

Table 1. Study characteristics and results – Module Uitstel van operatie bij pneumonie

Publication	Study design	Population	Surgery	Comparison	Results
Codner, 2023	Cohort study USA	N=262 SARS-CoV-2 (+) Age 55.7 ± 16.1 Male 46%	Non-preoperative critically ill adult surgical patients from 5/2020–12/2021 Gastrointestinal: 36% Orthopedics: 17% Elective: 54%	SARS-CoV-2 positive, Days prior to surgery, reference is SARS-CoV-2 negative	Postoperative pneumonia incidence 0-14d: 21/145 (14.5%) 15-30d: 0/53 31-50d: 2/64 (3.1%) Mortality 0-14d: 8/145 (5.6%) 15-30d: 0/53 31-50d: 0/64 Length of stay, median (IQR) 0-14d: 8 (4-15) 15-30d: 3 (1-5) 31-50d: 3.5 (2-6) ICU admission 0-14d: 36/145 (25.9%) 15-30d: 8/53 (15.4%) 31-50d: 6/64 (9.7%)

					Multivariable OR (95% CI) for major complication
					0-14d: 1.88 (1.13, 3.15)
					15-30d: 0.43 (0.14, 1.30)
					31-50d: 0.98 (0.44, 2.21)
COVIDSurg, 2021	international, multicentre, prospective cohort study 116 countries	N=3127 SARS-CoV-2 (+) Predominant age category: 30-49 ASA physical status I-II: 69% Respiratory comorbidities: 10% Indication for surgery benign: 55-68%	Patients undergoing any type of surgery in October 2020	Timing of <i>elective</i> surgery following the diagnosis of SARS-CoV-2 infection. Rates adjusted for age, sex, ASA, revised cardiac risk index, respiratory comorbidity, grade of surgery, urgency of surgery, country income, timing of surgery following SARS-CoV-2 diagnosis.	Adjusted 30-day PPC rate 0-2w: 5.6% (4.6-6.5%) 3-4w: 6.3% (4.7-7.9%) 5-6w: 5.5% (3.7-7.4%) >6w: 1.9% (1.3-2.5%) Adjusted 30-day mortality rate 0-2w: 2.0% (1.5-2.4%) 3-4w: 1.9% (1.2-2.7%) 5-6w: 1.4% (0.6-2.2%) >6w: 0.7% (0.4-1%)
Deng, 2022	Observational cohort study USA	N=2858 with a confirmed COVID-19 diagnosis before the date of surgery Mean age: 56 Male: 34-39% COPD: 5.4-8.8%	Patients undergoing major elective surgery between March 1, 2020 and May 30, 2021 Hysterectomy: 25% Knee arthroplasty: 22% Lung resection: 0.9%	Timing of surgery relative to the development of Covid-19	Pneumonia, incidence 0-4w: 57/780 (7.3%) 4-8w: 11/445 (2.5%) 8w or more: 23/1633 (1.4%) Pneumonia, OR (95% CI) compared to COVID-19 negative

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					0-4w: 6.46 (4.06-10.27)
					4-8w: 2.44 (1.20-4.96)
					8w or more: 1.15 (0.66-2.01)
					Postoperative respiratory failure, incidence
					0-4w: 57/780 (7.3%)
					4-8w: 11/445 (2.5%)
					8w or more: 45 (2.8%)
					Postoperative respiratory failure, OR (95% CI) compared to COVID-19 negative
					0-4w: 3.36 (2.22, 5.10)
					4-8w: 1.23 (0.62, 2.47)
					8w or more: 1.09 (0.71, 1.67)
Lal, 2021	Multicenter, prospective propensity-matched analysis USA	N=432 SARS-CoV-2 (+) Age 65.1 (12.7) Male: 92.1% COPD: 23.4% ASA III: 60.2%	Patients who underwent a surgical procedure between March 1 and August 15, 2020 General anesthesia: 62.3% Musculoskeletal: 20.6% Urological: 19.7% Gastrointestinal: 15.7%	COVID-19 positive interval between testing and date of procedure	Pneumonia, OR (95% CI) compared to COVID-19 negative ≤10d: 7.7 (4.4-13.3) 11-30d: 6.2 (3.7-10.1) >30d: 2.7 (1.8-4.1) Postoperative mechanical ventilation

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			Elective: 45.4%		≤10d: 3.1 (1.3-6.4) 11-30d: 3.1 (1.5-5.9) >30d: 1.3 (0.7-2.3) ARDS ≤10d: 4.0 (2.2-7.2) 11-30d: 4.5 (2.7-7.5) >30d: 2.0 (1.3-3.0)
Liu, 2024	Observational cohort study China	N=2249 preoperative COVID-19 Age 54 (40–65) Male: 52.2% ASA I or II: 90.4%	Elective, noncardiac surgery under general anesthesia Orthopedic: 31.8% Abdominal: 19.8% Thoracic and vascular: 14.8%	Timing from COVID-19 diagnosis to surgery. All analyses were adjusted for age, sex, body mass index, American Society of Anesthesiologists physical status, grade of surgery and vaccination status	PPC, adjusted OR (95% CI) <7w: 0.95 (0.66-1.38) ≥7w: 0.80 (0.56-1.16)
Qudaisat, 2023	Propensity score matched retrospective single-center cohort study Jordan	N=209 COVID-19 Patients Age: 45 ± 18 Male: 44% ASA I-II: 79% COPD: 0.5% Asthma: 1.0%	GI surgery: 28.2% ENT surgery: 13.4% Orthopedic surgery: 12.0% General anesthesia: 86.6%	Association between COVID-19 status and duration between surgery and infection	Primary composite: death, unplanned ICU admission or postoperative mechanical ventilation Adjusted OR (95% CI) >4w vs. <4w: 0.02 (0.00-0.33) >8w vs. 4-8w: 0.26 (0.02-2.83) >12w vs. 8-12w: 0.00(0.00-0.00) Length of hospital stay

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					>4w vs. <4w: 3.05(0.41-5.70)
					>8w vs. 4-8w: -0.52(-1.49-0.45)
					>12w vs. 8-12w: -0.71(-1.62-0.21)
Xiong, 2024	Propensity-score-matched Case-control Study	N=560 SARS-CoV-2 (+)	Patients who had elective surgery between October 2022 and January 2023.	Time of surgery relative to first infection (0-7, 8-14, 15-30, and >30 days)	Pulmonary infection/pneumonia
	China	Age ≤60: 73.57%	Elective: 78%		0-7d: 22/317 (6.94%)
		Male 73%	General anesthesia: 74%		8-14d: 0/12
		COPD 2%			15-30d: 7/117 (5.98%)
		ASA II 76%			>30d: 9/130 (6.92%)
					Pleural effusion
					0-7d: 3/317 (0.95%)
					8-14d: 0/12
					15-30d: 1/117 (0.85%)
					>30d: 2/130 (1.54%)
					Respiratory failure
					0-7d: 9/317 (2.84%)
					8-14d: 0/12
					15-30d: 0/117
					>30d: 1/130 (0.77%)
					Transfer to ICU

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	>30d: 2/130 (1.54%)