

**What Proportion of Systematic Reviews and Meta-Analyses Published in
the *Annals of Surgery* Provide Definitive Conclusions – A Systematic
Review and Bibliometric Analysis**

Supplementary Material

Table S1: List of included systematic review and meta-analysis included in this systematic review by year of publication.

2020	Country	LOE	Surgery Type/Theme	SR +/- MA	Number	2 Year Impact	Conclusive
Nickel	Germany	IA	Gastrointestinal	MA	224	35	Yes
Kuper	Canada	IA	Gastrointestinal	MA	792	8	Yes
Eyck	Netherlands	III	Gastrointestinal	MA	1328	N/C	Yes
Yeung	United Kingdom	III	Gastrointestinal	MA	10,718	28	Yes
Zhang	Canada	III	Opioid reduction	MA	21,204	12	Yes
Petrelli	Italy	III	Gastrointestinal	MA	3,579	N/C	No
Wang	China	III	Gastrointestinal	MA	4,025	N/C	Yes
Blok	Netherlands	III	Gastrointestinal	MA	1,894	N/C	Yes
Page	Canada	III	Opioid reduction	SR	1,398,182	N/C	Yes
Attaar	United States	III	Cardiothoracic	MA	37,118	N/C	Yes
Chowdhury	United Kingdom	IA	Gastrointestinal	MA	2,723	N/C	Yes
McCarthy	United States	III	Gastrointestinal	MA	653	N/C	No
Zwanenburg	Netherlands	III	Wound complications	MA	4,398	N/C	Yes
Syn	Singapore	III	Gastrointestinal	MA	3,148	N/C	Yes
Braungart	United Kingdom	III	Gastrointestinal	SR	451	N/C	No
Houghton	United Kingdom	III	Vascular	MA	62,976	N/C	Yes
Fu	Netherlands	IA	Perioperative management	MA	4,968	N/C	Yes
Rizan	United Kingdom	III	Carbon footprint (other)	SR	N/R	N/C	No
2019							
Fernando	Canada	III	Soft tissue	MA	5,982	28	Yes
Mungroop	Netherlands	IA	Gastrointestinal	MA	2,059	4	Yes
Visser	Netherlands	III	Gastrointestinal	MA	48,612	15	Yes
Criss	United States	I	Robotic (other)	SR	16,562	3	Yes
Simons	Netherlands	III	Breast	MA	2,217	9	No
Poorthuis	Netherlands	III	Vascular	MA	6,901,162	7	Yes
Acuna	Canada	IA	Gastrointestinal	MA	2,347	16	Yes
Althoff	Germany	III	Hemovigilance (other)	MA	235,779	30	Yes

Syn	Singapore	III	Gastrointestinal	MA	1,621	5	Yes
Simillis	United Kingdom	IA	Gastrointestinal	MA	6,237	17	Yes
Rollins	United Kingdom	III	Gastrointestinal	MA	69,517	22	No
Li	Canada	IA	Anaesthesia/ Gastrointestinal	MA	278	4	Yes
Adiamah	United Kingdom	IA	Gastrointestinal	MA	1,387	17	Yes
Gottlieb-Vedi	Sweden	III	Gastrointestinal	MA	14,592	29	Yes
Dorcarratto	Spain	III	Gastrointestinal	MA	12,817	13	Yes
Podda	Italy	III	Gastrointestinal	MA	3,618	44	No
2018							
Viosini	United States	III	Gastrointestinal	MA	6,511	27	Yes
Columbo	United States	III	Non-cardiac (other)	MA	48,874	13	Yes
Penna	United Kingdom	III	Gastrointestinal	MA	589	13	Yes
Beger	Germany	III	Gastrointestinal	MA	1,295	17	Yes
Schlottman	United States	III	Gastrointestinal	MA	5,834	27	Yes
Wakaem	Canada	III	Breast	MA	1,305	2	No
Fiore	Canada	II	Gastrointestinal	SR	N/R	6	No
Wang	China	III	Vascular	MA	20,903	1	Yes
Prete	Italy	IA	Gastrointestinal	MA	671	22	Yes
Margonis	United States	III	Gastrointestinal	MA	11,147	10	Yes
Feinberg	Canada	II	Opioid reduction	SR	3,535	25	Yes
Borgersen	Denmark	II	Simulation	SR	18,312	9	Yes
Childers	United States	III	Cost reduction (other)	SR	90,449	6	No
Simonsen	Denmark	III	Gastrointestinal	MA	7,176	20	No
Pan	China	III	Gastrointestinal	MA	1,757	13	Yes
Liang	China	III	Cardiothoracic	MA	7,438	27	Yes
Dattani	United Kingdom	III	Gastrointestinal	SR	692	22	Yes
2017							
French	Australia	IA	Critical care	MA	2,607	6	No
Sidhwa	United States	V	Gastrointestinal	MA	2,929	8	Yes
Grant	United States	IA	Gastrointestinal	MA	4,142	15	Yes
Liang	United States	III	Gastrointestinal	SR	4,199	20	No

Simillis	United Kingdom	III	Gastrointestinal	MA	19,607	8	Yes
St John	United Kingdom	III	Breast	MA	8,052	18	No
Fesco	Canada	III	Gastrointestinal	MA	6,072	3	No
Pasquali	Italy	IA	Surgical performance	SR	7,775	19	Yes
Marshall	New Zealand	IA	Gastrointestinal	MA	307	10	Yes
Harnoss	Germany	III	Gastrointestinal	MA	2,551	22	Yes
Lonjon	France	III	Propensity matching (other)	SR	N/R	8	Yes
Gou	China	III	Cancer (other)	MA	16,366	7	Yes
Payet	France	III	Long-term outcomes (other)	SR	55,830	0	Yes
Pannucci	United States	III	Perioperative management	MA	14,776	14	Yes
Ferris	Canada	III	Gastrointestinal	MA	29,812	21	Yes
Fisher	United States	III	Gastrointestinal	MA	26,446	6	Yes
Timberlake	United States	II	Surgical education	SR	N/R	1	Yes
Allebas	Netherlands	III	Surgeon welfare	MA	N/R	11	No
Alali	Canada	III	Neurosurgery	MA	12,366	9	No
2016							
Chana	United Kingdom	IV	Emergency (other)	SR	744,238	6	Yes
Maret-Ouda	Sweden	III	Gastrointestinal	MA	114,218	4	Yes
Memon	Australia	IA	Gastrointestinal	MA	406	10	Yes
Petrelli	Italy	II	Gastrointestinal	MA	3,584	37	No
Rollins	United Kingdom	IA	Gastrointestinal	MA	2,099	8	Yes
Gordon-Weeks	United Kingdom	IV	Gastrointestinal	MA	1,486	5	Yes
Hata	Japan	III	Gastrointestinal	MA	58,023	17	Yes
Louridas	Canada	III	Surgical skills/experience	SR	N/R	1	No
Switzer	Canada	IV	Academic surgery	SR	N/R	4	Yes
O'Connell	Ireland	II	Orthopaedic/Neurosurgical	MA	1,677	5	Yes
Yang	China	IA	Postoperative management	MA	1,054	8	Yes
Markar	United Kingdom	III	Gastrointestinal	SR	991	27	No
Kwakman	Netherlands	III	Gastrointestinal	MA	3,036	5	Yes
Willcutts	United States	III	Gastrointestinal	MA	2,112	5	Yes
Barazanachi	New Zealand	IA	Gastrointestinal	MA	1,031	4	Yes

de Rooji	Netherlands	III	Gastrointestinal	MA	1,833	14	Yes
Cousin	France	III	Gastrointestinal	MA	2,692	6	Yes
Al-Maary	Canada	II	Paediatric	MA	211	9	Yes
Cullis	United Kingdom	III	Paediatric	SR	414	1	Yes
2015							
Rowland	United Kingdom	III	Gastrointestinal	SR	497	7	Yes
Saleh	United States	III	Cardiovascular/Orthopaedics	MA	8,952	2	No
Jones	United Kingdom	IA	Academic surgery	SR	N/R	6	No
Muller-Stich	Germany	III	Gastrointestinal	MA	818	21	Yes
Panunzi	Italy	III	Gastrointestinal	MA	94,579	17	Yes
Fokkema	Netherlands	III	Vascular	MA	1,132	3	Yes
Maruthappu	France	IV	Surgical skills/experience	SR	1,061,913	9	Yes
Matsuda	Japan	III	Gastrointestinal	MA	1,006	8	Yes
Mazaki	Japan	III	Gastrointestinal	MA	7,572	4	Yes
Adie	Australia	IA	Academic surgery	SR	N/R	1	Yes
De Brujin	Netherlands	III	Gastrointestinal	SR	1,731	4	Yes
Menaham	France	IA	Gastrointestinal	MA	562	21	Yes
Szasz	Canada	III	Surgical skills/experience	SR	2,369	3	No
Roberts	Canada	IV	Cardiothoracic	SR	466	7	Yes
Kwon	Korea	III	Gastrointestinal	MA	3,361	1	No
Collaud	Canada	V	Cardiothoracic	SR	135	3	Yes
Vetter	Switzerland	V	Perioperative management	MA	3,549	5	No
Siminas	United Kingdom	IV	Paediatric	SR	1,157	5	No
2014							
Gronkjaer	Denmark	III	Postoperative complications	MA	533,602	4	Yes
Kim	Korea	III	Gastrointestinal	MA	1,373	14	Yes
Dawe	Australia	II	Simulation	SR	N/R	11	No
Sharma	New Zealand	III	Gastrointestinal	MA	1,970	11	Yes
Findlay	United Kingdom	III	Gastrointestinal	SR	910	5	Yes
Almenawer	Canada	III	Neurosurgery	MA	34,829	9	Yes
Reames	United States	III	Epidemiology (other)	SR	N/R	9	Yes

Howell	United Kingdom	III	Postoperative complications	SR	7,802,423	7	No
Lee	United States	III	Gastrointestinal	SR	N/R	7	No
UKNSRC	United Kingdom	III	Gastrointestinal	MA	2,510	5	Yes
Ahmed	Canada	III	Surgeon welfare	SR	N/R	20	Yes
Popping	Germany	IA	Perioperative management	MA	9,044	14	Yes
Li	China	II	Gastrointestinal	MA	1,315	3	Yes
Harrysson	United States	IV	Gastrointestinal	SR	N/R	11	No
O'Callaghan	United Kingdom	IA	Transplant	MA	1,619	2	Yes
Foster	United Kingdom	IA	Gastrointestinal	MA	5,857	2	No
Orri	France	V	Surgeon welfare	MA	N/R	4	Yes
Bouras	United Kingdom	III	Gastrointestinal	MA	57,058	4	Yes
Fayanju	United States	IV	Breast	MA	12,978	10	Yes
2013							
Yin	China	II	Gastrointestinal	MA	956	8	Yes
O'Brien	Australia	III	Gastrointestinal	MA	3,227	43	Yes
Lin	Japan	IV	Gastrointestinal	SR	2,278	18	Yes
Pairkh	United States	III	Gastrointestinal	MA	9,991	29	Yes
Honda	Japan	IA	Gastrointestinal	MA	1,407	11	Yes
Houssami	Australia	III	Breast	MA	3,112	15	Yes
Zendejas	Canada	III	Surgical skills/simulation	SR	7,138	10	Yes
Halaou	Netherlands	III	Breast	SR	1,343	8	Yes
Roberts	Canada	III	Neurosurgery	MA	5,704	3	Yes
Broeders	Australia	IA	Gastrointestinal	MA	458	13	Yes
Knops	Netherlands	III	Patient decision making (other)	MA	2,674	9	Yes
Chang	New Zealand	IA	Postoperative complications	MA	6,979	4	Yes
Berqvist	Sweden	V	Vascular	SR	231	8	No
Russ	United Kingdom	II	Perioperative care	SR	N/R	7	No
Adie	Australia	IA	Academic surgery	SR	N/R	4	Yes
Acedillo	Canada	III	Postoperative complications	MA	679,173	2	No
Leinicke	United States	III	Cardiothoracic	MA	538	7	Yes

Eliassen	Denmark	III	Postoperative complications	MA	1,234,019	4	Yes
Teraa	Netherlands	IA	Vascular	MA	510	8	No
Schoenberg	Germany	II	Gastrointestinal	MA	590	8	Yes
2012							
Verschurr-Maes	Netherlands	III	Breast	SR	1,672	2	No
Maniko	United States	IV	Gastrointestinal	SR	N/R	14	Yes
Lehman	Switzerland	III	Gastrointestinal	SR	N/R	14	Yes
Vinuela	United States	I	Gastrointestinal	MA	3,055	15	Yes
Guo	United States	IA	Palliative (other)	MA	1,332	2	Yes
Blencowe	United Kingdom	III	Gastrointestinal	SR	57,299	9	No
Maniko	United States	III	Gastrointestinal	SR	378	12	Yes
Talat	United Kingdom	V	Soft tissue	SR	278	10	Yes
Hansson	Netherlands	III	Gastrointestinal	SR	733	13	Yes
Chang	New Zealand	IA	Postoperative complications	MA	836	3	No
van Baal	Netherlands	III	Gastrointestinal	MA	7,161	6	Yes
O'Reilly	Ireland	IA	Gastrointestinal	SR	998	12	Yes
Gheorghe	United Kingdom	III	Postoperative complications	SR	1,933	8	No
Venkat	United States	III	Gastrointestinal	MA	1,814	22	Yes
Marimutha	United Kingdom	IA	Gastrointestinal	MA	2,496	9	Yes
Sorenson	Denmark	IV	Postoperative complications	SR	N/R	11	Yes
Zevin	Canada	IV	Gastrointestinal	SR	458,032	5	No
Zeng	China	III	Gastrointestinal	MA	3,411	16	No
Edwards	Canada	IA	Postoperative complications	MA	1,008	11	Yes
Acheson	United Kingdom	III	Gastrointestinal	MA	20,795	14	Yes
Warshckow	Switzerland	III	Gastrointestinal	MA	1,832	9	Yes
Borchard	Austria	III	Perioperative care	SR	N/R	9	Yes
Shabanzedeh	Denmark	III	Gastrointestinal	MA	58,755	7	Yes
Rahbour	United Kingdom	IA	Gastrointestinal	MA	288	3	Yes
Kao	United States	IA	Perioperative care	MA	4,778	3	No
2011							
Ahmad	Ireland	IA	Perioperative care	MA	3,122	2	Yes

Thakur	Canada	IA	Gastrointestinal	MA	1,460	4	No
Jay	United States	III	Transplant	MA	4,944	9	Yes
Groenveld	Netherlands	III	Perioperative care	SR	42,806	12	Yes
Pontiroli	Italy	IA	Gastrointestinal	MA	44,022	17	Yes
Patel	Canada	III	Gastrointestinal	SR	440	6	No
Mirnaezami	United Kingdom	III	Gastrointestinal	MA	21,902	12	Yes
Memon	Australia	IA	Gastrointestinal	MA	1,876	6	Yes
Broeders	Netherlands	IA	Gastrointestinal	MA	690	3	Yes
Mertz	Canada	IA	Cardiothoracic	MA	7,893	2	No
Srinivasa	New Zealand	IA	Gastrointestinal	MA	439	3	Yes
Dhir	United States	III	Gastrointestinal	MA	4,821	7	Yes
Houmossi	Australia	III	Breast	MA	6,166	5	Yes
Mollberg	Germany	III	Gastrointestinal	MA	2,609	14	Yes
Boshier	United Kingdom	III	Gastrointestinal	MA	5,905	11	No

LOE; level of evidence, SR; systematic review, MA; meta-analysis, N/C; not calculable, N/R; not reported/recorded.

Table S2: Correlations between study characteristics and the conclusiveness of systematic review and meta-analyses published in the *Annals of Surgery* which were included in the current study.

Parameter	Number (%)	Number that are Conclusive (%)	P-value
Country			
- United States	30 (16.1%)	23 (76.7%)	0.971, χ^2
- United Kingdom	35 (18.8%)	22 (62.9%)	
- Switzerland	3 (1.6%)	2 (66.7%)	
- Sweden	3 (1.6%)	2 (66.7%)	
- Spain	1 (0.5%)	1 (100.0%)	
- Singapore	2 (1.1%)	2 (100.0%)	
- New Zealand	6 (3.2%)	5 (83.3%)	
- Netherlands	21 (11.3%)	17 (81.0%)	
- Korea	2 (1.1%)	1 (50.0%)	
- Japan	5 (2.7%)	5 (100.0%)	
- Italy	7 (3.8%)	4 (57.1%)	
- Ireland	3 (1.6%)	3 (100.0%)	
- Germany	8 (4.3%)	8 (100.0%)	
- France	6 (3.2%)	6 (100.0%)	
- Denmark	6 (3.2%)	5 (83.3%)	
- China	9 (4.8%)	8 (88.9%)	
- Canada	28 (15.1%)	17 (60.7%)	
- Austria	1 (0.5%)	1 (100.0%)	
- Australia	10 (5.4%)	8 (80.0%)	
Region			
- North America	58 (31.2%)	40 (69.0%)	0.416, χ^2
- Europe	94 (50.5%)	71 (75.5%)	
- Australia/New Zealand	16 (8.6%)	13 (81.3%)	
- Asia	18 (9.7%)	16 (88.9%)	
Level of Evidence			

- Level 1	45 (21.2%)	37 (82.2%)	0.342, χ^2
- Level 2	12 (6.5%)	8 (66.7%)	
- Level 3	111 (59.7%)	82(73.9%)	
- Level 4	12 (6.5%)	9 (75.0%)	
- Level 5	6 (3.2%)	4 (66.7%)	
Level of Evidence			
- High Level of Evidence	57 (30.7%)	45 (78.9%)	0.465, †
- Low Level of Evidence	129 (69.3%)	94 (72.9%)	
Type of Surgery / Topic			
- Academic	4	3 (75.0%)	0.736, χ^2
- Breast	8	4 (50.0%)	
- Other	14	11 (78.6%)	
- Cardiothoracic	7	5 (71.4%)	
- GI/General	103	82 (79.6%)	
- Neurosurgery	3	2 (66.7%)	
- Opioid Crisis	3	3 (100.0%)	
- Paediatric	3	2 (66.7%)	
- Perioperative management	9	6 (66.7%)	
- Postoperative management	11	7 (63.6%)	
- Simulation	3	2 (66.7%)	
- Soft Tissue	2	2 (100.0%)	
- Surgical welfare	3	2 (66.7%)	
- Surgical Education	5	3 (60.0%)	
- Transplant	2	2 (100.0%)	
- Vascular	6	4 (66.7%)	
Study Type			
- Systematic Review	55 (29.6%)	34 (61.8%)	0.009, †
- Meta-Analysis	131 (70.4%)	106 (80.9%)	
Two-year Impact Factor			
- Conclusive	Mean (+/- SD)	9.40 (+/- 9.35)	0.251, ‡
- Inconclusive	Mean (+/- SD)	11.10 +/- 7.93	

GI; gastrointestinal, mgt; management, SD; standard deviation.

χ^2 denotes Chi-Square test.

† denotes Fisher's Exact test.

‡ denotes Independent samples T-test.

Table S3: Correlations between study characteristics based on subgroups and the conclusiveness of systematic review and meta-analyses published in the *Annals of Surgery* which were included in the current study.

Parameter	Number of Inconclusive Studies (%)	Number of Conclusive studies (%)	P-value
Region - LOE			
North America			
- Level 1	3	8	0.873, χ^2
- Level 2	1	3	
- Level 3	12	23	
- Level 4	2	4	
- Level 5	0	2	
Europe			
- Level 1	3	18	0.505, χ^2
- Level 2	2	3	
- Level 3	15	44	
- Level 4	1	4	
- Level 5	2	2	
Australia/New Zealand			
- Level 1	2	9	0.072, χ^2
- Level 2	1	0	
- Level 3	0	4	
Asia			
- Level 1	0	2	0.834, χ^2
- Level 2	0	2	
- Level 3	2	11	
- Level 4	0	1	
Region – Surgical Speciality			
North America			
- Academic	0	1	0.923, χ^2

- Breast	1	1	
- Other	1	4	
- Cardiothoracic	2	4	
- GI/General	9	17	
- Neurosurgery	1	2	
- Opioid Crisis	0	3	
- Paediatric	0	1	
- Perioperative management	1	1	
- Postoperative management	1	1	
- Simulation	0	1	
- Soft Tissue	0	1	
- Surgical welfare	0	1	
- Surgical Education	2	1	
- Transplant	0	1	
Europe			
- Academic	1	0	0.289, χ^2
- Breast	3	1	
- Other	1	6	
- GI/General	10	45	
- Paediatric	1	1	
- Perioperative management	2	5	
- Postoperative management	2	4	
- Simulation	0	1	
- Soft Tissue	0	1	
- Surgical welfare	1	1	
- Surgical Education	0	2	
- Transplant	0	1	
- Vascular	2	3	
Australia/New Zealand			
- Academic	0	2	0.026, χ^2
- Breast	0	2	

- Other	1	0	
- GI/General	0	8	
- Postoperative management	1	1	
- Simulation	1	0	
Asia			
- Other	0	1	0.958, χ^2
- Cardiothoracic	0	1	
- GI/General	2	12	
- Postoperative management	0	1	
- Vascular	0	1	
Region –Study Type			
North America			
- Systematic review	9	12	0.237, †
- Meta-Analysis	9	28	
Europe			
- Systematic review	11	19	0.074, †
- Meta-Analysis	12	52	
Australia/New Zealand			
- Systematic review	1	2	0.489, †
- Meta-Analysis	2	11	
Asia			
- Systematic review	0	1	1.000, †
- Meta-Analysis	2	15	
LOE – Surgical Speciality			
Level I			
- Academic	1	2	0.114, χ^2
- Other	1	2	
- Cardiothoracic	1	0	
- GI/General	2	25	
- Perioperative management	1	3	
- Postoperative management	1	3	

- Surgical Education	0	1	
- Transplant	0	1	
- Vascular	1	0	
Level II			
- Other	0	1	0.629, χ^2
- GI/General	2	3	
- Opioid Crisis	0	1	
- Paediatric	0	1	
- Perioperative management	1	0	
- Simulation	1	1	
- Surgical Education	0	1	
Level III			
- Breast	4	3	0.280, χ^2
- Other	2	7	
- Cardiothoracic	1	3	
- GI/General	15	50	
- Neurosurgery	1	2	
- Opioid Crisis	0	2	
- Paediatric	0	1	
- Perioperative management	0	3	
- Postoperative management	3	3	
- Simulation	0	1	
- Soft Tissue	0	1	
- Surgical welfare	1	1	
- Surgical Education	2	0	
- Transplant	0	1	
- Vascular	0	4	
Level IV			
- Academic	0	1	0.587, χ^2
- Breast	0	1	
- Other	0	1	

- Cardiothoracic	0	1	
- GI/General	2	3	
- Paediatric	0	1	
- Postoperative management	0	1	
- Surgical Education	0	1	
Level V			
- Cardiothoracic	0	1	0.306, χ^2
- GI/General	0	1	
- Perioperative management	1	0	
- Soft Tissue	0	1	
- Surgical welfare	0	1	
- Vascular	1	0	
LOE –Study Type			
Level I			
- Systematic review	1	5	1.000, †
- Meta-Analysis	7	32	
Level II			
- Systematic review	3	3	0.545, †
- Meta-Analysis	1	5	
Level III			
- Systematic review	13	17	0.016, †
- Meta-Analysis	16	65	
Level IV			
- Systematic review	3	7	1.000, †
- Meta-Analysis	0	2	
Level V			
- Systematic review	1	2	1.000, †
- Meta-Analysis	1	2	
Study Type - Surgical Speciality			
Systematic Review			
- Academic	1	3	0.850, χ^2

- Breast	1	1	
- Other	2	5	
- Cardiothoracic	0	2	
- GI/General	9	10	
- Opioid Crisis	0	2	
- Paediatric	1	1	
- Perioperative management	1	2	
- Postoperative management	2	1	
- Simulation	1	2	
- Soft Tissue	0	1	
- Surgical welfare	0	1	
- Surgical Education	2	3	
- Vascular	1	0	
Meta-Analysis			
- Breast	3	3	0.592, χ^2
- Other	1	6	
- Cardiothoracic	2	3	
- GI/General	12	72	
- Neurosurgery	1	2	
- Opioid Crisis	0	1	
- Paediatric	0	1	
- Perioperative management	2	4	
- Postoperative management	2	6	
- Soft Tissue	0	1	
- Surgical welfare	1	1	
- Transplant	0	2	
- Vascular	1	4	

LOE; level of evidence, GI; gastrointestinal

Full Reference List

1. Attaar, A., V. Tam, and K.S. Nason, *Risk Factors for Prolonged Air Leak After Pulmonary Resection: A Systematic Review and Meta-analysis*. Annals of Surgery, 2020. **271**(5).
2. Blok, R.D., et al., *A Systematic Review and Meta-analysis on Omentoplasty for the Management of Abdominoperineal Defects in Patients Treated for Cancer*. Annals of Surgery, 2020. **271**(4).
3. Braungart, S. and S. Siminas, *Early Enteral Nutrition Following Gastrointestinal Surgery in Children: A Systematic Review of the Literature*. Annals of Surgery, 2020. **272**(2).
4. Chowdhury, A.H., et al., *Perioperative Probiotics or Synbiotics in Adults Undergoing Elective Abdominal Surgery: A Systematic Review and Meta-analysis of Randomized Controlled Trials*. Annals of Surgery, 2020. **271**(6).
5. Eyck, B.M., et al., *Accuracy of Detecting Residual Disease After Neoadjuvant Chemoradiotherapy for Esophageal Cancer: A Systematic Review and Meta-analysis*. Annals of Surgery, 2020. **271**(2).
6. Fu, V.X., et al., *The Effect of Perioperative Music on Medication Requirement and Hospital Length of Stay: A Meta-analysis*. Annals of Surgery, 2020. **272**(6).
7. Houghton, J.S.M., et al., *Frailty Factors and Outcomes in Vascular Surgery Patients: A Systematic Review and Meta-analysis*. Annals of Surgery, 2020. **272**(2).
8. Kuper, T.M., et al., *Prophylactic Negative Pressure Wound Therapy for Closed Laparotomy Incisions: A Meta-analysis of Randomized Controlled Trials*. Annals of Surgery, 2020. **271**(1).
9. McCarty, T.R., P. Jirapinyo, and C.C. Thompson, *Effect of Sleeve Gastrectomy on Ghrelin, GLP-1, PYY, and GIP Gut Hormones: A Systematic Review and Meta-analysis*. Annals of Surgery, 2020. **272**(1).
10. Nickel, F., et al., *Laparoscopic Versus Open Pancreaticoduodenectomy: A Systematic Review and Meta-analysis of Randomized Controlled Trials*. Annals of Surgery, 2020. **271**(1).
11. Pagé, M.G., et al., *A Systematic Review of the Relative Frequency and Risk Factors for Prolonged Opioid Prescription Following Surgery and Trauma Among Adults*. Annals of Surgery, 2020. **271**(5).
12. Petrelli, F., et al., *Total Neoadjuvant Therapy in Rectal Cancer: A Systematic Review and Meta-analysis of Treatment Outcomes*. Annals of Surgery, 2020. **271**(3).
13. Rizan, C., et al., *The Carbon Footprint of Surgical Operations: A Systematic Review*. Annals of Surgery, 2020. **272**(6).

14. Syn, N.L., et al., *Survival Advantage of Laparoscopic Versus Open Resection For Colorectal Liver Metastases: A Meta-analysis of Individual Patient Data From Randomized Trials and Propensity-score Matched Studies*. *Annals of Surgery*, 2020. **272**(2).
15. Wang, X., et al., *Early Versus Delayed Surgical Repair and Referral for Patients With Bile Duct Injury: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2020. **271**(3).
16. Yeung, K.T.D., et al., *Does Sleeve Gastrectomy Expose the Distal Esophagus to Severe Reflux?: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2020. **271**(2).
17. Zhang, D.D.Q., et al., *A Systematic Review of Behavioral Interventions to Decrease Opioid Prescribing After Surgery*. *Annals of Surgery*, 2020. **271**(2).
18. Zwanenburg, P.R., et al., *Meta-analysis, Meta-regression, and GRADE Assessment of Randomized and Nonrandomized Studies of Incisional Negative Pressure Wound Therapy Versus Control Dressings for the Prevention of Postoperative Wound Complications*. *Annals of Surgery*, 2020. **272**(1).
19. Acuna, S.A., et al., *Laparoscopic Versus Open Resection for Rectal Cancer: A Noninferiority Meta-analysis of Quality of Surgical Resection Outcomes*. *Annals of Surgery*, 2019. **269**(5).
20. Adiamah, A., et al., *The Impact of Preoperative Immune Modulating Nutrition on Outcomes in Patients Undergoing Surgery for Gastrointestinal Cancer: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2019. **270**(2).
21. Althoff, F.C., et al., *Multimodal Patient Blood Management Program Based on a Three-pillar Strategy: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2019. **269**(5).
22. Criss, C.N., et al., *The Impact of Corporate Payments on Robotic Surgery Research: A Systematic Review*. *Annals of Surgery*, 2019. **269**(3).
23. Dorcaratto, D., et al., *Impact of Postoperative Complications on Survival and Recurrence After Resection of Colorectal Liver Metastases: Systematic Review and Meta-analysis*. *Annals of Surgery*, 2019. **270**(6).
24. Fernando, S.M., et al., *Necrotizing Soft Tissue Infection: Diagnostic Accuracy of Physical Examination, Imaging, and LRINEC Score: A Systematic Review and Meta-Analysis*. *Annals of Surgery*, 2019. **269**(1).
25. Gottlieb-Vedi, E., et al., *Long-term Survival in Esophageal Cancer After Minimally Invasive Compared to Open Esophagectomy: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2019. **270**(6).
26. Li, J., et al., *Efficacy and Safety of Patient-controlled Analgesia Compared With Epidural Analgesia After Open Hepatic Resection: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2019. **270**(2).
27. Mungroop, T.H., et al., *Preperitoneal or Subcutaneous Wound Catheters as Alternative for Epidural Analgesia in Abdominal Surgery: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2019. **269**(2).
28. Podda, M., et al., *Antibiotic Treatment and Appendectomy for Uncomplicated Acute Appendicitis in Adults and Children: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2019. **270**(6).

29. Poorthuis, M.H.F., et al., *High Operator and Hospital Volume Are Associated With a Decreased Risk of Death and Stroke After Carotid Revascularization: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2019. **269**(4).
30. Rollins, K.E., et al., *The Role of Oral Antibiotic Preparation in Elective Colorectal Surgery: A Meta-analysis*. *Annals of Surgery*, 2019. **270**(1).
31. Simillis, C., et al., *Open Versus Laparoscopic Versus Robotic Versus Transanal Mesorectal Excision for Rectal Cancer: A Systematic Review and Network Meta-analysis*. *Annals of Surgery*, 2019. **270**(1).
32. Simons, J.M., et al., *Diagnostic Accuracy of Different Surgical Procedures for Axillary Staging After Neoadjuvant Systemic Therapy in Node-positive Breast Cancer: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2019. **269**(3).
33. Syn, N.L., et al., *Pouch Versus No Pouch Following Total Gastrectomy: Meta-analysis of Randomized and Non-randomized Studies*. *Annals of Surgery*, 2019. **269**(6).
34. Visser, E., et al., *Prognostic Value of Lymph Node Yield on Overall Survival in Esophageal Cancer Patients: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2019. **269**(2).
35. Beger, H.G., et al., *New Onset of Diabetes and Pancreatic Exocrine Insufficiency After Pancreaticoduodenectomy for Benign and Malignant Tumors: A Systematic Review and Meta-analysis of Long-term Results*. *Annals of Surgery*, 2018. **267**(2).
36. Borgersen, N.J., et al., *Gathering Validity Evidence for Surgical Simulation: A Systematic Review*. *Annals of Surgery*, 2018. **267**(6).
37. Childers, C.P., et al., *Interventions to Reduce Intraoperative Costs: A Systematic Review*. *Annals of Surgery*, 2018. **268**(1).
38. Columbo, J.A., et al., *A Meta-analysis of the Impact of Aspirin, Clopidogrel, and Dual Antiplatelet Therapy on Bleeding Complications in Noncardiac Surgery*. *Annals of Surgery*, 2018. **267**(1).
39. Dattani, M., et al., *Oncological and Survival Outcomes in Watch and Wait Patients With a Clinical Complete Response After Neoadjuvant Chemoradiotherapy for Rectal Cancer: A Systematic Review and Pooled Analysis*. *Annals of Surgery*, 2018. **268**(6).
40. Feinberg, A.E., et al., *Opioid Use After Discharge in Postoperative Patients: A Systematic Review*. *Annals of Surgery*, 2018. **267**(6).
41. Fiore, J.F., Jr., et al., *How Do We Value Postoperative Recovery?: A Systematic Review of the Measurement Properties of Patient-reported Outcomes After Abdominal Surgery*. *Annals of Surgery*, 2018. **267**(4).
42. Liang, H., et al., *Robotic Versus Video-assisted Lobectomy/Segmentectomy for Lung Cancer: A Meta-analysis*. *Annals of Surgery*, 2018. **268**(2).
43. Margonis, G.A., et al., *Impact of Surgical Margin Width on Recurrence and Overall Survival Following R0 Hepatic Resection of Colorectal Metastases: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2018. **267**(6).
44. Pan, L., et al., *The Safety and Efficacy of Laparoscopic Common Bile Duct Exploration Combined with Cholecystectomy for the Management of Cholecysto-choledocholithiasis: An Up-to-date Meta-analysis*. *Annals of Surgery*, 2018. **268**(2).
45. Penna, M., et al., *Laparoscopic Lavage Versus Primary Resection for Acute Perforated Diverticulitis: Review and Meta-analysis*. *Annals of Surgery*, 2018. **267**(2).

46. Prete, F.P., et al., *Robotic Versus Laparoscopic Minimally Invasive Surgery for Rectal Cancer: A Systematic Review and Meta-analysis of Randomized Controlled Trials*. *Annals of Surgery*, 2018. **267**(6).
47. Schlottmann, F., et al., *Laparoscopic Heller Myotomy Versus Peroral Endoscopic Myotomy (POEM) for Achalasia: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2018. **267**(3).
48. Simonsen, C., et al., *Sarcopenia and Postoperative Complication Risk in Gastrointestinal Surgical Oncology: A Meta-analysis*. *Annals of Surgery*, 2018. **268**(1).
49. Visioni, A., et al., *Enhanced Recovery After Surgery for Noncolorectal Surgery?: A Systematic Review and Meta-analysis of Major Abdominal Surgery*. *Annals of Surgery*, 2018. **267**(1).
50. Wakeam, E., S.A. Acuna, and S. Keshavjee, *Chest Wall Resection for Recurrent Breast Cancer in the Modern Era: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2018. **267**(4).
51. Wang, J., et al., *Percutaneous Vascular Interventions Versus Bypass Surgeries in Patients With Critical Limb Ischemia: A Comprehensive Meta-analysis*. *Annals of Surgery*, 2018. **267**(5).
52. Alali, A.S., et al., *Beta-blockers and Traumatic Brain Injury: A Systematic Review, Meta-analysis, and Eastern Association for the Surgery of Trauma Guideline*. *Annals of Surgery*, 2017. **266**(6).
53. Alleblas, C.C.J., et al., *Prevalence of Musculoskeletal Disorders Among Surgeons Performing Minimally Invasive Surgery: A Systematic Review*. *Annals of Surgery*, 2017. **266**(6).
54. Fecso, A.B., et al., *The Effect of Technical Performance on Patient Outcomes in Surgery: A Systematic Review*. *Annals of Surgery*, 2017. **265**(3).
55. Ferris, M., et al., *The Global Incidence of Appendicitis: A Systematic Review of Population-based Studies*. *Annals of Surgery*, 2017. **266**(2).
56. Fisher, A.V., et al., *30-day Readmission After Pancreatic Resection: A Systematic Review of the Literature and Meta-analysis*. *Annals of Surgery*, 2017. **266**(2).
57. French, C.J., et al., *Erythropoiesis-stimulating Agents in Critically Ill Trauma Patients: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2017. **265**(1).
58. Grant, M.C., et al., *Impact of Enhanced Recovery After Surgery and Fast Track Surgery Pathways on Healthcare-associated Infections: Results From a Systematic Review and Meta-analysis*. *Annals of Surgery*, 2017. **265**(1).
59. Guo, Q., et al., *Perioperative Pharmacological Thromboprophylaxis in Patients With Cancer: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2017. **265**(6).
60. Harnoss, J.C., et al., *Antibiotics Versus Surgical Therapy for Uncomplicated Appendicitis: Systematic Review and Meta-analysis of Controlled Trials (PROSPERO 2015: CRD42015016882)*. *Annals of Surgery*, 2017. **265**(5).

61. Lonjon, G., et al., *Potential Pitfalls of Reporting and Bias in Observational Studies With Propensity Score Analysis Assessing a Surgical Procedure: A Methodological Systematic Review*. Annals of Surgery, 2017. **265**(5).
62. Marshall, J.R., et al., *Laparoscopic Lavage in the Management of Hinchey Grade III Diverticulitis: A Systematic Review*. Annals of Surgery, 2017. **265**(4).
63. Pannucci, C.J., et al., *Individualized Venous Thromboembolism Risk Stratification Using the 2005 Caprini Score to Identify the Benefits and Harms of Chemoprophylaxis in Surgical Patients: A Meta-analysis*. Annals of Surgery, 2017. **265**(6).
64. Pasquali, S., et al., *Survival After Neoadjuvant and Adjuvant Treatments Compared to Surgery Alone for Resectable Esophageal Carcinoma: A Network Meta-analysis*. Annals of Surgery, 2017. **265**(3).
65. Payet, C., et al., *Methodological Quality of Surgical Mortality Studies Using Large Hospital Databases: A Systematic Review*. Annals of Surgery, 2017. **265**(6).
66. Sidhwa, F., et al., *Diagnosis and Treatment of the Extraesophageal Manifestations of Gastroesophageal Reflux Disease*. Annals of Surgery, 2017. **265**(1).
67. Simillis, C., et al., *A Systematic Review to Assess Resection Margin Status After Abdominoperineal Excision and Pelvic Exenteration for Rectal Cancer*. Annals of Surgery, 2017. **265**(2).
68. St John, E.R., et al., *Diagnostic Accuracy of Intraoperative Techniques for Margin Assessment in Breast Cancer Surgery: A Meta-analysis*. Annals of Surgery, 2017. **265**(2).
69. Timberlake, M.D., et al., *What Do We Know About Intraoperative Teaching?: A Systematic Review*. Annals of Surgery, 2017. **266**(2).
70. Liang, M.K., et al., *Ventral Hernia Management: Expert Consensus Guided by Systematic Review*. Ann Surg, 2017. **265**(1): p. 80-89.
71. Al-Maary, J., et al., *Fetal Tracheal Occlusion for Severe Pulmonary Hypoplasia in Isolated Congenital Diaphragmatic Hernia: A Systematic Review and Meta-analysis of Survival*. Annals of Surgery, 2016. **264**(6).
72. Barazanchi, A.W.H., et al., *Routine Neurectomy of Inguinal Nerves During Open Onlay Mesh Hernia Repair: A Meta-analysis of Randomized Trials*. Annals of Surgery, 2016. **264**(1).
73. Chana, P., et al., *A Systematic Review of the Impact of Dedicated Emergency Surgical Services on Patient Outcomes*. Annals of Surgery, 2016. **263**(1).
74. Cousin, F., et al., *Diagnostic Accuracy of Procalcitonin and C-reactive Protein for the Early Diagnosis of Intra-abdominal Infection After Elective Colorectal Surgery: A Meta-analysis*. Annals of Surgery, 2016. **264**(2).
75. Cullis, P.S., S. Siminas, and P.D. Losty, *Is Screening of Intestinal Foregut Anatomy in Heterotaxy Patients Really Necessary?: A Systematic Review in Search of the Evidence*. Annals of Surgery, 2016. **264**(6).
76. de Rooij, T., et al., *Minimally Invasive Versus Open Pancreatoduodenectomy: Systematic Review and Meta-analysis of Comparative Cohort and Registry Studies*. Annals of Surgery, 2016. **264**(2).

77. Gordon-Weeks, A.N., et al., *Systematic Review and Meta-analysis of Current Experience in Treating IPNB: Clinical and Pathological Correlates*. Annals of Surgery, 2016. **263**(4).
78. Hata, T., et al., *Effect of Hospital Volume on Surgical Outcomes After Pancreaticoduodenectomy: A Systematic Review and Meta-analysis*. Annals of Surgery, 2016. **263**(4).
79. Kwakman, R., et al., *Clinicopathological Parameters in Patient Selection for Cytoreductive Surgery and Hyperthermic Intraperitoneal Chemotherapy for Colorectal Cancer Metastases: A Meta-analysis*. Annals of Surgery, 2016. **263**(6).
80. Louridas, M., et al., *Can We Predict Technical Aptitude?: A Systematic Review*. Annals of Surgery, 2016. **263**(4).
81. Maret-Ouda, J., et al., *Antireflux Surgery and Risk of Esophageal Adenocarcinoma: A Systematic Review and Meta-analysis*. Annals of Surgery, 2016. **263**(2).
82. Markar, S.R., et al., *Influence of Surgical Resection of Hepatic Metastases From Gastric Adenocarcinoma on Long-term Survival: Systematic Review and Pooled Analysis*. Annals of Surgery, 2016. **263**(6).
83. Memon, M.A., et al., *Suture Cruroplasty Versus Prosthetic Hiatal Herniorrhaphy for Large Hiatal Hernia: A Meta-analysis and Systematic Review of Randomized Controlled Trials*. Annals of Surgery, 2016. **263**(2).
84. O'Connell, S., et al., *The Use of Intermittent Pneumatic Compression in Orthopedic and Neurosurgical Postoperative Patients: A Systematic Review and Meta-analysis*. Annals of Surgery, 2016. **263**(5).
85. Petrelli, F., et al., *Increasing the Interval Between Neoadjuvant Chemoradiotherapy and Surgery in Rectal Cancer: A Meta-analysis of Published Studies*. Annals of Surgery, 2016. **263**(3).
86. Rollins, K.E. and D.N. Lobo, *Intraoperative Goal-directed Fluid Therapy in Elective Major Abdominal Surgery: A Meta-analysis of Randomized Controlled Trials*. Annals of Surgery, 2016. **263**(3).
87. Switzer, N.J., et al., *Quality of Follow-up: Systematic Review of the Research in Bariatric Surgery*. Annals of Surgery, 2016. **263**(5).
88. Willcutts, K.F., et al., *Early Oral Feeding as Compared With Traditional Timing of Oral Feeding After Upper Gastrointestinal Surgery: A Systematic Review and Meta-analysis*. Annals of Surgery, 2016. **264**(1).
89. Yang, D., et al., *A Meta-analysis of Intraoperative Ventilation Strategies to Prevent Pulmonary Complications: Is Low Tidal Volume Alone Sufficient to Protect Healthy Lungs?* Annals of Surgery, 2016. **263**(5).
90. Adie, S., et al., *Quality of Conduct and Reporting of Meta-analyses of Surgical Interventions*. Annals of Surgery, 2015. **261**(4).
91. Collaud, S., et al., *En Bloc Resection of Pulmonary Sulcus Non-small Cell Lung Cancer Invading the Spine: A Systematic Literature Review and Pooled Data Analysis*. Annals of Surgery, 2015. **262**(1).
92. De Bruijn, K.M.J. and C.H.J. van Eijck, *New-onset Diabetes After Distal Pancreatectomy: A Systematic Review*. Annals of Surgery, 2015. **261**(5).

93. Fokkema, M., et al., *Stenting Versus Endarterectomy for Restenosis Following Prior Ipsilateral Carotid Endarterectomy: An Individual Patient Data Meta-analysis*. *Annals of Surgery*, 2015. **261**(3).
94. Jones, E.L., et al., *Quality of Reporting on Patient and Public Involvement Within Surgical Research: A Systematic Review*. *Annals of Surgery*, 2015. **261**(2).
95. Kwon, J., et al., *Survival Benefit of Adjuvant Chemoradiotherapy in Patients With Ampulla of Vater Cancer: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2015. **262**(1).
96. Maruthappu, M., et al., *The Influence of Volume and Experience on Individual Surgical Performance: A Systematic Review*. *Annals of Surgery*, 2015. **261**(4).
97. Matsuda, A., et al., *Abdominoperineal Resection Provides Better Local Control But Equivalent Overall Survival to Local Excision of Anorectal Malignant Melanoma: A Systematic Review*. *Annals of Surgery*, 2015. **261**(4).
98. Mazaki, T., Y. Ishii, and I. Murai, *Immunoenhancing Enteral and Parenteral Nutrition for Gastrointestinal Surgery: A Multiple-treatments Meta-analysis*. *Annals of Surgery*, 2015. **261**(4).
99. Menahem, B., et al., *Pancreaticogastrostomy Is Superior to Pancreaticojejunostomy for Prevention of Pancreatic Fistula After Pancreaticoduodenectomy: An Updated Meta-analysis of Randomized Controlled Trials*. *Annals of Surgery*, 2015. **261**(5).
100. Müller-Stich, B.P., et al., *Surgical Versus Medical Treatment of Type 2 Diabetes Mellitus in Nonseverely Obese Patients: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2015. **261**(3).
101. Panunzi, S., et al., *Predictors of Remission of Diabetes Mellitus in Severely Obese Individuals Undergoing Bariatric Surgery: Do BMI or Procedure Choice Matter? A Meta-analysis*. *Annals of Surgery*, 2015. **261**(3).
102. Roberts, D.J., et al., *Clinical Presentation of Patients With Tension Pneumothorax: A Systematic Review*. *Annals of Surgery*, 2015. **261**(6).
103. Rowland, S.P., et al., *Inferior Vena Cava Filters for Prevention of Venous Thromboembolism in Obese Patients Undergoing Bariatric Surgery: A Systematic Review*. *Annals of Surgery*, 2015. **261**(1).
104. Saleh, A., et al., *Glycopeptides Versus β -Lactams for the Prevention of Surgical Site Infections in Cardiovascular and Orthopedic Surgery: A Meta-Analysis*. *Annals of Surgery*, 2015. **261**(1).
105. Siminas, S. and P.D. Losty, *Current Surgical Management of Pediatric Idiopathic Constipation: A Systematic Review of Published Studies*. *Annals of Surgery*, 2015. **262**(6).
106. Szasz, P., et al., *Assessing Technical Competence in Surgical Trainees: A Systematic Review*. *Annals of Surgery*, 2015. **261**(6).
107. Vetter, D., et al., *Effects of Art on Surgical Patients: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2015. **262**(5).
108. Ahmed, N., et al., *A Systematic Review of the Effects of Resident Duty Hour Restrictions in Surgery: Impact on Resident Wellness, Training, and Patient Outcomes*. *Annals of Surgery*, 2014. **259**(6).

109. Almenawer, S.A., et al., *Chronic Subdural Hematoma Management: A Systematic Review and Meta-analysis of 34829 Patients*. *Annals of Surgery*, 2014. **259**(3).
110. Bouras, G., et al., *Systematic Review of the Impact of Surgical Harm on Quality of Life After General and Gastrointestinal Surgery*. *Annals of Surgery*, 2014. **260**(6).
111. Dawe, S.R., et al., *A Systematic Review of Surgical Skills Transfer After Simulation-Based Training: Laparoscopic Cholecystectomy and Endoscopy*. *Annals of Surgery*, 2014. **259**(2).
112. Fayanju, O.M., et al., *Contralateral Prophylactic Mastectomy After Unilateral Breast Cancer: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2014. **260**(6).
113. Findlay, J.M., et al., *Enhanced Recovery for Esophagectomy: A Systematic Review and Evidence-Based Guidelines*. *Annals of Surgery*, 2014. **259**(3).
114. Foster, J.D., et al., *Methods of Quality Assurance in Multicenter Trials in Laparoscopic Colorectal Surgery: A Systematic Review*. *Annals of Surgery*, 2014. **260**(2).
115. Grønkjær, M., et al., *Preoperative Smoking Status and Postoperative Complications: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2014. **259**(1).
116. Harrysson, I.J., et al., *Systematic Review of Learning Curves for Minimally Invasive Abdominal Surgery: A Review of the Methodology of Data Collection, Depiction of Outcomes, and Statistical Analysis*. *Annals of Surgery*, 2014. **260**(1).
117. Howell, A.-M., et al., *Reducing the Burden of Surgical Harm: A Systematic Review of the Interventions Used to Reduce Adverse Events in Surgery*. *Annals of Surgery*, 2014. **259**(4).
118. Kim, K.W., et al., *Imaging Features to Distinguish Malignant and Benign Branch-Duct Type Intraductal Papillary Mucinous Neoplasms of the Pancreas: A Meta-analysis*. *Annals of Surgery*, 2014. **259**(1).
119. Lee, L., et al., *A Systematic Review of Economic Evaluations of Enhanced Recovery Pathways for Colorectal Surgery*. *Annals of Surgery*, 2014. **259**(4).
120. Li, J., Z. Ji, and Y. Li, *The Comparison of Self-Gripping Mesh and Sutured Mesh in Open Inguinal Hernia Repair: The Results of Meta-analysis*. *Annals of Surgery*, 2014. **259**(6).
121. O'Callaghan, J.M., et al., *The Effect of Preservation Solutions for Storage of Liver Allografts on Transplant Outcomes: A Systematic Review and Meta-Analysis*. *Annals of Surgery*, 2014. **260**(1).
122. Orri, M., et al., *Being a Surgeon—The Myth and the Reality: A Meta-Synthesis of Surgeons' Perspectives About Factors Affecting Their Practice and Well-being*. *Annals of Surgery*, 2014. **260**(5).
123. Pöpping, D.M., et al., *Impact of Epidural Analgesia on Mortality and Morbidity After Surgery: Systematic Review and Meta-analysis of Randomized Controlled Trials*. *Annals of Surgery*, 2014. **259**(6).

124. Reames, B.N., S.P. Shubeck, and J.D. Birkmeyer, *Strategies for Reducing Regional Variation in the Use of Surgery: A Systematic Review*. Annals of Surgery, 2014. **259**(4).
125. Sharma, P.V., et al., *Systematic Review and Meta-analysis of the Role of Routine Colonic Evaluation After Radiologically Confirmed Acute Diverticulitis*. Annals of Surgery, 2014. **259**(2).
126. The United Kingdom National Surgical Research, C., *Safety of Short, In-Hospital Delays Before Surgery for Acute Appendicitis: Multicentre Cohort Study, Systematic Review, and Meta-Analysis*. Annals of Surgery, 2014. **259**(5).
127. Acedillo, R.R., et al., *The Risk of Perioperative Bleeding in Patients With Chronic Kidney Disease: A Systematic Review and Meta-Analysis*. Annals of Surgery, 2013. **258**(6).
128. Adie, S., et al., *CONSORT Compliance in Surgical Randomized Trials: Are We There Yet? A Systematic Review*. Annals of Surgery, 2013. **258**(6).
129. Bergqvist, D., M. Björck, and A. Wanhainen, *Treatment of Vascular Ehlers-Danlos Syndrome: A Systematic Review*. Annals of Surgery, 2013. **258**(2).
130. Broeders, J.A., et al., *Laparoscopic Anterior 180-Degree Versus Nissen Fundoplication for Gastroesophageal Reflux Disease: Systematic Review and Meta-Analysis of Randomized Clinical Trials*. Annals of Surgery, 2013. **257**(5).
131. Chang, W.K., et al., *Gentamicin-Collagen Implants to Reduce Surgical Site Infection: Systematic Review and Meta-analysis of Randomized Trials*. Annals of Surgery, 2013. **258**(1).
132. Eliassen, M., et al., *Preoperative Alcohol Consumption and Postoperative Complications: A Systematic Review and Meta-Analysis*. Annals of Surgery, 2013. **258**(6).
133. Haloua, M.H., et al., *A Systematic Review of Oncoplastic Breast-Conserving Surgery: Current Weaknesses and Future Prospects*. Annals of Surgery, 2013. **257**(4).
134. Honda, M., et al., *Hand-Sewn Versus Mechanical Esophagogastric Anastomosis After Esophagectomy: A Systematic Review and Meta-Analysis*. Annals of Surgery, 2013. **257**(2).
135. Houssami, N., R. Turner, and M. Morrow, *Preoperative Magnetic Resonance Imaging in Breast Cancer: Meta-Analysis of Surgical Outcomes*. Annals of Surgery, 2013. **257**(2).
136. Knops, A.M., et al., *Decision Aids for Patients Facing a Surgical Treatment Decision: A Systematic Review and Meta-analysis*. Annals of Surgery, 2013. **257**(5).
137. Leinicke, J.A., et al., *Operative Management of Rib Fractures in the Setting of Flail Chest: A Systematic Review and Meta-Analysis*. Annals of Surgery, 2013. **258**(6).
138. Lin, N.-C., H. Nitta, and G. Wakabayashi, *Laparoscopic Major Hepatectomy: A Systematic Literature Review and Comparison of 3 Techniques*. Annals of Surgery, 2013. **257**(2).

139. O'Brien, P.E., et al., *Long-Term Outcomes After Bariatric Surgery: Fifteen-Year Follow-Up of Adjustable Gastric Banding and a Systematic Review of the Bariatric Surgical Literature*. *Annals of Surgery*, 2013. **257**(1).
140. Parikh, M., et al., *Surgical Strategies That May Decrease Leak After Laparoscopic Sleeve Gastrectomy: A Systematic Review and Meta-Analysis of 9991 Cases*. *Annals of Surgery*, 2013. **257**(2).
141. Roberts, D.J., et al., *Diagnostic Accuracy of Computed Tomographic Angiography for Blunt Cerebrovascular Injury Detection in Trauma Patients: A Systematic Review and Meta-Analysis*. *Annals of Surgery*, 2013. **257**(4).
142. Russ, S., et al., *Do Safety Checklists Improve Teamwork and Communication in the Operating Room? A Systematic Review*. *Annals of Surgery*, 2013. **258**(6).
143. Schoenberg, M.B., et al., *Laparoscopic Heller Myotomy Versus Endoscopic Balloon Dilatation for the Treatment of Achalasia: A Network Meta-Analysis*. *Annals of Surgery*, 2013. **258**(6).
144. Teraa, M., et al., *Autologous Bone Marrow-Derived Cell Therapy in Patients With Critical Limb Ischemia: A Meta-Analysis of Randomized Controlled Clinical Trials*. *Annals of Surgery*, 2013. **258**(6).
145. Yin, Z., et al., *Is the End of the T-Tube Drainage Era in Laparoscopic Choledochotomy for Common Bile Duct Stones Is Coming? A Systematic Review and Meta-Analysis*. *Annals of Surgery*, 2013. **257**(1).
146. Zendejas, B., et al., *State of the Evidence on Simulation-Based Training for Laparoscopic Surgery: A Systematic Review*. *Annals of Surgery*, 2013. **257**(4).
147. Acheson, A.G., M.J. Brookes, and D.R. Spahn, *Effects of Allogeneic Red Blood Cell Transfusions on Clinical Outcomes in Patients Undergoing Colorectal Cancer Surgery: A Systematic Review and Meta-Analysis*. *Annals of Surgery*, 2012. **256**(2).
148. Blencowe, N.S., et al., *Reporting of Short-Term Clinical Outcomes After Esophagectomy: A Systematic Review*. *Annals of Surgery*, 2012. **255**(4).
149. Borchard, A., et al., *A Systematic Review of the Effectiveness, Compliance, and Critical Factors for Implementation of Safety Checklists in Surgery*. *Annals of Surgery*, 2012. **256**(6).
150. Chang, W.K., et al., *Triclosan-Impregnated Sutures to Decrease Surgical Site Infections: Systematic Review and Meta-Analysis of Randomized Trials*. *Annals of Surgery*, 2012. **255**(5).
151. Edwards, J.P., et al., *Wound Protectors Reduce Surgical Site Infection: A Meta-Analysis of Randomized Controlled Trials*. *Annals of Surgery*, 2012. **256**(1).
152. Gheorghe, A., et al., *Systematic Review of the Clinical Effectiveness of Wound-edge Protection Devices in Reducing Surgical Site Infection in Patients Undergoing Open Abdominal Surgery*. *Annals of Surgery*, 2012. **255**(6).
153. Guo, L., et al., *Meta-Analysis of Clinical Efficacy of Pulsed Radio Frequency Energy Treatment*. *Annals of Surgery*, 2012. **255**(3).

154. Hansson, B.M.E., et al., *Surgical Techniques for Parastomal Hernia Repair: A Systematic Review of the Literature*. Annals of Surgery, 2012. **255**(4).
155. Kao, L.S., et al., *Should Perioperative Supplemental Oxygen Be Routinely Recommended for Surgery Patients? A Bayesian Meta-Analysis*. Annals of Surgery, 2012. **256**(6).
156. Lehmann, K., et al., *Chemotherapy Before Liver Resection of Colorectal Metastases: Friend or Foe?* Annals of Surgery, 2012. **255**(2).
157. Makino, T., et al., *The Impact of Obesity on Perioperative Outcomes After Laparoscopic Colorectal Resection*. Annals of Surgery, 2012. **255**(2).
158. Marimuthu, K., et al., *A Meta-Analysis of the Effect of Combinations of Immune Modulating Nutrients on Outcome in Patients Undergoing Major Open Gastrointestinal Surgery*. Annals of Surgery, 2012. **255**(6).
159. O'Reilly, E.A., J.P. Burke, and P.R. O'Connell, *A Meta-Analysis of Surgical Morbidity and Recurrence After Laparoscopic and Open Repair of Primary Unilateral Inguinal Hernia*. Annals of Surgery, 2012. **255**(5).
160. Rahbour, G., et al., *A Meta-analysis of Outcomes Following Use of Somatostatin and Its Analogues for the Management of Enterocutaneous Fistulas*. Annals of Surgery, 2012. **256**(6).
161. Shabanzadeh, D.M. and L.T. Sørensen, *Laparoscopic Surgery Compared With Open Surgery Decreases Surgical Site Infection in Obese Patients: A Systematic Review and Meta-Analysis*. Annals of Surgery, 2012. **256**(6).
162. Sørensen, L.T., *Wound Healing and Infection in Surgery: The Pathophysiological Impact of Smoking, Smoking Cessation, and Nicotine Replacement Therapy: A Systematic Review*. Annals of Surgery, 2012. **255**(6).
163. Talat, N., A.P. Belgaumkar, and K.-M. Schulte, *Surgery in Castleman's Disease: A Systematic Review of 404 Published Cases*. Annals of Surgery, 2012. **255**(4).
164. van Baal, M.C., et al., *Timing of Cholecystectomy After Mild Biliary Pancreatitis: A Systematic Review*. Annals of Surgery, 2012. **255**(5).
165. Venkat, R., et al., *Laparoscopic Distal Pancreatectomy Is Associated With Significantly Less Overall Morbidity Compared to the Open Technique: A Systematic Review and Meta-Analysis*. Annals of Surgery, 2012. **255**(6).
166. Verschuur-Maes, A.H.J., et al., *Columnar Cell Lesions on Breast Needle Biopsies: Is Surgical Excision Necessary?: A Systematic Review*. Annals of Surgery, 2012. **255**(2).
167. Viñuela, E.F., et al., *Laparoscopic Versus Open Distal Gastrectomy for Gastric Cancer: A Meta-Analysis of Randomized Controlled Trials and High-Quality Nonrandomized Studies*. Annals of Surgery, 2012. **255**(3).
168. Warschkow, R., et al., *Safe and Early Discharge After Colorectal Surgery Due to C-Reactive Protein: A Diagnostic Meta-Analysis of 1832 Patients*. Annals of Surgery, 2012. **256**(2).
169. Zeng, Y.-K., et al., *Laparoscopy-Assisted Versus Open Distal Gastrectomy for Early Gastric Cancer: Evidence from Randomized and Nonrandomized Clinical Trials*. Annals of Surgery, 2012. **256**(1).

170. Zevin, B., R. Aggarwal, and T.P. Grantcharov, *Volume-Outcome Association in Bariatric Surgery: A Systematic Review*. Annals of Surgery, 2012. **256**(1).
171. Makino, T., J.W. Milsom, and S.W. Lee, *Feasibility and Safety of Single-Incision Laparoscopic Colectomy: A Systematic Review*. Annals of Surgery, 2012. **255**(4).
172. Ahmad, N.Z. and A. Ahmed, *Meta-analysis of the Effectiveness of Surgical Scalpel or Diathermy in Making Abdominal Skin Incisions*. Annals of Surgery, 2011. **253**(1).
173. Boshier, P.R., O. Anderson, and G.B. Hanna, *Transthoracic Versus Transhiatal Esophagectomy for the Treatment of Esophagogastric Cancer: A Meta-Analysis*. Annals of Surgery, 2011. **254**(6).
174. Broeders, J.A., et al., *Laparoscopic Anterior Versus Posterior Fundoplication for Gastroesophageal Reflux Disease: Systematic Review and Meta-Analysis of Randomized Clinical Trials*. Annals of Surgery, 2011. **254**(1).
175. Dhir, M., et al., *Influence of Margins on Overall Survival After Hepatic Resection for Colorectal Metastasis: A Meta-Analysis*. Annals of Surgery, 2011. **254**(2).
176. Groeneveld, A.B.J., R.J. Navickis, and M.M. Wilkes, *Update on the Comparative Safety of Colloids: A Systematic Review of Clinical Studies*. Annals of Surgery, 2011. **253**(3).
177. Houssami, N., et al., *Preoperative Ultrasound-Guided Needle Biopsy of Axillary Nodes in Invasive Breast Cancer: Meta-Analysis of Its Accuracy and Utility in Staging the Axilla*. Annals of Surgery, 2011. **254**(2).
178. Jay, C.L., et al., *Ischemic Cholangiopathy After Controlled Donation After Cardiac Death Liver Transplantation: A Meta-analysis*. Annals of Surgery, 2011. **253**(2).
179. Memon, M.A., et al., *Meta-Analysis of D1 Versus D2 Gastrectomy for Gastric Adenocarcinoma*. Annals of Surgery, 2011. **253**(5).
180. Mertz, D., J. Johnstone, and M. Loeb, *Does Duration of Perioperative Antibiotic Prophylaxis Matter in Cardiac Surgery? A Systematic Review and Meta-Analysis*. Annals of Surgery, 2011. **254**(1).
181. Mirnezami, A., et al., *Increased Local Recurrence and Reduced Survival From Colorectal Cancer Following Anastomotic Leak: Systematic Review and Meta-Analysis*. Annals of Surgery, 2011. **253**(5).
182. Mollberg, N., et al., *Arterial Resection During Pancreatectomy for Pancreatic Cancer: A Systematic Review and Meta-Analysis*. Annals of Surgery, 2011. **254**(6).
183. Patel, S., et al., *Positron Emission Tomography/Computed Tomographic Scans Compared to Computed Tomographic Scans for Detecting Colorectal Liver Metastases: A Systematic Review*. Annals of Surgery, 2011. **253**(4).
184. Pontiroli, A.E. and A. Morabito, *Long-term Prevention of Mortality in Morbid Obesity Through Bariatric Surgery. A Systematic Review and Meta-analysis of Trials Performed With Gastric Banding and Gastric Bypass*. Annals of Surgery, 2011. **253**(3).

185. Srinivasa, S., et al., *Preoperative Glucocorticoid Use in Major Abdominal Surgery: Systematic Review and Meta-Analysis of Randomized Trials*. *Annals of Surgery*, 2011. **254**(2).
186. Thakur, V., C.M. Schlachta, and S. Jayaraman, *Minilaparoscopic Versus Conventional Laparoscopic Cholecystectomy: A Systematic Review and Meta-analysis*. *Annals of Surgery*, 2011. **253**(2).