

Table 1. Study characteristics – Module Aanvullende diagnostiek

Study	Design	Surgery type	Patients: N, age, sex	Abnormal spirometry	PPC definition	Risk of bias ¹
Kanat, 2007	Prospective cohort	Upper abdominal surgery	60 consecutive patients (29 men, 31 women) with a mean age of 55 (SD 16) years	Abnormal spirometric test; abnormal functional patterns were categorized as (i) obstructive, when FEV1/FVC ratio was below the normal range; (ii) restrictive, when TLC was less than the lower limit of normal; and (iii) combined, when both abnormalities were concomitantly present in the same patient.	PPCs within 48 hours after surgery: atelectasis, pulmonary emboli, bronchitis, pneumonia, pneumonitis and acute respiratory failure	High for reference standard
Jeong, 2013	Prospective cohort	Gastric cancer surgery	582 consecutive patients of which 538 were included; 368 males and 170 females, mean age 61.8 (SD 11.6) years	Pulmonary function airway limitations were classified as normal ($FEV1/FVC \geq 0.7$), mild ($FEV1/FVC < 0.7$, $FEV1 \geq 80\%$ predicted), moderate ($FEV1/FVC < 0.7$, $50\% \leq FEV1 < 80\%$ predicted), severe ($FEV1/FVC < 0.7$, $30\% \leq FEV1 < 50\%$), or very severe ($FEV1/FVC < 0.7$, $FEV1 < 30\%$ predicted), according to the spirometric classification of COPD.	Pulmonary complications, not explicitly defined	High for reference standard
Huh, 2013	Retro-spective cohort	Laparoscopyassisted gastrectomy	Elderly patients (60+): 213 patients (124 male, 89 female), mean age 67.0 (SD 6.3) years	Patients were spirometrically classified as normal or abnormal according to the following cut-off points commonly accepted in clinical practice: normal, $\geq 80\%$ of predicted values for FVC and FEV1, and $\geq 70\%$ for FEV1/FVC; abnormal, $< 80\%$ of predicted values for FVC and FEV1, and $< 70\%$ for FEV1/FVC.	Atelectasis; pulmonary embolism; bronchitis; pneumonia; and/or acute respiratory failure	High for patient selection and reference standard, unclear for flow and timing
Clavellina-Gaytán, 2015	Retro-spective cohort	Bariatric surgery	Obese patients: 602 patients, 256 male (42.5 %) and 346 female (57.5 %), with a mean age of 40.2 (SD 11.6) years	Results were interpreted based on GOLD and ATS criteria; COPD was diagnosed in the presence of $FEV1/FVC < 70\%$ of the predicted value. It was considered mild when FEV1 was $\geq 80\%$ of the predicted value, moderate when FEV1 was between 70 and 79 %, and severe when FEV1 was between 30 and 49%. A restrictive pattern was suggested in the presence of a FVC $< 70\%$ of the predicted value with a normal	Respiratory postoperative complications: O2 desaturation, symptomatic atelectasis, productive cough, dyspnea, pneumonia,	High for reference standard, unclear for flow and timing

				FEV1/FVC, and a mixed pattern was diagnosed when there was a combination of the two.	pulmonary thromboembolism	
Kim, 2016	Retro-spective cohort	Abdominal surgery	387 patients ² of which 258 (66.7%) were male, median age 69 years (range, 40–90 years)	COPD patients were classified according to the severity defined by spirometry findings on the basis of GOLD guidelines. Mild-to-moderate COPD was defined as FEV1 $\geq$ 50% of predicted value, and severe-to-very severe COPD was defined as FEV1 <50% of predicted value. Among patients with FEV1/FVC $\geq$ 0.7, those with FVC <80% of predicted value were found to have pulmonary disease with restrictive pattern, and those with FVC $\geq$ 80% of predicted value were defined as control subjects.	PPCs included new-onset pneumonia, pulmonary edema, pulmonary thromboembolism, atelectasis, and acute exacerbation of COPD after surgery.	High for patient selection and reference standard, unclear for index test

ATS: American Thoracic Society; ERS: European Respiratory Society; GOLD: Global Initiative for Chronic Obstructive Lung Disease.

¹ Dankert (2022) assessed risk of bias by means of QUADAS- 2

² Patients who met the following criteria were included in the present study: preoperative pulmonology consultation because of comorbidity, old age, or abnormal lung function; abdominal surgery under general anesthesia; and age $\geq$ 40 years