Forest Plot - Stroke

Robotic	ID	LogOR	Lower	Upper	p-value	Weight	Weight (%)
0	Grossi 2014	-0.12	-1.08	0.84	0.81	4.14	11.29
	Nasso 2014	1.11	-2.10	4.33	0.50	0.37	1.01
	Nishi 2015	0.00	-1.14	1.14	1.00	2.98	8.12
	Downs 2016	0.00	-1.61	1.61	1.00	1.49	4.06
	Hawkins 2018	-1.11	-4.33	2.10	0.50	0.37	1.01
	Grant 2019	0.29	-0.58	1.16	0.51	5.06	13.80
	Liu 2019	0.41	-1.39	2.21	0.65	1.19	3.23
	Paparella 2020	0.13	-0.88	1.15	0.80	3.71	10.13
	Cetinkaya 2021	0.59	-0.24	1.42	0.16	5.60	15.28
	Pojar 2021	-0.07	-1.58	1.44	0.93	1.68	4.59
	Olsthoorn 2022	0.70	-0.51	1.90	0.26	2.65	7.22
	Subgroup Overall	0.24	-0.12	0.60	0.19		
1	Mihaljevic 2011	-0.70	-3.12	1.71	0.57	0.66	1.80
	Suri 2011	-1.11	-4.32	2.10	0.50	0.37	1.01
	Hawkins 2018	-0.29	-1.80	1.21	0.70	1.70	4.62
	Wang A 2018	0.46	-0.50	1.42	0.35	4.20	11.47
	Coyan 2018	0.00	-2.79	2.79	1.00	0.49	1.35
	Subgroup Overall	0.08	-0.64	0.80	0.84		
Overall		0.21	-0.12	0.53	0.21		
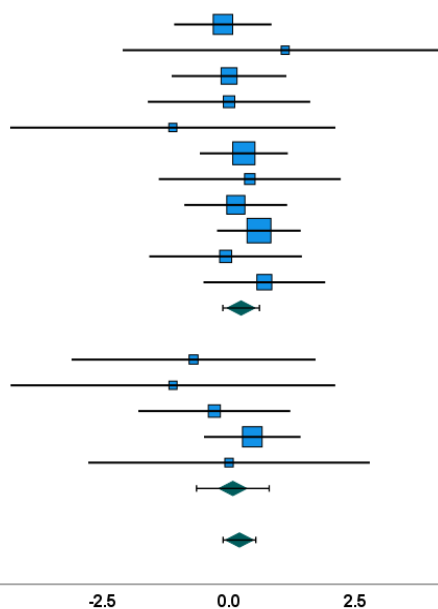
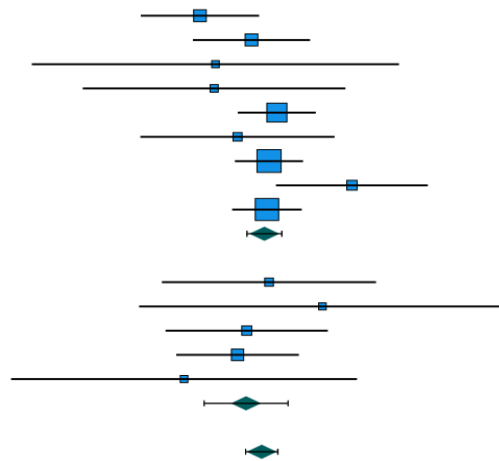**In Favor Sternotomy** | **In Favor Mini-Thoracotomy**

Model: Random-effects model
Heterogeneity: Tau-squared = 0.00, H-squared = 1.00, I-squared = 0.00
Homogeneity: Q = 5.19, df = 15, p-value = 0.99
Test of between-subgroup homogeneity: Q = 0.16, df = 1, p-value = 0.69

Forest Plot - Reoperation for bleeding

Robotic	ID	LogOR	Lower	Upper	p-value	Weight	Weight (%)
0	Nishi 2015	-0.91	-1.69	-0.13	0.02	6.28	7.38
	Downs 2016	-0.23	-1.01	0.54	0.56	6.42	7.55
	Hawkins 2018	-0.71	-3.13	1.72	0.57	0.65	0.77
	Wang Q 2018	-0.72	-2.46	1.01	0.41	1.28	1.51
	Grant 2019	0.10	-0.41	0.62	0.69	14.49	17.04
	Liu 2019	-0.42	-1.70	0.86	0.52	2.34	2.76
	Paparella 2020	-0.00	-0.45	0.45	1.00	18.99	22.34
	Pojar 2021	1.09	0.09	2.10	0.03	3.83	4.50
	Olsthoorn 2022	-0.03	-0.49	0.43	0.91	18.21	21.42
	Subgroup Overall	-0.06	-0.29	0.17	0.61		
1	Mihaljevic 2011	0.00	-1.41	1.41	1.00	1.92	2.26
	Suri 2011	0.70	-1.71	3.12	0.57	0.66	0.77
	Hawkins 2018	-0.29	-1.36	0.78	0.59	3.35	3.94
	Wang A 2018	-0.42	-1.23	0.39	0.31	5.86	6.89
	Coyan 2018	-1.12	-3.40	1.16	0.34	0.74	0.87
	Subgroup Overall	-0.30	-0.86	0.25	0.28		
Overall		-0.10	-0.31	0.12	0.38		

**In Favor Sternotomy** | **In Favor Mini-Thoracotomy**

Model: Random-effects model
Heterogeneity: Tau-squared = 0.00, H-squared = 1.00, I-squared = 0.00
Homogeneity: Q = 13.48, df = 13, p-value = 0.41
Test of between-subgroup homogeneity: Q = 0.62, df = 1, p-value = 0.43

Forest Plot - Renal Failure

| Robotic	ID	LogOR	Lower	Upper	p-value	Weight	Weight (%)
0	Nishi 2015	0.32	-0.59	1.24	0.49	2.11	11.21
	Downs 2016	-0.70	-2.40	1.00	0.42	0.99	5.26
	Hawkins 2018	0.42	-1.40	2.24	0.65	0.89	4.76
	Wang Q 2018	0.00	-1.99	1.99	1.00	0.78	4.14
	Grant 2019	0.29	-0.77	1.36	0.59	1.81	9.66
	Liu 2019	1.96	-1.01	4.93	0.20	0.39	2.09
	Paparella 2020	0.11	-0.18	0.41	0.45	3.58	19.07
	Cetinkaya 2021	1.82	1.10	2.54	0.00	2.55	13.57
	Pojar 2021	0.05	-1.23	1.34	0.93	1.46	7.79
	Olsthoorn 2022	0.85	-0.50	2.21	0.22	1.36	7.24
	Subgroup Overall	0.50	-0.02	1.02	0.06		
1	Suri 2011	1.11	-2.10	4.32	0.50	0.34	1.81
	Hawkins 2018	-0.70	-3.10	1.71	0.57	0.57	3.02
	Wang A 2018	0.82	-0.36	2.01	0.17	1.61	8.57
	Coyan 2018	1.10	-2.12	4.31	0.50	0.34	1.81
	Subgroup Overall	0.63	-0.33	1.59	0.20		
Overall		0.51	0.06	0.96	0.03		
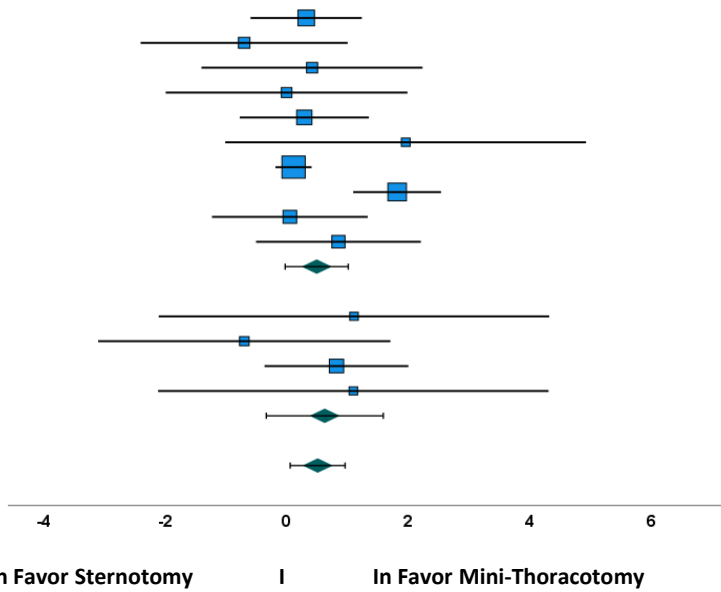
Model: Random-effects model
Heterogeneity: Tau-squared = 0.26, H-squared = 1.85, I-squared = 0.46
Homogeneity: Q = 23.46, df = 13, p-value = 0.04
Test of between-subgroup homogeneity: Q = 0.06, df = 1, p-value = 0.81

In Favor Sternotomy | In Favor Mini-Thoracotomy

Funnel Plot - Renal Failure

Forest Plot - Atrial Fibrillation
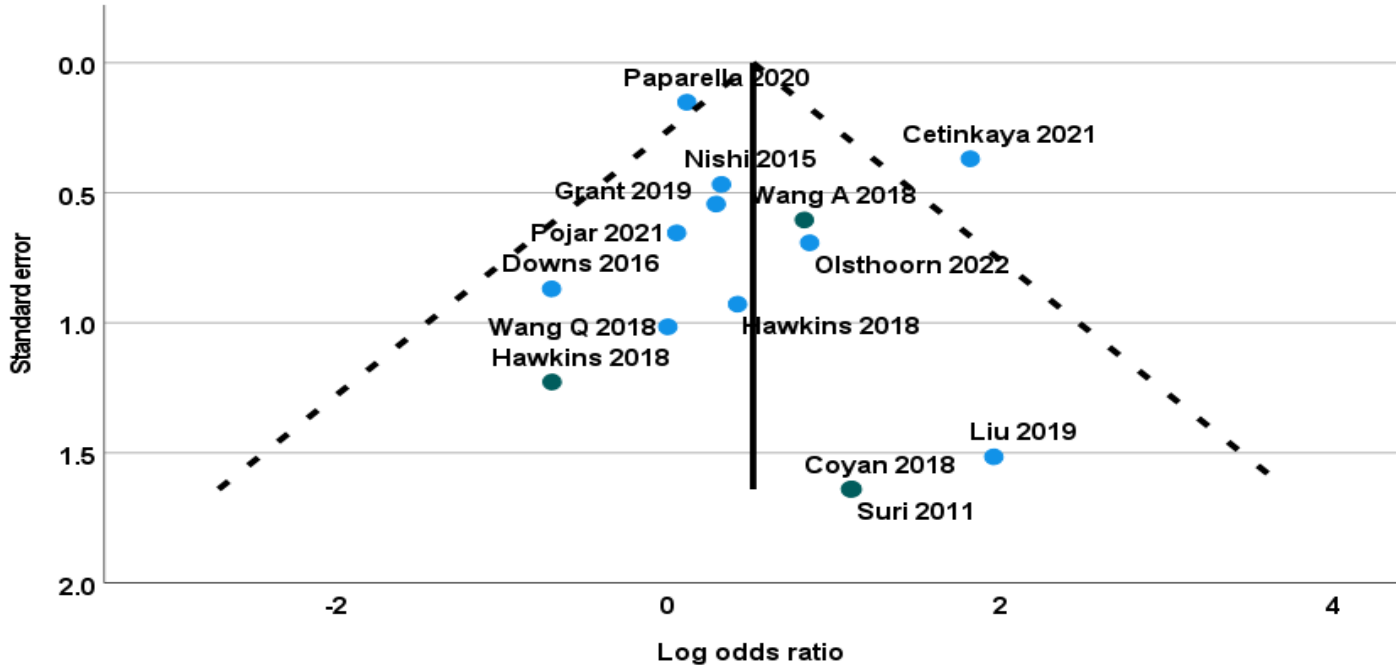
| Robotic	ID	LogOR	Lower	Upper	p-value	Weight	Weight (%)
0	Nishi 2015	0.12	-0.15	0.38	0.38	24.85	12.17
	Downs 2016	0.20	-0.19	0.59	0.32	16.07	7.87
	Hawkins 2018	0.16	-0.62	0.94	0.69	5.50	2.69
	Wang Q 2018	0.32	-0.80	1.44	0.57	2.88	1.41
	Liu 2019	0.35	-0.82	1.51	0.56	2.67	1.31
	Paparella 2020	0.12	-0.09	0.32	0.27	30.34	14.86
	Cetinkaya 2021	0.65	0.30	0.99	0.00	18.82	9.22
	Pojar 2021	-0.01	-0.43	0.40	0.95	14.96	7.33
	Olsthoorn 2022	0.46	0.22	0.69	0.00	27.51	13.47
	Subgroup Overall	0.26	0.09	0.43	0.00		
1	Mihaljevic 2011	0.19	-0.41	0.78	0.54	8.68	4.25
	Hawkins 2018	0.15	-0.21	0.50	0.41	18.24	8.93
	Wang A 2018	0.54	0.27	0.80	0.00	24.95	12.22
	Coyan 2018	0.14	-0.46	0.74	0.65	8.67	4.25
	Subgroup Overall	0.31	0.06	0.57	0.02		
Overall		0.27	0.14	0.41	0.00		
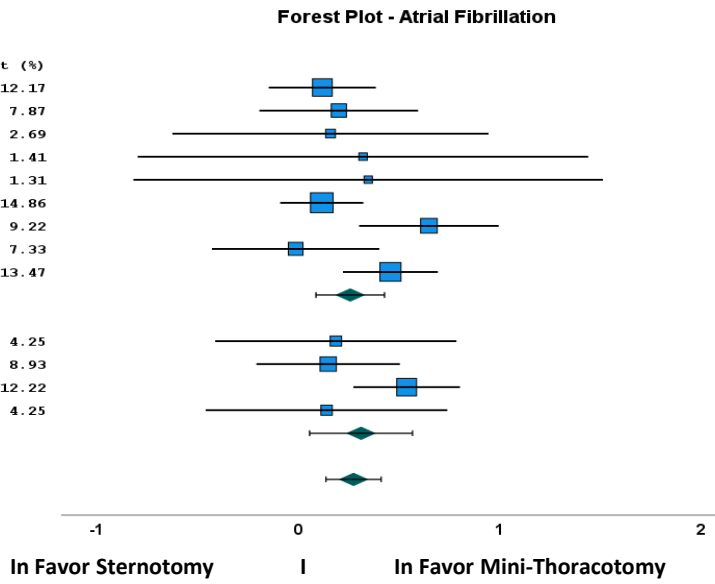
Model: Random-effects model
Heterogeneity: Tau-squared = 0.02, H-squared = 1.65, I-squared = 0.39
Homogeneity: Q = 16.96, df = 12, p-value = 0.15
Test of between-subgroup homogeneity: Q = 0.12, df = 1, p-value = 0.73

In Favor Sternotomy   I   In Favor Mini-Thoracotomy

Funnel Plot - Atrial Fibrillation
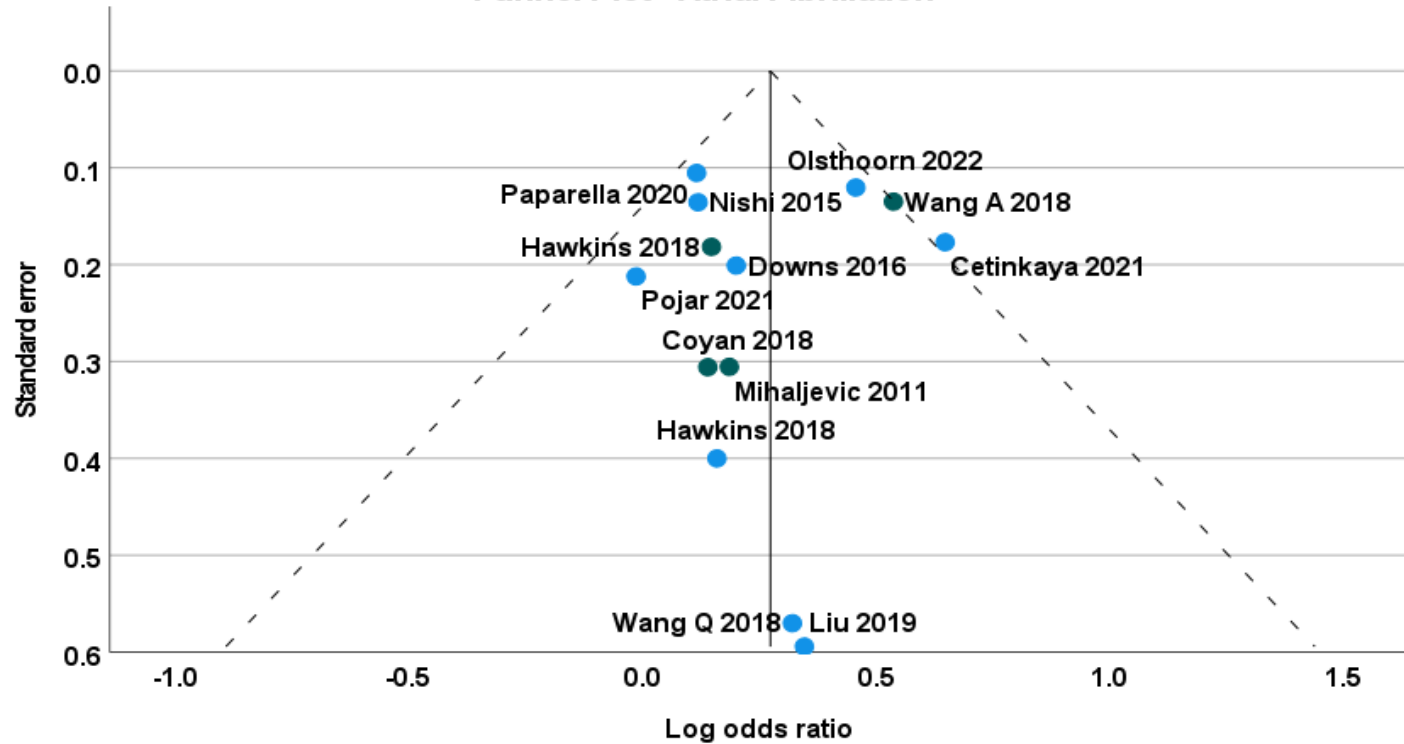
Forest Plot - Blood transfusion

Robotic	ID	LogOR	Lower	Upper	p-value	Weight	Weight (%)
0	Nishi 2015	-0.13	-0.34	0.08	0.24	7.09	11.25
	Downs 2016	1.09	0.69	1.49	0.00	5.85	9.27
	Hawkins 2018	1.12	0.22	2.01	0.01	2.96	4.69
	Wang Q 2018	1.42	0.66	2.18	0.00	3.58	5.67
	Grant 2019	0.43	0.13	0.72	0.00	6.59	10.44
	Liu 2019	0.46	0.03	0.89	0.04	5.60	8.88
	Paparella 2020	0.33	0.17	0.49	0.00	7.35	11.65
	Pojar 2021	0.74	0.30	1.18	0.00	5.56	8.82
	Subgroup Overall	0.60	0.26	0.94	0.00		
1	Mihaljevic 2011	0.78	-0.12	1.67	0.09	2.96	4.69
	Suri 2011	0.63	-0.21	1.46	0.14	3.22	5.10
	Hawkins 2018	0.18	-0.24	0.61	0.39	5.69	9.02
	Wang 1 2018	0.75	0.46	1.03	0.00	6.65	10.54
	Subgroup Overall	0.56	0.21	0.90	0.00		
Overall		0.57	0.33	0.82	0.00		
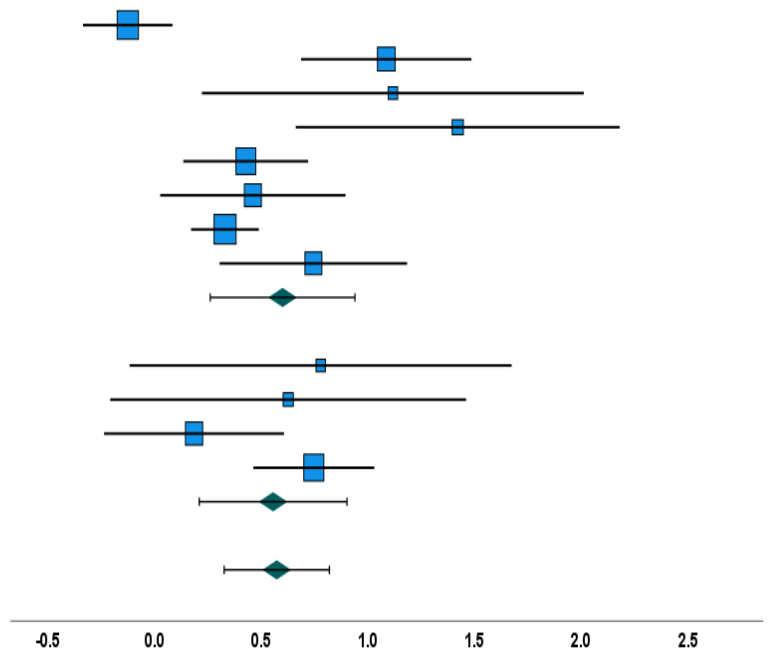
Model: Random-effects model
Heterogeneity: Tau-squared = 0.13, H-squared = 5.18, I-squared = 0.81
Homogeneity: Q = 55.68, df = 11, p-value = 0.00
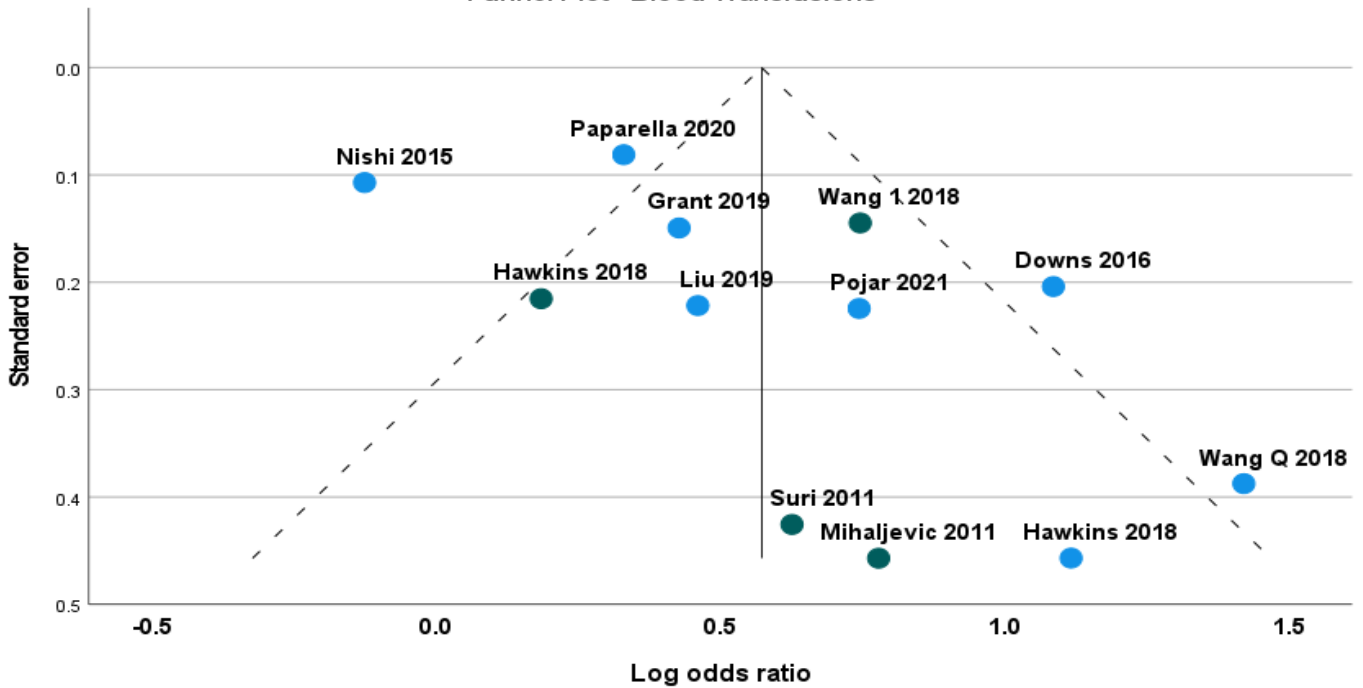Test of overall effect size: z = 4.55, p-value = 0.00
Test of between-subgroup homogeneity: Q = 0.03, df = 1, p-value = 0.86

In Favor Sternotomy   I   In Favor Mini-Thoracotomy

Funnel Plot - Blood Transfusions

## Forest Plot - Prolonged ventilation

Robotic	ID	LogOR	Lower	Upper	p-value	Weight	Weight (%)
0	Nishi 2015	-0.71	-1.47	0.06	0.07	2.80	13.38
	Downs 2016	-0.54	-1.20	0.12	0.11	3.16	15.07
	Hawkins 2018	0.43	-0.87	1.74	0.52	1.54	7.35
	Wang Q 2018	0.54	-0.93	2.02	0.47	1.30	6.21
	Pojar 2021	0.93	0.16	1.71	0.02	2.77	13.25
	Olsthoorn 2022	0.29	-0.77	1.35	0.59	2.01	9.58
	Subgroup Overall	0.08	-0.52	0.68	0.79		
1	Mihaljevic 2011	0.42	-1.39	2.22	0.65	0.95	4.52
	Suri 2011	0.00	-2.79	2.79	1.00	0.45	2.15
	Hawkins 2018	0.34	-0.39	1.07	0.36	2.91	13.91
	Wang A 2018	0.64	-0.05	1.32	0.07	3.06	14.61
	Subgroup Overall	0.48	0.00	0.95	0.05		
Overall		0.20	-0.23	0.63	0.36		
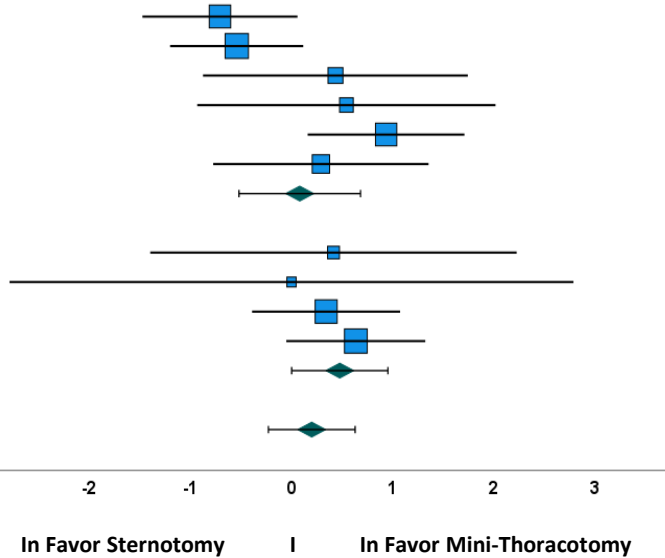
Model: Random-effects model
Heterogeneity: Tau-squared = 0.20, H-squared = 1.90, I-squared = 0.47
Homogeneity: Q = 15.78, df = 9, p-value = 0.07
Test of between-subgroup homogeneity: Q = 1.03, df = 1, p-value = 0.31

In Favor Sternotomy   I   In Favor Mini-Thoracotomy

Forest Plot - Wound infection

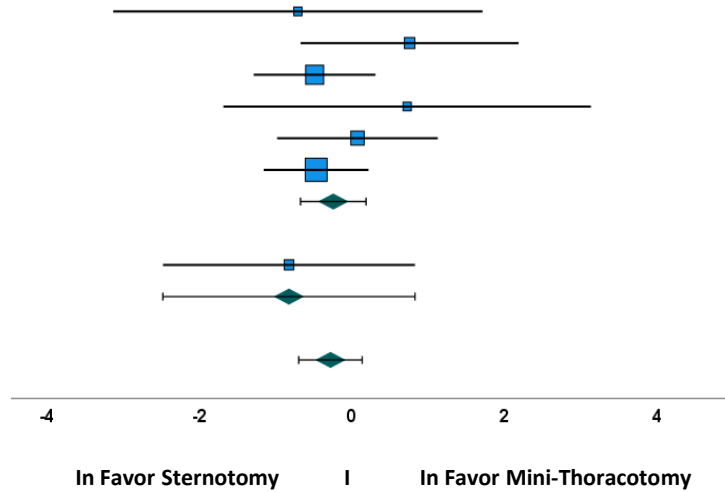| Robotic	ID	LogOR	Lower	Upper	p-value	Weight	Weight (%)
0	Grossi 2014	0.31	-0.32	0.93	0.34	4.73	33.51
	Nishi 2015	1.61	-1.43	4.65	0.30	0.40	2.82
	Downs 2016	0.00	-3.92	3.92	1.00	0.24	1.72
	Hawkins 2018	0.00	-3.93	3.93	1.00	0.24	1.71
	Liu 2019	1.74	0.49	2.99	0.01	1.94	13.77
	Paparella 2020	0.34	-0.33	1.00	0.32	4.46	31.62
	Cetinkaya 2021	0.00	-3.92	3.92	1.00	0.24	1.72
	Pojar 2021	1.76	-0.33	3.84	0.10	0.80	5.69
	Subgroup Overall	0.66	0.09	1.23	0.02		
1	Wang A 2018	1.10	-1.16	3.37	0.34	0.69	4.90
	Coyan 2018	1.11	-2.10	4.32	0.50	0.36	2.53
	Subgroup Overall	1.10	-0.75	2.96	0.24		
Overall		0.68	0.15	1.20	0.01		
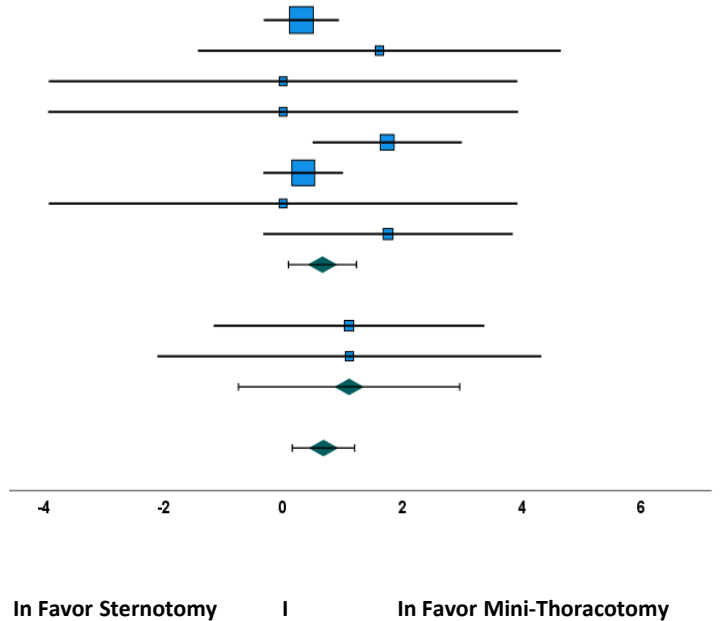
Model: Random-effects model
Heterogeneity: Tau-squared = 0.11, H-squared = 1.20, I-squared = 0.17
Homogeneity: Q = 6.78, df = 9, p-value = 0.66
Test of overall effect size: z = 2.54, p-value = 0.01
Test of between-subgroup homogeneity: Q = 0.20, df = 1, p-value = 0.65

In Favor Sternotomy   I   In Favor Mini-Thoracotomy

Funnel Plot - Wound infection
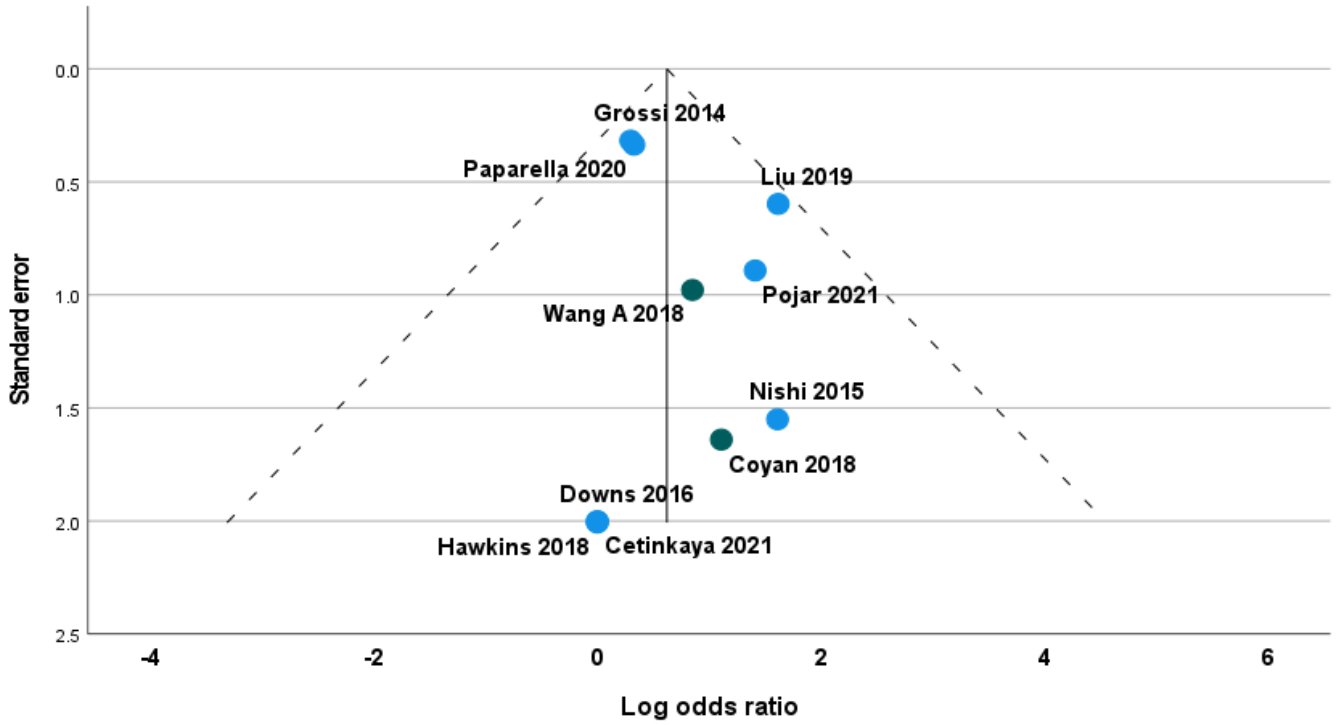
Forest Plot - Mid-term Reoperation

Robotic	ID	LogOR	Lower	Upper	p-value	Weight	Weight (%)
0	Nasso 2014	-0.71	-3.13	1.72	0.57	0.66	2.95
	Wang Q 2018	0.76	-0.67	2.19	0.30	1.88	8.45
	Grant 2019	-0.49	-1.28	0.31	0.23	6.03	27.15
	Liu 2019	0.73	-1.68	3.14	0.55	0.66	2.98
	Pojar 2021	0.08	-0.98	1.13	0.89	3.46	15.57
	Olsthoorn 2022	-0.47	-1.15	0.22	0.18	8.13	36.58
	Subgroup Overall	-0.24	-0.67	0.19	0.27		
1	Wang A 2018	-0.82	-2.48	0.83	0.33	1.41	6.33
	Subgroup Overall	-0.82	-2.48	0.83	0.33		
Overall		-0.28	-0.69	0.14	0.19		

Model: Random-effects model
Heterogeneity: Tau-squared = 0.00, H-squared = 1.00, I-squared = 0.00
Homogeneity: Q = 4.20, df = 6, p-value = 0.65
Test of between-subgroup homogeneity: Q = 0.45, df = 1, p-value = 0.50

In Favor Sternotomy   I   **In Favor Mini-Thoracotomy**

Forest Plot - Mid-term Mortality

| Robotic	ID	LogOR	Lower	Upper	p-value	Weight	Weight (%)
0	Nasso 2014	-0.01	-2.80	2.78	0.99	0.48	1.28
	Wang Q 2018	0.00	-3.93	3.93	1.00	0.25	0.65
	Grant 2019	0.73	0.27	1.20	0.00	9.50	25.28
	Liu 2019	0.26	-1.07	1.59	0.70	1.96	5.22
	Cetinkaya 2021	0.64	0.13	1.15	0.01	8.60	22.86
	Pojar 2021	0.45	-0.37	1.27	0.29	4.47	11.89
	Olsthoorn 2022	-0.08	-0.60	0.45	0.78	8.32	22.12
	Subgroup Overall	0.42	0.07	0.78	0.02		
1	Wang A 2018	0.25	-0.63	1.13	0.58	4.02	10.69
	Subgroup Overall	0.25	-0.63	1.13	0.58		
Overall		0.41	0.09	0.73	0.01		
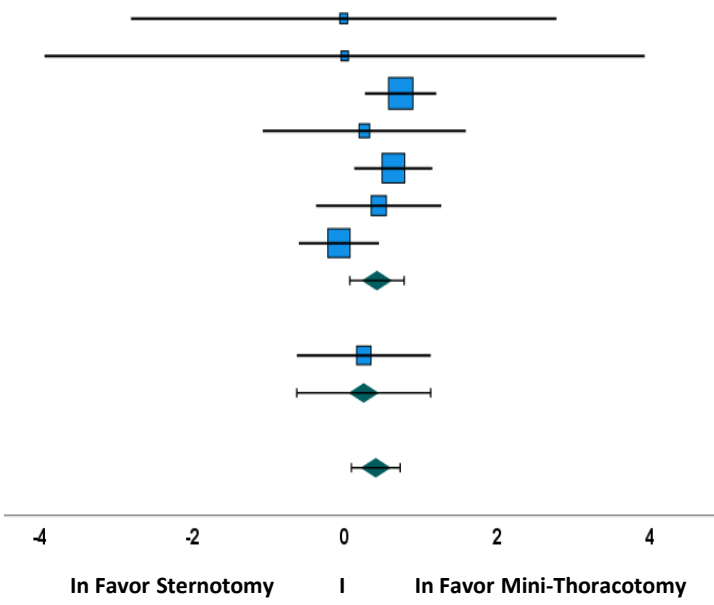
Model: Random-effects model
Heterogeneity: Tau-squared = 0.05, H-squared = 1.32, I-squared = 0.24
Homogeneity: Q = 6.19, df = 7, p-value = 0.52
Test of between-subgroup homogeneity: Q = 0.13, df = 1, p-value = 0.72

In Favor Sternotomy   I   In Favor Mini-Thoracotomy

Funnel Plot - Mid-term Mortality
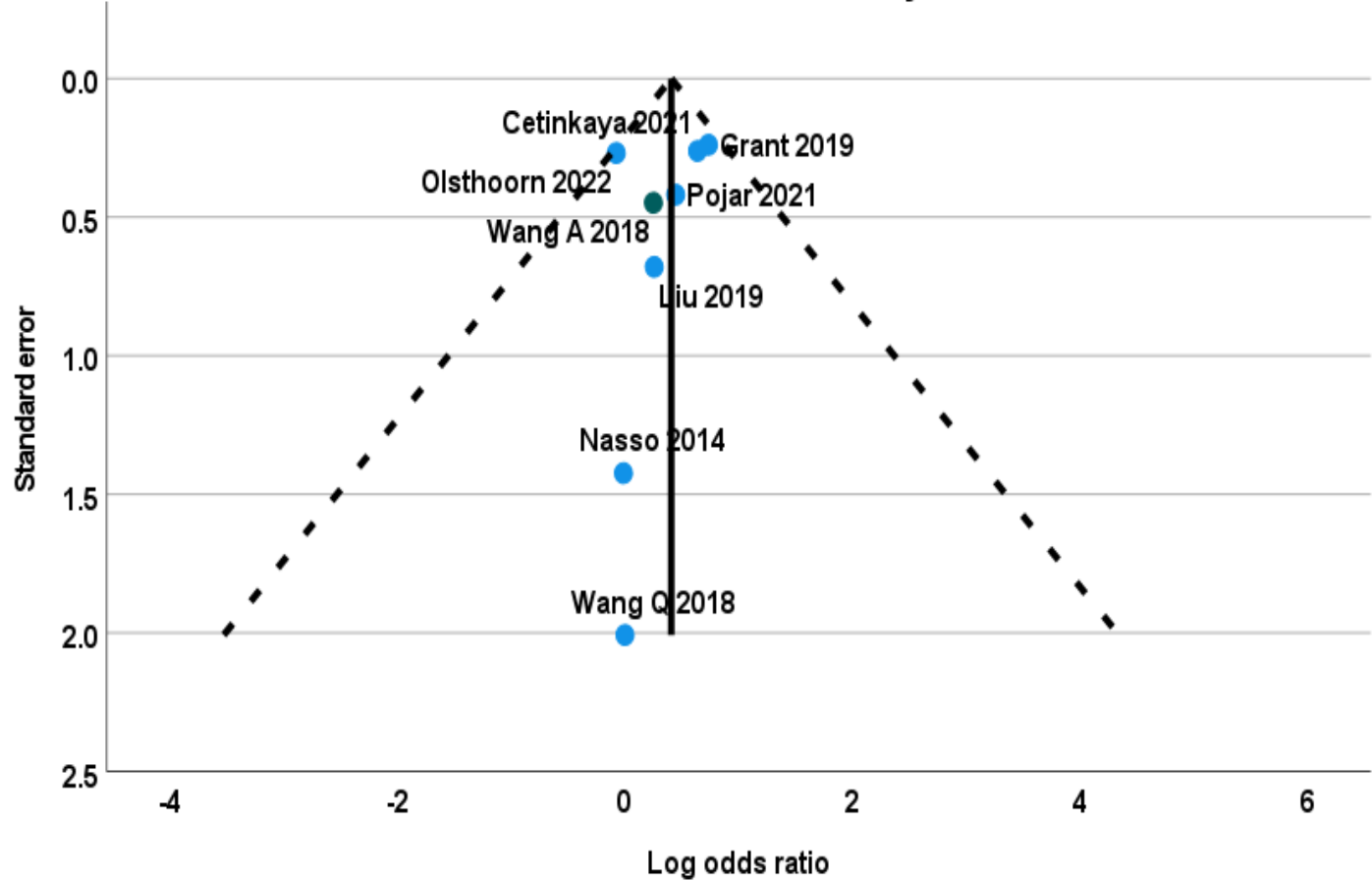
Forest Plot - Clamp Time

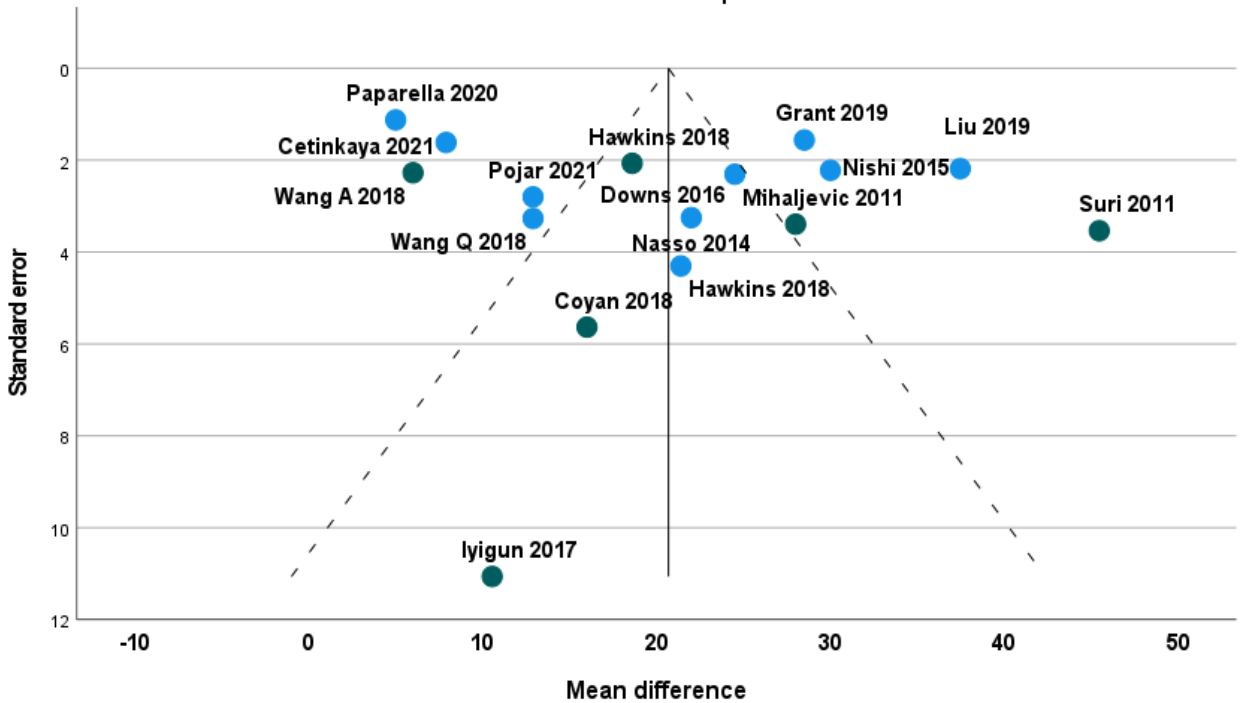| Robotic	ID	Mean difference	Lower	Upper	p-value	Weight	Weight (%)
0	Nasso 2014	22.00	15.63	28.37	0.00	0.01	6.34
	Nishi 2015	30.00	25.65	34.35	0.00	0.01	6.61
	Downs 2016	24.50	19.98	29.02	0.00	0.01	6.59
	Hawkins 2018	21.40	12.97	29.83	0.00	0.01	5.99
	Wang Q 2018	12.90	6.50	19.30	0.00	0.01	6.33
	Grant 2019	28.50	25.44	31.56	0.00	0.01	6.74
	Liu 2019	37.47	33.19	41.75	0.00	0.01	6.62
	Paparella 2020	5.00	2.80	7.20	0.00	0.01	6.80
	Cetinkaya 2021	7.90	4.74	11.06	0.00	0.01	6.73
	Pojar 2021	12.90	7.42	18.38	0.00	0.01	6.47
	Subgroup Overall	20.23	13.62	26.85	0.00		
1	Mihaljevic 2011	28.00	21.35	34.65	0.00	0.01	6.30
	Suri 2011	45.46	38.53	52.39	0.00	0.01	6.25
	Iyigun 2017	10.55	-11.13	32.23	0.34	0.00	3.48
	Hawkins 2018	18.60	14.55	22.65	0.00	0.01	6.65
	Wang A 2018	6.00	1.54	10.46	0.01	0.01	6.60
	Coyan 2018	16.00	4.96	27.04	0.00	0.01	5.49
	Subgroup Overall	21.37	9.56	33.17	0.00		
Overall		20.68	14.92	26.45	0.00		
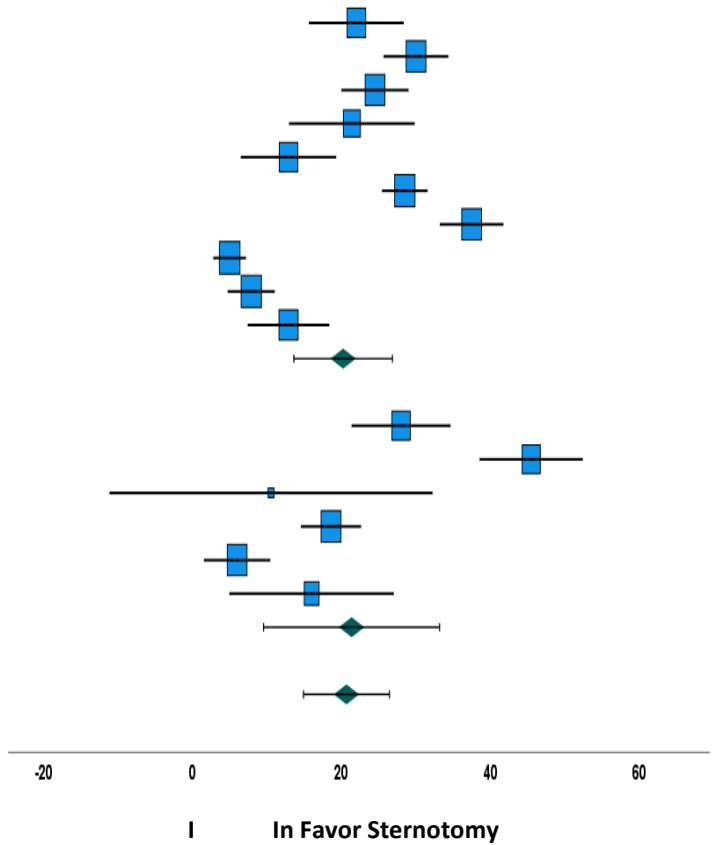
Model: Random-effects model

Heterogeneity: Tau-squared = 125.87, H-squared = 24.60, I-squared = 0.96

Homogeneity: Q = 439.18, df = 15, p-value = 0.00

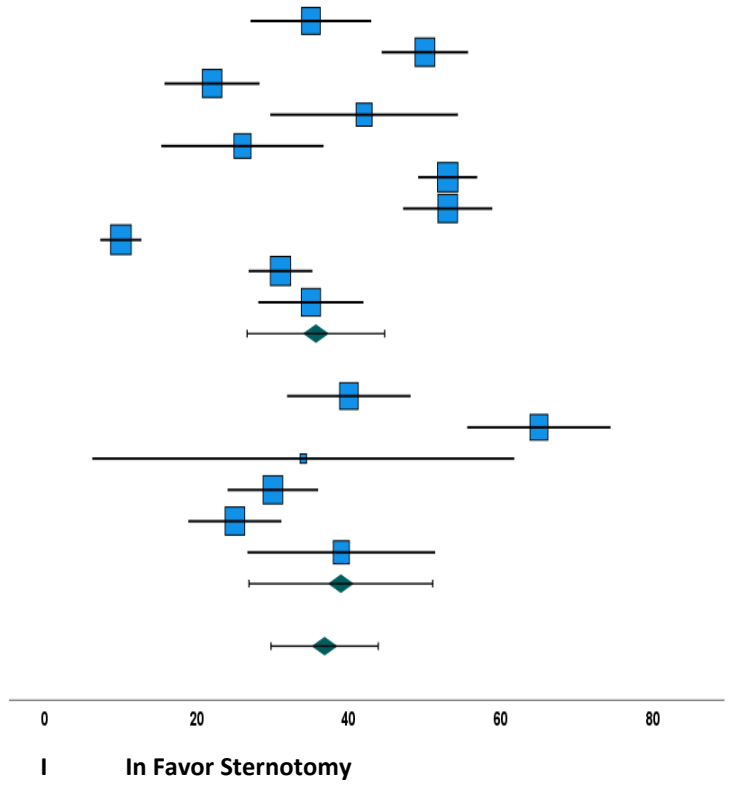Test of overall effect size: z = 7.03, p-value = 0.00

Test of between-subgroup homogeneity: Q = 0.03, df = 1, p-value = 0.87

In Favor Sternotomy

Funnel Plot - Cross Clamp time

Forest Plot - CPB time

| Robotic	ID	Mean difference	Lower	Upper	p-value	Weight	Weight (%)
0	Nasso 2014	35.00	27.06	42.94	0.00	0.00	6.40
	Nishi 2015	50.00	44.32	55.68	0.00	0.01	6.66
	Downs 2016	22.00	15.75	28.25	0.00	0.01	6.60
	Hawkins 2018	42.00	29.65	54.35	0.00	0.00	5.74
	Wang Q 2018	26.00	15.33	36.67	0.00	0.00	6.01
	Grant 2019	53.00	49.11	56.89	0.00	0.01	6.82
	Liu 2019	53.00	47.13	58.87	0.00	0.01	6.64
	Paparella 2020	10.00	7.29	12.71	0.00	0.01	6.89
	Cetinkaya 2021	31.00	26.80	35.20	0.00	0.01	6.80
	Pojar 2021	35.00	28.09	41.91	0.00	0.01	6.53
	Subgroup Overall	35.66	26.62	44.71	0.00		
1	Mihaljevic 2011	40.00	31.87	48.13	0.00	0.00	6.37
	Suri 2011	65.00	55.56	74.44	0.00	0.00	6.19
	Iyigun 2017	34.00	6.24	61.76	0.02	0.00	3.35
	Hawkins 2018	30.00	24.04	35.96	0.00	0.01	6.63
	Wang A 2018	25.00	18.87	31.13	0.00	0.01	6.62
	Coyan 2018	39.00	26.65	51.35	0.00	0.00	5.74
	Subgroup Overall	38.95	26.87	51.04	0.00		
	Overall	36.81	29.75	43.87	0.00		

Model: Random-effects model
Heterogeneity: Tau-squared = 186.19, H-squared = 21.09, I-squared = 0.95
Homogeneity: Q = 524.67, df = 15, p-value = 0.00
Test of overall effect size: z = 10.22, p-value = 0.00
Test of between-subgroup homogeneity: Q = 0.18, df = 1, p-value = 0.67

In Favor Sternotomy

Funnel Plot - CPB time
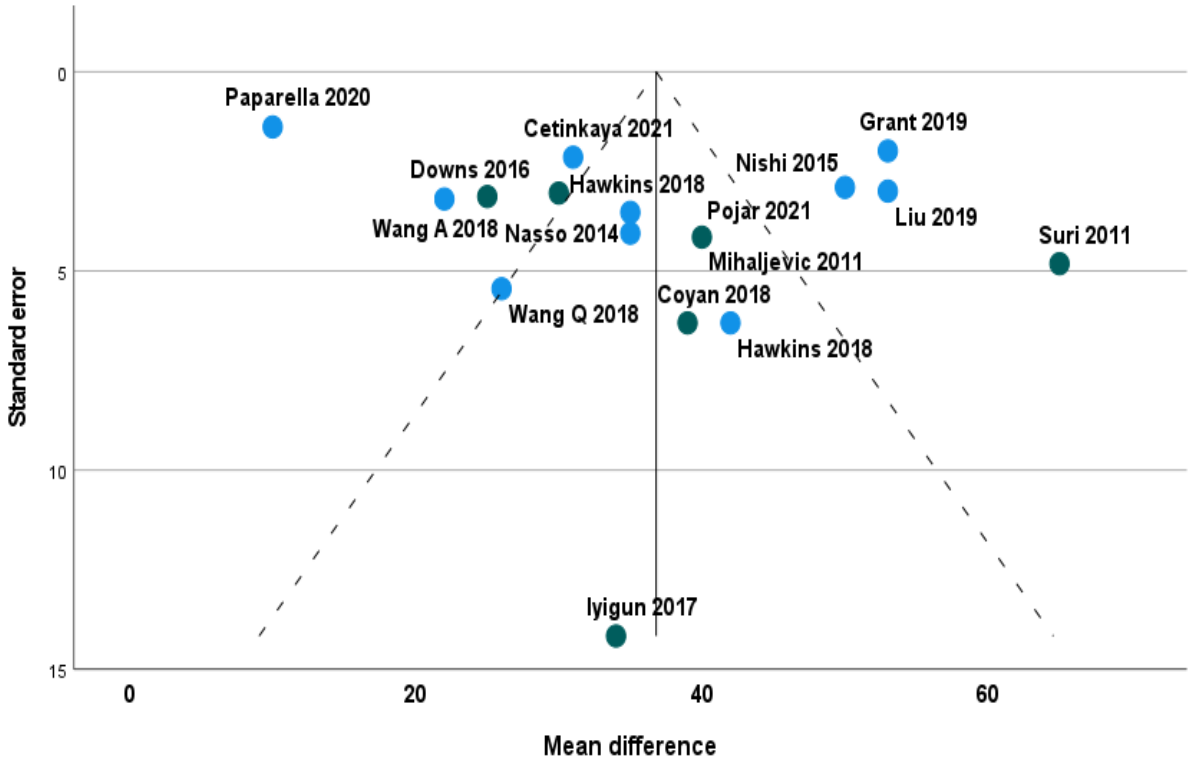
Forest Plot - Total operative time

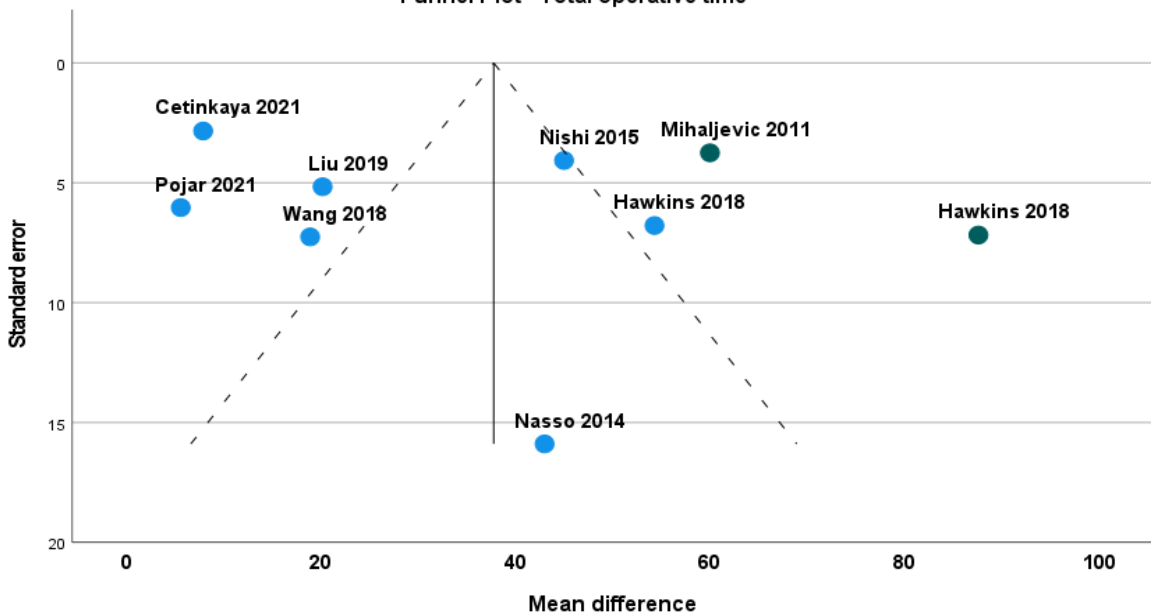| Robotic	ID	Mean difference	Lower	Upper	p-value	Weight	Weight (%)
0	Nasso 2014	43.00	11.86	74.14	0.01	0.00	8.80
	Nishi 2015	45.00	37.03	52.97	0.00	0.00	11.63
	Hawkins 2018	54.30	41.01	67.59	0.00	0.00	11.18
	Wang 2018	18.90	4.68	33.12	0.01	0.00	11.08
	Liu 2019	20.18	10.06	30.30	0.00	0.00	11.47
	Cetinkaya 2021	7.90	2.34	13.46	0.01	0.00	11.76
	Pojar 2021	5.60	-6.22	17.42	0.35	0.00	11.32
	Subgroup Overall	26.85	12.19	41.50	0.00		
1	Mihaljevic 2011	60.00	52.65	67.35	0.00	0.00	11.67
	Hawkins 2018	87.60	73.53	101.67	0.00	0.00	11.10
	Subgroup Overall	73.12	46.11	100.14	0.00		
	Overall	37.78	19.68	55.87	0.00		

In Favor Sternotomy
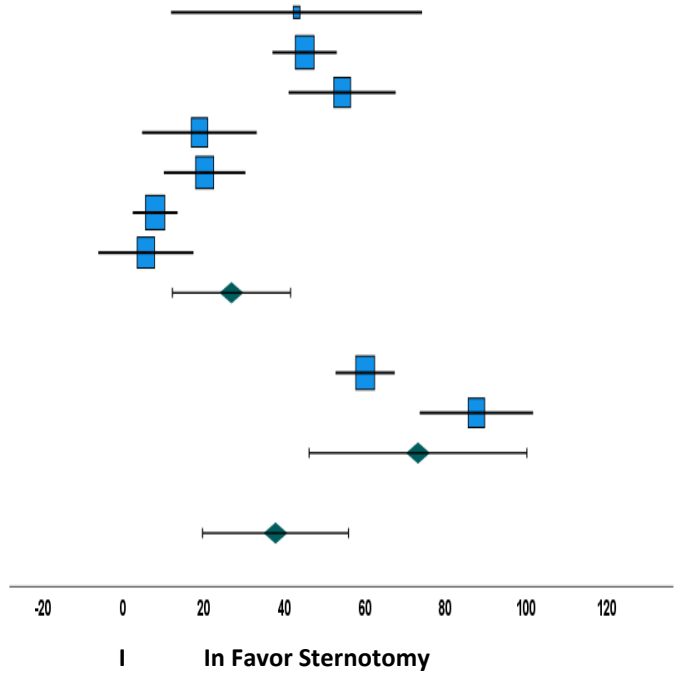
Model: Random-effects model
Heterogeneity: Tau-squared = 716.35, H-squared = 29.06, I-squared = 0.97
Homogeneity: Q = 237.11, df = 8, p-value = 0.00
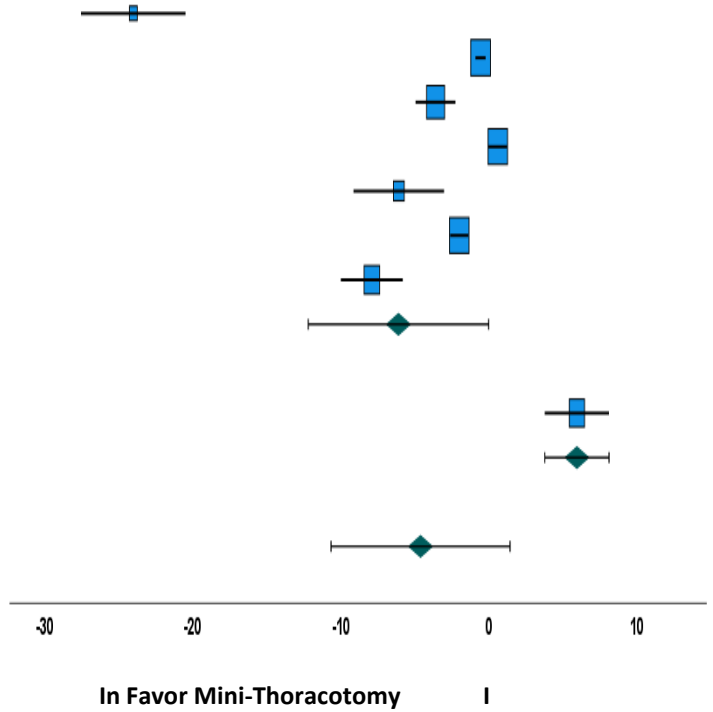Test of overall effect size: z = 4.09, p-value = 0.00
Test of between-subgroup homogeneity: Q = 8.71, df = 1, p-value = 0.00

Funnel Plot - Total operative time

Forest Plot - Ventilation time

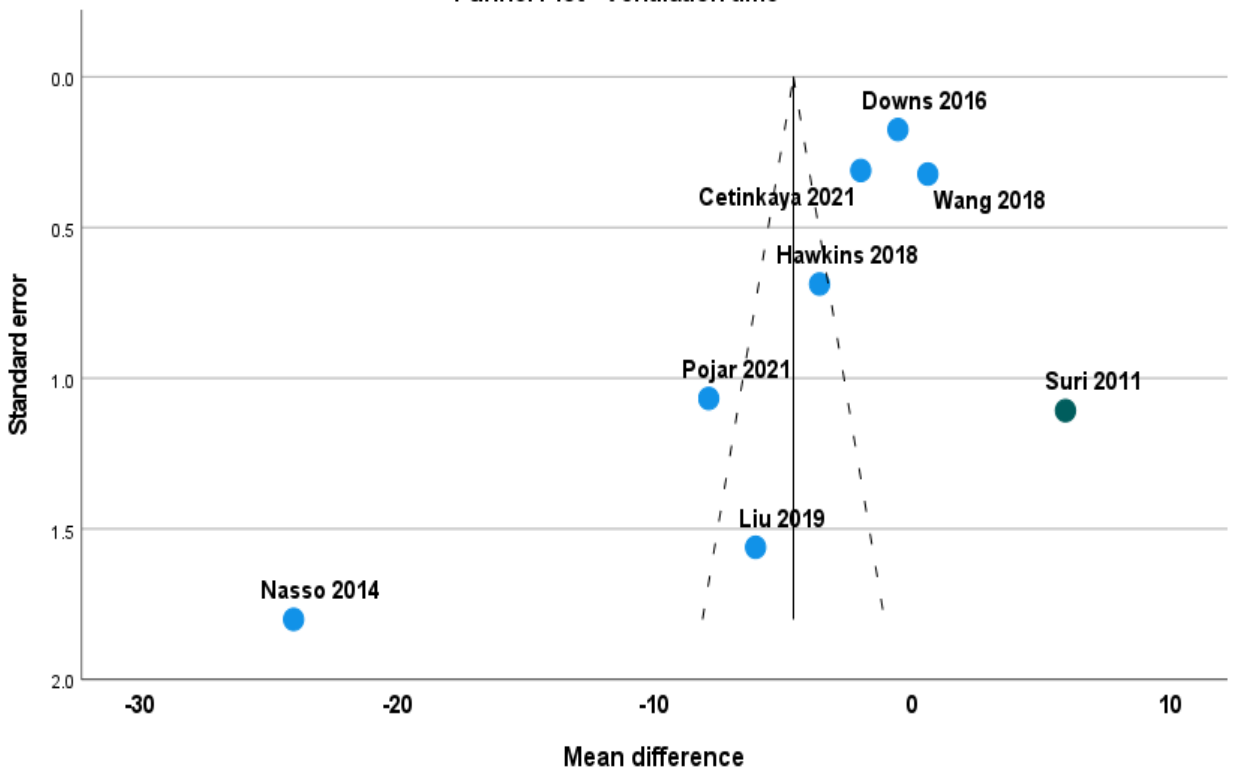| Robotic	ID	Mean difference	Lower	Upper	p-value	Weight	Weight (%)
0	Nasso 2014	-24.00	-27.53	-20.47	0.00	0.01	12.15
	Downs 2016	-0.56	-0.90	-0.22	0.00	0.01	12.67
	Hawkins 2018	-3.60	-4.95	-2.25	0.00	0.01	12.60
	Wang 2018	0.60	-0.03	1.23	0.06	0.01	12.66
	Liu 2019	-6.08	-9.14	-3.02	0.00	0.01	12.28
	Cetinkaya 2021	-2.00	-2.61	-1.39	0.00	0.01	12.66
	Pojar 2021	-7.90	-9.99	-5.81	0.00	0.01	12.49
	Subgroup Overall	-6.10	-12.19	-0.01	0.05		
1	Suri 2011	5.94	3.77	8.11	0.00	0.01	12.48
	Subgroup Overall	5.94	3.77	8.11	0.00		
Overall		-4.61	-10.65	1.43	0.13		

Model: Random-effects model
Heterogeneity: Tau-squared = 74.92, H-squared = 374.59, I-squared = 1.00
Homogeneity: Q = 310.23, df = 7, p-value = 0.00
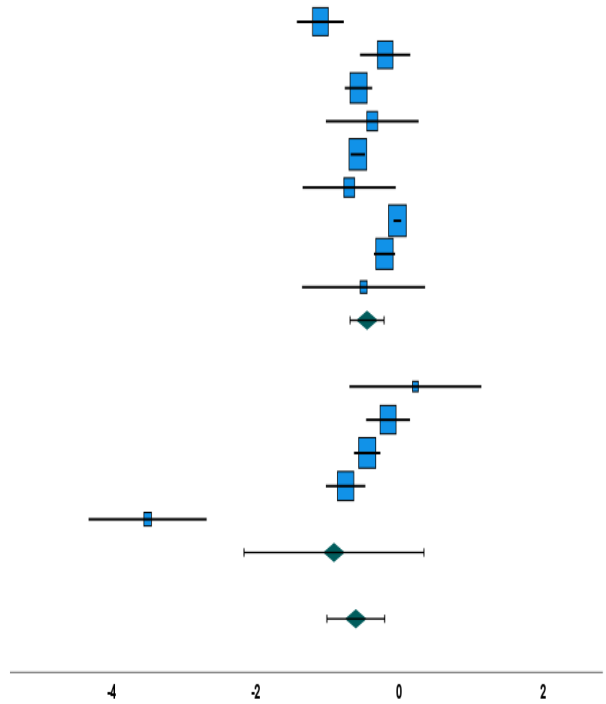Test of overall effect size: z = -1.50, p-value = 0.13
Test of between-subgroup homogeneity: Q = 13.33, df = 1, p-value = 0.00

In Favor Mini-Thoracotomy   I

Funnel Plot - Ventilation time

Forest Plot - ICU stay

Robotic	ID	Mean difference	Lower	Upper	p-value	Weight	Weight (%)
0	Nasso 2014	-1.10	-1.43	-0.77	0.00	1.80	7.53
	Nishi 2015	-0.20	-0.55	0.15	0.26	1.78	7.48
	Downs 2016	-0.57	-0.76	-0.38	0.00	1.86	7.79
	Hawkins 2018	-0.38	-1.02	0.26	0.25	1.57	6.58
	Wang Q 2018	-0.58	-0.68	-0.48	0.00	1.88	7.89
	Liu 2019	-0.70	-1.35	-0.05	0.03	1.57	6.57
	Paparella 2020	-0.03	-0.08	0.02	0.27	1.89	7.91
	Cetinkaya 2021	-0.21	-0.36	-0.06	0.01	1.87	7.84
	Pojar 2021	-0.50	-1.36	0.36	0.25	1.39	5.83
	Subgroup Overall	-0.45	-0.69	-0.22	0.00		
1	Suri 2011	0.22	-0.70	1.14	0.64	1.34	5.61
	Iyigun 2017	-0.16	-0.46	0.14	0.30	1.81	7.58
	Hawkins 2018	-0.45	-0.63	-0.27	0.00	1.86	7.80
	Wang A 2018	-0.75	-1.02	-0.48	0.00	1.82	7.64
	Coyan 2018	-3.50	-4.32	-2.68	0.00	1.42	5.95
	Subgroup Overall	-0.91	-2.16	0.34	0.15		
	Overall	-0.61	-1.01	-0.21	0.00		

In Favor Mini-Thoracotomy

Model: Random-effects model
Heterogeneity: Tau-squared = 0.53, H-squared = 60.53, I-squared = 0.98
Homogeneity: Q = 226.51, df = 13, p-value = 0.00
Test of overall effect size: z = -2.97, p-value = 0.00
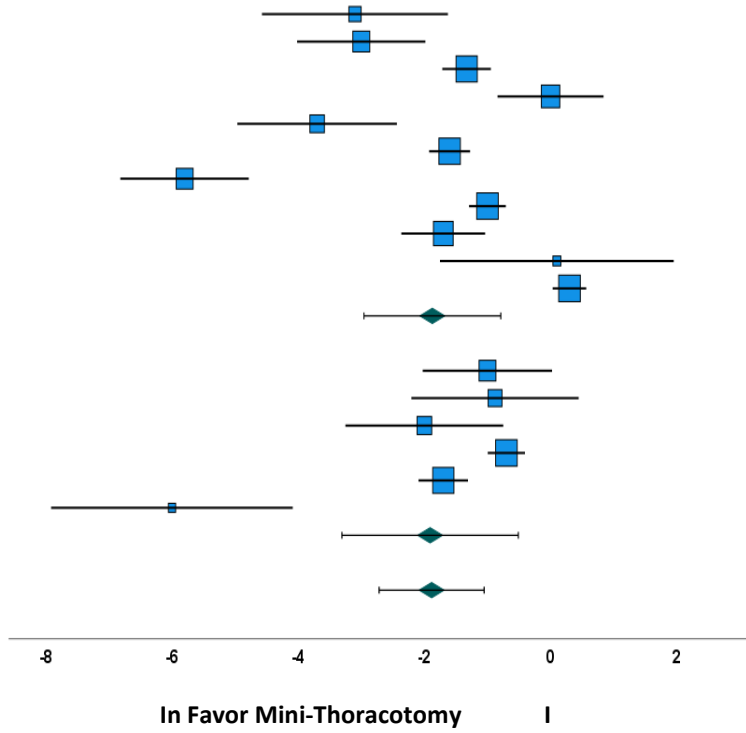Test of between-subgroup homogeneity: Q = 0.50, df = 1, p-value = 0.48

Funnel Plot - ICU stay
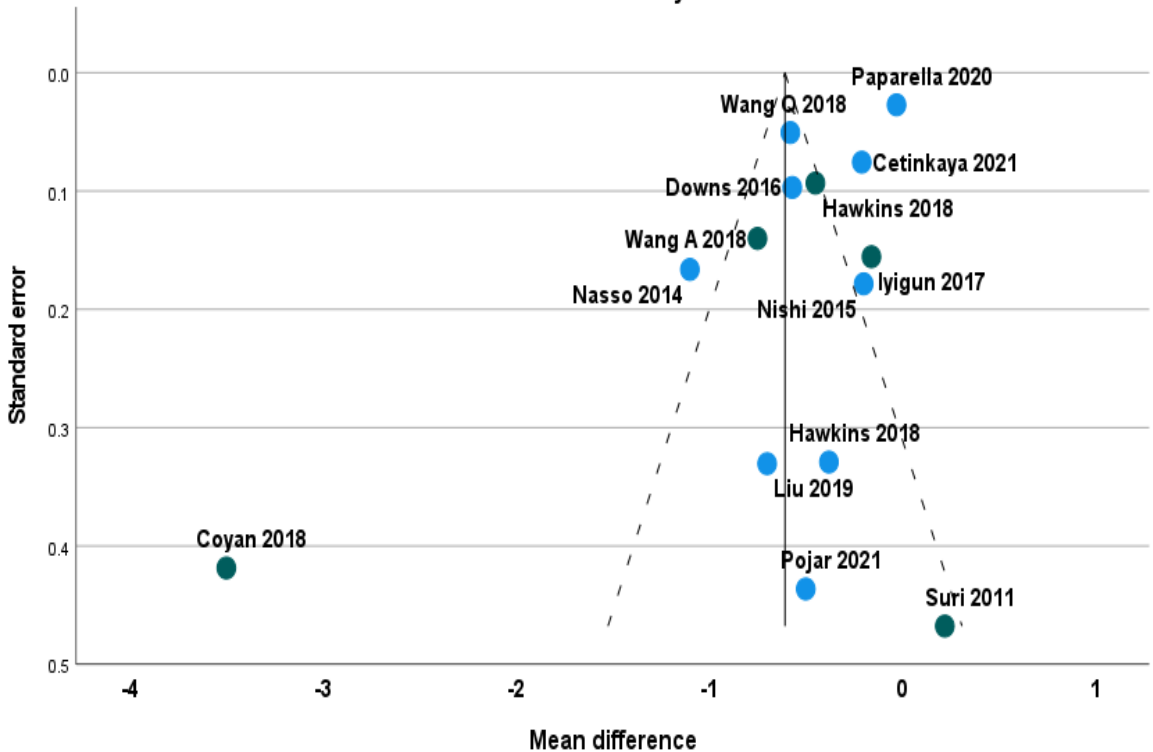
Forest Plot - Hospital stay
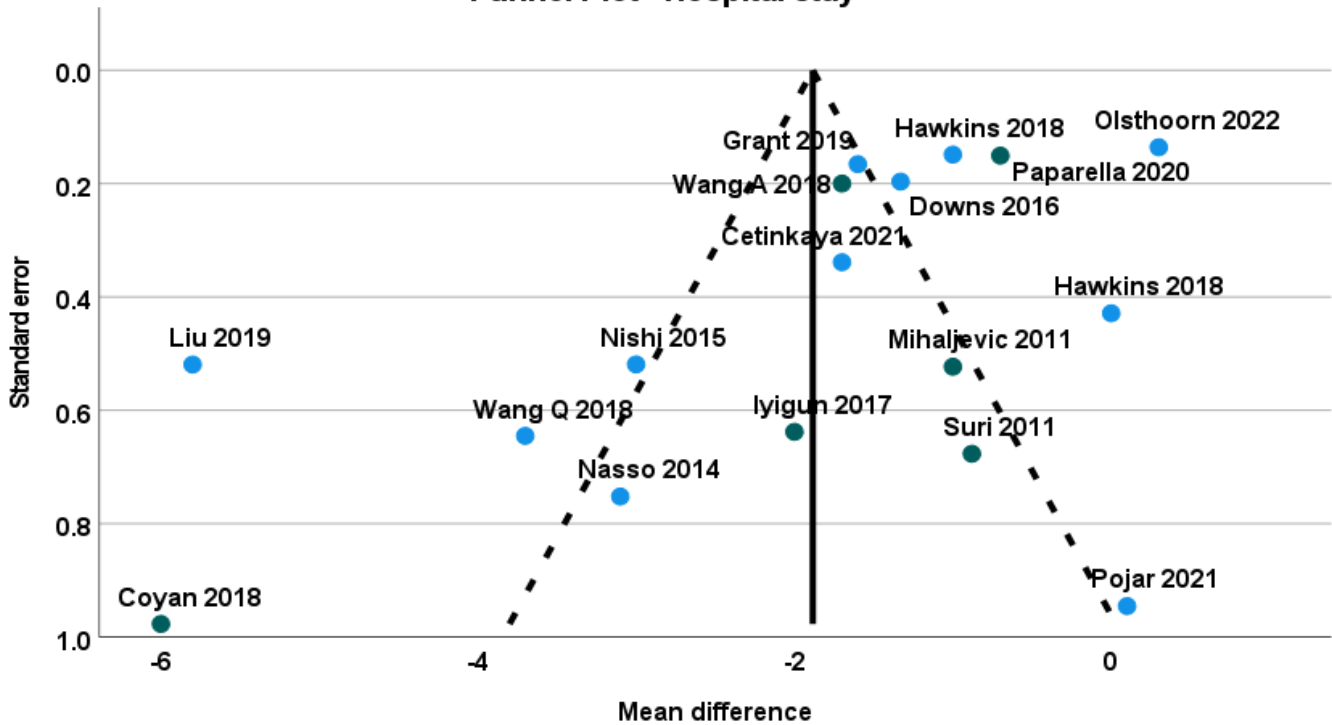
| Robotic	ID	Mean difference	Lower	Upper	p-value	Weight	Weight (%)
0	Nasso 2014	-3.10	-4.57	-1.63	0.00	0.30	5.36
	Nishi 2015	-3.00	-4.02	-1.98	0.00	0.33	5.88
	Downs 2016	-1.33	-1.71	-0.95	0.00	0.35	6.36
	Hawkins 2018	0.00	-0.84	0.84	1.00	0.34	6.05
	Wang Q 2018	-3.70	-4.96	-2.44	0.00	0.31	5.61
	Grant 2019	-1.60	-1.92	-1.28	0.00	0.35	6.38
	Liu 2019	-5.80	-6.82	-4.78	0.00	0.33	5.88
	Paparella 2020	-1.00	-1.29	-0.71	0.00	0.35	6.40
	Cetinkaya 2021	-1.70	-2.36	-1.04	0.00	0.34	6.19
	Pojar 2021	0.10	-1.75	1.95	0.92	0.27	4.89
	Olsthoorn 2022	0.30	0.03	0.57	0.03	0.36	6.40
	Subgroup Overall	-1.87	-2.96	-0.79	0.00		
1	Mihaljevic 2011	-1.00	-2.03	0.03	0.06	0.33	5.87
	Suri 2011	-0.88	-2.21	0.45	0.19	0.31	5.54
	Iyigun 2017	-2.00	-3.25	-0.75	0.00	0.31	5.63
	Hawkins 2018	-0.70	-1.00	-0.40	0.00	0.35	6.39
	Wang A 2018	-1.70	-2.09	-1.31	0.00	0.35	6.36
	Coyan 2018	-6.00	-7.91	-4.09	0.00	0.27	4.81
	Subgroup Overall	-1.91	-3.31	-0.51	0.01		
Overall		-1.88	-2.72	-1.05	0.00		

Model: Random-effects model
Heterogeneity: Tau-squared = 2.80, H-squared = 41.34, I-squared = 0.98
Homogeneity: Q = 289.00, df = 16, p-value = 0.00
Test of between-subgroup homogeneity: Q = 0.00, df = 1, p-value = 0.97

In Favor Mini-Thoracotomy

Forest Plot - Cost (USD)

Robotic	ID	Mean difference	Lower	Upper	p-value	Weight	Weight (%)
0	Grossi 2014	-10527.00	-14709.69	-6344.31	0.00	0.00	25.05
	Downs 2016	-3276.00	-4747.12	-1804.88	0.00	0.00	32.02
	Hawkins 2018	-5267.00	-25081.69	14547.69	0.60	0.00	3.96
	Pojar 2021	-904.00	-16518.82	14710.82	0.91	0.00	5.94
	Subgroup Overall	-5890.34	-11263.21	-517.47	0.03		
1	Coyan 2018	-1750.00	-2433.91	-1066.09	0.00	0.00	33.04
	Subgroup Overall	-1750.00	-2433.91	-1066.09	0.00		
Overall		-4525.81	-8725.02	-326.59	0.03		

In Favor Mini-Thoracotomy
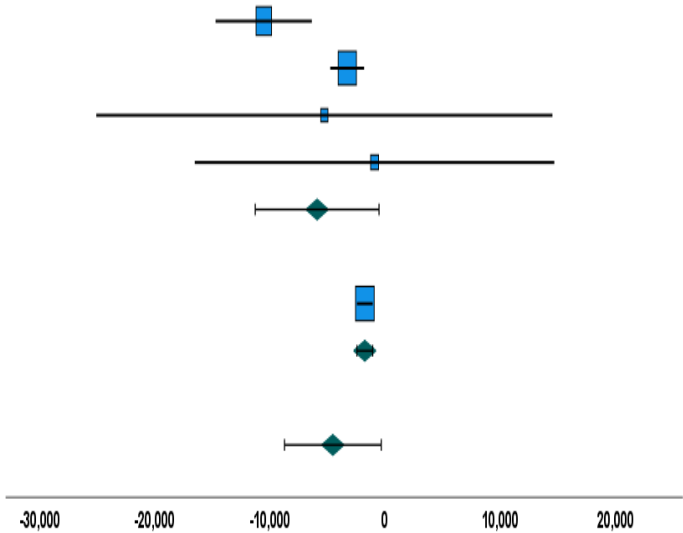
Model: Random-effects model
Heterogeneity: Tau-squared = 13773191.05, H-squared = 12.46, I-squared = 0.92
Homogeneity: Q = 19.06, df = 4, p-value = 0.00
Test of overall effect size: z = -2.11, p-value = 0.03
Test of between-subgroup homogeneity: Q = 2.24, df = 1, p-value = 0.13

Funnel Plot - Cost (USD)