

First Author	Year	Location	Study Design	Type of Surgery	N	Outcome	Endpoint	Risk of Bias
Gawande	2007	USA	Retrospective cohort for derivation, prospective cohort for testing and validation	General/Vascular	767	Morbidity and mortality (NSQIP)	30d	Low
Regenbogen	2009	USA	Retrospective cohort	General/Vascular	4119	Morbidity and mortality (NSQIP)	30d	Low
Regenbogen	2010	USA	Retrospective cohort	General	795	Morbidity and mortality (NSQIP)	30d	Low
Wuerz	2011	USA	Retrospective cohort	Orthopedic Surgery	3511	Morbidity and mortality (NSQIP)	30d	Low
Haynes	2011	Canada, India, Jordan, New Zealand, Philippines, Tanzania, UK, USA	Prospective cohort	Non-cardiac procedures undergoing general anesthesia	5909	Morbidity and mortality (NSQIP)	30d	Low
Ohlsson	2011	Sweden	Prospective cohort	General/Vascular	224	Morbidity and mortality (NSQIP)	30d	Low
Roghman	2012	Germany	Combined retrospective and cohort	Urologic	44	Mortality	30d	Low
Thorn	2012	UK	Prospective cohort	General/Vascular/Orthopedic	223	Morbidity and mortality (NSQIP)	30d	Low
Urrutia	2012	Chile	Prospective cohort	Orthopedic	723	Morbidity and mortality (NSQIP)	30d	Low
Dullo	2013	Kenya	Prospective cohort	General – emergent laparotomy	152	Morbidity and mortality using definition from POSSUM validation	30d	Low
Sobol	2013	USA	Retrospective cohort	General – major intra-abdominal	8501	Post-op ICU admission		Low
Miki	2014	Japan	Retrospective cohort	General - gastrectomy	328	Morbidity and mortality (CDC)	30d	Low
Glass	2015	USA	Retrospective cohort	General other than trauma or endoscopy	2125	Post-op ICU admission		Low
Jering	2015	USA	Retrospective cohort	General/Vascular/Oncological	4728	Morbidity and mortality (NSQIP)	30d	Low
Sakan	2015	Croatia	Retrospective cohort	Orthopedic	43	Morbidity and mortality (NSQIP)	30d and 6mo	Low
Urrutia	2015	Chile	Prospective cohort	Orthopedic spine	268	Morbidity and mortality (NSQIP)	30d	Low
Eto	2016	Japan	Retrospective cohort	Thoracic - esophagectomy	399	Morbidity and mortality (CDC)	Not specified	Low
Wied	2016	Denmark	Retrospective cohort	Orthopedic – lower limb amputation	170	Morbidity and mortality (NSQIP)	30d	Low

Ejaz	2016	USA	Retrospective cohort	General – major gastrointestinal	1833	Morbidity and mortality (NSQIP)	30d	Low
House	2016	USA	Retrospective cohort	Non-cardiac/non-thoracic	46799	Peak troponin, length of stay, 7 and 30d mortality	30d	Low
Choric	2016	Denmark	Prospective cohort	General - emergent	355	Morbidity and mortality (NSQIP and CDC)	30d	Low
Stroyer	2017	Denmark	Retrospective cohort	Thoracic – Ivor-Lewis esophagectomy	234	Morbidity and mortality (CDC)	30d	Low
Ngarambe	2017	Rwanda	Prospective cohort	General – exploratory laparotomy	218	Morbidity and mortality (NSQIP)	In-hospital	Low
Ou	2017	Taiwan	Retrospective cohort	Neuro/Orthopedic spine fusion	199	In-hospital major complication (NSQIP)	In-hospital	Low
Hsu	2017	Taiwan	Retrospective cohort	Neuro – craniotomy for meningioma	99	Morbidity and mortality (NSQIP)	30d	Low
Kurata	2017	Japan	Retrospective cohort	Gyne/Onc	70	Morbidity and mortality (CDC)	30d	Low
Mastalerz	2018	Poland	Prospective cohort	General	144	Morbidity and mortality (CDC)	30d	Low
Day	2018	USA	Case series/chart review	Head and neck cancer surgery	713	Morbidity and mortality (NSQIP)	30d	Low
Kotera	2018	Japan	Retrospective cohort	Orthopedic	506	Morbidity and mortality (NSQIP)	30d morbidity, 90d mortality	Low
Goel	2018	USA	Prospective cohort	Cancer surgery	405	Morbidity and mortality (NSQIP)	30d	Low
Kenig(2)	2018	Poland	Prospective cohort	General – emergency in elderly population	315	Morbidity and mortality (CDC)	30d	Low
Kenig(1)	2018	Poland	Prospective cohort	General/Oncological surgery in elderly patients	165	Morbidity and mortality (CDC)	30d	Low
Yoshito	2018	Japan	Retrospective cohort	Hepatobiliary – curative resection for hepatocellular carcinoma	158	Morbidity and mortality (CDC)	30d	Low
Prince	2018	USA	Retrospective case series	Head and Neck – resection of squamous cell carcinoma	563	Morbidity and mortality (NSQIP)	30d	Low
Ding	2019	China	Prospective cohort	Hepatobiliary – pancreaticoduodenectomy or distal pancreatectomy for pancreatic ductal carcinoma	160	Morbidity and mortality (NSQIP)	30d	Low
Singh	2019	Trinidad	Retrospective cohort	General - emergency	220	Morbidity and mortality (NSQIP and CDC)	Not specified	Low
CDC: Clavien-Dindo classification, NSQIP: National Surgery Quality Improvement Program								