Supplementary appendix

Table S1: Search terms for the meta-analysis in PubMed, Scopus, Web of Science, and Science Direct databases.

Database	Search terms
PubMed (n=152)	"Gastrectomy"[MeSH Terms] OR "sleeve gastrectomy"[Title/Abstract] OR "gastric sleeve surgery"[Title/Abstract]**AND** ("one anastomosis duodenal switch"[Title/Abstract] OR "one anastomosis duodenal switch with SG"[Title/Abstract] OR "one anastomosis duodenal switch with sleeve"[Title/Abstract] OR "one anastomosis duodenal switch with sleeve gastrectomy"[Title/Abstract] OR "one anastomosis duodeno ileal bypass with SG"[Title/Abstract] OR "one anastomosis duodeno ileal bypass with sleeve"[Title/Abstract] OR "one anastomosis duodeno ileal bypass with sleeve gastrectomy"[Title/Abstract] OR "one anastomosis Duodeno ileostomy with SG"[Title/Abstract] OR "one anastomosis Duodeno ileostomy with sleeve"[Title/Abstract] OR "one anastomosis Duodeno ileostomy with sleeve gastrectomy"[Title/Abstract] OR "one anastomosis duodenoileal bypass with SG"[Title/Abstract] OR "one anastomosis duodeno-ileal bypass with SG"[Title/Abstract] OR "one anastomosis duodenoileal bypass with sleeve"[Title/Abstract] OR "one anastomosis duodeno-ileal bypass with sleeve"[Title/Abstract] OR "one anastomosis duodenoileal bypass with sleeve gastrectomy"[Title/Abstract] OR "one anastomosis duodeno-ileal bypass with sleeve gastrectomy"[Title/Abstract] OR "one anastomosis Duodenoileostomy with SG"[Title/Abstract] OR "one anastomosis Duodeno-ileostomy with SG"[Title/Abstract] OR "one anastomosis Duodenoileostomy with sleeve"[Title/Abstract] OR "one anastomosis Duodeno-ileostomy with sleeve"[Title/Abstract] OR "one anastomosis Duodenoileostomy with sleeve gastrectomy"[Title/Abstract] OR "one anastomosis Duodeno-ileostomy with sleeve gastrectomy"[Title/Abstract] OR "Single anastomosis duodenal switch"[Title/Abstract] OR "Single anastomosis duodenal switch with SG"[Title/Abstract] OR "Single anastomosis duodenal switch with sleeve"[Title/Abstract] OR "Single anastomosis duodenal switch with sleeve gastrectomy"[Title/Abstract] OR "Single anastomosis duodeno ileal bypass with SG"[Title/Abstract] OR "Single anastomosis duodeno ileal bypass with sleeve"[Title/Abstract] OR "Single anastomosis duodeno ileal bypass with sleeve gastrectomy"[Title/Abstract] OR "Single anastomosis Duodeno ileostomy with SG"[Title/Abstract] OR "Single anastomosis Duodeno ileostomy with SG"[Title/Abstract] OR "Single anastomosis Duodeno ileostomy with sleeve"[Title/Abstract] OR "Single anastomosis Duodeno ileostomy with sleeve gastrectomy"[Title/Abstract] OR "Single anastomosis duodenoileal bypass with SG"[Title/Abstract] OR "Single anastomosis duodeno-ileal bypass with SG"[Title/Abstract] OR "Single anastomosis duodenoileal bypass with sleeve"[Title/Abstract] OR "Single anastomosis duodeno-ileal bypass with sleeve"[Title/Abstract] OR "Single anastomosis duodenoileal bypass with sleeve gastrectomy"[Title/Abstract] OR "Single anastomosis duodeno-ileal bypass with sleeve gastrectomy"[Title/Abstract] OR "Single anastomosis Duodenoileostomy with SG"[Title/Abstract] OR "Single anastomosis Duodeno-ileostomy with SG"[Title/Abstract] OR "Single anastomosis Duodenoileostomy with sleeve"[Title/Abstract] OR "Single anastomosis Duodeno-ileostomy with sleeve"[Title/Abstract] OR "Single anastomosis Duodenoileostomy with sleeve gastrectomy"[Title/Abstract] OR "Single anastomosis Duodeno-ileostomy with sleeve gastrectomy"[Title/Abstract] OR "Single-anastomosis duodenal switch"[Title/Abstract] OR "Single-anastomosis duodenal switch with

	SG"[Title/Abstract] OR "Single-anastomosis duodenal switch with sleeve"[Title/Abstract] OR "Single-anastomosis duodenal switch with sleeve gastrectomy"[Title/Abstract] OR "Single-anastomosis duodeno ileal bypass with SG"[Title/Abstract] OR "Single-anastomosis duodeno ileal bypass with sleeve"[Title/Abstract] OR "Single-anastomosis duodeno ileal bypass with sleeve gastrectomy"[Title/Abstract] OR "Single-anastomosis Duodeno ileostomy with SG"[Title/Abstract] OR "Single-anastomosis Duodeno ileostomy with sleeve"[Title/Abstract] OR "Single-anastomosis Duodeno ileostomy with sleeve gastrectomy"[Title/Abstract] OR "Single-anastomosis duodenoileal bypass with SG"[Title/Abstract] OR "Single-anastomosis duodeno-ileal bypass with SG"[Title/Abstract] OR "Single-anastomosis duodenoileal bypass with sleeve"[Title/Abstract] OR "Single-anastomosis duodeno-ileal bypass with sleeve"[Title/Abstract] OR "Single-anastomosis duodenoileal bypass with sleeve gastrectomy"[Title/Abstract] OR "Single-anastomosis duodeno-ileal bypass with sleeve gastrectomy"[Title/Abstract] OR "Single-anastomosis Duodenoileostomy with SG"[Title/Abstract] OR "Single-anastomosis Duodeno-ileostomy with SG"[Title/Abstract] OR "Single-anastomosis Duodenoileostomy with sleeve"[Title/Abstract] OR "Single-anastomosis Duodeno-ileostomy with sleeve"[Title/Abstract] OR "Single-anastomosis Duodenoileostomy with sleeve gastrectomy"[Title/Abstract] OR "Single-anastomosis Duodeno-ileostomy with sleeve gastrectomy"[Title/Abstract] OR "SADI-S"[Title/Abstract])
Web of Science (n=287)	TS=(sleeve gastrectomy OR gastric sleeve surgery) **AND** TS=(one anastomosis duodenal switch OR one anastomosis duodenal switch with SG OR one anastomosis duodenal switch with sleeve OR one anastomosis duodenal switch with sleeve gastrectomy OR one anastomosis duodeno ileal bypass with SG OR one anastomosis duodeno ileal bypass with sleeve OR one anastomosis duodeno ileal bypass with sleeve gastrectomy OR one anastomosis Duodeno ileostomy with SG OR one anastomosis Duodeno ileostomy with sleeve OR one anastomosis Duodeno ileostomy with sleeve gastrectomy OR one anastomosis duodenoileal bypass with SG OR one anastomosis duodeno-ileal bypass with SG OR one anastomosis duodenoileal bypass with sleeve OR one anastomosis duodeno-ileal bypass with sleeve OR one anastomosis duodenoileal bypass with sleeve gastrectomy OR one anastomosis duodeno-ileal bypass with sleeve gastrectomy OR one anastomosis Duodenoileostomy with SG OR one anastomosis Duodeno-ileostomy with SG OR one anastomosis Duodenoileostomy with sleeve OR one anastomosis Duodeno-ileostomy with sleeve OR one anastomosis Duodenoileostomy with sleeve gastrectomy OR one anastomosis Duodeno-ileostomy with sleeve gastrectomy OR Single anastomosis duodenal switch OR Single anastomosis duodenal switch with SG OR Single anastomosis duodenal switch with sleeve OR Single anastomosis duodenal switch with sleeve gastrectomy OR Single anastomosis duodeno ileal bypass with SG OR Single anastomosis duodeno ileal bypass with sleeve OR Single anastomosis duodeno ileal bypass with sleeve gastrectomy OR Single anastomosis Duodeno ileostomy with SG OR Single anastomosis Duodeno ileostomy with SG OR Single anastomosis Duodeno ileostomy with sleeve OR Single anastomosis Duodeno ileostomy with sleeve gastrectomy OR Single anastomosis duodenoileal bypass with SG OR Single anastomosis duodeno-ileal bypass with SG OR Single anastomosis duodenoileal bypass with sleeve OR Single anastomosis duodeno-ileal bypass with sleeve OR Single anastomosis duodenoileal bypass with sleeve gastrectomy OR Single anastomosis duodeno-ileal bypass with sleeve gastrectomy OR Single anastomosis Duodenoileostomy with SG OR Single anastomosis Duodeno-ileostomy with SG OR Single anastomosis Duodenoileostomy with sleeve OR Single anastomosis Duodeno-ileostomy with sleeve OR Single anastomosis Duodenoileostomy with sleeve

	gastrectomy OR Single anastomosis Duodeno-ileostomy with sleeve gastrectomy OR Single-anastomosis duodenal switch OR Single-anastomosis duodenal switch with SG OR Single-anastomosis duodenal switch with sleeve OR Single-anastomosis duodenal switch with sleeve gastrectomy OR Single-anastomosis duodeno ileal bypass with SG OR Single-anastomosis duodeno ileal bypass with sleeve OR Single-anastomosis duodeno ileal bypass with sleeve gastrectomy OR Single-anastomosis Duodeno ileostomy with SG OR Single-anastomosis Duodeno ileostomy with sleeve OR Single-anastomosis Duodeno ileostomy with sleeve gastrectomy OR Single-anastomosis duodenoileal bypass with SG OR Single-anastomosis duodeno-ileal bypass with SG OR Single-anastomosis duodenoileal bypass with sleeve OR Single-anastomosis duodeno-ileal bypass with sleeve OR Single-anastomosis duodenoileal bypass with sleeve gastrectomy OR Single-anastomosis duodeno-ileal bypass with sleeve gastrectomy OR Single-anastomosis Duodenoileostomy with SG OR Single-anastomosis Duodeno-ileostomy with SG OR Single-anastomosis Duodenoileostomy with sleeve OR Single-anastomosis Duodeno-ileostomy with sleeve OR Single-anastomosis Duodenoileostomy with sleeve gastrectomy OR Single-anastomosis Duodeno-ileostomy with sleeve gastrectomy OR SADI-S)
Scopus (n=207)	TITLE-ABS-KEY ("sleeve gastrectomy" OR "gastric sleeve surgery") **AND** TITLE-ABS-KEY ("one anastomosis duodenal switch" OR "one anastomosis duodenal switch with SG" OR "one anastomosis duodenal switch with sleeve" OR "one anastomosis duodenal switch with sleeve gastrectomy" OR "one anastomosis duodeno ileal bypass with SG" OR "one anastomosis duodeno ileal bypass with sleeve" OR "one anastomosis duodeno ileal bypass with sleeve gastrectomy" OR "one anastomosis Duodeno ileostomy with SG" OR "one anastomosis Duodeno ileostomy with sleeve" OR "one anastomosis Duodeno ileostomy with sleeve gastrectomy" OR "one anastomosis duodenoileal bypass with SG" OR "one anastomosis duodeno-ileal bypass with SG" OR "one anastomosis duodenoileal bypass with sleeve" OR "one anastomosis duodeno-ileal bypass with sleeve" OR "one anastomosis duodenoileal bypass with sleeve gastrectomy" OR "one anastomosis duodeno-ileal bypass with sleeve gastrectomy" OR "one anastomosis Duodenoileostomy with SG" OR "one anastomosis Duodeno-ileostomy with SG" OR "one anastomosis Duodenoileostomy with sleeve" OR "one anastomosis Duodeno-ileostomy with sleeve" OR "one anastomosis Duodenoileostomy with sleeve gastrectomy" OR "one anastomosis Duodeno-ileostomy with sleeve gastrectomy" OR "Single anastomosis duodenal switch" OR "Single anastomosis duodenal switch with SG" OR "Single anastomosis duodenal switch with sleeve" OR "Single anastomosis duodenal switch with sleeve gastrectomy" OR "Single anastomosis duodeno ileal bypass with SG" OR "Single anastomosis duodeno ileal bypass with sleeve" OR "Single anastomosis duodeno ileal bypass with sleeve gastrectomy" OR "Single anastomosis Duodeno ileostomy with SG" OR "Single anastomosis Duodeno ileostomy with SG" OR "Single anastomosis Duodeno ileostomy with sleeve" OR "Single anastomosis Duodeno ileostomy with sleeve gastrectomy" OR "Single anastomosis duodenoileal bypass with SG" OR "Single anastomosis duodeno-ileal bypass with SG" OR "Single anastomosis duodenoileal bypass with sleeve" OR "Single anastomosis duodeno-ileal bypass with sleeve" OR "Single anastomosis duodenoileal bypass with sleeve gastrectomy" OR "Single anastomosis duodeno-ileal bypass with sleeve gastrectomy" OR "Single anastomosis Duodenoileostomy with SG" OR "Single anastomosis Duodeno-ileostomy with SG" OR "Single anastomosis Duodenoileostomy with sleeve" OR "Single anastomosis Duodeno-ileostomy with sleeve" OR "Single anastomosis Duodenoileostomy with sleeve gastrectomy" OR "Single anastomosis Duodeno-ileostomy with sleeve gastrectomy" OR "Single-anastomosis duodenal switch" OR "Single-anastomosis

	duodenal switch with SG" OR "Single-anastomosis duodenal switch with sleeve" OR "Single-anastomosis duodenal switch with sleeve gastrectomy" OR "Single-anastomosis duodeno ileal bypass with SG" OR "Single-anastomosis duodeno ileal bypass with sleeve" OR "Single-anastomosis duodeno ileal bypass with sleeve gastrectomy" OR "Single-anastomosis Duodeno ileostomy with SG" OR "Single-anastomosis Duodeno ileostomy with sleeve" OR "Single-anastomosis Duodeno ileostomy with sleeve gastrectomy" OR "Single-anastomosis duodenoileal bypass with SG" OR "Single-anastomosis duodeno-ileal bypass with SG" OR "Single-anastomosis duodenoileal bypass with sleeve" OR "Single-anastomosis duodeno-ileal bypass with sleeve" OR "Single-anastomosis duodenoileal bypass with sleeve gastrectomy" OR "Single-anastomosis duodeno-ileal bypass with sleeve gastrectomy" OR "Single-anastomosis Duodenoileostomy with SG" OR "Single-anastomosis Duodeno-ileostomy with SG" OR "Single-anastomosis Duodenoileostomy with sleeve" OR "Single-anastomosis Duodeno-ileostomy with sleeve" OR "Single-anastomosis Duodenoileostomy with sleeve gastrectomy" OR "Single-anastomosis Duodeno-ileostomy with sleeve gastrectomy" OR "SADI-S")
Science Direct (N=67)	Title, abstract, keywords: (Single anastomosis duodeno-ileal bypass with sleeve gastrectomy OR SADI-S OR SADIS) AND (sleeve gastrectomy OR gastric sleeve surgery)
Embase (N=379)	('gastrectomy'/exp OR 'gastrectomy' OR 'sleeve gastrectomy'/exp OR 'sleeve gastrectomy' OR 'gastric sleeve surgery'/exp OR 'gastric sleeve surgery') AND ('one anastomosis duodenal switch' OR 'one anastomosis duodenal switch with sg' OR 'one anastomosis duodenal switch with sleeve' OR 'one anastomosis duodenal switch with sleeve gastrectomy' OR 'one anastomosis duodeno ileal bypass with sg' OR 'one anastomosis duodeno ileal bypass with sleeve' OR 'one anastomosis duodeno ileal bypass with sleeve gastrectomy' OR 'one anastomosis duodeno ileostomy with sg' OR 'one anastomosis duodeno ileostomy with sleeve' OR 'one anastomosis duodeno ileostomy with sleeve gastrectomy' OR 'one anastomosis duodenoileal bypass with sg' OR 'one anastomosis duodeno-ileal bypass with sg' OR 'one anastomosis duodenoileal bypass with sleeve' OR 'one anastomosis duodeno-ileal bypass with sleeve' OR 'one anastomosis duodenoileal bypass with sleeve gastrectomy' OR 'one anastomosis duodeno-ileal bypass with sleeve gastrectomy' OR 'one anastomosis duodenoileostomy with sg' OR 'one anastomosis duodeno-ileostomy with sg' OR 'one anastomosis duodenoileostomy with sleeve' OR 'one anastomosis duodeno-ileostomy with sleeve' OR 'one anastomosis duodenoileostomy with sleeve gastrectomy' OR 'one anastomosis duodeno-ileostomy with sleeve gastrectomy' OR 'single anastomosis duodenal switch'/exp OR 'single anastomosis duodenal switch' OR 'single anastomosis duodenal switch with sg' OR 'single anastomosis duodenal switch with sleeve' OR 'single anastomosis duodenal switch with sleeve gastrectomy' OR 'single anastomosis duodeno ileal bypass with sg' OR 'single anastomosis duodeno ileal bypass with sleeve' OR 'single anastomosis duodeno ileal bypass with sleeve gastrectomy'/exp OR 'single anastomosis duodeno ileal bypass with sleeve gastrectomy' OR 'single anastomosis duodeno ileostomy with sg' OR 'single anastomosis duodeno ileostomy with sleeve' OR 'single anastomosis duodeno ileostomy with sleeve gastrectomy' OR 'single anastomosis duodenoileal bypass with sg' OR 'single anastomosis duodeno-ileal bypass with sg' OR 'single anastomosis duodenoileal bypass with sleeve' OR 'single anastomosis duodeno-ileal bypass with sleeve' OR 'single anastomosis duodenoileal bypass with sleeve gastrectomy'/exp OR 'single anastomosis duodenoileal bypass with sleeve gastrectomy' OR 'single anastomosis duodeno-ileal bypass with sleeve gastrectomy'/exp OR 'single anastomosis duodeno-ileal bypass with sleeve gastrectomy' OR 'single anastomosis duodenoileostomy with sg' OR 'single anastomosis duodeno-ileostomy with sg' OR 'single anastomosis

	duodenoileostomy with sleeve' OR 'single anastomosis duodeno-ileostomy with sleeve' OR 'single anastomosis duodenoileostomy with sleeve gastrectomy' OR 'single anastomosis duodeno-ileostomy with sleeve gastrectomy' OR 'single-anastomosis duodenal switch' OR 'single-anastomosis duodenal switch with sg' OR 'single-anastomosis duodenal switch with sleeve' OR 'single-anastomosis duodenal switch with sleeve gastrectomy' OR 'single-anastomosis duodeno ileal bypass with sg' OR 'single-anastomosis duodeno ileal bypass with sleeve' OR 'single-anastomosis duodeno ileal bypass with sleeve gastrectomy'/exp OR 'single-anastomosis duodeno ileal bypass with sleeve gastrectomy' OR 'single-anastomosis duodeno ileostomy with sg' OR 'single-anastomosis duodeno ileostomy with sleeve' OR 'single-anastomosis duodeno ileostomy with sleeve gastrectomy' OR 'single-anastomosis duodenoileal bypass with sg' OR 'single-anastomosis duodeno-ileal bypass with sg' OR 'single-anastomosis duodenoileal bypass with sleeve' OR 'single-anastomosis duodeno-ileal bypass with sleeve' OR 'single-anastomosis duodenoileal bypass with sleeve gastrectomy'/exp OR 'single-anastomosis duodenoileal bypass with sleeve gastrectomy' OR 'single-anastomosis duodeno-ileal bypass with sleeve gastrectomy'/exp OR 'single-anastomosis duodeno-ileal bypass with sleeve gastrectomy' OR 'single-anastomosis duodenoileostomy with sg' OR 'single-anastomosis duodeno-ileostomy with sg' OR 'single-anastomosis duodenoileostomy with sleeve' OR 'single-anastomosis duodeno-ileostomy with sleeve' OR 'single-anastomosis duodenoileostomy with sleeve gastrectomy' OR 'single-anastomosis duodeno-ileostomy with sleeve gastrectomy' OR 'sadi-s')

Table S2: Quality assessment of included studies based on the Newcastle Ottawa scale.

Author	**Year published**	**Selection**	**Comparability**	**Outcomes**	**TOTAL (maximum 10★)**
Clapp et al. (15)	2023	4	1	2	7
Sessa et al. (17)	2019	4	2	2	8
Enochs et al. (16)	2020	5	2	2	9
Walton et al. (19)	2023	4	0	2	6
Soroceanu et al. (18)	2023	4	1	2	7