterogeneity: Tau ² =	1.51 · C	$hi^2 = 29$		= 5 (P <	0.0001).				
Test for overall effect:				0 (1	0.0001),				
1.3.2 Children: Pain	scores a	at rest a	at 1h						
Sahin 201317	1.97	0.75	29	2.01	0.75	28	16.7%	-0.04 [-0.43, 0.35]	+
Subtotal (95% CI)			29			28	16.7%	-0.04 [-0.43, 0.35]	•
Heterogeneity: Not ap	nlicable								
Test for overall effect:			.84)						
Total (95% CI)			191			190	100.0%	-0.94 [-1.97, 0.09]	•
Heterogeneity: Tau ² =	1 62· C	$hi^2 = 56$		= 6 (P <	0.00001				
Test for overall effect:				-0(P 5	0.00001), 1 – 0.	5 70		-4 -2 0 2 4
Test for subaroup diffe				f = 1 /D -	- 0.07)	2 - 60 7	0/		TAP block Wound infiltrat
rest for subdroub diffe	erences.	Chi	3.30. u	1-1(P-	- 0.071.1	09.7	70		
В	TA	P block	K	Wound	d infiltra	tion		Mean Difference	Mean Difference
Study or Subgroup				Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% Cl
1.4.1 Adults: Pain sc									
Atim 2011 ¹⁹	1.07	1.37	18	2.21	0.97	19	15.0%	-1.14 [-1.91, -0.37]	
Aydogmus 2014 ¹⁸	4	1.48	35	5	1.48	35	15.4%	-1.00 [-1.69, -0.31]	
Ortiz 2012 ²³	3.09	3.02	39	3.54	2.86	35	11.8%	-0.45 [-1.79, 0.89]	
Skjelsager 2013 ²⁰	1.3	1.4	23	1.89	1.5	25	14.7%	-0.59 [-1.41, 0.23]	
Tolchard 2012 ²²	1.61	1.76	21	2.9	2.12	22	12.8%	-1.29 [-2.45, -0.13]	
Subtotal (95% CI)			136			136	69.7%	-0.93 [-1.32, -0.54]	◆
Heterogeneity: Tau ² =	0.00.0	hi² = 1 ۶		A(P = 0)	76): 12 =				
Test for overall effect:)					
1.4.2 Children: Pain s Sahin 2013 ¹⁷		at rest a 1.49	at 8h 29	6.03	1.25	28	15.3%	-3.00 [-3.71, -2.29]	-
Sandeman 2011 ²		1.46	42	1.93	2.2	45	15.0%	0.08 [-0.70, 0.86]	
Subtotal (95% CI)	2.01	1.40	71	1.95	2.2	73	30.3%	-1.46 [-4.48, 1.55]	
Heterogeneity: Tau ² =				= 1 (P <	0.00001)	; l ² = 97			
Test for overall effect:	Z = 0.95	i (P = 0	.34)						
Total (95% CI)			207			209	100.0%	-1.08 [-1.89, -0.26]	•
Heterogeneity: Tau ² =	0.99; Cl	ni² = 38	.48, df	= 6 (P <	0.00001	; l ² = 84	1%	-	
Test for overall effect:		•			0.70				-4 -2 0 2 4 TAP block Wound infiltrati
Test for subaroup diffe	erences:	Chi* =	U.12. d	f = 1 (P =	= 0.73). P	= 0%			
С	TA	P block	< C	Wound	d infiltra	tion		Mean Difference	Mean Difference
Study or Subgroup	Mean	ŞD	Total	Mean	SD	Total	Weight	IV, Random, 95% CI	IV, Random, 95% CI
1.5.1 Adults: Pain sc									
Atim 2011 ¹⁹		0.92	18	1.06	1.03	19	14.5%	-0.78 [-1.41, -0.15]	
Aydogmus 2014 ¹⁸		1.48	35	1.00	0.74	35	14.5%		
Ortiz 2012 ²³								-2.00 [-2.55, -1.45]	
	1.51		39	2.09	2.66	35	11.9%	-0.58 [-1.70, 0.54]	-
Sivapurapu 2013 ²¹		0.75	26	5	0.5	26	15.5%	-2.00 [-2.35, -1.65]	
Skjelsager 2013 ²⁰	0.6	1	23	0.9	0.8	25	14.9%	-0.30 [-0.82, 0.22]	
Subtotal (95% CI)	10 10 10 10 10 10 10 10 10 10 10 10 10 1		141			140	71.7%	-1.17 [-1.96, -0.39]	
Heterogeneity: Tau ² = Test for overall effect:				= 4 (P <	0.00001)); I ² = 9(0%		
			,						
									\perp
	3	0.75	29	3.01	0.74	28	15.4%	-0.01 [-0.40, 0.38]	Ť
Sahin 2013 ¹⁷	2.05	2.2	42	2.01	2.26	45	12.9%	0.04 [-0.90, 0.98]	<u> </u>
Sahin 2013 ¹⁷	2.00		71			73	28.3%	-0.00 [-0.36, 0.35]	•
Sahin 2013 ¹⁷ Sandeman 2011 ²	2.00		1 df -	1 (P = 0	.92); I ² =	0%			
1.5.3 Children: Pain s Sahin 2013 ¹⁷ Sandeman 2011 ² Subtotal (95% CI) Heterogeneity: Tau ² =	0.00; Cl								
Sahin 2013 ¹⁷ Sandeman 2011 ² Subtotal (95% CI)	0.00; Cl								
Sahin 2013 ¹⁷ Sandeman 2011 ² Subtotal (95% CI) Heterogeneity: Tau ² =	0.00; Cl					213	100.0%	-0.83 [-1.60, -0.06]	•
Sahin 2013 ¹⁷ Sandeman 2011 ² Subtotal (95% CI) Heterogeneity: Tau ² = Test for overall effect: Total (95% CI)	0.00; Cł Z = 0.01	1 (P = 0	.99) 212	= 6 (P <	0.00001			-0.83 [-1.60, -0.06]	• • • • •
Sahin 2013 ¹⁷ Sandeman 2011 ² Subtotal (95% CI) Heterogeneity: Tau ² = Test for overall effect:	0.00; Cl Z = 0.01 0.95; Cl	1 (P = 0	.99) 212 .76, df	= 6 (P <	0.00001)			-0.83 [-1.60, -0.06]	-4 -2 0 2 4 TAP block Wound infiltrati

Supplementary Figure 1. Subgroup analysis of different participants (adults vs children) in rest pain scores at 1 hour (A), 8 hour (B) and 24 hour (C) postoperatively.

A		block			d infiltra		144-1-1-4	Mean Difference	Mean Difference
Study or Subgroup	Mean			Mean	SD		Weight	IV, Random, 95% CI	IV, Random, 95% Cl
1.6.1 Non-Laparosco Atim 2011 ¹⁹	-						40.00/	4 44 5 0 00 0 001	
Aum 2011 Aydogmus 2014 ¹⁸	3.2	2.2 2.96	18 35	4.61 6	2.17 2.22	19 35	13.0% 13.8%	-1.41 [-2.82, -0.00] -2.00 [-3.23, -0.77]	
Sahin 2013 ¹⁷	1.97		29	2.01	0.75	28	16.7%	-0.04 [-0.43, 0.35]	+
Sivapurapu 2013 ²¹	4	1	26	6.51	1.25	26	16.1%	-2.51 [-3.13, -1.89]	
Skjelsager 2013 ²⁰	2.99		23	2.89	1.63	25	14.5%	0.10 [-0.95, 1.15]	_ _
Subtotal (95% CI)			131			133	74.0%	-1.16 [-2.42, 0.11]	
Heterogeneity: Tau ² =	1.84; Ch	i² = 51.	52, df =	= 4 (P <	0.00001); l ² = 92	2%		
Test for overall effect:	Z = 1.79	(P = 0.	07)						
1.6.2 Laparoscopic s	uraerv:	pain so	ores a	t rest af	t 1h				
Ortiz 201223	3.63		39	2.93	3.23	35	12.9%	0.70 [-0.73, 2.13]	
Tolchard 2012 ²²	3.1	1.76	21	4.41	2.76	22	13.1%	-1.31 [-2.69, 0.07]	
Subtotal (95% CI)			60			57	26.0%	-0.31 [-2.28, 1.66]	
Heterogeneity: Tau ² =				1 (P = 0	.05); l² =	75%			
Test for overall effect:	Z = 0.31	(P = 0.	75)						
Total (95% CI)			191			190	100.0%	-0.94 [-1.97, 0.09]	-
Heterogeneity: Tau ² =	1.62; Ch	i² = 56.	16, df =	= 6 (P <	0.00001); l ² = 89	9%		-4 -2 0 2 4
Test for overall effect:	Z = 1.78	(P = 0.	08)						TAP block Wound infiltraion
Test for subaroup diffe	rences:	Chi ² = ().50. df	= 1 (P =	= 0.48). I	² = 0%			
В	TAF	block		Wound	d infiltra	tion		Mean Difference	Mean Difference
Study or Subgroup	Mean				SD		Weight	IV, Random, 95% CI	IV, Random, 95% Cl
1.7.1 Non-Laparosco	pic surg	ery: pa	ain sco	res at re	est at 8h	1			
Atim 2011 ¹⁹	1.07	1.37	18	2.21	0.97	19	15.0%	-1.14 [-1.91, -0.37]	
Aydogmus 2014 ¹⁸	4	1.48	35	5	1.48	35	15.4%	-1.00 [-1.69, -0.31]	
Sahin 2013 17	3.03	1.49	29	6.03	1.25	28	15.3%	-3.00 [-3.71, -2.29]	
Skjelsager 2013 ²⁰	1.3	1.4	23	1.89	1.5	25	14.7%	-0.59 [-1.41, 0.23]	
Subtotal (95% CI)			105			107	60.5%	-1.44 [-2.51, -0.37]	-
Heterogeneity: Tau ² =				= 3 (P <	0.0001);	$ ^2 = 88^{\circ}$	%		
Test for overall effect:	Z = 2.64	(P = 0.	008)						
1.7.2 Laparoscopic s	urgery:	pain so	ores a	t rest at	t 8h				
Ortiz 2012 ²³	3.09	3.02	39	3.54	2.86	35	11.8%	-0.45 [-1.79, 0.89]	
Sandeman 20112	2.01	1.46	42	1.93	2.2	45	15.0%	0.08 [-0.70, 0.86]	-
Tolchard 2012	1.61	1.76	21	2.9	2.12	22	12.8%	-1.29 [-2.45, -0.13]	
Subtotal (95% CI)			102			102	39.5%	-0.47 [-1.31, 0.37]	
Heterogeneity: Tau ² = Test for overall effect:				2 (P = 0	.16); l² =	46%			
	2 - 1.05	(i – 0.	21)						
Total (95% CI)			207			209	100.0%	-1.08 [-1.89, -0.26]	-
Heterogeneity: Tau ² =				= 6 (P <	0.00001); l ² = 84	4%	-	-4 -2 0 2 4
Test for overall effect: Test for subaroup diffe		•	'	- 1 (D -	- 0.16) 1	2 - 10 1	0/_		TAP block Wound infiltraion
C							76		
		P block			d infiltra		Maight	Mean Difference	Mean Difference IV, Random, 95% CI
Study or Subgroup 1.8.1 Non-Laparosco				Mean			weight	IV, Random, 95% CI	IV, Random, 95% CI
Atim 2011 ¹⁹		0.92					14 50/	-0.78[-1.41 -0.45]	
Aydogmus 2014 ¹⁸		1.48	18 35	1.06 4	1.03 0.74	19 35		-0.78 [-1.41, -0.15] -2.00 [-2.55, -1.45]	
Sahin 2013 ¹⁷		0.75	29	3.01	0.74	28	14.8%	-0.01 [-0.40, 0.38]	+
Sivapurapu 2013 ²¹	3	0.75	26	5.01	0.74	26	15.5%	-2.00 [-2.35, -1.65]	-
Skjelsager 2013 ²⁰	0.6	1	23	0.9	0.8	25	14.9%	-0.30 [-0.82, 0.22]	
Subtotal (95% CI)	5.0		131		0.0	133	75.1%	-1.02 [-1.93, -0.11]	
Heterogeneity: Tau ² =	1.01; Cł	ni² = 76	.98, df	= 4 (P <	0.00001); l² = 9			
Test for overall effect:									
1.8.3 Laparoscopic s	urgerv:	pain se	cores a	at rest a	t 24h				
Ortiz 2012 ²³	1.51	2.2	39	2.09	2.66	35	11.9%	-0.58 [-1.70, 0.54]	
Sandeman 2011 ²	2.05	2.2	42	2.01	2.26	45		0.04 [-0.90, 0.98]	
Subtotal (95% CI)			81			80	24.9%	-0.22 [-0.93, 0.50]	+
Heterogeneity: Tau ² =				1 (P = 0	0.41); l² =	= 0%			
Test for overall effect:	Z = 0.59	(P = 0	.56)						
Total (95% CI)			212			213	100.0%	-0.83 [-1.60, -0.06]	•
Heterogeneity: Tau ² =	0.95; Ch	ni² = 82		= 6 (P <	0.00001				
Test for overall effect:				,					-4 -2 0 2 4 TAP block Wound infiltraion
Test for subaroup diffe	erences:	Chi ² =	1.84. d	f=1(P:	= 0.17). I	² = 45.8	3%		TAF DIOCK WOUND INIIITRION

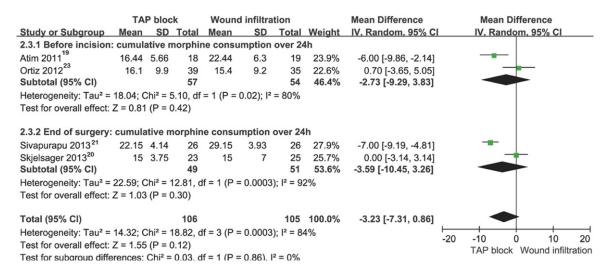
Supplementary Figure 2. Subgroup analysis of different types of surgery (non-laparoscopic vs laparoscopic) in rest pain scores at 1 hour (A), 8 hour (B) and 24 hour (C) postoperatively.



Supplementary Figure 3. Subgroup analysis of different time TAP block performed (before incision vs end of surgery) in rest pain scores at 1 hour (A), 8 hour (B) and 24 hour (C) postoperatively.

	TA	TAP block			d infiltra	tion		Mean Difference	Mean Difference		
Study or Subgroup	Mean	SD	Total	Mean	SD	Total	Weight	IV, Random, 95% C	IV. Random, 95% Cl		
2.2.1 Non-Laparosco	pic surg	jery: c	umula	tive mor	phine co	onsump	tion over	24h			
Atim 2011 ¹⁹	16.44	5.66	18	22.44	6.3	19	20.4%	-6.00 [-9.86, -2.14]			
Sivapurapu 2013 ²¹	22.15	4.14	26	29.15	3.93	26	24.2%	-7.00 [-9.19, -4.81]	i —		
Skjelsager 2013 ²⁰	15	3.75	23	15	7	25	22.1%	0.00 [-3.14, 3.14]	i _+-		
Subtotal (95% CI)			67			70	66.7%	-4.37 [-8.84, 0.09]	-		
Heterogeneity: Tau ² =	13.08; 0	chi² = 1	3.17, d	f = 2 (P =	= 0.001);	l ² = 85	%				
Test for overall effect:	Z = 1.92	(P=0	0.05)								
2.2.2 Laparoscopic s	urgery:	cumu	lative n	norphine	consu	mption	over 24h				
Ortiz 2012 ²³	16.1	9.9	39	15.4	9.2	35	19.2%	0.70 [-3.65, 5.05]			
Tolchard 2012 ²²	12.99	7.84	21	20.52	13.61	22	14.1%	-7.53 [-14.13, -0.93]			
Subtotal (95% CI)			60			57	33.3%	-3.03 [-11.05, 5.00]			
Heterogeneity: Tau ² =	25.73; 0	chi² = 4	1.16, df	= 1 (P =	0.04); l ²	= 76%					
Test for overall effect:	Z = 0.74	(P = 0).46)								
Total (95% CI)			127			127	100.0%	-3.85 [-7.47, -0.22]	•		
Heterogeneity: Tau ² =	12.93; 0	chi² = 1	9.72, d	f = 4 (P =	= 0.0006); l ² = 80	0%		-20 -10 0 10 20		
Test for overall effect:	Test for overall effect: $Z = 2.08$ (P = 0.04)										
Test for subaroup diffe	rences:	Chi ² =	0.08. d	f = 1 (P =	= 0.77). I	² = 0%			TAP block Wound infiltration		

Supplementary Figure 4. Subgroup analysis of different types of surgery (non-laparoscopic vs laparoscopic) in cumulative morphine consumption over 24 hour.



Supplementary Figure 5. Subgroup analysis of different time TAP block performed (before incision vs end of surgery) in cumulative morphine consumption over 24 hour.