

Appendix A. Search strategy

PubMed (searched 12/1/2016)

("Anastomosis, Roux-en-Y"[Mesh] or "anti obesity procedure" or "anti obesity surgery" OR "Gastric Balloon"[Mesh] OR "Gastroenterostomy"[Mesh] or "anti-obesity procedure" OR "anti-obesity procedures" OR "anti-obesity surgery" OR "Aspiration therapy" OR "balloon system" OR "bariatric operation" OR "bariatric operations" OR "bariatric procedure" OR "bariatric procedures" OR "bariatric surgeries" OR "bariatric surgery" OR "Bariatric Surgery"[Mesh] OR "biliopancreatic bypass" OR "biliopancreatic diversion" OR "Biliopancreatic Diversion"[Mesh] OR "collis gastropasty" OR "Duodenal mucosal resurfacing" OR "duodenal switch" OR "Duodenojejunal bypass sleeve" OR "Endoluminal vertical gastropasty" OR "gastric balloon" OR "gastric band" OR "gastric banding" OR "gastric bands" OR "gastric bypass" OR "Gastric Bypass"[Mesh] OR "gastric greater curvature plication" OR "gastric imbrication" OR "gastric pacing" OR "gastric plication" OR "gastric procedure" OR "gastric procedures" OR "gastric sleeve" OR "gastric staple" OR "gastric stapling" OR "Gastric stimulation" OR "Gastroduodenojejunal bypass sleeve" OR "gastroileal bypass" OR "gastroileal bypass" OR "gastrointestinal diversion" OR "gastrointestinal procedure" OR "gastrointestinal procedures" OR "gastrointestinal surgeries" OR "gastrointestinal surgery" OR "Gastropasty"[Mesh] OR "horizontal banded" gastropasty OR "ileojejunal bypass" OR "intestinal bypass" OR "intragastric balloon" OR "intragastric band" OR "intragastric bypass" OR "intragastric sleeve" OR "jejunio ilial bypass" OR "jejunio-ilial bypass" OR "jejunioileal bypass" OR "Jejunioileal Bypass"[Mesh] OR "lap band" OR "lap banding" OR "lap bands" OR "laparoscopic adjustable gastric banding" OR "realize band" OR "restrictive bypass" OR "restrictive procedure" OR "restrictive procedures" OR "restrictive surgeries" OR "restrictive surgery" OR "Self-assembling magnets" endoscopy OR "silicon band" OR "silicon banding" OR "silicon bands" OR "Single Anastomosis Duodeno-Ileostomy" OR "sleeve gastrectomy" OR "stomach band" OR "stomach banding" OR "stomach bands" OR "stomach bypass" OR "stomach stapling" OR "Swedish band" OR "transpyloric shuttle" OR "Vagal blockade" OR "vertical banded gastropasty" OR "vertical-banded gastropasty" OR aspireassist OR gastroenterostomy OR gastrogastrostomy OR gastrojejunostom* OR gastroplasties OR gastropasty OR malabsorpti* procedure OR malabsorpti* surgery OR omentectomy OR "Omentum removal" OR roux-en-y)

AND

("Comparative Study" [Publication Type] OR "Cohort Studies"[Mesh] OR cohort OR "Clinical Trial" [Publication Type] OR "Clinical Trials as Topic"[Mesh] OR longitudinal OR "Placebos"[Mesh] OR placebo* OR "Research Design"[Mesh] OR "Evaluation Studies" [Publication Type] OR "Evaluation Studies as Topic"[Mesh] OR "Comparative Study" [Publication Type] OR comparative study OR Intervention study OR Intervention Studies OR pretest* OR pre test* OR posttest* OR post test* OR prepost* OR pre post* OR "before and after" OR interrupted time* OR time serie* OR intervention* OR quasi-experiment* OR quasiexperiment* OR quasi experiment * OR "Case-Control Studies"[Mesh] OR Clinical Studies OR "Clinical Studies as Topic"[Mesh] OR random allocation [mh] OR double-blind method[mh] OR single-blind method[mh] OR random* OR "Clinical Trial" [Publication Type] OR "Clinical Trials as Topic"[Mesh] OR "Placebos"[Mesh] OR placebo OR clinical trial OR controlled trial* OR singl* blind* OR doubl* blind* OR trebl* blind* OR tripl* blind* OR singl* mask* OR doubl* mask* OR trebl* mask* OR tripl* mask* OR rct OR Observational Study OR "Epidemiologic Studies"[Mesh] OR "Cohort Studies"[Mesh] OR cohort study OR cohort studies

OR observational studies OR Longitudinal OR Retrospective OR "Prospective Studies"[Mesh]
OR "Longitudinal Studies"[Mesh] OR "Follow-Up Studies"[Mesh] OR "Registries"[Mesh] OR
Evaluation Studies [Publication Type] OR Validation Studies [Publication Type] OR
"Randomized Controlled Trial" [Publication Type] OR "Controlled Clinical Trial" [Publication
Type] OR randomized)

NOT

("addresses"[pt] or "autobiography"[pt] or "bibliography"[pt] or "biography"[pt] or "case
reports"[pt] or "comment"[pt] or "congresses"[pt] or "dictionary"[pt] or "directory"[pt] or
"editorial"[pt] or "festschrift"[pt] or "government publications"[pt] or "historical article"[pt] or
"interview"[pt] or "lectures"[pt] or "legal cases"[pt] or "legislation"[pt] or "letter"[pt] or
"news"[pt] or "newspaper article"[pt] or "patient education handout"[pt] or "periodical
index"[pt] or "Case Reports" [Publication Type] or "Case-Control Studies"[Mesh] or "comment
on" OR rats[tw] or cow[tw] or cows[tw] or chicken*[tw] or horse[tw] or horses[tw] or mice[tw]
or mouse[tw] or bovine[tw] or sheep or ovine or murinae) OR (("Child"[Mesh] NOT
"Adult"[Mesh]) OR ("Animals"[Mesh] NOT "Humans"[Mesh])) OR pregnant or pregnancy or
childbearing)

Date limit 2001-

Embase (Searched 12/1/2016)

#66 NOT #67

5,558

#67

'adolescent' OR 'child'

2,881,922

#66

#60 NOT #64 AND ([article]/lim OR [article in press]/lim) AND [humans]/lim

6,056

#65

#60 NOT #64

6,817

#64

#61 OR #63

916,432

#63

'autobiography'/exp OR 'autobiography' OR 'bibliography'/exp

OR 'bibliography' OR 'biography'/exp

OR 'biography' OR case AND reports OR 'congresses'/exp

OR 'congresses' OR 'dictionary'/exp OR 'dictionary' OR 'directory'/exp

OR 'directory' OR 'editorial'/exp OR 'editorial' OR festschrift OR 'government'/exp

OR 'government' AND ('publications'/exp OR 'publications') OR historical AND

('article'/exp OR 'article') OR 'interview'/exp

OR 'interview' OR lectures OR legal AND cases OR 'legislation'/exp

OR 'legislation' OR 'letter'/exp OR 'letter' OR news OR 'newspaper'/exp

OR 'newspaper' AND ('article'/exp OR 'article') OR 'patient'/exp OR 'patient' AND

('education'/exp OR 'education') AND handout OR periodical AND ('index'/exp

OR 'index') OR 'case control' AND ('studies'/exp OR 'studies')

[54,086](#)

#61

'pregnancy' OR pregnant OR 'childbearing age'

[866,037](#)

#60

#59 NOT #46

[6,932](#)

#59

#58 AND [2000-2016]/py AND ([young adult]/lim OR [adult]/lim OR [middle aged]/lim OR [aged]/lim OR [very elderly]/lim) AND [humans]/lim AND [english]/lim

[7,064](#)

#58

#44 AND #57

[14,907](#)*

#57

#45 OR #46 OR #47 OR #48 OR #49 OR #50 OR #51 OR #52 OR #53 OR #54 OR #55 OR #56

[5,513,969](#)*

#56

'double blind procedure'

[132,231](#)*

#55

'single blind procedure'

[23,658](#)*

#54

random*

[1,289,260](#)*

#53

'clinical trial'

[1,246,407](#)*

#52

follow AND up AND study

[953,336](#)*

#51

cohort AND analysis

[407,939](#)*

#50

'randomized controlled trial'

[531,350](#)*

#49

prospective AND study

[649,916](#)*

#48

retrospective AND study

[686,809](#)*

#47

longitudinal AND study

[206,571](#)*

#46

'case control study'

[142,757](#)*

#45

'clinical study'

[2,720,441](#)*

#44

#42 AND #43

[33,370](#)*

#43

#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13
OR #14 OR #15 OR #16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR
#25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36
OR #37 OR #38 OR #39 OR #40 OR #41

[61,049](#)*

#42

bariatric OR obese

[161,138](#)*

#41

'roux y anastomosis'

[8,139](#)*

#40

omentum AND removal

[479](#)*

#39

omentectomy

[2,871](#)*

#38

malabsorpti* AND (procedure* OR surger*)

[5,309](#)*

#37

gastroenterostomy OR gastrogastrostomy OR gastrojejunostom* OR gastroplast* AND
(bariatric OR obese)

[3,123](#)*

#36

aspireassist

[17](#)*

#35

vagal AND blockade

[1,667](#)*

#34

transpyloric AND shuttle

[9](#)*

#33

swedish AND band

[329](#)*

#32

stomach AND (band* OR bypass OR stapl*) AND (bariatric OR obese)

[12,255](#)*

#31

silicon* AND band* AND (bariatric OR obese)

[192](#)*

#30

'self assembling' AND magnets AND endoscopy

[14](#)*

#29

restrictive AND (bypass OR procedure* OR surger*) AND (bariatric OR obese)

[1,413](#)*

#28

realize AND band

[204](#)*

#27

laparoscopic AND adjustable AND gastric AND banding

[2,738](#)*

#26

lap AND band* AND (bariatric OR obese)

[548](#)*

#25

jejunoileal AND bypass

[1,407](#)*

#24

intragastric AND (balloon OR band OR bypass OR sleeve) AND (bariatric OR obese)

[644](#)*

#23

ileojejunal OR intestinal AND bypass AND (bariatric OR obese)

[909](#)*

#22

gastrointestinal AND (procedure* OR surger* OR diversion) AND (bariatric OR obese)

[5,598](#)*

#21

gastroileal AND bypass

[15](#)*

#20

gastroduodenojejunal AND bypass AND sleeve

[4](#)*

#19

gastric AND (procedure* OR sleeve* OR stapl* OR stimulation) AND (bariatric OR obese)

[9,934](#)*

#18

gastric AND pacing

[294](#)*
 #17
 gastric AND imbrication
[31](#)*
 #16
 plication
[4,270](#)*
 #15
 gastric AND (band* OR bypass) AND (bariatric OR obese)
[14,757](#)*
 #14
 'gastroplasty'/exp OR gastroplasty
[3,995](#)*
 #13
 duodenojejunal AND bypass AND sleeve
[71](#)*
 #12
 duodenal AND switch
[1,141](#)*
 #11
 'biliopancreatic bypass'
[2,444](#)*
 #10
 duodenal AND mucosal AND resurfacing
[9](#)*
 #9
 biliopancreatic AND (bypass OR diversion)
[2,895](#)*
 #8
 operation* OR procedure* OR surgeon* AND bariatric
[28,125](#)*
 #7
 'aspiration'/exp OR aspiration AND ('therapy'/exp OR therapy) AND bariatric
[130](#)*
 #6
 'anti obesity' AND surgery
[264](#)*
 #5
 'anti obesity' AND procedure*
[143](#)*
 #4
 'gastroenterostomy'/exp OR gastroenterostomy
[3,256](#)*
 #3
 gastric AND ('balloon'/exp OR balloon)
[3,807](#)*

#2

anti AND obesity AND surgery

[1,774](#)*

#1

anti AND obesity AND procedure

[549](#)*

Cochrane (Searched 12/1/2016)

(Anastomosis Roux-en-Y OR anti obesity procedure OR anti obesity surgery OR Gastric Balloon OR Gastroenterostomy OR anti-obesity procedure OR anti-obesity procedures OR anti-obesity surgery OR Aspiration therapy OR balloon system OR bariatric operation OR bariatric operations OR bariatric procedure OR bariatric procedures OR bariatric surgeries OR bariatric surgery OR Bariatric Surgery OR biliopancreatic bypass OR biliopancreatic diversion OR Biliopancreatic Diversion OR collis gastropasty OR Duodenal mucosal resurfacing OR duodenal switch OR Duodenojejunal bypass sleeve OR Endoluminal vertical gastropasty OR gastric balloon OR gastric band OR gastric banding OR gastric bands OR gastric bypass OR Gastric Bypass OR gastric greater curvature plication OR gastric imbrication OR gastric pacing OR gastric plication OR gastric procedure OR gastric procedures OR gastric sleeve OR gastric staple OR gastric stapling OR Gastric stimulation OR Gastroduodenojejunal bypass sleeve OR gastroileal bypass OR gastroileal bypass OR gastrointestinal diversion OR gastrointestinal procedure OR gastrointestinal procedures OR gastrointestinal surgeries OR gastrointestinal surgery OR Gastropasty OR horizontal banded gastropasty OR ileojejunal bypass OR intestinal bypass OR intragastric balloon OR intragastric band OR intragastric bypass OR intragastric sleeve OR jejuno ilial bypass OR jejuno-ilial bypass OR jejunoileal bypass OR Jejunoileal Bypass OR lap band OR lap banding OR lap bands OR laparoscopic adjustable gastric banding OR realize band OR restrictive bypass OR restrictive procedure OR restrictive procedures OR restrictive surgeries OR restrictive surgery OR Self-assembling magnets endoscopy OR silicon band OR silicon banding OR silicon bands OR Single Anastomosis Duodeno-Ileostomy OR sleeve gastrectomy OR stomach band OR stomach banding OR stomach bands OR stomach bypass OR stomach stapling OR Swedish band OR transpyloric shuttle OR Vagal blockade OR vertical banded gastropasty OR vertical-banded gastropasty OR aspireassist OR gastroenterostomy OR gastrogastrostomy OR gastrojejunostom* OR gastropasties OR gastropasty OR malabsorpti* procedure OR malabsorpti* surgery OR omentectomy OR Omentum removal OR roux-en-y) AND (Obese or bariatric) NOT (child or adolescent or animal or pregnant or childbearing)

CINAHL/PsycINFO (Searched 12/1/2016)

(Anastomosis Roux-en-Y OR anti obesity procedure OR anti obesity surgery OR Gastric Balloon OR Gastroenterostomy OR anti-obesity procedure OR anti-obesity procedures OR anti-obesity surgery OR Aspiration therapy OR balloon system OR bariatric operation OR bariatric operations OR bariatric procedure OR bariatric procedures OR bariatric surgeries OR bariatric surgery OR Bariatric Surgery OR biliopancreatic bypass OR biliopancreatic diversion OR Biliopancreatic Diversion OR collis gastropasty OR Duodenal mucosal resurfacing OR duodenal switch OR Duodenojejunal bypass sleeve OR Endoluminal vertical gastropasty OR

gastric balloon OR gastric band OR gastric banding OR gastric bands OR gastric bypass OR Gastric Bypass OR gastric greater curvature plication OR gastric imbrication OR gastric pacing OR gastric plication OR gastric procedure OR gastric procedures OR gastric sleeve OR gastric staple OR gastric stapling OR Gastric stimulation OR Gastroduodenojejunal bypass sleeve OR gastroileal bypass OR gastroileal bypass OR gastrointestinal diversion OR gastrointestinal procedure OR gastrointestinal procedures OR gastrointestinal surgeries OR gastrointestinal surgery OR Gastroplasty OR horizontal banded gastroplasty OR ileojejunal bypass OR intestinal bypass OR intragastric balloon OR intragastric band OR intragastric bypass OR intragastric sleeve OR jejuno ilial bypass OR jejuno-ilial bypass OR jejunoileal bypass OR Jejunoileal Bypass OR lap band OR lap banding OR lap bands OR laparoscopic adjustable gastric banding OR realize band OR restrictive bypass OR restrictive procedure OR restrictive procedures OR restrictive surgeries OR restrictive surgery OR Self-assembling magnets endoscopy OR silicon band OR silicon banding OR silicon bands OR Single Anastomosis Duodeno-Ileostomy OR sleeve gastrectomy OR stomach band OR stomach banding OR stomach bands OR stomach bypass OR stomach stapling OR Swedish band OR transpyloric shuttle OR Vagal blockade OR vertical banded gastroplasty OR vertical-banded gastroplasty OR aspireassist OR gastroenterostomy OR gastrogastrostomy OR gastrojejunostom* OR gastroplasties OR gastroplasty OR malabsorpti* procedure OR malabsorpti* surgery OR omentectomy OR Omentum removal OR roux-en-y) AND (Obese or bariatric) NOT (child or adolescent or animal or pregnant or childbearing OR addresses or autobiography or bibliography or biography or case reports or comment or congresses or dictionary or directory or editorial or festschrift or government publications or historical article or interview or lectures or legal cases or legislation or letter or news or newspaper article or patient education handout or periodical index or Case Reports or Case-Control Studies or comment OR rats or cow or cows or chicken or chickens or horse or horses or mice or mouse or bovine or sheep or ovine or murinae)

Appendix B. Excluded Studies

ID	Title	Journal	Authors	Reason for Exclusion
104610058. Language:	The association between physical activity and quality of life in adults after bariatric surgery	Cardiopulmonary Physical Therapy Journal (American Physical Therapy Association, Cardiopulmonary Section)	.	Abstract only
HTA-32005000169	Bariatric surgery: an evidence-based analysis (Structured abstract)	Health Technology Assessment Database	.	Abstract only
CN-00919183	Treating diabetes with bariatric surgery	BMJ (Clinical research ed.)	.	Abstract only
HTA-32011000036	Bariatric surgery in adults (Structured abstract)	Health Technology Assessment Database	.	Abstract only
HTA-32011000280	BRATS 05: Bariatric surgery for the treatment of morbid obesity (Structured abstract)	Health Technology Assessment Database	.	Abstract only
111415156. Language:	Weight loss surgery can improve fertility - RCOG	Practising Midwife	.	mean age <55; not medicare eligible
CN-01194508	Comment on: Rhabdomyolysis after bariatric surgery: A multicenter, prospective study on incidence, risk factors, and therapeutic strategy in a cohort from South-Italy	Surgery for Obesity and Related Diseases. 12 (2) (pp 390-391), 2016. Date of Publication: 01 Feb 2016.	.	No primary data
110306092. Language:	Surgery effective for obese patients with type 2 diabetes	British Journal of Hospital Medicine (17508460)	.	No primary data
112410782. Language:	Weight loss surgery cuts risk of developing serious heart problems	Community Practitioner	.	No primary data
114640264. Language:	POEMs: Bariatric surgery in obese patients with T2DM: more achieve partial remission at five years	Practical Diabetes	.	No primary data
115414876. Language:	Change in pain and physical function in the 3 years after bariatric surgery for severe obesity	British Journal of Hospital Medicine (17508460)	.	No primary data
118452875. Language:	Weight loss surgery in severely obese patients associated with increased fracture risk	British Journal of Hospital Medicine (17508460)	.	No primary data
HTA-32012000311	BY-BAND. Gastric Bypass or adjustable gastric Banding surgery to treat morbid obesity: a multi-centre randomised controlled trial (Project record)	Health Technology Assessment Database	.	No primary data
0	Binge Eating Disorder Prevalence in Bariatric Surgery Patients: Evaluation of Presurgery and Postsurgery Quality of Life, Anxiety and Depression Levels	Bariatric Surgical Practice and Patient Care	Celik Erden, S.	mean age <55; not medicare eligible
0	Revisional surgery after failed gastric banding: Results of one-stage conversion to RYGB in	Surgery for Obesity and Related Diseases	Aarts, E.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	195 patients			
25204408	Attachment anxiety predicts poor adherence to dietary recommendations: an indirect effect on weight change 1 year after gastric bypass surgery	Obes Surg	Aarts, F. and Geenen, R. and Gerdes, V. E. and van de Laar, A and Brandjes, D. P. and Hinnen, C.	mean age <55; not medicare eligible
19439456	Vitamin status after bariatric surgery: a randomized study of gastric bypass and duodenal switch	Am J Clin Nutr	Aasheim, E. T.	mean age <55; not medicare eligible
0	Vitamin status after gastric bypass and lifestyle intervention: A comparative prospective study	Surgery for Obesity and Related Diseases	Aasheim, E. T. and Johnson, L. K. and HofsÅ, D. and BÅ, hmer, T. and HjelmessÅ, th, J.	mean age <55; not medicare eligible
0	Laparoscopic adjustable gastric banding. A prospective randomized study comparing the Swedish Adjustable Gastric Band and the MiniMizer Extra: One-year results	Wideochirurgia I Inne Techniki Maloinwazyjne	AbalikÅ, ta, T. and Brimas, G and Strupas, K.	mean age <55; not medicare eligible
0	Long-term effects of laparoscopic sleeve gastrectomy, gastric bypass, and adjustable gastric banding on type 2 diabetes	Surgical Endoscopy and Other Interventional Techniques	Abbatini, F.	mean age <55; not medicare eligible
27247708	Place of upper endoscopy before and after bariatric surgery: A multicenter experience with 3219 patients	World J Gastrointest Endosc	Abd Ellatif, M. E. and Alfalah, H. and Asker, W. A. and El Nakeeb, A. E. and Magdy, A. and Thabet, W. and Ghaith, M. A. and Abdallah, E. and Shahin, R. and Shoma, A. and Dawoud, I. E. and Abbas, A. and Ali Gamal, M.	mean age <55; not medicare eligible
0	Laparoscopic gastric greater curvature plication versus laparoscopic sleeve gastrectomy: Early outcome in 140 patients	Surgery for Obesity and Related Diseases	Abdelbaki, T. N.	mean age <55; not medicare eligible
26809671	Management of Complications and Outcomes After Revisional Bariatric Surgery: 3-Year Experience at a Bariatric Center of Excellence	Obes Surg	Abdelgawad, M.	mean age <55; not medicare eligible
CN-01099434	Comparative study between laparoscopic gastroduodenal bypass and ileal transposition (DJB &IT) in the management of type 2 diabetes mellitus (DM) in obese patients	Surgical Endoscopy and Other Interventional Techniques	Abdelhafez, At and Mahfouz, M and Hefny, A and Ibraheem, A and Abuzaid, T	Abstract only
25820625	Stapling Versus Hand Suture for Gastroenteric Anastomosis in Roux-en-Y Gastric Bypass: a	Obes Surg	Abellan, I., Lopez, V., Lujan, J., Abrisqueta, J.,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	Randomized Clinical Trial		Hernandez, Q., Frutos, M. D., Parrilla, P.	
CN-01130492	Laparoscopic sleeve gastrectomy versus laparoscopic gastric greater curvature plication a prospective randomized comparative study	Obesity surgery	AbouZeid, Mm	mean age <55; not medicare eligible
25899582	Hypoglycemia in everyday life after gastric bypass and duodenal switch	Eur J Endocrinol	Abrahamsson, N., Eden Engstrom, B., Sundbom, M., Karlsson, F. A.	mean age <55; not medicare eligible
117667146. Language:	Gastric Bypass Reduces Symptoms and Hormonal Responses in Hypoglycemia	Diabetes	Abrahamsson, Niclas, Lau BÅŕrjesson, Joey, Sundbom, Magnus, Wiklund, Urban, Karlsson, F. Anders, Eriksson, Jan W.	mean age <55; not medicare eligible
102314074. Language:	444 A Randomized, Multi-Center Study to Evaluate the Safety and Effectiveness of an Intra-gastric Balloon As an Adjunct to a Behavioral Modification Program, in Comparison With a Behavioral Modification Program Alone in the Weight Management of Obese Subjects	Gastrointestinal Endoscopy	Abu Dayyeh, Barham K. and Eaton, Laura L. and Woodman, George and Fusco, Mark and Shayani, Vafa and Billy, Helmuth T. and Courcoulas, Anita and Pambianco, Daniel J. and Gostout, Christopher J.	Abstract only
11285954	Resolution of chronic medical conditions after laparoscopic adjustable silicone gastric banding for the treatment of morbid obesity in the elderly	Surg Endosc.	Abu-Abeid	single arm study n<50
21937286	Conversion of failed gastric banding into four different bariatric procedures	Surg Obes Relat Dis	Abu-Gazala, S.	mean age <55; not medicare eligible
25560186	Laparoscopic conversion of failed silastic ring vertical gastropasty (SRVG) and vertical banded gastropasty (VBG) into biliopancreatic diversion (BPD)	J Gastrointest Surg	Abu-Gazala, S., Sadot, E., Maler, I., Golomb, I., Carmeli, I., Keidar, A.	mean age <55; not medicare eligible
0	Effect of Sleeve Gastrectomy on Thyroid Hormone Levels	Obesity Surgery	Abu-Ghanem, Y. and Inbar, R. and Tyomkin, V. and Kent, I. and Berkovich, L. and Ghinea, R. and Avital, S.	mean age <55; not medicare eligible
CN-01088842	A randomized, multi-center study to evaluate the safety and effectiveness of an intra-gastric balloon as an adjunct to a behavioral	Gastrointestinal endoscopy	Abu, Dayyeh Bk and Eaton, LI and Woodman, G and Fusco, M and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	modification program, in comparison with a behavioral modification program alone in the weight management of obese subjects		Shayani, V and Billy, Ht and Courcoulas, A and Pambianco, Dj and Gostout, Cj	
0	Does preoperative diabetes mellitus affect weight loss outcome after biliopancreatic diversion with duodenal switch?	Surgery for Obesity and Related Diseases	Abulfaraj, M.	mean age <55; not medicare eligible
0	Bariatric surgery outcomes: A single-center study in the United Arab Emirates	Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy	Abusnana, S.	mean age <55; not medicare eligible
26353467	[Gastric Bypass versus Sleeve gastrectomy: comparison between type 2 Diabetes weight loss and complications. Review of randomized control trails]	Acta Gastroenterol Latinoam	Acquafresca, P. A.	mean age <55; not medicare eligible
17715409	Long-term mortality after gastric bypass surgery	N Engl J Med.	Adams	mean age <55; not medicare eligible
16046191	Design and rationale of the Utah obesity study. A study to assess morbidity following gastric bypass surgery	Contemp Clin Trials	Adams, T. D. and Avelar, E. and Cloward, T. and Crosby, R. D. and Farney, R. J. and Gress, R. and Halverson, R. C. and Hopkins, P. N. and Kolotkin, R. L. and Lamonte, M. J. and Litwin, S. and Nuttall, R. T. and Pendleton, R. and Rosamond, W. and Simper, S. C. and Smith, S. C. and Strong, M. and Walker, J. M. and Wiebke, G. and Yanowitz, F. G. and Hunt, S. C.	mean age <55; not medicare eligible
0	Health benefits of gastric bypass surgery after 6 years	JAMA - Journal of the American Medical Association	Adams, T. D. and Davidson, L. E. and Litwin, S. E. and Kolotkin, R. L. and LaMonte, M. J. and Pendleton, R. C. and Strong, M. B. and Vinik, R. and Wanner, N. A. and Hopkins, P. N. and Gress, R. E. and Walker,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			J. M. and Cloward, T. V. and Nuttall, R. T. and Hammoud, A. and Greenwood, J. L. J. and Crosby, R. D. and McKinlay, R. and Simper, S. C. and Smith, S. C. and Hunt, S. C.	
115656613. Language:	Clinical Outcomes of Metabolic Surgery: Microvascular and Macrovascular Complications	Diabetes Care	Adams, Ted D., Arterburn, David E., Nathan, David M., Eckel, Robert H.	No primary data
104363455. Language:	Ethnic Differences in Weight Loss and Diabetes Remission After Bariatric Surgery: A meta-analysis	Diabetes Care	Admiraal, W. M.	No primary data
23093234	Effect of source of funding on weight loss up to 3 years after gastric banding	Surg Endosc	Afoke, J. and Agrawal, S. and Edmond, J. and Mahon, D. and Welbourn, R.	mean age <55; not medicare eligible
DARE-12014045637	The effects of bariatric surgery on colorectal cancer risk: systematic review and meta-analysis (Provisional abstract)	Database of Abstracts of Reviews of Effects	Afshar, S and Kelly, Sb and Seymour, K and Lara, J and Woodcock, S and Mathers, Jc	No primary data
0	Laparoscopic vs open gastric bypass in the management of morbid obesity: A 7-year retrospective study of 1,364 patients from a single center	Obesity Surgery	Agaba, E. A.	mean age <55; not medicare eligible
12490672	Cost of in-patient care over 7 years among surgically and conventionally treated obese patients	Obes Res	Agren, G. and Narbro, K. and Jonsson, E. and Naslund, I. and Sjostrom, L. and Peltonen, M.	mean age <55; not medicare eligible
0	Comparative Study Between Laparoscopic Adjustable Gastric Banded Plication and Sleeve Gastrectomy in Moderate Obesityâ€™2Â Year Results	Obesity Surgery	Ahluwalia, J. S.	mean age <55; not medicare eligible
26130177	Standardized Technique of Laparoscopic Adjustable Gastric Banded Plication with 4-Year Results	Obes Surg	Ahluwalia, J. S., Kuo, H. C., Chang, P. C., Sun, P. L., Hung, K. C., Huang, C. K.	mean age <55; not medicare eligible
0	The effect of bariatric surgery on psychiatric course among patients with bipolar disorder	Bipolar Disorders	Ahmed, A. T. and Warton, E. M. and Schaefer, C. A. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Shen, L. and McIntyre, R. S.	
15946454	Laparoscopic adjustable gastric banding: weight loss, co-morbidities, medication usage and quality of life at one year	Obes Surg	Ahroni, J. H.	mean age <55; not medicare eligible
25586971	Effectiveness and cost-effectiveness of paediatric bariatric surgery: a systematic review	Clin Obes	Aikenhead, A. and Knai, C. and Lobstein, T.	mean age <55; not medicare eligible
26242886	Association of Body Mass Index (BMI) with Patterns of Fundoplication Failure: Insights Gained	J Gastrointest Surg	Akimoto, S., Nandipati, K. C., Kapoor, H., Yamamoto, S. R., Pallati, P. K., Mittal, S. K.	Not about bariatric surgery
21111379	Natural history and metabolic consequences of morbid obesity for patients denied coverage for bariatric surgery	Surg Obes Relat Dis	Al Harakeh, A. B. and Burkhamer, K. J. and Kallies, K. J. and Mathiason, M. A. and Kothari, S. N.	mean age <55; not medicare eligible
CN-01174250	Post implant analysis of epidemiologic and eating behaviour data related to effectiveness in weight loss in morbid obese patients treated with gastric electrical stimulation	Surgical Endoscopy and Other Interventional Techniques. Conference: 23rd International Congress of the European Association for Endoscopic Surgery, EAES 2015 Bucharest Romania. Conference Start: 20150603 Conference End: 20150606. Conference Publication: (var.pagings)	Alarcon, del Agua I	mean age <55; not medicare eligible
0	Short- and midterm results between laparoscopic roux-en-Y gastric bypass and laparoscopic sleeve gastrectomy for the treatment of morbid obesity	Journal of Obesity	Albeladi, B.	mean age <55; not medicare eligible
0	Resolution of diabetes mellitus and metabolic syndrome following Roux-en-Y gastric bypass and a variant of biliopancreatic diversion in patients with morbid obesity	Obesity Surgery	Alexandrides, T. K. and Skroubis, G. and Kalfarentzos, F.	mean age <55; not medicare eligible
0	Cross-sectional long-term micronutrient deficiencies after sleeve gastrectomy versus Roux-en-Y gastric bypass: A pilot study	Surgery for Obesity and Related Diseases	Alexandrou, A.	mean age <55; not medicare eligible
25260133	Is age a better predictor of weight loss one year after gastric bypass than symptoms of disordered eating, depression, adult ADHD and alcohol consumption?	Eat Behav	Alfonsson, S.	mean age <55; not medicare eligible
18478306	Preoperative binge eating status and gastric	Obes Surg	Alger-Mayer, S.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	bypass surgery: a long-term outcome study			medicare eligible
	Laparoscopic adjustable gastric banding: a 10-year single-centre experience of 575 cases with weight loss following surgery	Obesity Surgery	Alhamdani, A; Wilson, M; Taqvi, L; Gonsalves, P; et al.	mean age <55; not medicare eligible
102314068. Language:	Mo1515 Efficacy and Safety of Endobarrier Implantation on Weight Reduction and Glycemic Control Among Obese Type 2 Diabetic Patients	Gastrointestinal Endoscopy	Alhassani, Abdulla, Alhamadi, Duha, Taha, Hala A., Alnuaimi, Huda A., Alnuaimi, Mohammed	Abstract only
17404587	Laparoscopic gastric banding or gastric bypass for morbid obesity?	Nat Clin Pract Gastroenterol Hepatol	Allen, J. W. and Tanner, B.	No primary data
0	Quality of life after sleeve gastrectomy and adjustable gastric banding	Surgery for Obesity and Related Diseases	Alley, J. B.	mean age <55; not medicare eligible
0	Improved memory function two years after bariatric surgery	Obesity	Alosco, M. L. and Spitznagel, M. B. and Strain, G. and Devlin, M. and Cohen, R. and Paul, R. and Crosby, R. D. and Mitchell, J. E. and Gunstad, J.	mean age <55; not medicare eligible
25620435	Predictors of a successful medical weight loss program	Surgery for Obesity and Related Diseases	Altieri, M. S., Tuppo, C., Telem, D. A., Herlihy, D., Cottell, K., Pryor, A. D.	mean age <55; not medicare eligible
0	Early hospital readmission after bariatric surgery	Surgical Endoscopy and Other Interventional Techniques	Aman, M. W.	mean age <55; not medicare eligible
0	The impact of bariatric surgery on retinopathy in patients with type 2 diabetes: A retrospective cohort study	Surgery for Obesity and Related Diseases	Amin, A. M.	mean age <55; not medicare eligible
25614353	Safety of one-step conversion of gastric band to sleeve: a comparative analysis of ACS-NSQIP data	Surg Obes Relat Dis	Aminian, A. and Shoar, S. and Khorgami, Z. and Augustin, T. and Schauer, P. R. and Brethauer, S. A.	mean age <55; not medicare eligible
27425840	A nationwide safety analysis of bariatric surgery in nonseverely obese patients with type 2 diabetes	Surgery for Obesity and Related Diseases	Aminian, A., Andalib, A., Khorgami, Z., Kashyap, S. R., Burguera, B., Schauer, P. R., Brethauer, S. A.	mean age <55; not medicare eligible
0	Outcomes of Bariatric Surgery in Patients with Inflammatory Bowel Disease	Obesity Surgery	Aminian, A., Andalib, A., Ver, M. R., Corcelles, R., Schauer, P. R., Brethauer, S. A.	N < 10 per arm

ID	Title	Journal	Authors	Reason for Exclusion
26301769	Is Laparoscopic Bariatric Surgery a Safe Option in Extremely High-Risk Morbidly Obese Patients?	J Laparoendosc Adv Surg Tech A	Aminian, A., Jamal, M. H., Andalib, A., Batayyah, E., Romero-Talamas, H., Chand, B., Schauer, P. R., Brethauer, S. A.	mean age <55; not medicare eligible
109647525. Language:	Failed Surgical Weight Loss Does Not Necessarily Mean Failed Metabolic Effects	Diabetes Technology & Therapeutics	Aminian, Ali, Jamal, Mohammad, Augustin, Toms, Corcelles, Ricard, Kirwan, John P., Schauer, Philip R., Brethauer, Stacy A.	mean age <55; not medicare eligible
0	Incidence and Clinical Features of Diabetic Ketoacidosis After Bariatric and Metabolic Surgery	Diabetes Care	Aminian, Ali, Kashyap, Sangeeta R., Burguera, Bartolome, Punchai, Suriya, Sharma, Gautam, Froylich, Dvir, Brethauer, Stacy A., Schauer, Philip R.	mean age <55; not medicare eligible
0	Weight Loss before Bariatric Surgery and Postoperative Complications: Data from the Scandinavian Obesity Registry (SOREg)	Annals of Surgery	Anderin, C., Gustafsson, U. O., Heijbel, N., Thorell, A.	mean age <55; not medicare eligible
24242844	Predictors of weight loss are different in men and women after sleeve gastrectomy	Obes Surg	Andersen, J. R.	mean age <55; not medicare eligible
0	Age and gender may influence the results of Roux-en-Y gastric bypass? Metabolic syndrome parameters	Arquivos de Gastroenterologia	Andrade-Silva, S. G., Caranti, D. A., Sallet, J. A., Leal, L. P. F. F., Leal, A. J. F., D'Amato, A. R.	N < 10 per arm
0	Laparoscopic Sleeve Gastrectomy for Morbid Obesity with Intra-operative Endoscopy: Lessons We Learned After 100 Consecutive Patients	Obesity Surgery	Andreas, A., Adamantios, M., Antonios, A., Theofilos, R., Christos, T., Theodoros, D.	mean age <55; not medicare eligible
20820937	Protein intake, body composition, and protein status following bariatric surgery	Obes Surg	Andreu, A. and Moize, V. and Rodriguez, L. and Flores, L. and Vidal, J.	mean age <55; not medicare eligible
21696079	Short-term outcomes of two laparoscopic bariatric procedures	J Med Assoc Thai	Angkoolpakdeekul, T.	mean age <55; not medicare eligible
23453785	Laparoscopic adjustable gastric banding versus Roux-en-Y gastric bypass: 10-year results of a prospective, randomized trial	Surg Obes Relat Dis	Angrisani, L.	mean age <55; not medicare eligible
17331805	Laparoscopic adjustable gastric banding	Surg Obes Relat Dis	Angrisani, L.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	versus Roux-en-Y gastric bypass: 5-year results of a prospective randomized trial			medicare eligible
18996759	Laparoscopic adjustable gastric banding with truncal vagotomy versus laparoscopic adjustable gastric banding alone: interim results of a prospective randomized trial	Surg Obes Relat Dis	Angrisani, L. and Cutolo, P. P. and Ciciriello, M. B. and Vitolo, G. and Persico, F. and Lorenzo, M. and Scarano, P.	mean age <55; not medicare eligible
0	Is bariatric surgery necessary after intragastric balloon treatment?	Obesity Surgery	Angrisani, L. and Lorenzo, M. and Borrelli, V. and Giuffr�, M. and Fonderico, C. and Capece, G.	mean age <55; not medicare eligible
18438114	Long-term efficacy of a low-pressure adjustable gastric band in the treatment of morbid obesity	Ann Surg	Anwar, M.	mean age <55; not medicare eligible
0	Perioperative outcomes of revisional laparoscopic gastric bypass after failed adjustable gastric banding and after vertical banded gastroplasty: Experience with 107 cases and subgroup analysis	Surgical Endoscopy and Other Interventional Techniques	Apers, J. A.	mean age <55; not medicare eligible
27453881	Evaluation of laparoscopic sleeve gastrectomy compared with laparoscopic Roux-en-Y gastric bypass for people with morbid obesity: A systematic review and meta-analysis	Med J Islam Repub Iran	Arabi Basharic, F.	No primary data
0	Resolution of diabetes after Bariatric surgery among predominantly african-american patients: Race has no effect in remission of diabetes after Bariatric surgery	Obesity Surgery	Araia, M.	mean age <55; not medicare eligible
12448388	Quality of life in bariatric surgery	Obes Surg	Arcila, D.	mean age <55; not medicare eligible
0	Band revision versus Roux-en-Y gastric bypass conversion as salvage operation after laparoscopic adjustable gastric banding	Surgery for Obesity and Related Diseases	Ardestani, A.	mean age <55; not medicare eligible
0	Airway Hyperresponsiveness to Mannitol in Obesity Before and After Bariatric Surgery	Obesity Surgery	Arismendi, E., Rivas, E., Vidal, J., Barreiro, E., Torralba, Y., Burgos, F., Rodriguez-Roisin, R.	mean age <55; not medicare eligible
26752949	The hidden endoscopic burden of sleeve gastrectomy and its comparison with Roux-en-Y gastric bypass	Ann Gastroenterol	Arndtz, K.	mean age <55; not medicare eligible
0	Nutritional and protein deficiencies in the short term following both gastric bypass and gastric	PLoS ONE	Aron-Wisnewsky, J.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	banding			
25595796	Weight loss, saline loading, and the natriuretic peptide system	J Am Heart Assoc	Arora, P., Reingold, J., Baggish, A., Guanaga, D. P., Wu, C., Ghorbani, A., Song, Y., Chen-Tournaux, A., Khan, A. M., Tainsh, L. T., Buys, E. S., Williams, J. S., Heublein, D. M., Burnett, J. C., Semigran, M. J., Bloch, K. D., Scherrer-Crosbie, M., Newton-Cheh, C., Kaplan, L. M., Wang, T. J.	mean age <55; not medicare eligible
0	Magenstrasse and Mill gastroplasty and sleeve gastrectomy as treatment for morbid obesity	Connecticut medicine	Arroyo, K.	mean age <55; not medicare eligible
0	Usefulness of Clinical Signs and Diagnostic Tests for Suspected Leaks in Bariatric Surgery	Obesity Surgery	Arteaga-González, I. and Martín-Malagón, A. and Martín-Páez, J. and Carrillo-Pallarés, A.	single arm study n<50
19450339	Obesity in adults	BMJ Clin Evid	Arterburn, D.	No primary data
0	Comparative effectiveness of laparoscopic adjustable gastric banding vs laparoscopic gastric bypass	JAMA Surgery	Arterburn, D.	mean age <55; not medicare eligible
0	Comparative effectiveness of bariatric surgery vs. nonsurgical treatment of type 2 diabetes among severely obese adults	Obesity Research and Clinical Practice	Arterburn, D.	mean age <55; not medicare eligible
DARE-12015000998	Bariatric surgery or non-surgical weight loss for obstructive sleep apnoea? A systematic review and comparison of meta-analyses (Provisional abstract)	Database of Abstracts of Reviews of Effects	Ashrafian, H	mean age <55; not medicare eligible
25967714	Relation between weight loss and age after laparoscopic sleeve gastrectomy	Eur Rev Med Pharmacol Sci	Aslaner, A., Ongen, A., Kosar, M., Cakir, T., Mayir, B., Dogan, U., Gunduz, U., Cantilav, G., Habibi, M., Ozdemir, S., Oruc, M. T., Bulbul, N.	mean age <55; not medicare eligible
0	Bariatric surgery for patients with early-onset vs late-onset type 2 diabetes	JAMA Surgery	Aung, L., Lee, W. J., Chen, S. C., Ser, K. H., Wu, C. C., Chong, K.,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Lee, Y. C., Chen, J. C.	
0	Enhanced Recovery after Bariatric Surgery (ERABS): Clinical outcomes from a tertiary referral bariatric centre	Obesity Surgery	Awad, S. and Carter, S. and Purkayastha, S. and Hakky, S. and Moorthy, K. and Cousins, J. and Ahmed, A. R.	mean age <55; not medicare eligible
0	Correlation between the Beck Depression Inventory and bariatric surgical procedures	Surgery for Obesity and Related Diseases	Ayloo, S. and Thompson, K. and Choudhury, N. and Sheriffdeen, R.	mean age <55; not medicare eligible
0	Adjustable gastric banding: A comparison of models	Surgery for Obesity and Related Diseases	Ayloo, S. M., Fernandes, E., Masrur, M. A., Giulianotti, P. C.	mean age <55; not medicare eligible
26853430	Can response to dietary restriction predict weight loss after Roux-en-Y gastroplasty?	Obesity (Silver Spring)	Azar, M., Nikpay, M., Harper, M. E., McPherson, R., Dent, R.	mean age <55; not medicare eligible
CN-01098603	T2DM: Evolution after bariatric surgery. Randomized controlled trial comparing sleeve gastrectomy, laparoscopic greater curvature plication and metabolic gastric bypass	Obesity surgery	Badia, Ac	mean age <55; not medicare eligible
0	Application of side-to-side anastomosis of the lesser curvature of stomach and jejunum in gastric bypass	World Journal of Gastroenterology	Bai, R. X., Yan, W. M., Li, Y. G., Xu, J., Zhong, Z. Q., Yan, M.	mean age <55; not medicare eligible
0	Surgical treatment of morbid obesity with biliopancreatic diversion and gastric banding: Report on an 8-year experience involving 235 cases	Annales de Chirurgie	Bajardi, G.	mean age <55; not medicare eligible
0	Plastic surgery improves long-term weight control after bariatric surgery	Plastic and reconstructive surgery	Balagu�, N., Combescur�, C., Huber, O., Pittet-Cu�nod, B., Modarressi, A.	mean age <55; not medicare eligible
26093003	Factors Associated With Long-Term Weight Loss Following Bariatric Surgery Using 2 Methods for Repeated Measures Analysis	Am J Epidemiol	Baldrige, A. S.	mean age <55; not medicare eligible
0	The evaluation of pyrosis and long-term satisfaction after gastric restrictive procedures: A retrospective study	Acta Chirurgica Belgica	Balduyck, B.	mean age <55; not medicare eligible
16989703	Short-term changes in insulin resistance following weight loss surgery for morbid obesity: laparoscopic adjustable gastric banding versus laparoscopic Roux-en-Y gastric bypass	Obes Surg	Ballantyne, G. H.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
0	The surgical treatment of type II diabetes mellitus: Changes in HOMA insulin resistance in the first year following laparoscopic roux-en-Y gastric bypass (LRYGB) and laparoscopic adjustable gastric banding (LAGB)	Obesity Surgery	Ballantyne, G. H.	mean age <55; not medicare eligible
21442375	Copper and zinc serum levels after derivative bariatric surgery: differences between Roux-en-Y Gastric bypass and biliopancreatic diversion	Obes Surg	Balsa, J. A.	mean age <55; not medicare eligible
0	The role of serum osteoprotegerin and receptor-activator of nuclear factor- κ B ligand in metabolic bone disease of women after obesity surgery	Journal of Bone and Mineral Metabolism	Balsa, J. A.	mean age <55; not medicare eligible
11307094	Ten and more years after vertical banded gastroplasty as primary operation for morbid obesity	J Gastrointest Surg	Balsiger, B. M.	mean age <55; not medicare eligible
0	Analysis of the prevalence of atelectasis in patients undergoing bariatric surgery	Brazilian Journal of Anesthesiology	Baltieri, L. and Peixoto and Rasera and Montebelo, M. I. D. L. and Costa, D. and Pazzianotto M.	mean age <55; not medicare eligible
0	A Genetic Risk Score Is Associated with Weight Loss Following Roux-en Y Gastric Bypass Surgery	Obesity Surgery	Bandstein, M.	mean age <55; not medicare eligible
0	Relationship between gastric pouch and weight loss after laparoscopic sleeve gastrectomy	Surgical Endoscopy and Other Interventional Techniques	Barbiero, G. and Romanucci, G. and Ortu, V. and Zuliani, M. and Miotto, D. and Pomerri, F. and Albanese, A. and Verdi, D. and Prevedello, L. and Foletto, M.	mean age <55; not medicare eligible
25005812	Argon plasma coagulation of gastrojejunal anastomosis for weight regain after gastric bypass	Obes Surg	Baretta, G. A., Alinho, H. C., Matias, J. E., Marchesini, J. B., de Lima, J. H., Empinotti, C., Campos, J. M.	mean age <55; not medicare eligible
25294547	Bariatric postoperative fistula: a life-saving endoscopic procedure	Surg Endosc	Baretta, G. and Campos, J. and Correia, S. and Alinho, H. and Marchesini, J. B. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Lima, J. H. and Neto, M. G.	
26433591	Predictors of Excess Weight Loss in Obese Patients After Gastric Bypass: a 60-Month Follow-up	Obes Surg	Barhouch, A. S.	mean age <55; not medicare eligible
27287901	GERD and acid reduction medication use following gastric bypass and sleeve gastrectomy	Surg Endosc	Barr, A. C.	mean age <55; not medicare eligible
15672653	Quality of life of obese patients submitted to bariatric surgery	Nutr Hosp	Barreto Villela, N. and Braghrolli Neto, O. and Lima Curvello, K. and Eduarda Paneili, B. and Seal, C. and Santos, D. and Cruz, T.	mean age <55; not medicare eligible
0	Physical Activity, Decision-Making Abilities, and Eating Disturbances in Pre- and Postbariatric Surgery Patients	Obesity Surgery	Bartsch, M. and Langenberg, S. and Gruner-Labitzke, K. and Schulze, M. and Kähler, H. and Crosby, R. D. and Marschollek, M. and de Zwaan, M. and Möller, A.	mean age <55; not medicare eligible
17355767	A nationwide survey on bariatric surgery in France: two years prospective follow-up	Obes Surg	Basdevant, A.	mean age <55; not medicare eligible
23478701	[Evolution of the intake and nutritional status of zinc, iron and copper in women undergoing bariatric surgery until the second year after surgery]	Nutr Hosp	Basfi-Fer, K.	mean age <55; not medicare eligible
0	Effect of bariatric surgery on cardiometabolic risk in elderly patients: A population-based study	Geriatrics and Gerontology International	Batsis, J. A. and Miranda, W. R. and Prasad, C. and Collazo-Clavell, M. L. and Sarr, M. G. and Somers, V. K. and Lopez-Jimenez, F.	single arm study n<50
0	Effect of bariatric surgery on the metabolic syndrome: A population-based, long-term controlled study	Mayo Clinic Proceedings	Batsis, J. A. and Romero-Corral, A. and Collazo-Clavell, M. L. and Sarr, M. G. and Somers, V. K. and Lopez-Jimenez, F.	mean age <55; not medicare eligible
18805125	Cardiovascular risk after bariatric surgery for obesity	Am J Cardiol	Batsis, J. A. and Sarr, M. G. and Collazo-Clavell,	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
			M. L. and Thomas, R. J. and Romero-Corral, A. and Somers, V. K. and Lopez-Jimenez, F.	
0	Racial differences in weight loss, payment method, and complications following Roux-en-Y gastric bypass and sleeve gastrectomy	Advances in Therapy	Bayham, B. E.	mean age <55; not medicare eligible
0	Early resolution of type 2 diabetes seen after Roux-en-Y gastric bypass and vertical sleeve gastrectomy	Diabetes Technology and Therapeutics	Bayham, B. E.	mean age <55; not medicare eligible
20174885	Weight loss prior to bariatric surgery is not a pre-requisite of excess weight loss outcomes in obese patients	Obes Surg	Becouarn, G. and Topart, P. and Ritz, P.	mean age <55; not medicare eligible
0	Early results of a Canadian laparoscopic sleeve gastrectomy experience	Canadian Journal of Surgery	Behrens, C.	mean age <55; not medicare eligible
0	Gender influence on long-term weight loss after three bariatric procedures: Gastric banding is less effective in males in a retrospective analysis	Surgical Endoscopy and Other Interventional Techniques	Bekheit, M.	mean age <55; not medicare eligible
0	Nutritional deficiencies after sleeve gastrectomy: Can they be predicted preoperatively?	Surgery for Obesity and Related Diseases	Ben-Porat, T., Elazary, R., Yuval, J. B., Wieder, A., Khalaileh, A., Weiss, R.	mean age <55; not medicare eligible
23462580	Sleeve gastrectomy and Roux-en-Y gastric bypass are equally effective in correcting insulin resistance	Int J Surg	Benaiges, D.	mean age <55; not medicare eligible
22544352	Impact of restrictive (sleeve gastrectomy) vs hybrid bariatric surgery (Roux-en-Y gastric bypass) on lipid profile	Obes Surg	Benaiges, D.	mean age <55; not medicare eligible
21546321	Laparoscopic sleeve gastrectomy and laparoscopic gastric bypass are equally effective for reduction of cardiovascular risk in severely obese patients at one year of follow-up	Surg Obes Relat Dis	Benaiges, D.	mean age <55; not medicare eligible
26350297	Predictors of Hypertension Remission and Recurrence After Bariatric Surgery	Am J Hypertens	Benaiges, D., Sague, M., Flores-Le Roux, J. A., Pedro-Botet, J., Ramon, J. M., Villatoro, M., Chillaron, J. J., Pera, M., Mas, A., Grande, L., Goday, A.	mean age <55; not medicare eligible
15018753	Initial experience with laparoscopic adjustable	Obes Surg	Bende, J.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	gastric banding in Hungary			medicare eligible
0	Predictors of dropout and bariatric surgery in Icelandic morbidly obese female patients	Obesity Research and Clinical Practice	Benediktsdottir, A., Halldorsson, T. I., Bragadottir, G. J., Gudmundsson, L., Ramel, A.	mean age <55; not medicare eligible
104074520. Language:	Cholesterol Metabolism After Bariatric Surgery in Grade 3 Obesity: Differences between malabsorptive and restrictive procedures	Diabetes Care	Benetti, Alberto	mean age <55; not medicare eligible
23470583	Risk factors associated with mortality after Roux-en-Y gastric bypass surgery	Ann Surg	Benotti	mean age <55; not medicare eligible
0	Preoperative weight loss before bariatric surgery	Archives of Surgery	Benotti, P. N.	mean age <55; not medicare eligible
21866377	Laparoscopic sleeve gastrectomy feasible for bariatric revision surgery	Obes Surg	Berende, C. A.	mean age <55; not medicare eligible
26965158	Preoperative predictors of adherence to dietary and physical activity recommendations and weight loss one year after surgery	Surg Obes Relat Dis	Bergh, I.	mean age <55; not medicare eligible
17544335	Prospective randomized trial of banded versus nonbanded gastric bypass for the super obese: early results	Surg Obes Relat Dis	Bessler, M.	mean age <55; not medicare eligible
16354525	Adjustable gastric banding as a revisional bariatric procedure after failed gastric bypass	Obes Surg	Bessler, M.	N < 10 per arm
0	Cognitive function predicts 24-month weight loss success after bariatric surgery	Surgery for Obesity and Related Diseases	Beth Spitznagel, M.	mean age <55; not medicare eligible
0	Comparison Between Banded and Nonbanded Roux-En-Y Gastric Bypass with 2-Year Follow-Up: a Preliminary Retrospective Analysis	Obesity Surgery	Bhandari, M.	mean age <55; not medicare eligible
25399348	Predictors of Remission of T2DM and Metabolic Effects after Laparoscopic Roux-en-y Gastric Bypass in Obese Indian Diabetics-a 5-Year Study	Obes Surg	Bhasker, A. G.	mean age <55; not medicare eligible
0	Traffic Crash Risks in Morbidly Obese Drivers Before and After Weight Loss Surgery	Obesity Surgery	Bhatti, J. A., Nathens, A. B., Redelmeier, D. A.	mean age <55; not medicare eligible
115067764. Language:	Weight loss surgery and subsequent emergency care use: a population-based cohort study	American Journal of Emergency Medicine	Bhatti, Junaid A., Nathens, Avery B., Thiruchelvam, Deva, Redelmeier, Donald A.	mean age <55; not medicare eligible
0	Laparoscopic sleeve gastrectomy: with or without duodenal switch? A consecutive series of 800 cases	Digestive surgery	Biertho, L.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
0	Perioperative complications in a consecutive series of 1000 duodenal switches	Surgery for Obesity and Related Diseases	Biertho, L.	mean age <55; not medicare eligible
25904235	Risk of Malnutrition, Trace Metal, and Vitamin Deficiency Post Roux-en-Y Gastric Bypass--a Prospective Study of 20 Patients with BMI < 35 kg/m(2)	Obes Surg	Billeter, A. T., Probst, P., Fischer, L., Senft, J., Kenngott, H. G., Schulte, T., Clemens, G., Zech, U., Buchler, M. W., Nawroth, P. P., Muller-Stich, B. P.	single arm study n<50
0	Combined Non-alcoholic Fatty Liver Disease and Type 2 Diabetes Mellitus: Sleeve Gastrectomy or Gastric Bypass?â€a Controlled Matched Pair Study of 34 Patients	Obesity Surgery	Billeter, A. T., Senft, J., Gotthardt, D., Knefeli, P., Nickel, F., Schulte, T., Fischer, L., Nawroth, P. P., BÃ¼chler, M. W., MÃ¼ller-Stich, B. P.	mean age <55; not medicare eligible
24837559	Experience of excess skin after gastric bypass or duodenal switch in patients with super obesity	Surg Obes Relat Dis	Biorserud, C.	mean age <55; not medicare eligible
0	Hospital complication rates with bariatric surgery in Michigan	JAMA - Journal of the American Medical Association	Birkmeyer, N. J. O. and Dimick, J. B. and Share, D. and Hawasli, A. and English, W. J. and Genaw, J. and Finks, J. F. and Carlin, A. M. and Birkmeyer, J. D.	mean age <55; not medicare eligible
26306602	The Association Between Preoperative Symptoms of Obesity in Knee and Hip Joints and the Change in Quality of Life After Laparoscopic Roux-en-Y Gastric Bypass	Obes Surg	Birn, I., Mechenburg, I., Liljensoe, A., Soballe, K., Larsen, J. F.	mean age <55; not medicare eligible
26316928	The Sleeve Bypass Trial: a multicentre randomized controlled trial comparing the long term outcome of laparoscopic sleeve gastrectomy and gastric bypass for morbid obesity in terms of excess BMI loss percentage and quality of life	BMC Obes	Biter, L. U.	No primary data
26969666	Outcomes associated with preoperative weight loss after laparoscopic Roux-en-Y gastric bypass	Surg Endosc	Blackledge, C.	mean age <55; not medicare eligible
20005783	Metabolic acuity score: effect on major complications after bariatric surgery	Surg Obes Relat Dis	Blackstone, R. P. and Cortes, M. C.	mean age <55; not medicare eligible
0	Bariatric surgery leads to 3-year resolution of diabetes in 24% to 38% of patients	Journal of Clinical Outcomes Management	Block, J. P.	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
26906645	Body mass index strongly impacts the diagnosis and incidence of heparin-induced thrombocytopenia in the surgical intensive care unit	Journal of Trauma and Acute Care Surgery	Bloom, M. B., Zaw, A. A., Hoang, D. M., Mason, R., Alban, R. F., Chung, R., Melo, N., Volod, O., Ley, E. J., Margulies, D. R.	Not about bariatric surgery
0	The frequency of respiratory failure in patients with morbid obesity undergoing gastric bypass	Journal of the American Association of Nurse Anesthetists	Blouw, E. L.	mean age <55; not medicare eligible
15072655	Binge eating, quality of life and physical activity improve after Roux-en-Y gastric bypass for morbid obesity	Obes Surg	Boan, J.	mean age <55; not medicare eligible
HTA-32006001206	Evaluation of medical and health economic effectiveness of bariatric surgery (obesity surgery) versus conservative strategies in adult patients with morbid obesity (Structured abstract)	Health Technology Assessment Database	Bockelbrink, A and Stoeber, Y and Roll, S and Vauth, C and Willich, Sn and Greiner, W	No primary data
20526694	Roux-en-Y bypass gastroplasty: markers of oxidative stress 6 months after surgery	Obes Surg	Boesing, F. and Moreira, E. A. and Wilhelm-Filho, D. and Vigil, S. V. and Parizotto, E. B. and Inacio, D. B. and Portari, G. V. and Trindade, E. B. and Jordao-Junior, A. A. and Frode, T. S.	mean age <55; not medicare eligible
0	Clinical outcomes after bariatric surgery: A five-year matched cohort analysis in seven US states	Obesity Surgery	Bolen, S. D. and Chang, H. Y. and Weiner, J. P. and Richards, T. M. and Shore, A. D. and Goodwin, S. M. and Johns, R. A. and Magnuson, T. H. and Clark, J. M.	mean age <55; not medicare eligible
0	Endoscopic revision (stomaphyx) versus formal surgical revision (gastric bypass) for failed vertical band gastroplasty	Journal of Obesity	Bolton, J. and Gill, R. S. and Al-Jahdali, A. and Byrns, S. and Shi, X. and Birch, D. W. and Karmali, S.	mean age <55; not medicare eligible
20678969	Significant resolution of female sexual dysfunction after bariatric surgery	Surg Obes Relat Dis	Bond, D. S.	mean age <55; not medicare eligible
25668345	Roux-en-Y gastric bypass alleviates hypertension and is associated with an increase in mid-regional pro-atrial natriuretic peptide in morbid obese patients	J Hypertens	Bonfils, P. K., Taskiran, M., Damgaard, M., Goetze, J. P., Floyd, A. K., Funch-Jensen, P.,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Kristiansen, V. B., Stockel, M., Bouchelouche, P. N., Gadsboll, N.	
116951663. Language:	Eating Behavior, Low-Frequency Functional Mutations in the Melanocortin-4 Receptor (MC4R) Gene, and Outcomes of Bariatric Operations: A 6-Year Prospective Study	Diabetes Care	Bonnefond, Amélie, Keller, Ramsi, Meyre, David, Stutzmann, Fanny, Thuillier, Dorothée, Stefanov, Dimitre G., Froguel, Philippe, Horber, Fritz F., Kral, John G.	mean age <55; not medicare eligible
CN-01080346	Remission of type 2 diabetes mellitus 1 year after bariatric surgery in severely obese patients	Surgical Endoscopy and Other Interventional Techniques	Boonyagard, N	mean age <55; not medicare eligible
25577158	Impact of bariatric surgery on clinical depression. Interrupted time series study with matched controls	J Affect Disord	Booth, H.	mean age <55; not medicare eligible
25466723	Incidence of type 2 diabetes after bariatric surgery: population-based matched cohort study	Lancet Diabetes Endocrinol	Booth, H. and Khan, O. and Prevost, T. and Reddy, M. and Dregan, A. and Charlton, J. and Ashworth, M. and Rudisill, C. and Littlejohns, P. and Gulliford, M. C.	mean age <55; not medicare eligible
0	Pouch Reshaping for Significant Weight Regain after Roux-en-Y Gastric Bypass	Obesity Surgery	Borbely, Y., Winkler, C., Kröll, D., Nett, P.	mean age <55; not medicare eligible
CN-01100857	Changes in appetite, food intake, and appetite regulating hormones during acute weight loss induced by Roux-en-y gastric bypass and low-calorie diet	Obesity facts	Bottin, Jh and Thomas, El and Balogun, B and Bech, Pr and Ghatei, Ma and Moorthy, K and Leeds, Ar and Bell, Jd and Frost, Gs	Abstract only
16847241	Laparoscopic gastric bypass is superior to adjustable gastric band in super morbidly obese patients: A prospective, comparative analysis	Arch Surg	Bowne, W. B.	mean age <55; not medicare eligible
20702146	Laparoscopic Roux-en-Y gastric bypass versus laparoscopic adjustable gastric banding: five years of follow-up	Surg Obes Relat Dis	Boza, C.	mean age <55; not medicare eligible
26361022	[Plasma ghrelin levels in the late postoperative	Rev Med Chil	Braghetto, I.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	period of vertical sleeve gastrectomy]			medicare eligible
0	Scintigraphic evaluation of gastric emptying in obese patients submitted to sleeve gastrectomy compared to normal subjects	Obesity Surgery	Braghetto, I. and Davanzo, C. and Korn, O. and Csendes, A. and Valladares, H. and Herrera, E. and Gonzalez, P. and Papapietro, K.	mean age <55; not medicare eligible
22392129	Laparoscopic treatment of obese patients with gastroesophageal reflux disease and Barrett's esophagus: a prospective study	Obes Surg	Braghetto, I. and Korn, O. and Csendes, A. and Gutierrez, L. and Valladares, H. and Chacon, M.	mean age <55; not medicare eligible
27285093	[Type 2 Diabetes Mellitus, Depression and Eating Disorders in Patients Submitted to Bariatric Surgery]	Acta Med Port	Brandao, I. and Marques Pinho, A. and Arrojado, F. and Pinto-Bastos, A. and Maia da Costa, J. and Coelho, R. and Calhau, C. and Conceicao, E.	mean age <55; not medicare eligible
DARE-12014028764	Systematic review on reoperative bariatric surgery: American Society for Metabolic and Bariatric Surgery Revision Task Force (Provisional abstract)	Database of Abstracts of Reviews of Effects	Brethauer, Sa and Kothari, S and Sudan, R and Williams, B and English, Wj and Brengman, M and Kurian, M and Hutter, M and Stegemann, L and Kallies, K and Nguyen, Nt and Ponce, J and Morton, Jm	No primary data
0	Bariatric surgery for morbid obesity: Pre-operative assessment, surgical techniques and post-operative monitoring	Journal of International Medical Research	Breznikar, B.	mean age <55; not medicare eligible
20660040	Elevated fetuin-A concentrations in morbid obesity decrease after dramatic weight loss	Journal of Clinical Endocrinology and Metabolism	Brix, J. M. and Stingl, H. and HÄ¶llerl, F. and Scherthaner, G. H. and Kopp, H. P. and Scherthaner, G.	mean age <55; not medicare eligible
0	Upper gastrointestinal swallow study following bariatric surgery: Institutional review and review of the literature	Obesity Surgery	Brockmeyer, J. R. and Simon, T. E. and Jacob, R. K. and Husain, F. and Choi, Y.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
0	Weight loss outcome of revisional bariatric operations varies according to the primary procedure	Annals of Surgery	Brolin, R. E.	mean age <55; not medicare eligible
11077320	Lipid risk profile and weight stability after gastric restrictive operations for morbid obesity	J Gastrointest Surg	Brolin, R. E. and Bradley, L. J. and Wilson, A. C. and Cody, R. P.	mean age <55; not medicare eligible
24378190	[Prospective study of gluco-lipidic hormone and peptide levels in morbidly obese patients after sleeve gastrectomy]	Cir Esp	Bruna, M.	mean age <55; not medicare eligible
21533881	Observations regarding 'quality of life' and 'comfort with food' after bariatric surgery: comparison between laparoscopic adjustable gastric banding and sleeve gastrectomy	Obes Surg	Brunault, P.	mean age <55; not medicare eligible
0	What is the impact of sleeve gastrectomy and gastric bypass on metabolic control of diabetes? A clinic-based cohort of Mediterranean diabetic patients	Surgery for Obesity and Related Diseases	Bruno, G.	mean age <55; not medicare eligible
0	Single anastomosis or mini-gastric bypass: Long-term results and quality of life after a 5-year follow-up	Surgery for Obesity and Related Diseases	Bruzzi, M.	mean age <55; not medicare eligible
27226121	Thickening of inner retinal layers in the parafovea after bariatric surgery in patients with type 2 diabetes	Acta Ophthalmol	Brynskov, T., Laugesen, C. S., Floyd, A. K., Sorensen, T. L.	mean age <55; not medicare eligible
DARE-12009103562	Weight and type 2 diabetes after bariatric surgery: systematic review and meta-analysis (Structured abstract)	American Journal of Medicine	Buchwald, H and Estok, R and Fahrbach, K and Banel, D and Jensen, Md and Pories, Wj and Bantle, Jp and Sledge, I	No primary data
106579357. Language:	Bariatric surgery: a systematic review and meta-analysis	JAMA: Journal of the American Medical Association	Buchwald, H.	No primary data
25001288	Systematic review and meta-analysis of medium-term outcomes after banded Roux-en-Y gastric bypass	Obes Surg	Buchwald, H.	No primary data
17950357	Trends in mortality in bariatric surgery: a systematic review and meta-analysis	Surgery	Buchwald, H.	No primary data
27149810	[THE CHANGE IN THE CONCENTRATION OF VITAMINS AFTER BARIATRIC SURGERY]	Klin Med (Mosk)	Bodunova, N. A., Sabelnikova, E. A., Parfenov, A. I., Askerhanov, R. G., Tkachenko, E. V., Varvanina, G. G., Feydorov, I. U., Khatkov,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			I. E., Mosin, S. V.	
16545164	Physical and psychosocial outcome in morbidly obese patients with and without bariatric surgery: A 4 1/2-year follow-up	Obesity Surgery	Buddeberg-Fischer, Klaghofer, Krug, Buddeberg, Müller, Schoeb, Weber	mean age <55; not medicare eligible
0	Who benefits from gastric banding?	Obesity Surgery	Bueter, M.	mean age <55; not medicare eligible
25223870	Laparoscopic sleeve gastrectomy is safe and effective in elderly patients: a comparative analysis	Obes Surg	Burchett	single arm study n<50
19194620	Resection gastric bypass in morbid obese patients aged less than 18 and over 65 years.	Rev Med Chil	Burgos	N < 10 per arm
CN-01005786	TRAMOMTANA (multidisciplinary treatment of morbid obesity: Behavioral therapy, nutritional support and physical activity)	Obesity (Silver Spring, Md.)	Burguera, B	No primary data
CN-01085046	An Intensive Lifestyle Intervention Is an Effective Treatment of Morbid Obesity: The TRAMOMTANA Study-A Two-Year Randomized Controlled Clinical Trial	International journal of endocrinology	Burguera, B	No primary data
105101881. Language:	Introduction of laparoscopic bariatric surgery in England: observational population cohort study	BMJ: British Medical Journal (Overseas & Retired Doctors Edition)	Burns, E. M.	mean age <55; not medicare eligible
CN-00917030	Long-Term Effect of Bariatric Surgery on Liver Enzymes in the Swedish Obese Subjects (SOS) Study	PloS one	Burza, Ma and Romeo, S and Kotronen, A and Svensson, P-A and Sjöholm, K and Torgerson, Js and Lindroos, A-K and Sjostrom, L and Carlsson, Lms and Peltonen, M	mean age <55; not medicare eligible
17903768	Comparative long-term mortality after laparoscopic adjustable gastric banding versus nonsurgical controls	Surg Obes Relat Dis	Busetto, L.	mean age <55; not medicare eligible
0	Three years durability of the improvements in health-related quality of life observed after gastric banding	Surgery for Obesity and Related Diseases	Busetto, L.	mean age <55; not medicare eligible
25365646	Management options for obesity after bariatric surgery	Surgical Laparoscopy, Endoscopy and Percutaneous Techniques	Buttelmann, K., Linn, J. G., Denham, W., Ruiz, M., Yetasook, A., Ujiki, M.	mean age <55; not medicare eligible
27143901	The influence of methods of bariatric surgery	Therapeutics and Clinical Risk	Buzga, M.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	for treatment of type 2 diabetes mellitus	Management		medicare eligible
26649086	Laparoscopic gastric plication and its effect on saccharide and lipid metabolism: A 12-month prospective study	Wideochirurgia I Inne Techniki Maloinwazyjne	Buzga, M.	mean age <55; not medicare eligible
25561993	Dietary intake and ghrelin and leptin changes after sleeve gastrectomy	Wideochirurgia I Inne Techniki Maloinwazyjne	Buzga, M.	mean age <55; not medicare eligible
0	Prevalence of anemia after Roux-en-Y gastric bypass surgery: What is the right number?	Surgery for Obesity and Related Diseases	Cable, C. T.	mean age <55; not medicare eligible
109828712. Language:	A review of the safety and efficacy of bariatric surgery in adults over the age of 60: 2002-2013	Journal of the American Association of Nurse Practitioners	Caceres, Billy A. and Moskowitz, Dana and O'Connell, Theresa	No primary data
107858016. Language:	Long-Term Outcomes of Bariatric Surgery in Obese Adults	Journal of Clinical Outcomes Management	Caceres, Billy A. and Squires, Allison	mean age <55; not medicare eligible
HTA-32015000291	Bariatric surgical procedures for obese and morbidly obese patients: a review of comparative clinical and cost-effectiveness, and guidelines (Structured abstract)	Health Technology Assessment Database	Cadth	No primary data
120516004. Language:	Weight Loss Surgery May Cut Risk of Heart Failure	American Journal of Managed Care	Caffrey, Mary	Abstract only
25379859	Roux-en-Y gastric bypass versus adjustable gastric banding to reduce nonalcoholic fatty liver disease: a 5-year controlled longitudinal study	Ann Surg	Caiazzo, R.	mean age <55; not medicare eligible
21519768	[Long-term efficacy and safety of Roux-en-Y gastric bypass and gastric banding: systematic review]	Nutr Hosp	Camberos-Solis, R. and Jimenez-Cruz, A. and Bacardi-Gascon, M. and Culebras, J. M.	No primary data
25861068	Post-bariatric surgery weight regain: evaluation of nutritional profile of candidate patients for endoscopic argon plasma coagulation	Arq Bras Cir Dig	Cambi, M. P., Marchesini, S. D., Baretta, G. A.	mean age <55; not medicare eligible
11557840	Failure of preoperative resting energy expenditure in predicting weight loss after gastroplasty	Obes Res	Camerini, G.	mean age <55; not medicare eligible
0	The long-term impact of biliopancreatic diversion on glycemic control in the severely obese with type 2 diabetes mellitus in relation to preoperative duration of diabetes	Surgery for Obesity and Related Diseases	Camerini, G. B., Papadia, F. S., Carlini, F., Catalano, M., Adami, G. F., Scopinaro, N.	mean age <55; not medicare eligible
0	Better weight loss, resolution of diabetes, and quality of life for laparoscopic gastric bypass vs banding results of a 2-cohort pair-matched	Archives of Surgery	Campos, G. M.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	study			
105451650. Language:	Psychosocial predictors of weight loss and psychological adjustment following bariatric surgery and a weight-loss program: the mediating role of emotional eating	International Journal of Eating Disorders	Canetti, L.	mean age <55; not medicare eligible
0	Health-related quality of life changes and weight reduction after bariatric surgery vs. a weight-loss program	The Israel journal of psychiatry and related sciences	Canetti, L.	mean age <55; not medicare eligible
0	An assessment of vertical banded gastroplasty-Roux-en-Y gastric bypass for the treatment of morbid obesity	American Journal of Surgery	Capella, J. F.	mean age <55; not medicare eligible
25954762	Is type 2 diabetes really resolved after laparoscopic sleeve gastrectomy? Glucose variability studied by continuous glucose monitoring	J Diabetes Res	Capoccia, D., Coccia, F., Guida, A., Rizzello, M., De Angelis, F., Silecchia, G., Leonetti, F.	mean age <55; not medicare eligible
0	Two-step conversion surgery after failed laparoscopic adjustable gastric banding. Comparison between laparoscopic Roux-en-Y gastric bypass and laparoscopic gastric sleeve	Surgery for Obesity and Related Diseases	Carandina, S.	mean age <55; not medicare eligible
0	Weight loss and improvement of lipid profiles in morbidly obese patients after laparoscopic one-anastomosis gastric bypass: 2-year follow-up	Surgical Endoscopy and Other Interventional Techniques	Carbajo, M. A., Fong-Hirales, A., Luque-de-LeÃn, E., Molina-Lopez, J. F., Ortiz-de-SolÃrzano, J.	mean age <55; not medicare eligible
25078508	Impact of bariatric surgery on the oral health of patients with morbid obesity	Obes Surg	Cardozo, D. D.	mean age <55; not medicare eligible
105649523. Language:	Can body mass index predict percent body fat and changes in percent body fat with weight loss in bariatric surgery patients?	Journal of Strength & Conditioning Research (Lippincott Williams & Wilkins)	Carey, D. G. and Raymond, R. L.	mean age <55; not medicare eligible
20700409	Bariatric Revisionary Surgery for Failed or Complicated Vertical Banded Gastroplasty (VBG): Comparison of VBG Reoperation (re-VBG) versus Roux-en-Y Gastric Bypass-on-VBG (RYGB-on-VBG)	J Obes	Cariani, S.	mean age <55; not medicare eligible
23470577	The comparative effectiveness of sleeve gastrectomy, gastric bypass, and adjustable gastric banding procedures for the treatment of morbid obesity	Ann Surg	Carlin, A. M.	mean age <55; not medicare eligible
0	Preoperative weight loss is not a predictor of postoperative weight loss after laparoscopic Roux-en-Y gastric bypass	Surgery for Obesity and Related Diseases	Carlin, A. M.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
22913680	Bariatric surgery and prevention of type 2 diabetes in Swedish obese subjects	N Engl J Med	Carlsson, L. M. and Peltonen, M. and Ahlin, S. and Anveden, A. and Bouchard, C. and Carlsson, B. and Jacobson, P. and Lonroth, H. and Maglio, C. and Naslund, I. and Pirazzi, C. and Romeo, S. and Sjöholm, K. and Sjöström, E. and Wedel, H. and Svensson, P. A. and Sjöström, L.	mean age <55; not medicare eligible
0	The incidence of albuminuria after bariatric surgery and usual care in Swedish obese subjects (SOS): A prospective controlled intervention trial	International Journal of Obesity	Carlsson, L. M. S.	mean age <55; not medicare eligible
0	Laparoscopic conversion of sleeve gastrectomy to a biliopancreatic diversion with duodenal switch or a Roux-en-Y gastric bypass due to weight loss failure: Our algorithm	Surgery for Obesity and Related Diseases	Carmeli, I.	mean age <55; not medicare eligible
0	Acute and chronic effects of biliopancreatic diversion with duodenal switch surgery on plasma visfatin and apelin levels in patients with severe obesity	Obesity Surgery	Caron-Cantin, S. M. and Martin, J. and Bastien, M. and Munkonda, M. N. and Lu, H. and Cianflone, K. and Moustarah, F. and Biertho, L. and Marceau, S. and Hould, F. S. and Bussières, J. and Poirier, P.	mean age <55; not medicare eligible
0	A retrospective comparison of early results of conversion of failed gastric banding to sleeve gastrectomy or gastric bypass	Surgery for Obesity and Related Diseases	Carr, W. R. J.	mean age <55; not medicare eligible
0	Preoperative thiamine deficiency in obese population undergoing laparoscopic bariatric surgery	Surgery for Obesity and Related Diseases	Carrodeguas, L.	mean age <55; not medicare eligible
22692668	Changes in bone mineral density in women following 1-year gastric bypass surgery	Obes Surg	Casagrande, D. S.	mean age <55; not medicare eligible
0	Long-term results after laparoscopic sleeve gastrectomy in a large monocentric series	Surgery for Obesity and Related Diseases	Casella, G.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
27887931	Revision of primary sleeve gastrectomy to Roux-en-Y gastric bypass: indications and outcomes from a high-volume center	Surg Obes Relat Dis	Casillas, R. A.	mean age <55; not medicare eligible
21978748	Effect of preoperative weight loss in bariatric surgical patients: a systematic review	Surg Obes Relat Dis	Cassie, S.	No primary data
24737175	Psychological effects and outcome predictors of three bariatric surgery interventions: a 1-year follow-up study	Eat Weight Disord	Castellini, G.	mean age <55; not medicare eligible
0	Five-year results of sleeve gastrectomy	Journal of visceral surgery	Catheline, J. M.	mean age <55; not medicare eligible
0	Predictors for weight loss failure following Roux-en-Y gastric bypass	Arquivos de Gastroenterologia	Cazzo, E.	mean age <55; not medicare eligible
25381118	Effect of Roux-en-Y gastric bypass on nonalcoholic fatty liver disease evaluated through NAFLD fibrosis score: a prospective study	Obes Surg	Cazzo, E., Jimenez, L. S., Pareja, J. C., Chaim, E. A.	mean age <55; not medicare eligible
27565665	Time to Glycemic Control - an Observational Study of 3 Different Operations	Obes Surg	Celik, A	mean age <55; not medicare eligible
27287899	Comparative effectiveness of Roux-en-Y gastric bypass and sleeve gastrectomy in super obese patients	Surg Endosc	Celio, A. C.	mean age <55; not medicare eligible
0	Laparoscopic versus open biliopancreatic diversion: A prospective comparative study	Obesity Surgery	Ceriani, V.	mean age <55; not medicare eligible
26805016	Hypovitaminosis D in bariatric surgery: A systematic review of observational studies	Metabolism	Chakhtoura, M. T.	No primary data
0	Single and multiple incision laparoscopic adjustable gastric banding: A matched comparison	Obesity Surgery	Chakravartty, S.	mean age <55; not medicare eligible
22405735	Comparison of laparoscopic adjustable gastric banding (LAGB) with other bariatric procedures; a systematic review of the randomised controlled trials	Surgeon	Chakravarty, P. D.	No primary data
16804453	Quality of life after laparoscopic gastric banding: Prospective study (152 cases) with a follow-up of 2 years	Surg Laparosc Endosc Percutan Tech	Champault, A.	mean age <55; not medicare eligible
DARE-12013008758	Randomized controlled trials in bariatric surgery (Provisional abstract)	Database of Abstracts of Reviews of Effects	Chan, Cp and Wang, By and Cheng, Cy and Lin, Ch and Hsieh, Mc and Tsou, Jj and Lee, Wj	No primary data
0	Bariatric surgery is associated with improvement in kidney outcomes	Kidney International	Chang, A. R. and Chen, Y. and Still, C. and Wood, G. C. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Kirchner, H. L. and Lewis, M. and Kramer, H. and Hartle, J. E. and Carey, D. and Appel, L. J. and Grams, M. E.	
24352617	The effectiveness and risks of bariatric surgery: an updated systematic review and meta-analysis, 2003-2012	JAMA Surg	Chang, S. H.	No primary data
119417082. Language:	PI-03 - Effect of bariatric surgery on diabetic complications: the Taiwan diabetes study	Diabetes Research & Clinical Practice	Chang, Yi-Cheng, Lee, Wei-Jei, Lu, Chieh Hsiang, Chao, Seh-Huang, Chen, Ching-Chu	Abstract only
22770864	Normal alcohol metabolism after gastric banding and sleeve gastrectomy: a case-cross-over trial	J Am Coll Surg	Changchien, E. M.	N < 10 per arm
CN-01080345	Nutrient deficiencies after laparoscopic roux-en-y gastric bypass and laparoscopic sleeve gastrectomy: A comparative study	Surgical Endoscopy and Other Interventional Techniques	Chanswangphuvana, P	Abstract only
119416932. Language:	PI-28 - Effect of bariatric surgery on diabetic nephropathy in obese type 2 diabetes patients in a local retrospective 2 year study	Diabetes Research & Clinical Practice	Chao, Anthony, Sum, Chee Fang, Lam, Benjamin, Cheng, Anton, Low, Serena, Lim, Su Chi	Abstract only
14976485	Laparoscopic adjustable gastric banding in the treatment of obesity: a systematic literature review	Surgery	Chapman, A. E.	No primary data
25443051	Quality of life before and after laparoscopic sleeve gastrectomy. A prospective cohort study	Surg Obes Relat Dis	Charalampakis, V.	mean age <55; not medicare eligible
17075583	Changes in fat-free mass during significant weight loss: a systematic review	Int J Obes (Lond)	Chaston, T. B.	No primary data
0	Prevalence and factors associated with persistent pain following body contouring surgery	Journal of Plastic, Reconstructive and Aesthetic Surgery	Chatel, H., Madar, Y., Leyder, P., Bonneau, C., Barrat, C., Quilichini, J.	mean age <55; not medicare eligible
15826467	Patient characteristics impacting excess weight loss following laparoscopic adjustable gastric banding	Obes Surg	Chau, W. Y.	mean age <55; not medicare eligible
25443058	Laparoscopic adjustable gastric banded plication: case-matched study from a single U.S. center	Surg Obes Relat Dis	Chaudhry, U. I.	mean age <55; not medicare eligible
105309005. Language:	Bariatric surgery for non-alcoholic steatohepatitis in obese patients	Cochrane Database of Systematic Reviews	Chavez-Tapia, N. C. and Tellez-Avila, F. I. and	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
			Barrientos-Gutierrez, T. and Mendez-Sanchez, N. and Lizardi-Cervera, J. and Uribe, M.	
23006039	The effect of restrictive bariatric surgery on urolithiasis	J Endourol	Chen, T.	mean age <55; not medicare eligible
CN-01138581	Comparison of gut hormones and adipokines stimulated by glucagon test among patients with type II diabetes mellitus after metabolic surgery	Neuropeptides	Chen, Y-C	mean age <55; not medicare eligible
26599565	Gastric Bypass Surgery Leads to Long-term Remission or Improvement of Type 2 Diabetes and Significant Decrease of Microvascular and Macrovascular Complications	Ann Surg	Chen, Y.	mean age <55; not medicare eligible
23302455	[Efficacy of modified Roux-en-Y gastric bypass in the treatment of non-obese type 2 diabetes mellitus:one year follow-up]	Zhonghua Wai Ke Za Zhi	Chen, Y. F.	mean age <55; not medicare eligible
24222534	Comparison of weight loss and body composition changes in morbidly obese Taiwanese patients with different bariatric surgeries: a 1-year follow-up study	Obes Surg	Cheng, I. C.	mean age <55; not medicare eligible
CN-01160369	The risk of kidney stones following bariatric surgery: A meta-analysis	Blood purification	Cheungpasitporn, W	No primary data
18043107	Predictive factors of outcome after gastric banding: a nationwide survey on the role of center activity and patients' behavior	Ann Surg	Chevallier, J. M.	mean age <55; not medicare eligible
25585612	One thousand single anastomosis (omega loop) gastric bypasses to treat morbid obesity in a 7-year period: outcomes show few complications and good efficacy	Obes Surg	Chevallier, J. M., Arman, G. A., Guenzi, M., Rau, C., Bruzzi, M., Beupel, N., Zinzindohoue, F., Berger, A.	mean age <55; not medicare eligible
0	Incidental Finding of GIST During Obesity Surgery	Obesity Surgery	Chiappetta, S. and Theodoridou, S. and Stier, C. and Weiner, R. A.	N < 10 per arm
18996754	Adjustable gastric band placed around gastric bypass pouch as revision operation for failed gastric bypass	Surg Obes Relat Dis	Chin, P. L.	N < 10 per arm
0	Early outcomes of laparoscopic sleeve gastrectomy in a multiethnic Asian cohort	Surgery for Obesity and Related Diseases	Ching, S. S.	mean age <55; not medicare eligible
26071847	Effect of sleeve gastrectomy on type 2 diabetes as an alternative treatment modality	Surg Obes Relat Dis	Cho, J. M.	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
	to Roux-en-Y gastric bypass: systemic review and meta-analysis			
27783367	National Differences in Remission of Type 2 Diabetes Mellitus After Roux-en-Y Gastric Bypass Surgery-Subgroup Analysis of 2-Year Results of the Diabetes Surgery Study Comparing Taiwanese with Americans with Mild Obesity (BMI 30-35 kg/m ²)	Obes Surg	Chong, K.	mean age <55; not medicare eligible
0	Re-examining the BMI threshold for bariatric surgery in the USA	Journal of gastrointestinal surgery : official journal of the Society for Surgery of the Alimentary Tract	Choudhury, R. A. and Murayama, K. M. and Neylan, C. J. and Savulionyte, G. and Glick, H. A. and Williams, N. N. and Dempsey, D. T. and Dumon, K. R.	No primary data
26667164	Roux-en-Y Gastric Bypass in the Elderly: a Systematic Review	Obes Surg	Chow, A., Switzer, N. J., Gill, R. S., Dang, J., Ko, Y. M., Shi, X., Birch, D. W., de Gara, C., Karmali, S.	No primary data
105271355. Language:	Five-year outcomes of laparoscopic adjustable gastric banding and laparoscopic Roux-en-Y gastric bypass in a comprehensive bariatric surgery program in Canada	Canadian Journal of Surgery	Christou, N.	mean age <55; not medicare eligible
15319713	Surgery decreases long-term mortality, morbidity, and health care use in morbidly obese patients	Ann Surg	Christou, N. V. and Sampalis, J. S. and Liberman, M. and Look, D. and Auger, S. and McLean, A. P. and MacLean, L. D.	mean age <55; not medicare eligible
0	A mixed flavonoid-fish oil supplement induces immune-enhancing and anti-inflammatory transcriptomic changes in adult obese and overweight womenâ€A randomized controlled trial	Nutrients	Cialdella-Kam, L., Nieman, D. C., Knab, A. M., Shanely, R. A., Meaney, M. P., Jin, F., Sha, W., Ghosh, S.	Not about bariatric surgery
HTA-32010001057	Bariatric surgery in diabetic type 2 patients with CMI at or above 30 kg/m ² (Structured abstract)	Health Technology Assessment Database	Claveria, Fontan A and Punal, Rioboo J	Abstract only
14513064	Clinical and cost effectiveness of surgery for morbid obesity: a systematic review and economic evaluation	Int J Obes Relat Metab Disord	Clegg, A. and Colquitt, J. and Sidhu, M. and Royle, P. and Walker, A.	No primary data
12935364	Gastrointestinal symptoms are more intense in	Obes Surg	Clements, R. H.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	morbidly obese patients and are improved with laparoscopic Roux-en-Y gastric bypass			medicare eligible
0	Pharmacologic Prophylaxis Against Venous Thromboembolic Complications Is Not Mandatory for All Laparoscopic Roux-en-Y Gastric Bypass Procedures	Journal of the American College of Surgeons	Clements, R. H.	mean age <55; not medicare eligible
0	Revisional bariatric surgery for failed restrictive procedures	Surgery for Obesity and Related Diseases	Coakley, B. A.	N < 10 per arm
0	Trocar Port Hernias After Bariatric Surgery	Obesity Surgery	Coblijn, U. K. and de Raaff, C. A. L. and van Wagenveld, B. A. and van Tets, W. F. and de Castro, S. M. M.	mean age <55; not medicare eligible
CN-01059281	Impact of intra-gastric balloon (IGB) before laparoscopic gastric by-pass (LGBP) in patients with morbid obesity: A randomized multicenter study comparing igb to standard medical care (SMC) during the pre-operative period. (bigpom study)	Obesity surgery	Coffin, B	mean age <55; not medicare eligible
CN-01209152	Impact of Intra-gastric Balloon Before Laparoscopic Gastric Bypass on Patients with Super Obesity: a Randomized Multicenter Study	Obesity surgery	Coffin, B	mean age <55; not medicare eligible
0	Laparoscopic revisional bariatric surgery: Myths and facts	Surgical Endoscopy	Cohen, R.	mean age <55; not medicare eligible
0	Three-year weight outcomes from a bariatric surgery registry in a large integrated healthcare system	Surgery for Obesity and Related Diseases	Coleman, K. J.	mean age <55; not medicare eligible
0	Metabolic syndrome is less likely to resolve in hispanics and non-hispanic blacks after bariatric surgery	Annals of Surgery	Coleman, K. J. and Huang, Y. C. and Koebnick, C. and Reynolds, K. and Xiang, A. H. and Black, M. H. and Alskaf, S.	mean age <55; not medicare eligible
18408982	Hunger control and regular physical activity facilitate weight loss after laparoscopic adjustable gastric banding	Obes Surg	Colles, S. L.	mean age <55; not medicare eligible
17938315	Gastric bypass: why Roux-en-Y? A review of experimental data	Arch Surg	Collins, B. J. and Miyashita, T. and Schweitzer, M. and Magnuson, T. and Harmon, J. W.	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
12804481	Surgery for morbid obesity	Cochrane Database Syst Rev	Colquitt, J.	No primary data
16235331	Surgery for morbid obesity	Cochrane Database Syst Rev	Colquitt, J. and Clegg, A. and Loveman, E. and Royle, P. and Sidhu, M. K.	No primary data
19370590	Surgery for obesity	Cochrane Database Syst Rev	Colquitt, J. L.	No primary data
25105982	Surgery for weight loss in adults	Cochrane Database Syst Rev	Colquitt, J. L. and Pickett, K. and Loveman, E. and Frampton, G. K.	No primary data
0	Food Intake and Changes in Eating Behavior After Laparoscopic Sleeve Gastrectomy	Obesity Surgery	Coluzzi, I., Raparelli, L., Guarnacci, L., Paone, E., Del Genio, G., le Roux, C. W., Silecchia, G.	mean age <55; not medicare eligible
22161257	Attendance at clinical visits predicts weight loss after gastric bypass surgery	Obes Surg	Compher, C. W.	mean age <55; not medicare eligible
23560285	Substance use following bariatric weight loss surgery	JAMA Surg	Conason, A. and Teixeira, J. and Hsu, C. H. and Puma, L. and Knafo, D. and Geliebter, A.	mean age <55; not medicare eligible
0	Loss of control eating and weight outcomes after bariatric surgery: A study with a Portuguese sample	Eating and Weight Disorders	Conceição, E. and Bastos, A. P. and Brandão, I. and Vaz, A. R. and Ramalho, S. and Arrojado, F. and Da Costa, J. M. and Machado, P. P. P.	mean age <55; not medicare eligible
111238757. Language:	Eating Disorders and Problematic Eating Behaviours Before and After Bariatric Surgery: Characterization, Assessment and Association with Treatment Outcomes	European Eating Disorders Review	Conceição, Eva M., Utzinger, Linsey M., Pisetsky, Emily M.	No primary data
25213792	The presence of maladaptive eating behaviors after bariatric surgery in a cross sectional study: importance of picking or nibbling on weight regain	Eat Behav	Conceicao, E. and Mitchell, J. E. and Vaz, A. R. and Bastos, A. P. and Ramalho, S. and Silva, C. and Cao, L. and Brandao, I. and Machado, P. P.	mean age <55; not medicare eligible
0	Do gallstones found before sleeve gastrectomy behave the same as those formed after surgery due to weight loss?	American Journal of Surgery	Conley, A., Tarboush, M., Manatsathit, W., Meguid, A., Szpunar, S.,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Hawasli, A.	
23462862	Correlation between age and weight loss after bariatric surgery	Obes Surg	Contreras, J. E.	mean age <55; not medicare eligible
25595383	Trends in Weight Regain Following Roux-en-Y Gastric Bypass (RYGB) Bariatric Surgery	Obes Surg	Cooper, T. C., Simmons, E. B., Webb, K., Burns, J. L., Kushner, R. F.	mean age <55; not medicare eligible
0	[Effects of gastric bypass on estimated cardiovascular risk in morbidly obese patients with metabolic syndrome]	CirugĂa espaĂola	Corcelles, R.	mean age <55; not medicare eligible
0	Laparoscopic three-port sleeve gastrectomy: A single institution case series	Journal of Laparoendoscopic and Advanced Surgical Techniques	Corcelles, R., Boules, M., Froylich, D., Daigle, C. R., Hag, A., Schauer, P. R., Rogula, T.	mean age <55; not medicare eligible
15826472	Comparison of changes in lipid profile after bilio-intestinal bypass and gastric banding in patients with morbid obesity	Obes Surg	Corradini, S. G.	mean age <55; not medicare eligible
25296074	Outcomes on quality of life, weight loss, and comorbidities after Roux-en-Y gastric bypass	Arq Gastroenterol	Costa, R. C.	mean age <55; not medicare eligible
0	Calcium metabolism, vitamin D and bone mineral density after bariatric surgery	Osteoporosis International	Costa, T. L.	mean age <55; not medicare eligible
26694182	A matched cohort analysis of single anastomosis loop duodenal switch versus Roux-en-Y gastric bypass with 18-month follow-up	Surg Endosc	Cottam, A.	mean age <55; not medicare eligible
27568033	A Matched Cohort Analysis of Stomach Intestinal Pylorus Saving (SIPS) Surgery Versus Biliopancreatic Diversion with Duodenal Switch with Two-Year Follow-up	Obes Surg	Cottam, A.	mean age <55; not medicare eligible
26992894	A Matched Cohort Analysis of Sleeve Gastrectomy With and Without 300 cm Loop Duodenal Switch With 18-Month Follow-Up	Obes Surg	Cottam, A.	mean age <55; not medicare eligible
0	Clinical efficacy of bariatric surgery versus liraglutide in patients with type 2 diabetes and severe obesity: a 12-month retrospective evaluation	Acta Diabetologica	Cotugno, M.	mean age <55; not medicare eligible
18542847	Nutritional consequences of adjustable gastric banding and gastric bypass: a 1-year prospective study	Obes Surg	Coupaye, M.	mean age <55; not medicare eligible
0	Comparison of nutritional status during the first year after sleeve gastrectomy and Roux-en-Y gastric bypass	Obesity Surgery	Coupaye, M.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
25851775	Comparison of the incidence of cholelithiasis after sleeve gastrectomy and Roux-en-Y gastric bypass in obese patients: a prospective study	Surg Obes Relat Dis	Coupaye, M.	mean age <55; not medicare eligible
0	Is lean body mass decreased after obesity treatment by adjustable gastric banding?	Obesity Surgery	Coupaye, M. and Bouillot, J. L. and Poitou, C. and Schutz, Y. and Basdevant, A. and Oppert, J. M.	mean age <55; not medicare eligible
23150206	Serum vitamin D increases with weight loss in obese subjects 6 months after Roux-en-Y gastric bypass	Obes Surg	Coupaye, M. and Breuil, M. C. and Riviere, P. and Castel, B. and Bogard, C. and Dupre, T. and Msika, S. and Ledoux, S.	mean age <55; not medicare eligible
12841890	Comparing the outcomes after laparoscopic versus open gastric bypass: a matched paired analysis	Obes Surg	Courcoulas, A.	mean age <55; not medicare eligible
26132586	Three-Year Outcomes of Bariatric Surgery vs Lifestyle Intervention for Type 2 Diabetes Mellitus Treatment: A Randomized Clinical Trial	JAMA Surg	Courcoulas, A. P.	mean age <55; not medicare eligible
24189773	Weight change and health outcomes at 3 years after bariatric surgery among individuals with severe obesity	Jama	Courcoulas, A. P.	mean age <55; not medicare eligible
24899268	Surgical vs medical treatments for type 2 diabetes mellitus: a randomized clinical trial	JAMA Surg	Courcoulas, A. P.	mean age <55; not medicare eligible
104902474. Language:	Weighing the clinical benefits and economic impact of bariatric surgery in morbidly obese patients with diabetes	Canadian Journal of Diabetes	Cremieux, Pierre Y.	no outcome of interest
0	Fat-soluble vitamin deficiencies after bariatric surgery could be misleading if they are not appropriately adjusted	Nutrici3n hospitalaria	Cuesta, M., Pelaz, L., P3rez, C., Torrej3n, M. J., Cabrerizo, L., Mat3a, P., P3rez-Ferre, N., S3nchez-Pernaute, A., Torres, A., Rubio, M. A.	mean age <55; not medicare eligible
26983924	Gastric bypass surgery vs intensive lifestyle and medical intervention for type 2 diabetes: the CROSSROADS randomised controlled trial	Diabetologia	Cummings, D. E.	mean age <55; not medicare eligible
115656619. Language:	Bariatric/Metabolic Surgery to Treat Type 2 Diabetes in Patients With a BMI <35 kg/m2	Diabetes Care	Cummings, David E., Cohen, Ricardo V.	No primary data
27260650	Effect of different bariatric surgery type on the	Surg Obes Relat Dis	Cunha, F. M.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	leukocyte formula			medicare eligible
0	The Effect of Bariatric Surgery Type on Lipid Profile: An Age, Sex, Body Mass Index and Excess Weight Loss Matched Study	Obesity Surgery	Cunha, F. M.	mean age <55; not medicare eligible
18501315	Review of meta-analytic comparisons of bariatric surgery with a focus on laparoscopic adjustable gastric banding	Surg Obes Relat Dis	Cunneen, S. A.	No primary data
18243061	Studies of Swedish adjustable gastric band and Lap-Band: systematic review and meta-analysis	Surg Obes Relat Dis	Cunneen, S. A.	No primary data
DARE-12013071702	Effects of bariatric surgery on cardiac structure and function: a systematic review and meta-analysis (Provisional abstract)	American Journal of Hypertension	Cuspidi, C and Rescaldani, M and Tadic, M and Sala, C and Grassi, G	No primary data
CN-00899545	Clinical efficacy of laparoscopic sleeve gastrectomy vs laparoscopic gastric bypass in obese type 2 diabetic patients: A retrospective comparison	Obesity surgery	Cutolo, Pp	mean age <55; not medicare eligible
17476866	Predicting maximum Roux-en-Y gastric bypass-induced weight reduction--preoperative plasma leptin or body weight?	Obes Surg	Czupryniak, L.	mean age <55; not medicare eligible
0	Metabolic surgery and intestinal gene expression: Digestive tract and diabetes evolution considerations	World Journal of Gastroenterology	Da Silva Rodrigues, M. R., Santo, M. A., Favero, G. M., Vieira, E. C., Artoni, R. F., Nogaroto, V., De Moura, E. G., Lisboa, P., Milleo, F. Q.	N < 10 per arm
27544005	Poor diet quality and postoperative time are independent risk factors for weight regain after Roux-en-Y gastric bypass	Nutrition	da Silva, F. B. and Gomes, D. L. and de Carvalho, K. M.	mean age <55; not medicare eligible
0	Quality of life evaluation after selected bariatric procedures using the bariatric analysis and reporting outcome system	Wideochirurgia I Inne Techniki Maloinwazyjne	Dadan, J.	mean age <55; not medicare eligible
112458129. Language:	Effect of Bariatric Surgery on Adipose Tissue Glucose Metabolism in Different Depots in Patients With or Without Type 2 Diabetes	Diabetes Care	Dadson, Prince, Landini, Linda, HelmiÄ¶, Mika, Hannukainen, Jarna C., Immonen, Heidi, Honka, Miiikka-Juhani, Bucci, Marco, Savisto, Nina, Soinio, Minna, Salminen, Paulina, Parkkola, Riitta, PihlajamÄ¶ki, Jussi,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Iozzo, Patricia, Nuutila, Pirjo, Ferrannini, Ele	
26077696	Bariatric and metabolic outcomes in the superobese elderly.	Surg Obes Relat Dis.	Daigle	N < 10 per arm
0	Revisional bariatric surgery can improve refractory metabolic disease	Surgery for Obesity and Related Diseases	Daigle, C. R., Chaudhry, R., Boules, M., Corcelles, R., Kroh, M., Schauer, P. R., Brethauer, S. A.	mean age <55; not medicare eligible
26948944	Long-term outcomes of laparoscopic sleeve gastrectomy: a Lebanese center experience	Surg Obes Relat Dis	Dakour Aridi, H.	mean age <55; not medicare eligible
19705207	Long-term nutritional outcome after gastric bypass	Obes Surg	Dalcanale, L.	mean age <55; not medicare eligible
22011941	Analysis of perioperative outcomes, length of hospital stay, and readmission rate after gastric bypass	Surg Endosc	Dallal, R. M.	mean age <55; not medicare eligible
113724584. Language:	THE RISK OF ADVERSE CARDIOVASCULAR OUTCOMES AFTER BARIATRIC SURGERY IN PATIENTS WITH MORBID OBESITY WITH AND WITHOUT OBSTRUCTIVE SLEEP APNEA	Journal of the American College of Cardiology (JACC)	Dalmar, Ahmed, Singh, Maharaj, Heis, Zoe, Katzoff, Michael N., Chua, Thomas, Tajik, A. Jamil, Jahangir, Arshad	mean age <55; not medicare eligible
0	Internal herniation after laparoscopic antecolic Roux-en-Y gastric bypass: A nationwide Danish study based on the Danish National Patient Register	Surgery for Obesity and Related Diseases	Daneshmandi, Kristensen, S., Jess, P., Karen Floyd, A., Eller, A., Engberg, A., Naver, L.	mean age <55; not medicare eligible
0	Laparoscopic conversion of adjustable gastric banding and vertical banded gastroplasty to duodenal switch	Surgery for Obesity and Related Diseases	Dapri, G.	mean age <55; not medicare eligible
0	Laparoscopic repeat sleeve gastrectomy versus duodenal switch after isolated sleeve gastrectomy for obesity	Surgery for Obesity and Related Diseases	Dapri, G.	mean age <55; not medicare eligible
21138345	Laparoscopic conversion of Roux-en-Y gastric bypass to distal gastric bypass for weight regain	J Laparoendosc Adv Surg Tech A	Dapri, G.	N < 10 per arm
20838919	Laparoscopic conversion of Roux-en-Y gastric bypass to sleeve gastrectomy as first step of duodenal switch: technique and preliminary outcomes	Obes Surg	Dapri, G.	N < 10 per arm
24321569	Laparoscopic gastric plication versus mini-gastric bypass surgery in the treatment of morbid obesity: a randomized clinical trial	Surg Obes Relat Dis	Darabi, S.	mean age <55; not medicare eligible
19727984	Conversion of failed vertical banded gastroplasty to biliopancreatic diversion, a	Obes Surg	Daskalakis, M.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	wise option			
0	Laparoscopic conversion of failed vertical banded gastroplasty to Roux-en-Y gastric bypass or biliopancreatic diversion	Surgery for Obesity and Related Diseases	David, M. B.	mean age <55; not medicare eligible
12568187	Open versus laparoscopic vertical banded gastroplasty: a randomized controlled double blind trial	Obes Surg	Davila-Cervantes, A.	mean age <55; not medicare eligible
112217213. Language:	Mental Health Conditions Among Patients Seeking and Undergoing Bariatric Surgery: A Meta-analysis	JAMA: Journal of the American Medical Association	Dawes, Aaron J. and Maggard-Gibbons, Melinda and Maher, Alicia R. and Booth, Marika J. and Miake-Lye, Isomi and Beroes, Jessica M. and Shekelle, Paul G.	No primary data
0	Nonalcoholic fatty liver disease in severely obese individuals: The influence of bariatric surgery	Annals of Hepatology	De Andrade, A. R. and Cotrim, H. P. and Alves, E. and Daniela Soares, R. and Rocha, A. and Almeida, A. and Almeida, C. G. and De Freitas, L. A.	mean age <55; not medicare eligible
0	Prevalence of Alcohol Abuse Before and After Bariatric Surgery Associated With Nutritional and Lifestyle Factors: A Study Involving a Portuguese Population	Obesity Surgery	de Araujo Burgos, M. G. P.	mean age <55; not medicare eligible
25919069	Early Endocrine and Metabolic Changes After Bariatric Surgery in Grade III Morbidly Obese Patients: A Randomized Clinical Trial Comparing Sleeve Gastrectomy and Gastric Bypass	Metab Syndr Relat Disord	de Barros, F.	mean age <55; not medicare eligible
107793499. Language:	Safety and effectiveness of gastric balloons associated with hypocaloric diet for the treatment of obesity	Revista Espanola de Enfermedades Digestivas	de Castro, Maria Luisa and Morales, Maria Jose and Mart��nez-Olmos, Miguel A. and Pineda, Juan R. and Cid, Lucia and Est��vez, Pamela and del-Campo, Victor and Rodr��guez-Prada, J. Ignacio	mean age <55; not medicare eligible
0	Rhabdomyolysis after bariatric surgery	Obesity Surgery	De Freitas Carvalho, D. A. and Valezi, A. C. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			De Brito, E. M. and Lacerda De Souza, J. C. and Masson, A. C. and Matsuo, T.	
0	Is sleeve gastrectomy as effective as gastric bypass for remission of type 2 diabetes in morbidly obese patients?	Surgery for Obesity and Related Diseases	De Gordejuela, A. G. R.	mean age <55; not medicare eligible
0	Patterns of Weight Loss Response Following Gastric Bypass and Sleeve Gastrectomy	Obesity Surgery	de Hollanda, A.	mean age <55; not medicare eligible
0	Perioperative morbi-mortality associated with bariatric surgery: From systematic biliopancreatic diversion to a tailored laparoscopic gastric bypass or sleeve gastrectomy approach	Obesity Surgery	De La Matta-Mart��n, M.	mean age <55; not medicare eligible
0	Effect of the rs10767664 variant of the brain-derived neurotrophic factor gene on weight change and cardiovascular risk factors in morbidly obese patients after biliopancreatic diversion surgery	Journal of Nutrigenetics and Nutrigenomics	De Luis, D. A., Izaola, O., Primo, D., Pacheco, D.	No outcome of interest
0	Effects of Duodenal-Jejunal Bypass Liner (EndoBarrier��) on Gastric Emptying in Obese and Type 2 Diabetic Patients	Obesity Surgery	de Moura, E. G. H., Lopes, G. S., da Costa Martins, B., Orso, I. R. B., Coutinho, A. M. N., de Oliveira, S. L., Sakai, P., dos Passos Galv��o-Neto, M., Santo, M. A., Sapienza, M. T., Cecconello, I., Buchpigel, C. A.	mean age <55; not medicare eligible
26537269	GLYCEMIC BEHAVIOR IN 48 HOURS POSTOPERATIVE PERIOD OF PATIENTS WITH TYPE 2 DIABETES MELLITUS AND NON DIABETIC SUBMITTED TO BARIATRIC SURGERY	Arq Bras Cir Dig	de Oliveira, L. F., Tisott, C. G., Silvano, D. M., Campos, C. M., do Nascimento, R. R.	mean age <55; not medicare eligible
0	Six-minute walk test: functional capacity of severely obese before and after bariatric surgery	Surgery for Obesity and Related Diseases	de Souza, S. A. F.	mean age <55; not medicare eligible
21501874	Anxiety and depression in bariatric surgery patients: A prospective, follow-up study using structured clinical interviews	Journal of Affective Disorders	De Zwaan, M.	mean age <55; not medicare eligible
15130234	Vertical banded gastroplasty: is it a durable operation for morbid obesity?	Obes Surg	del Amo, D. A.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
25862184	Sleeve gastrectomy improves obstructive sleep apnea syndrome (OSAS): 5 year longitudinal study	Surg Obes Relat Dis	Del Genio, G., Limongelli, P., Del Genio, F., Motta, G., Docimo, L., Testa, D.	mean age <55; not medicare eligible
21411021	Obesity in adults	BMJ Clin Evid	Delaet, D.	No primary data
108171961. Language:	Postoperative respiratory complications in bariatric surgery: review of literature	Fisioterapia e Pesquisa	Delgado, Priscila Martins and Lunardi, Adriana Claudia	No primary data
20739857	Early postoperative outcomes of metabolic surgery to treat diabetes from sites participating in the ASMBS bariatric surgery center of excellence program as reported in the bariatric outcomes longitudinal database	Annals of Surgery	Demaria, E. J.	mean age <55; not medicare eligible
12063573	Hand-assisted laparoscopic gastric bypass does not improve outcome and increases costs when compared to open gastric bypass for the surgical treatment of obesity	Surg Endosc	DeMaria, E. J. and Schweitzer, M. A. and Kellum, J. M. and Meador, J. and Wolfe, L. and Sugerman, H. J.	mean age <55; not medicare eligible
0	Differential effects of gastric bypass and banding on the cardiovascular risk profile in morbidly obese subjects: The correlation with plasma apolipoprotein A-IV concentration	Alexandria Journal of Medicine	Demerdash, H. M.	mean age <55; not medicare eligible
23406367	Laparoscopic sleeve gastrectomy and medical management for the treatment of type 2 diabetes mellitus in non-morbidly obese patients: a single-center experience	Diabetes Technol Ther	Desiderio, J. and Trastulli, S. and Scalercio, V. and Cirocchi, R. and Carloni, G. and Moriconi, E. and Boselli, C. and Noya, G. and Parisi, A.	single arm study n<50
15135686	Roux-en-Y divided gastric bypass results in the same weight loss as duodenal switch for morbid obesity	Am J Surg	Deveney, C. W.	mean age <55; not medicare eligible
0	Indications, safety, and feasibility of conversion of failed bariatric surgery to Roux-en-Y gastric bypass: A retrospective comparative study with primary laparoscopic Roux-en-Y gastric bypass	Surgical Endoscopy and Other Interventional Techniques	Deylgat, B.	mean age <55; not medicare eligible
18181007	Outcome of duodenal switch with a transitory vertical gastropasty, in super-super-obese patients in an 8-year series	Obes Surg	Di Betta, E.	mean age <55; not medicare eligible
15479599	Obesity and gastro-esophageal acid reflux: physiopathological mechanisms and role of	Obes Surg	Di Francesco, V. and Baggio, E. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	gastric bariatric surgery		Mastromauro, M. and Zoico, E. and Stefenelli, N. and Zamboni, M. and Panourgia, M. P. and Frulloni, L. and Bovo, P. and Bosello, O. and Cavallini, G.	
27722822	One-Stage vs Two-Stage Laparoscopic Roux-en-Y Gastric Bypass in Obese Patients with Body Mass Index >55 Kg/m ² ; 5-YEAR FOLLOW UP	Obes Surg	Diaz-Tobarra, M. and Cassinello Fernandez, N. and Jorda Gomez, P. and Nofal, M. N. and Alfonso Ballester, R. and Ortega Serrano, J.	mean age <55; not medicare eligible
26718983	Long-Term Outcomes of Three Types of Bariatric Surgery on Obesity and Type 2 Diabetes Control and Remission	Obes Surg	Dicker, D.	mean age <55; not medicare eligible
27084725	Laparoscopic Sleeve Gastrectomy Improves Excessive Daytime Sleepiness and Sleep Quality 6 Months Following Surgery: A Prospective Cohort Study	Adv Ther	Dilektasli, E.	mean age <55; not medicare eligible
27401183	Low Educational Status and Childhood Obesity Associated with Insufficient Mid-Term Weight Loss After Sleeve Gastrectomy: a Retrospective Observational Cohort Study	Obes Surg	Dilektasli, E.	mean age <55; not medicare eligible
0	Rapid Reduction in use of antidiabetic medication after laparoscopic sleeve gastrectomy: The Newfoundland and Labrador bariatric surgery cohort (BaSCo) study	Canadian Journal of Hospital Pharmacy	Dillon, C., Peddle, J., Twells, L., Lester, K., Midodzi, W., Manning, K., Murphy, R., Pace, D., Smith, C., Boone, D., Gregory, D.	mean age <55; not medicare eligible
25909333	Management in patients with type 2 diabetes: A randomized clinical trial	Journal of clinical endocrinology and metabolism	Ding, S-A	mean age <55; not medicare eligible
CN-01109575	Adjustable Gastric Band Surgery or Medical Management in Patients With Type 2 Diabetes: A Randomized Clinical Trial	The Journal of clinical endocrinology and metabolism	Ding, Sa	mean age <55; not medicare eligible
0	No Islet Cell Hyperfunction, but Altered Gut-Islet Regulation and Postprandial Hypoglycemia in Glucose-Tolerant Patients 3Å Years After Gastric Bypass Surgery	Obesity Surgery	Dirksen, C., Eiken, A., Bojsen-MÅller, K. N., Svane, M. S., Martinussen, C., JÅrgensen, N. B., Holst, J. J., Madsbad, S.	N < 10 per arm
0	Greater weight loss with the omega loop	Obesity Surgery	Disse, E.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	bypass compared to the roux-en-y gastric bypass: A comparative study			medicare eligible
CN-00840868	Surgical versus conventional therapy for weight loss treatment of obstructive sleep apnea: A randomized controlled trial	Sleep and Biological Rhythms. Conference: 24th ASM of Australasian Sleep Association and Australasian Sleep Technologists Association: Sleep up Top, Sleep DownUnder 2012 Darwin, North. Territ. Australia. Conference Start: 20121011 Conference End: 20121013. Conference Publication: (var.pagings)	Dixon, J	Abstract only
0	Adjustable gastric banding and conventional therapy for type 2 diabetes: A randomized controlled trial	JAMA - Journal of the American Medical Association	Dixon, J. B.	mean age <55; not medicare eligible
0	Pre-operative predictors of weight loss at 1-year after Lap-Band surgery	Obesity surgery : the official journal of the American Society for Bariatric Surgery and of the Obesity Surgery Society of Australia and New Zealand	Dixon, J. B.	mean age <55; not medicare eligible
17495195	Changes in body composition with weight loss: obese subjects randomized to surgical and medical programs	Obesity (Silver Spring)	Dixon, J. B. and Strauss, B. J. and Laurie, C. and O'Brien, P. E.	mean age <55; not medicare eligible
22869859	Laparoscopic adjustable gastric banding and other devices for the management of obesity	Circulation	Dixon, J. B. and Straznicki, N. E. and Lambert, E. A. and Schlaich, M. P. and Lambert, G. W.	No primary data
CN-01174194	Evaluation of ghrelin levels after laparoscopic greater curvature plication and laparoscopic sleeve gastrectomy in obese patients	Surgical Endoscopy and Other Interventional Techniques. Conference: 23rd International Congress of the European Association for Endoscopic Surgery, EAES 2015 Bucharest Romania. Conference Start: 20150603 Conference End: 20150606. Conference Publication: (var.pagings)	Dobrescu, A	Abstract only
0	Visceral to subcutaneous fat ratio predicts acuity of diverticulitis	Surgical Endoscopy and Other Interventional Techniques	Docimo, S., Lee, Y., Chatani, P., Rogers, A. M., Lacqua, F.	Not about bariatric surgery
0	Effectiveness and Safety of Sleeve Gastrectomy, Gastric Bypass, and Adjustable Gastric Banding in Morbidly Obese Patients: a Multicenter, Retrospective, Matched Cohort	Obesity Surgery	Dogan, K.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	Study			
15018743	A comparison of laparoscopic adjustable gastric banding and biliopancreatic diversion in superobesity	Obes Surg	Dolan, K.	mean age <55; not medicare eligible
0	Short-term cardiometabolic risk reduction after bariatric surgery	Hellenic Journal of Cardiology	Domienik-Karłowicz, J. and Dzikowska-Diduch, O. and Lisik, W. and Chmura, A. and Pruszczyk, P.	mean age <55; not medicare eligible
0	The short-term effect of bariatric surgery on non-invasive markers of artery function in patients with metabolic syndrome	Diabetology and Metabolic Syndrome	Domienik-Karłowicz, J. and Lisik, W. and Rymarczyk, Z. and Dzikowska-Diduch, O. and Chmura, A. and Demkow, U. and Pruszczyk, P.	mean age <55; not medicare eligible
0	Risk for hospital readmission following bariatric surgery	PLoS ONE	Dorman, R. B.	mean age <55; not medicare eligible
0	Benefits and complications of the duodenal switch/biliopancreatic diversion compared to the Roux-en-Y gastric bypass	Surgery (United States)	Dorman, R. B.	mean age <55; not medicare eligible
0	Case-matched outcomes in bariatric surgery for treatment of type 2 diabetes in the morbidly obese patient	Annals of Surgery	Dorman, R. B.	mean age <55; not medicare eligible
23719861	Does concomitant cholecystectomy at time of Roux-en-Y gastric bypass impact adverse operative outcomes?	Obes Surg	Dorman, R. B. and Zhong, W. and Abraham, A. A. and Ikramuddin, S. and Al-Refaie, W. B. and Leslie, D. B. and Habermann, E. B.	mean age <55; not medicare eligible
0	Bariatric Surgery in the United Kingdom: A Cohort Study of Weight Loss and Clinical Outcomes in Routine Clinical Care	PLoS Medicine	Douglas, I. J.	mean age <55; not medicare eligible
115214881. Language:	Tu1141 Effects of Gastric Bypass in Obese Patients With Barrett's Esophagus	Gastrointestinal Endoscopy	Dova, Guadalupe, Caro, Luis E., Brasesco, Oscar, Paleari, Julieta, Borlle, Gaston I, Durand, Luis, Bauer, Irma, Gajardo, Catherina, Bolino, Carolina, Dumonceau, Jean M., Cerisoli, Cecilio L.	Abstract only

ID	Title	Journal	Authors	Reason for Exclusion
27729621	Laparoscopic sleeve gastrectomy versus Roux-en-Y gastric bypass for morbid obesity: a 1:1 matched cohort study in a Chinese population	Oncotarget	Du, X.	mean age <55; not medicare eligible
27720418	A comparative study of the metabolic effects of LSG and LRYGB in Chinese diabetes patients with BMI<35 kg/m ²	Surg Obes Relat Dis	Du, X.	mean age <55; not medicare eligible
103984134. Language:	Bariatric surgery produces greater weight loss and improvements in medical conditions than nonsurgical treatment of obesity	Evidence Based Medicine	Dumon, Kristoffel and Savulionyte, Goda	No primary data
0	Halitosis in obese patients and those undergoing bariatric surgery	Surgery for Obesity and Related Diseases	Dupim Souza, A. C. and Franco, C. F. and Pataro, A. L. and Guerra, T. and De Oliveira Costa, F. and Da Costa, J. E.	mean age <55; not medicare eligible
0	Laparoscopic sleeve gastrectomy in patients with preexisting gastroesophageal reflux disease a national analysis	JAMA Surgery	DuPree, C. E.	mean age <55; not medicare eligible
11361166	Quality of life and psychosocial adjustment in patients after Roux-en-Y gastric bypass: a brief report	Obes Surg	Dymek, M. P.	mean age <55; not medicare eligible
12429877	Quality of life after gastric bypass surgery: a cross-sectional study	Obes Res	Dymek, M. P. and Le Grange, D. and Neven, K. and Alverdy, J.	mean age <55; not medicare eligible
16340046	Health-related quality of life after the surgical treatment of obesity	J Physiol Pharmacol	Dziurawicz-Kozłowska, A.	mean age <55; not medicare eligible
0	Improving outcome of bariatric surgery: Best practices in an accredited surgical center	Obesity Surgery	El Chaar, M. and Claros, L. and Ezeji, G. C. and Miletics, M. and Stoltzfus, J.	mean age <55; not medicare eligible
0	Short-Term Results of Laparoscopic Sleeve Gastrectomy in Combination with Hiatal Hernia Repair: Experience in a Single Accredited Center	Obesity Surgery	El Chaar, M., Ezeji, G., Claros, L., Miletics, M., Stoltzfus, J.	mean age <55; not medicare eligible
25982803	The Effect of Roux-en-Y Gastric Bypass and Sleeve Gastrectomy Surgery on Dietary Intake, Food Preferences, and Gastrointestinal Symptoms in Post-Surgical Morbidly Obese Lebanese Subjects: A Cross-Sectional Pilot Study	Obes Surg	El Labban, S.	mean age <55; not medicare eligible
22093378	Laparoscopic bariatric surgery for those with body mass index of 70-125 kg/m ²	Surg Obes Relat Dis	Eldar, S. M. and Heneghan, H. M. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Brethauer, S. A. and Khwaja, H. A. and Singh, M. and Rogula, T. and Schauer, P. R.	
25209438	Bone mineral density and expression of vitamin D receptor-dependent calcium uptake mechanisms in the proximal small intestine after bariatric surgery	Br J Surg	Elias, E.	mean age <55; not medicare eligible
26429401	Cardiovascular disease and mortality in patients with type 2 diabetes after bariatric surgery in Sweden: a nationwide, matched, observational cohort study	Lancet Diabetes Endocrinol	Eliasson, B.	mean age <55; not medicare eligible
0	Feasibility of laparoscopic management of hiatal hernia and/or gastroesophageal reflux disease with laparoscopic sleeve gastrectomy or greater curvature plication in morbidly obese patients	Trends in Medical Research	Elwan, A. M. and Abomera, M. A. and Ibrahim, A. R. and Atwa, N. S. and Bakheet, G. M. and Ziada, S. G. and Alsamahy, O. and Abo Al Makarem, M. A.	mean age <55; not medicare eligible
25318370	Conversion of failed laparoscopic adjustable gastric banding to Roux-en-Y gastric bypass is safe as a single-step procedure	Surg Endosc	Emous, M., Apers, J., Hoff, C., van Beek, A. P., Totte, E.	mean age <55; not medicare eligible
0	Recent improvements in bariatric surgery outcomes	Medical Care	Encinosa, W. E. and Bernard, D. M. and Du, D. and Steiner, C. A.	mean age <55; not medicare eligible
0	Changes in sexual functions of female patients after bariatric surgery: Relationship with body image, depression, and anxiety	Bariatric Surgical Practice and Patient Care	Erden, S. C., Seyit, H., Yazlslz, V., Uyar, E. T., AkÅşakaya, R. O., AliÅy, H., BeÅyrlı, A., GÅ¼leken, M. D., Mihmanlı, M.	mean age <55; not medicare eligible
12169351	Laparoscopic adjustable gastric banding for the treatment of morbid obesity	Am J Surg	Evans, J. D.	mean age <55; not medicare eligible
15756392	Initiation and progression of physical activity after laparoscopic and open gastric bypass surgery	Surg Innov	Evans, R. K.	mean age <55; not medicare eligible
CN-01059099	Gastric plication versus sleeve: 700 cases none randomized study	Obesity surgery	Fardoun, A	mean age <55; not medicare eligible
24462312	Fasting glycemia: a good predictor of weight loss after RYGB	Surg Obes Relat Dis	Faria, G.	mean age <55; not medicare eligible
19399563	Energy expenditure and weight regain in patients submitted to Roux-en-Y gastric	Obes Surg	Faria, S. L. and Kelly, E. and Faria, O. P.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	bypass			
22488682	Psoriasis following bariatric surgery: clinical evolution and impact on quality of life on 10 patients	Obes Surg	Farias, M. M. and Achurra, P. and Boza, C. and Vega, A. and de la Cruz, C.	mean age <55; not medicare eligible
0	Changes in depression and quality of life in obese individuals with binge eating disorder: Bariatric surgery versus lifestyle modification	Surgery for Obesity and Related Diseases	Faulconbridge, L. F.	mean age <55; not medicare eligible
18408983	Laparoscopic Roux-en-Y gastric bypass in morbidly obese patients > or =55 years old.	Obes Surg	Fazylov	single arm study n<50
22510895	Changes in dermal histomorphology following surgical weight loss versus diet-induced weight loss in the morbidly obese patient	Ann Plast Surg	Fearmonti, R. M. and Blanton, M. and Bond, J. E. and Pestana, I. A. and Selim, M. A. and Erdmann, D.	mean age <55; not medicare eligible
25702144	Laparoscopic Gastric Banding in Obese Patients with Sleep Apnea: A 3-Year Controlled Study and Follow-up After 10 Years	Obes Surg	Feigel-Guiller, B.	mean age <55; not medicare eligible
107929611. Language:	Effectiveness of weight loss interventions for obese older adults	American Journal of Health Promotion	Felix, H. C. and West, D. S. and Felix, Holly C. and West, Delia S.	No primary data
25098565	Surgical treatment of type 2 diabetes in subjects with mild obesity: mechanisms underlying metabolic improvements	Obes Surg	Fellici, A. C., Lambert, G., Lima, M. M., Pareja, J. C., Rodovalho, S., Chaim, E. A., Geloneze, B.	mean age <55; not medicare eligible
0	Effect of standard vs extended Roux limb length on weight loss outcomes after laparoscopic Roux-en-Y gastric bypass	Surgical Endoscopy	Feng, J. J.	mean age <55; not medicare eligible
22608055	Effect of bariatric surgery-induced weight loss on renal and systemic inflammation and blood pressure: a 12-month prospective study	Surg Obes Relat Dis	Fenske, W. K. and Dubb, S. and Bueter, M. and Seyfried, F. and Patel, K. and Tam, F. W. and Frankel, A. H. and le Roux, C. W.	mean age <55; not medicare eligible
0	Bariatric and Cardiovascular Efficacy of Long-Limb Roux-en-Y Gastric Bypass: Overcoming the Limitations Inherent in Individuals	Bariatric Surgical Practice and Patient Care	Fernández-Ruiz, V. E., Armero-Barranco, D., Xandri-Graupera, J. M., Paniagua-Urbano, J. A., Solís-Agustá, M., Mulero, J.	single arm study n<50

ID	Title	Journal	Authors	Reason for Exclusion
0	Band removal and conversion to sleeve or bypass: are they equally safe?	Surgical Endoscopy and Other Interventional Techniques	Fernando Santos, B.	mean age <55; not medicare eligible
25099551	The threshold shift paradigm of obesity: evidence from surgically induced weight loss	Am J Clin Nutr	Ferrannini, E. and Rosenbaum, M. and Leibel, R. L.	mean age <55; not medicare eligible
24792189	Haematological parameters and serum trace elements in 'healthy' and 'unhealthy' morbidly obese patients before and after gastric bypass	Clin Nutr	Ferrer, R., Pardina, E., Rossell, J., Baena-Fustegueras, J. A., Lecube, A., Balibrea, J. M., Caubet, E., Gonzalez, O., Vilallonga, R., Fort, J. M., Peinado-Onsurbe, J.	mean age <55; not medicare eligible
21298508	Improvement in quality of life after laparoscopic sleeve gastrectomy	Obes Surg	Fezzi, M.	mean age <55; not medicare eligible
26649192	Determinants of Weight Loss following Laparoscopic Sleeve Gastrectomy: The Role of Psychological Burden, Coping Style, and Motivation to Undergo Surgery	J Obes	Figura, A., Ahnis, A., Stengel, A., Hofmann, T., Elbelt, U., Ordemann, J., Rose, M.	mean age <55; not medicare eligible
0	Changes in self-reported eating patterns after laparoscopic sleeve gastrectomy: A pre-post analysis and comparison with conservatively treated patients with obesity	Surgery for Obesity and Related Diseases	Figura, A., Rose, M., Ordemann, J., Klapp, B. F., Ahnis, A.	mean age <55; not medicare eligible
109827263. Language:	Probability of an Obese Person Attaining Normal Body Weight: Cohort Study Using Electronic Health Records	American Journal of Public Health	Fildes, Alison, Charlton, Judith, Rudisill, Caroline, Littlejohns, Peter, Prevost, A. Toby, Gulliford, Martin C.	Not about bariatric surgery
26187377	BariSurg trial: Sleeve gastrectomy versus Roux-en-Y gastric bypass in obese patients with BMI 35-60 kg/m(2) - a multi-centre randomized patient and observer blind non-inferiority trial	BMC Surg	Fischer, L. and Wekerle, A. L. and Bruckner, T. and Wegener, I. and Diener, M. K. and Frankenberg, M. V. and Gartner, D. and Schon, M. R. and Raggi, M. C. and Tanay, E. and Brydniak, R. and Runkel, N. and Attenberger, C. and Son, M. S. and Turler, A. and Weiner, R. and Buchler, M. W. and Muller-Stich, B. P.	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
14980036	Comparison of recovery time after open and laparoscopic gastric bypass and laparoscopic adjustable banding	Obes Surg	Fisher	mean age <55; not medicare eligible
25662379	A comparison of laparoscopic adjustable gastric band and laparoscopic sleeve gastrectomy: a single surgeon's experience	N Z Med J	Flint, R.	mean age <55; not medicare eligible
0	Endothelial function in hypertensive obese patients: 1 Year after surgically induced weight loss	Obesity Surgery	Flores, L.	mean age <55; not medicare eligible
19641201	Perioperative safety in the longitudinal assessment of bariatric surgery	N Engl J Med	Flum, D. R. and Belle, S. H. and King, W. C. and Wahed, A. S. and Berk, P. and Chapman, W. and Pories, W. and Courcoulas, A. and McCloskey, C. and Mitchell, J. and Patterson, E. and Pomp, A. and Staten, M. A. and Yanovski, S. Z. and Thirlby, R. and Wolfe, B.	mean age <55; not medicare eligible
0	Impact of gastric bypass operation on survival: A population-based analysis	Journal of the American College of Surgeons	Flum, D. R. and Dellinger, E. P.	mean age <55; not medicare eligible
0	Sleeve gastrectomy as revisional procedure for failed gastric banding or gastroplasty	Surgery for Obesity and Related Diseases	Foletto, M.	mean age <55; not medicare eligible
0	Weight loss and quality of life after bariatric surgery: A study of 200 patients after vertical gastroplasty or adjustable gastric banding	European Journal of Clinical Nutrition	Folope, V.	mean age <55; not medicare eligible
106915172. Language:	Obese patients' perceptions of treatment outcomes and the factors that influence them	Archives of Internal Medicine	Foster, G. D. and Wadden, T. A. and Phelan, S. and Sarwer, D. B. and Sanderson, R. S.	mean age <55; not medicare eligible
26077700	Laparoscopic Roux-en-Y gastric bypass for failed gastric banding: outcomes in 642 patients	Surg Obes Relat Dis	Fournier, P.	mean age <55; not medicare eligible
0	Dietary and psych predictors of weight loss after gastric bypass	Journal of Surgical Research	Fox, B.	mean age <55; not medicare eligible
0	Fasting plasma ghrelin concentrations 6 months after gastric bypass are not determined by weight loss or changes in insulinemia	Obesity Surgery	FrÃ¼hbeck, G.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
26661530	Bone Structural Changes and Estimated Strength After Gastric Bypass Surgery Evaluated by HR-pQCT	Calcif Tissue Int	Frederiksen, K. D., Hanson, S., Hansen, S., Brixen, K., Gram, J., Jorgensen, N. R., Stoving, R. K.	mean age <55; not medicare eligible
23674932	Obstructive sleep apnea after weight loss: a clinical trial comparing gastric bypass and intensive lifestyle intervention	J Clin Sleep Med	Fredheim, J. M.	mean age <55; not medicare eligible
CN-00833985	Effect of bariatric surgery and intensive lifestyle intervention on obstructive sleep apnea: A controlled clinical trial	Obesity Reviews. Conference: 18th European Congress on Obesity, ECO 2011 Istanbul Turkey. Conference Start: 20110525 Conference End: 20110528. Conference Publication: (var.pagings)	Fredheim, Jm	mean age <55; not medicare eligible
CN-00834245	Type 2 diabetes and pre-diabetes are associated with obstructive sleep apnea in extremely obese subjects: a cross-sectional study	Cardiovascular diabetology	Fredheim, Jm and Rollheim, J and Omland, T and HofsÅ, D and RÅ, islien, J and Vegsgaard, K and HjelmæsÅth, J	mean age <55; not medicare eligible
24743015	Food tolerance and diet quality following adjustable gastric banding, sleeve gastrectomy and Roux-en-Y gastric bypass	Obes Res Clin Pract	Freeman, R. A.	mean age <55; not medicare eligible
22714824	Assessment of selenium in Roux-en-Y gastric bypass and gastric banding surgery	Obes Surg	Freeth, A. and Prajuabpansri, P. and Victory, J. M. and Jenkins, P.	N < 10 per arm
0	Is there any role of resecting the stomach to ameliorate weight loss and sugar control in morbidly obese diabetic patients?	Obesity Surgery	Frezza, E. E.	mean age <55; not medicare eligible
23856991	Laparoscopic sleeve gastrectomy compared to a multidisciplinary weight loss program for obesity--effects on body composition and protein status	Obes Surg	Friedrich, A. E.	mean age <55; not medicare eligible
26557387	Gastrojejunal Anastomosis Complications and Their Management after Laparoscopic Roux-en-Y Gastric Bypass	J Obes	Fringeli, Y., Worreth, M., Langer, I.	mean age <55; not medicare eligible
0	Revisional bariatric surgery at a single institution	American Journal of Surgery	Fronza, J. S.	mean age <55; not medicare eligible
26077701	Effect of Roux-en-Y gastric bypass and sleeve gastrectomy on nonalcoholic fatty liver disease: a comparative study	Surg Obes Relat Dis	Froylich, D.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
26723561	Weight loss is higher among patients who undergo body contouring procedures after bariatric surgery	Surg Obes Relat Dis	Froylich, D. and Corcelles, R. and Daigle, C. R. and Aminian, A. and Isakov, R. and Schauer, P. R. and Brethauer, S. A.	mean age <55; not medicare eligible
0	Factors associated with length of stay in intensive care after bariatric surgery	Surgery for Obesity and Related Diseases	Froylich, D., Corcelles, R., Davis, M., Boules, M., Daigle, C. R., Schauer, P. R., Brethauer, S. A.	mean age <55; not medicare eligible
16608611	Results of laparoscopic gastric bypass in patients > or =55 years old.	Obes Surg	Frutos	single arm study n<50
0	Patients with psychiatric comorbidity can safely undergo bariatric surgery with equivalent success	Surgical Endoscopy and Other Interventional Techniques	Fuchs, H. F. and Laughter, V. and Harnsberger, C. R. and Broderick, R. C. and Berducci, M. and DuCoin, C. and Langert, J. and Sandler, B. J. and Jacobsen, G. R. and Perry, W. and Horgan, S.	mean age <55; not medicare eligible
19081482	Results of laparoscopic sleeve gastrectomy: a prospective study in 135 patients with morbid obesity	Surgery	Fuks, D.	mean age <55; not medicare eligible
0	An intragastric balloon in the treatment of obese individuals with metabolic syndrome: A randomized controlled study	Obesity	Fuller, N. R.	mean age <55; not medicare eligible
17376042	Effects of bariatric surgery on nonalcoholic fatty liver disease: preliminary findings after 2 years	J Gastroenterol Hepatol	Furuya, C. K., Jr.	mean age <55; not medicare eligible
0	Outcomes in Bariatric Surgery in the Older Patient Population in Texas	Journal of Surgical Research	Gómez, V. and Riall, T. S. and Gómez, G. A.	mean age <55; not medicare eligible
0	Biliopancreatic diversion with duodenal switch combined with laparoscopic adjustable gastric banding	Obesity Surgery	Gabriel, S. G.	mean age <55; not medicare eligible
CN-01126565	Effects of gastric bypass surgery compared to intensive lifestyle treatment on blood gases and lung function in morbidly obese subjects	European respiratory journal	Gabrielsen, A-M	Abstract only
25586626	Pulmonary function and blood gases after gastric bypass and lifestyle intervention: a comparative study	Clin Obes	Gabrielsen, A. M.	mean age <55; not medicare eligible
17705071	Gastric banding: conversion to sleeve, bypass,	Surg Endosc	Gagner, M.	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
	or DS			
0	Laparoscopic reoperative bariatric surgery: Experience from 27 consecutive patients	Obesity Surgery	Gagner, M. and Gentileschi, P. and De Csepe, J. and Kini, S. and Patterson, E. and Inabnet, W. B. and Herron, D. and Pomp, A.	mean age <55; not medicare eligible
17931257	Efficacy of surgery in the management of obesity-related type 2 diabetes mellitus	ANZ J Surg	Gan, S. S. and Talbot, M. L. and Jorgensen, J. O.	mean age <55; not medicare eligible
DARE-12009110442	Bariatric surgery for the treatment of morbid obesity: a meta-analysis of weight loss outcomes for laparoscopic adjustable gastric banding and laparoscopic gastric bypass (Structured abstract)	Obesity Surgery	Garb, J and Welch, G and Zagarins, S and Kuhn, J and Romanelli, J	Abstract only
0	Bariatric surgery decreases carotid intima-media thickness in obese subjects	Nutrici3n hospitalaria	Garc3a, G., Bunout, D., Mella, J., Quiroga, E., de la Maza, M. P., Cavada, G., Hirsch, S.	mean age <55; not medicare eligible
22470034	Preoperative determinants of outcomes of laparoscopic gastric bypass in the treatment of morbid obesity	Nutr Hosp	Garcia Diaz, E.	mean age <55; not medicare eligible
0	Different effect of laparoscopic Roux-en-Y gastric bypass and open biliopancreatic diversion of Scopinaro on serum PYY and ghrelin levels	Obesity Surgery	Garcia-Fuentes, E.	mean age <55; not medicare eligible
0	Improvement of C peptide zero BMI 24-34 diabetic patients after tailored one anastomosis gastric bypass (BAGUA)	Nutrici3n hospitalaria	Garciacaballero, M., Mart3nez-Moreno, J. M., Toval, J. A., Miralles, F., M3n3guez, A., Osorio, D., Mata, J. M., Reyes-Ortiz, A.	mean age <55; not medicare eligible
0	Changes of Body Composition in Patients with BMI 23350 After Tailored One Anastomosis Gastric Bypass (BAGUA): Influence of Diabetes and Metabolic Syndrome	Obesity Surgery	Garciacaballero, M., Reyes-Ortiz, A., Garc3a, M., Mart3nez-Moreno, J. M., Toval, J. A., Garc3a, A., M3n3guez, A., Osorio, D., Mata, J. M., Miralles, F.	single arm study n<50
0	National prevalence, causes, and risk factors for3 bariatric surgery readmissions	American Journal of Surgery	Garg, T.	mean age <55; not medicare eligible
0	Long-term outcome after laparoscopic sleeve gastrectomy in patients over 65 years old: A	Surgery for Obesity and Related Diseases	Garofalo, F., Denis, R., Pescarus, R., Atlas, H.,	single arm study n<50

ID	Title	Journal	Authors	Reason for Exclusion
	retrospective analysis		Bacon, S. L., Garneau, P.	
26251036	[Routine fluoroscopic investigations after primary bariatric surgery]	Chirurg	Gartner, D., Ernst, A., Fedtke, K., Jenkner, J., Schottler, A., Reimer, P., Bluher, M., Schon, M. R.	mean age <55; not medicare eligible
27219496	AMERICAN ASSOCIATION OF CLINICAL ENDOCRINOLOGISTS AND AMERICAN COLLEGE OF ENDOCRINOLOGY COMPREHENSIVE CLINICAL PRACTICE GUIDELINES FOR MEDICAL CARE OF PATIENTS WITH OBESITY	Endocr Pract	Garvey, W. T. and Mechanick, J. I. and Brett, E. M. and Garber, A. J. and Hurley, D. L. and Jastreboff, A. M. and Nadolsky, K. and Pessah-Pollack, R. and Plodkowski, R.	No primary data
0	Structural and Functional Changes in Left and Right Ventricles After Major Weight Loss Following Bariatric Surgery for Morbid Obesity	American Journal of Cardiology	Garza, C. A. and Pellikka, P. A. and Somers, V. K. and Sarr, M. G. and Collazo-Clavell, M. L. and Korenfeld, Y. and Lopez-Jimenez, F.	mean age <55; not medicare eligible
0	Major weight loss prevents long-term left atrial enlargement in patients with morbid and extreme obesity	European Journal of Echocardiography	Garza, C. A. and Pellikka, P. A. and Somers, V. K. and Sarr, M. G. and Seward, J. B. and Collazo-Clavell, M. L. and Oehler, E. and Lopez-Jimenez, F.	mean age <55; not medicare eligible
119093417. Language:	Short-term Effects of Laparoscopic Adjustable Gastric Banding Versus Roux-en-Y Gastric Bypass	Diabetes Care	Gastaldelli, Amalia, Iaconelli, Amerigo, Gaggini, Melania, Magnone, Maria Chiara, Veneziani, Augusto, Rubino, Francesco, Mingrone, Geltrude	mean age <55; not medicare eligible
0	The influence of laparoscopic vs. open gastric bypass on hemodynamic function in morbidly obese patients during general anesthesia	Wideochirurgia I Inne Techniki Maloinwazyjne	Gaszynski, T.	mean age <55; not medicare eligible
25264657	Changes in high-sensitivity C-reactive protein levels after laparoscopic gastric stapling procedures versus laparoscopic gastric banding	American Surgeon	Gebhart, A.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
20101473	Fewer nutrient deficiencies after laparoscopic sleeve gastrectomy (LSG) than after laparoscopic Roux-Y-gastric bypass (LRYGB)- a prospective study	Obes Surg	Gehrer, S.	mean age <55; not medicare eligible
CN-00768518	Intragastric balloon followed by diet vs intragastric balloon followed by another balloon: a prospective study on 100 patients	Obesity surgery	Genco, A	mean age <55; not medicare eligible
16189503	BioEnterics Intragastric Balloon (BIB): a short-term, double-blind, randomised, controlled, crossover study on weight reduction in morbidly obese patients	Int J Obes (Lond)	Genco, A. and Cipriano, M. and Bacci, V. and Cuzzolaro, M. and Materia, A. and Raparelli, L. and Docimo, C. and Lorenzo, M. and Basso, N.	mean age <55; not medicare eligible
25566164	Cognitive function and nonfood-related impulsivity in post-bariatric surgery patients	Front Psychol	Georgiadou, E. and Gruner-Labitzke, K. and Kohler, H. and de Zwaan, M. and Muller, A.	No primary data
24068617	Laparoscopic gastric banding outcomes do not depend on device or technique. long-term results of a prospective randomized study comparing the Lapband(R) and the SAGB(R)	Obes Surg	Gero, D. and Dayer-Jankechova, A. and Worreth, M. and Giusti, V. and Suter, M.	mean age <55; not medicare eligible
25708572	Meta-analysis of internal herniation after gastric bypass surgery	Br J Surg	Geubbels, N., Lijftogt, N., Fiocco, M., van Leersum, N. J., Wouters, M. W., de Brauw, L. M.	No primary data
27720223	Bariatric surgery and intellectual disability: Furthering evidence-based practice	Disabil Health J	Gibbons, E. and Casey, A. F. and Brewster, K. Z.	No primary data
0	Laparoscopic sleeve gastrectomy: review of 500 cases in single surgeon Australian practice	ANZ journal of surgery	Gibson, S. C., Le Page, P. A., Taylor, C. J.	mean age <55; not medicare eligible
27240132	Comparative effectiveness and safety of gastric bypass, sleeve gastrectomy and adjustable gastric banding in a population-based bariatric program: prospective cohort study	Can J Surg	Gill, R. S.	mean age <55; not medicare eligible
0	Predictors of attrition in a multidisciplinary adult weight management clinic	Canadian Journal of Surgery	Gill, R. S. and Karmali, S. and Hadi, G. and Al-Adra, D. P. and Shi, X. and Birch, D. W.	Not about bariatric surgery
0	[Factors related with weight loss in a cohort of obese patients after gastric bypass]	Nutrici3n hospitalaria	Giraldo Villa, A., Serna L3pez, A. M., Mustiola	N < 10 per arm

ID	Title	Journal	Authors	Reason for Exclusion
			Calleja, K. G., LÃ³pez GÃ³mez, L. M., Donado GÃ³mez, J., Toro Escobar, J. M.	
0	Effects of intensive lifestyle intervention and gastric bypass on aortic stiffness: A 1-year nonrandomized clinical study	Obesity	Gjevestad, E.	mean age <55; not medicare eligible
24149519	Bariatric surgery versus non-surgical treatment for obesity: a systematic review and meta-analysis of randomised controlled trials	Bmj	Gloy, V. L.	No primary data
17943353	Gastric banding as a salvage procedure for patients with weight loss failure after Roux-en-Y gastric bypass	Surg Endosc	Gobble, R. M.	mean age <55; not medicare eligible
25282193	Can bariatric surgery improve cardiovascular risk factors in the metabolically healthy but morbidly obese patient?	Surg Obes Relat Dis	Goday, A.	mean age <55; not medicare eligible
0	Laparoscopic Roux-en-Y gastric bypass versus laparoscopic vertical banded gastroplasty: Results of a 2-year follow-up study	Surgical Endoscopy and Other Interventional Techniques	Goergen, M.	mean age <55; not medicare eligible
0	Blood neutrophil-to-lymphocyte and platelet-to-lymphocyte ratios are independent prognostic factors for surgically resected gastrointestinal stromal tumors	Surgery (United States)	Goh, B. K. P., Chok, A. Y., Allen, J. C., Quek, R., Teo, M. C. C., Chow, P. K. H., Chung, A. Y. F., Ong, H. S., Wong, W. K.	Not about bariatric surgery
0	Laparoscopic sleeve gastrectomy as a revisional option after gastric band failure	Surgical Endoscopy and Other Interventional Techniques	Goitein, D.	mean age <55; not medicare eligible
0	Assessment of perioperative complications following primary bariatric surgery according to the Clavien-Dindo classification: comparison of sleeve gastrectomy and Roux-Y gastric bypass	Surgical Endoscopy and Other Interventional Techniques	Goitein, D.	mean age <55; not medicare eligible
26665315	Bariatric Surgery Improves Sexual Function in Obese Patients	Isr Med Assoc J	Goitein, D., Zendel, A., Segev, L., Feigin, A., Zippel, D.	mean age <55; not medicare eligible
26580235	Link Between Increased Satiety Gut Hormones and Reduced Food Reward After Gastric Bypass Surgery for Obesity	J Clin Endocrinol Metab	Goldstone, A. P. and Miras, A. D. and Scholtz, S. and Jackson, S. and Neff, K. J. and Penicaud, L. and Geoghegan, J. and Chhina, N. and Durighel, G. and Bell, J.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			D. and Meillon, S. and le Roux, C. W.	
0	Predictors of success after laparoscopic sleeve gastrectomy	Bariatric Surgical Practice and Patient Care	Gomberawalla, A.	mean age <55; not medicare eligible
12415956	[Obesity and gastroesophageal reflux disease]	Rev Invest Clin	Gomez Escudero, O. and Herrera Hernandez, M. F. and Valdovinos Diaz, M. A.	No primary data
26275553	Surgical management of super-super obese patients: Roux-en-Y gastric bypass versus sleeve gastrectomy	Surg Endosc	Gonzalez-Heredia, R.	mean age <55; not medicare eligible
0	Revisions after failed gastric band: sleeve gastrectomy and Roux-en-Y gastric bypass	Surgical Endoscopy and Other Interventional Techniques	Gonzalez-Heredia, R.	mean age <55; not medicare eligible
0	Does age influence bariatric surgery outcomes?	Bariatric Surgical Practice and Patient Care	Gonzalez-Heredia, R.	mean age <55; not medicare eligible
14742841	Bone and gastric bypass surgery: effects of dietary calcium and vitamin D	Obes Res	Goode, L. R. and Brolin, R. E. and Chowdhury, H. A. and Shapses, S. A.	mean age <55; not medicare eligible
0	Barrett's esophagus after Roux-en-Y gastric bypass: does regression occur?	Surgical Endoscopy and Other Interventional Techniques	Gorodner, V. and Buxhoeveden, R. and Clemente, G. and Sánchez, C. and Caro, L. and Grigaites, A.	mean age <55; not medicare eligible
25303918	Does laparoscopic sleeve gastrectomy have any influence on gastroesophageal reflux disease? Preliminary results	Surg Endosc	Gorodner, V., Buxhoeveden, R., Clemente, G., Sole, L., Caro, L., Grigaites, A.	mean age <55; not medicare eligible
0	Assessment of hot flushes and vaginal dryness among obese women undergoing bariatric surgery	Climacteric	Goughnour, S. L., Thurston, R. C., Althouse, A. D., Freese, K. E., Edwards, R. P., Hamad, G. G., McCloskey, C., Ramanathan, R., Bovbjerg, D. H., Linkov, F.	mean age <55; not medicare eligible
0	Doctor, How Much Weight Will I Lose? A New Individualized Predictive Model for Weight Loss	Obesity Surgery	Goulart, A. and Leão, P. and Costa, P. and Pereira, M. and Fernandes, A. and Manso, F. and Maia-da-Costa, J.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
0	Perioperative safety and volume: Outcomes relationships in bariatric surgery: A study of 32,000 patients	Journal of the American College of Surgeons	Gould, J. C. and Kent, K. C. and Wan, Y. and Rajamanickam, V. and Levenson, G. and Campos, G. M.	mean age <55; not medicare eligible
21080097	Metabolic syndrome after bariatric surgery. Results depending on the technique performed	Obes Surg	Gracia-Solanas, J. A.	mean age <55; not medicare eligible
0	Obesity surgery results depending on technique performed: Long-term outcome	Obesity Surgery	Gracia, J. A.	mean age <55; not medicare eligible
18369683	Hypocarotenemia after bariatric surgery: a preliminary study	Obes Surg	Granado-Lorencio, F. and Herrero-Barbudo, C. and Olmedilla-Alonso, B. and Blanco-Navarro, I. and Perez-Sacristan, B.	mean age <55; not medicare eligible
0	Depletion of serum carotenoid and other fat-soluble vitamin concentrations following obesity surgery	Obesity Surgery	Granado-Lorencio, F. and Simal-Anta, A. and Blanco-Navarro, I. and Gonzalez-Dominguez, T. and Perez-Sacristan, B.	mean age <55; not medicare eligible
0	Time-course changes in bone turnover markers and fat-soluble vitamins after obesity surgery	Obesity Surgery	Granado-Lorencio, F. and Simal-Anta, A. and Salazar-Mosteiro, J. and Herrero-Barbudo, C. and Donoso-Navarro, E. and Blanco-Navarro, I. and Perez-Sacristan, B.	mean age <55; not medicare eligible
0	Quality of life and prevalence of osteoarticular pain in patients submitted to bariatric surgery	Einstein (São Paulo, Brazil)	Grans, R., Warth, C. F., Farah, J. F., Bassitt, D. P.	mean age <55; not medicare eligible
0	Laparoscopic adjustable gastric bandings: A prospective randomized study of 400 operations performed with 2 different devices	Archives of Surgery	Gravante, G.	mean age <55; not medicare eligible
22634116	Prevalence of adverse intraoperative events during obesity surgery and their sequelae	J Am Coll Surg	Greenstein, A. J.	mean age <55; not medicare eligible
27876334	Overall and cause-specific mortality after Roux-en-Y gastric bypass surgery: A nationwide cohort study	Surg Obes Relat Dis	Gribsholt, S. B.	mean age <55; not medicare eligible
0	A prospective comparison of gastric and jejunoileal bypass procedures for morbid obesity ¹	Surgery for Obesity and Related Diseases	Griffen Jr, W. O.	mean age <55; not medicare eligible
0	Effects of Sleeve Gastrectomy and Gastric	Obesity Surgery	Griffo, E.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	Bypass on Postprandial Lipid Profile in Obese Type 2 Diabetic Patients: a 2-Year Follow-up			medicare eligible
DARE-12010003696	Systematic review: the effects of conservative and surgical treatment for obesity on gastro-oesophageal reflux disease (Structured abstract)	Alimentary Pharmacology and Therapeutics	Groot, NI and Burgerhart, Js and Meeberg, Pc and Vries, Dr and Smout, Aj and Siersema and Pd	No primary data
CN-01167776	Greater curvature plication versus laparoscopic sleeve gastrectomy: 3-years results of randomized controlled trial	Obesity facts	Grubnik, V	mean age <55; not medicare eligible
26541724	Randomized controlled trial comparing laparoscopic greater curvature plication versus laparoscopic sleeve gastrectomy	Surg Endosc	Grubnik, V. V.	mean age <55; not medicare eligible
CN-01174257	Comparison of three-year outcomes of laparoscopic greater curvature plication versus laparoscopic sleeve gastrectomy	Surgical Endoscopy and Other Interventional Techniques. Conference: 23rd International Congress of the European Association for Endoscopic Surgery, EAES 2015 Bucharest Romania. Conference Start: 20150603 Conference End: 20150606. Conference Publication: (var.pagings)	Grubnik, Vv	Abstract only
CN-01099437	Comparison of two-year outcomes of laparoscopic greater curvature plication versus laparoscopic sleeve gastrectomy	Surgical Endoscopy and Other Interventional Techniques	Grubnik, Vv	mean age <55; not medicare eligible
0	Two year reduction in sleep apnea symptoms and associated diabetes incidence after weight loss in severe obesity	Sleep	Grunstein, R. R. and StenlÅf, K. and Hedner, J. A. and Peltonen, M. and Karason, K. and SjÅstrÅm, L.	mean age <55; not medicare eligible
0	Predictors of weight loss and effectiveness of Roux-en-Y gastric bypass in the morbidly obese Hispano-American population	Obesity Surgery	Guajardo-Salinas, G. E.	mean age <55; not medicare eligible
0	Remission of type 2 diabetes after omega loop gastric bypass for morbid obesity	Surgical Endoscopy and Other Interventional Techniques	Guenzi, M., Arman, G., Rau, C., Cordun, C., Moszkowicz, D., Voron, T., Chevallier, J. M.	mean age <55; not medicare eligible
24209879	Changes in post-prandial glucose and pancreatic hormones, and steady-state insulin and free fatty acids after gastric bypass surgery	Surg Obes Relat Dis	Guilherme	mean age <55; not medicare eligible
19614945	Dissociated incretin response to oral glucose at 1 year after restrictive vs. malabsorptive	Diabetes Obes Metab	Guldstrand, M.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	bariatric surgery			
0	Association of Race and Socioeconomic Status with Outcomes Following Laparoscopic Roux-en-Y Gastric Bypass	Obesity Surgery	Gullick, A. A.	mean age <55; not medicare eligible
26922184	Effect of Contemporary Bariatric Surgical Procedures on Type 2 Diabetes Remission. A Population-Based Matched Cohort Study	Obes Surg	Gulliford, M. C.	mean age <55; not medicare eligible
18074485	Revisional bariatric surgery for inadequate weight loss	Obes Surg	Gumbs, A. A. and Pomp, A. and Gagner, M.	No primary data
12841898	Effect of weight loss on bone metabolism: comparison of vertical banded gastroplasty and medical intervention	Obes Surg	Guney, E.	mean age <55; not medicare eligible
104089591. Language:	The Effects of Bariatric Procedures versus Medical Therapy for Obese Patients with Type 2 Diabetes: Meta-Analysis of Randomized Controlled Trials	BioMed Research International	Guo, Xiaohu and Liu, Xiaoyan and Wang, Mancai and Wei, Fengxian and Zhang, Yawu and Zhang, Youcheng	No primary data
18520904	Temporal and demographic factors influencing the desire for plastic surgery after gastric bypass surgery	Plast Reconstr Surg	Gusenoff, J. A.	mean age <55; not medicare eligible
0	Results of bariatric surgery. Experience over 18 years	Revista Medica de Chile	Guzmán, S.	mean age <55; not medicare eligible
0	Conversion of Open Vertical Banded Gastroplasty to Roux-en-Y Gastric Bypass: a Single-Center, Single-Surgeon Experience with 6 Years of Follow-up	Obesity Surgery	Gys, B.	mean age <55; not medicare eligible
0	The Efficacy of Laparoscopic Roux-En-Y Gastric Bypass after Previous Anti-Reflux Surgery: A Single Surgeon Experience	Acta chirurgica Belgica	Gys, B., Gys, T., Lafullarde, T.	mean age <55; not medicare eligible
26941053	Is bariatric surgery in patients following renal transplantation safe and effective? A best evidence topic	Int J Surg	Hadjievangelou, N. and Kulendran, M. and McGlone, E. R. and Reddy, M. and Khan, O. A.	No primary data
22763970	The influence of laparoscopic adjustable gastric banding and laparoscopic sleeve gastrectomy on weight loss, plasma ghrelin, insulin, glucose and lipids	Folia Histochem Cytobiol	Hady, H. R.	mean age <55; not medicare eligible
0	Gastric Bypass Surgery Is Followed by Lowered Blood Pressure and Increased	PLoS ONE	Hallersund, P.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	Diuresis - Long Term Results from the Swedish Obese Subjects (SOS) Study			
24899464	Roux-en-Y gastric bypass surgery or lifestyle with intensive medical management in patients with type 2 diabetes: feasibility and 1-year results of a randomized clinical trial	JAMA Surg	Halperin, F.	mean age <55; not medicare eligible
CN-01103655	The effect of why wait method of weight management vs. Laparoscopic adjustable gastric banding on cardiometabolic and quality of life outcomes in obese patients with type 2 diabetes: A 1-year randomized clinical trial	Diabetes	Hamdy, O	Abstract only
0	Predictors of remission of type 2 diabetes mellitus after laparoscopic gastric banding and bypass	Surgery for Obesity and Related Diseases	Hamza, N.	mean age <55; not medicare eligible
0	Obesity and weight management in the elderly	British Medical Bulletin	Han, T. S. and Tajar, A. and Lean, M. E. J.	No primary data
26138692	Laparoscopic Sleeve Gastrectomy Improves Olfaction Sensitivity in Morbidly Obese Patients	Obes Surg	Hanci, D., Altun, H., Altun, H., Batman, B., Karip, A. B., Serin, K. R.	mean age <55; not medicare eligible
0	Under and over 50: exploring long-term weight-loss outcomes following laparoscopic adjustable gastric band by age and body mass index group	Surgery for Obesity and Related Diseases	Hancock, J., Jackson, S., Johnson, A. B.	mean age <55; not medicare eligible
25956149	The Gastric Band That Is Not to Be : Efficacy, Safety and Performance of the Easyband: a Multicenter Experience	Obes Surg	Handgraaf, H. J., Ashton, D., Favretti, F., Segato, G., van Ramshorst, B., Meesters, B., Greve, J. W.	mean age <55; not medicare eligible
15240614	Plasma ghrelin in obesity before and after weight loss after laparoscopic adjustable gastric banding	J Clin Endocrinol Metab	Hanusch-Enserer, U.	mean age <55; not medicare eligible
25638656	Great Health Benefits But No Change in Employment or Psychopharmaceutical Drug Use 2 Years After Roux-en-Y Gastric Bypass	Obes Surg	Hanvold, S. E., Loken, E. B., Paus, S. F., de Brisis, E. R., Bjerkan, K., Refsum, H., Aas, A. M.	mean age <55; not medicare eligible
0	Preoperative weight gain does not predict failure of weight loss or co-morbidity resolution of laparoscopic Roux-en-Y gastric bypass for morbid obesity	Surgery for Obesity and Related Diseases	Harnisch, M. C.	mean age <55; not medicare eligible
18553046	Fundus rotation gastropasty vs. Kirschner-Akiyama gastric tube in esophageal resection: comparison of perioperative and long-term	World J Surg	Hartwig, W.	Not about bariatric surgery

ID	Title	Journal	Authors	Reason for Exclusion
	results			
0	Long-Term Outcomes of Bariatric and Metabolic Surgery in Japan: Results of a Multi-Institutional Survey	Obesity Surgery	Haruta, H.	mean age <55; not medicare eligible
0	The impact of race on weight loss after roux-en-Y gastric bypass surgery	Obesity Surgery	Harvin, G.	mean age <55; not medicare eligible
0	The effect of laparoscopic gastric plication surgery on body composition, resting energy expenditure, thyroid hormones, and physical activity in morbidly obese patients	Bariatric Surgical Practice and Patient Care	Hasani, M., Mirahmadian, M., Taheri, E., Qorbani, M., Talebpour, M., Hosseini, S.	mean age <55; not medicare eligible
0	Clinical factors associated with remission of obesity-related comorbidities after bariatric surgery	JAMA Surgery	Hatoum, I. J.	mean age <55; not medicare eligible
22425057	Superior weight loss and lower HbA1c 3 years after duodenal switch compared with Roux-en-Y gastric bypass--a randomized controlled trial	Surg Obes Relat Dis	Hedberg, J.	No primary data
2015-27709-002	Health-related quality of life six years after gastric bypass: A mixed methods study	Bariatric Surgical Practice and Patient Care	Heidmann, Jytte, GrÅ, nkjÅ, r, Mette	mean age <55; not medicare eligible
10929151	Evaluation of health status and quality of life after bariatric surgery: comparison of standard Roux-en-Y gastric bypass, vertical banded gastroplasty and laparoscopic adjustable silicone gastric banding	Obes Surg	Hell, E.	mean age <55; not medicare eligible
CN-01059282	Comparison of laparoscopic sleeve gastrectomy and gastric bypass in the treatment of morbid obesity: A prospective randomized controlled multicentre sleeveypass study with 4-year follow-up	Obesity surgery	Helmio, M	Abstract only
22476829	SLEEVEPASS: a randomized prospective multicenter study comparing laparoscopic sleeve gastrectomy and gastric bypass in the treatment of morbid obesity: preliminary results	Surg Endosc	Helmio, M.	mean age <55; not medicare eligible
24522349	Comparison of short-term outcome of laparoscopic sleeve gastrectomy and gastric bypass in the treatment of morbid obesity: A prospective randomized controlled multicenter SLEEVEPASS study with 6-month follow-up	Scand J Surg	Helmio, M.	mean age <55; not medicare eligible
0	Banded Roux-en-Y gastric bypass for the treatment of morbid obesity	Surgery for Obesity and Related Diseases	Heneghan, H. M.	mean age <55; not medicare eligible
22055390	Influence of pouch and stoma size on weight	Surg Obes Relat Dis	Heneghan, H. M. and	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	loss after gastric bypass		Yimcharoen, P. and Brethauer, S. A. and Kroh, M. and Chand, B.	medicare eligible
26583669	Prospective Study of Malabsorption and Malnutrition After Esophageal and Gastric Cancer Surgery	Ann Surg	Heneghan, H. M., Zaborowski, A., Fanning, M., McHugh, A., Doyle, S., Moore, J., Ravi, N., Reynolds, J. V.	Not about bariatric surgery
20584356	Quality-adjusted life expectancy benefits of laparoscopic bariatric surgery: a United States perspective	Int J Technol Assess Health Care	Hernandez, L. V.	mean age <55; not medicare eligible
0	Prevalence of mental disorders in normal-weight and obese individuals with and without weight loss treatment in a German urban population	Journal of Psychosomatic Research	Herpertz, S. and Burgmer, R. and Stang, A. and de Zwaan, M. and Wolf, A. M. and Chen-Stute, A. and Hulisz, T. and Jäckel, K. H. and Senf, W.	mean age <55; not medicare eligible
CN-01061959	Does proximal gut exclusion in bariatric procedure result in different hormonal effects?	Diabetes	Hershkop, K	Abstract only
0	Long-term outcomes of laparoscopic adjustable gastric banding	Archives of Surgery	Himpens, J.	mean age <55; not medicare eligible
17132410	A prospective randomized study between laparoscopic gastric banding and laparoscopic isolated sleeve gastrectomy: results after 1 and 3 years	Obes Surg	Himpens, J.	mean age <55; not medicare eligible
20622654	Long-term results of laparoscopic sleeve gastrectomy for obesity	Ann Surg	Himpens, J.	mean age <55; not medicare eligible
0	Resolution of systemic hypertension after laparoscopic gastric bypass	Journal of Gastrointestinal Surgery	Hinojosa, M. W.	mean age <55; not medicare eligible
0	National trends in use and outcome of laparoscopic adjustable gastric banding	Surgery for Obesity and Related Diseases	Hinojosa, M. W.	mean age <55; not medicare eligible
0	Laparoscopic sleeve gastrectomy: Long-term weight loss outcomes	Surgery for Obesity and Related Diseases	Hirth, D. A., Jones, E. L., Rothchild, K. B., Mitchell, B. C., Schoen, J. A.	mean age <55; not medicare eligible
0	Beta cell function after weight loss: A clinical trial comparing gastric bypass surgery and intensive lifestyle intervention	European Journal of Endocrinology, Supplement	Hofso, D	mean age <55; not medicare eligible
CN-01090138	Gastric bypass surgery has a weight-loss independent effect on post-challenge serum glucose levels	Diabetology & metabolic syndrome	Hofso, D	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
20798226	Obesity-related cardiovascular risk factors after weight loss: a clinical trial comparing gastric bypass surgery and intensive lifestyle intervention	Eur J Endocrinol	Hofso, D	mean age <55; not medicare eligible
CN-01167780	Increased bone resorption following gastric bypass surgery is related to the procedure itself, weight loss and changes in secreted Wnt antagonists	Obesity facts	Hofso, D	mean age <55; not medicare eligible
26956843	Bone resorption following weight loss surgery is associated with treatment procedure and changes in secreted Wnt antagonists	Endocrine	Hofso, D.	mean age <55; not medicare eligible
25774526	Patients lacking sustainable long-term weight loss after gastric bypass surgery show signs of decreased inhibitory control of prepotent responses	PLoS One	Hogenkamp, P. S., Sundbom, M., Nilsson, V. C., Benedict, C., Schioth, H. B.	mean age <55; not medicare eligible
0	Olfactory and Gustatory Function After Bariatric Surgery	Obesity Surgery	Holinski, F. and Menenakos, C. and Haber, G. and Olze, H. and Ordemann, J.	mean age <55; not medicare eligible
20596790	Does surgically induced weight loss improve daytime sleepiness?	Obes Surg	Holty, J. E.	mean age <55; not medicare eligible
0	Secondary surgery after sleeve gastrectomy: Roux-en-Y gastric bypass or biliopancreatic diversion with duodenal switch	Surgery for Obesity and Related Diseases	Homan, J.	mean age <55; not medicare eligible
26947791	An optimized multivitamin supplement lowers the number of vitamin and mineral deficiencies three years after Roux-en-Y gastric bypass: a cohort study	Surg Obes Relat Dis	Homan, J.	mean age <55; not medicare eligible
25595384	Vitamin and Mineral Deficiencies After Biliopancreatic Diversion and Biliopancreatic Diversion with Duodenal Switch--the Rule Rather than the Exception	Obes Surg	Homan, J. and Betzel, B. and Aarts, E. O. and Dogan, K. and van Laarhoven, K. J. and Janssen, I. M. and Berends, F. J.	mean age <55; not medicare eligible
25734253	The effects of bariatric surgery on pancreatic lipid metabolism and blood flow	J Clin Endocrinol Metab	Honka, H., Koffert, J., Hannukainen, J. C., Tuulari, J. J., Karlsson, H. K., Immonen, H., Oikonen, V., Tolvanen, T., Soinio, M., Salminen, P., Kudomi, N., Mari, A., Iozzo, P., Nuutila, P.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
0	Laparoscopic sleeve gastrectomy: perioperative outcomes, weight loss and impact on type 2 diabetes mellitus over 2 years	Canadian journal of surgery. Journal canadien de chirurgie	Hoogerboord, M.	mean age <55; not medicare eligible
CN-01009340	Gastric electrical stimulation with abiliti (GES) vs adjustable gastric band (GB): A multi-center randomized controlled study on weight loss efficacy and safety	Obesity surgery	Horbach, T	mean age <55; not medicare eligible
0	Three-year follow-up comparing metabolic surgery versus medical weight management in patients with type 2 diabetes and BMI 30â€³35. The role of sRAGE biomarker as predictor of satisfactory outcomes	Surgery for Obesity and Related Diseases	Horwitz, D.	mean age <55; not medicare eligible
0	Improved renal function 12 months after bariatric surgery	Surgery for Obesity and Related Diseases	Hou, C. C. and Shyu, R. S. and Lee, W. J. and Ser, K. H. and Lee, Y. C. and Chen, S. C.	mean age <55; not medicare eligible
0	A case-matched study of the differences in bone mineral density 1 year after 3 different bariatric procedures	Surgery for Obesity and Related Diseases	Hsin, M. C.	mean age <55; not medicare eligible
26374954	Effect of Bariatric Surgery vs Medical Treatment on Type 2 Diabetes in Patients With Body Mass Index Lower Than 35: Five-Year Outcomes	JAMA Surg	Hsu, C. C.	mean age <55; not medicare eligible
0	Loop Duodenojejunal Bypass with Sleeve Gastrectomy: Comparative Study with Roux-en-Y Gastric Bypass in Type 2 Diabetic Patients with a BMI <35Â kg/m2, First Year Results	Obesity Surgery	Huang, C. K.	mean age <55; not medicare eligible
20011163	Can Roux-en-Y gastric bypass provide a lifelong solution for diabetes mellitus?	Can J Surg	Hussain, A.	No primary data
16633001	Laparoscopic versus open gastric bypass for morbid obesity: a multicenter, prospective, risk-adjusted analysis from the National Surgical Quality Improvement Program	Ann Surg	Hutter, M. M.	mean age <55; not medicare eligible
21865942	First report from the American College of Surgeons Bariatric Surgery Center Network: laparoscopic sleeve gastrectomy has morbidity and effectiveness positioned between the band and the bypass	Ann Surg	Hutter, M. M.	mean age <55; not medicare eligible
25361763	Predictors of short-term diabetes remission after laparoscopic Roux-en-Y gastric bypass	Obes Surg	Iacobellis, G.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
24016714	Evolution of low-grade systemic inflammation, insulin resistance, anthropometrics, resting energy expenditure and metabolic syndrome after bariatric surgery: a comparative study between gastric bypass and sleeve gastrectomy	J Visc Surg	Iannelli, A.	mean age <55; not medicare eligible
20924713	Re-sleeve gastrectomy for failed laparoscopic sleeve gastrectomy: a feasibility study	Obes Surg	Iannelli, A.	mean age <55; not medicare eligible
19562420	Laparoscopic sleeve gastrectomy as revisional procedure for failed gastric banding and vertical banded gastroplasty	Obes Surg	Iannelli, A.	mean age <55; not medicare eligible
0	Laparoscopic conversion of vertical banded gastroplasty (Mason MacLean) into roux-en-Y gastric bypass	Obesity Surgery	Iannelli, A. and Amato, D. and Addeo, P. and Senni Buratti, M. and Damhan, M. and Ben Amor, I. and Sejour, E. and Facchiano, E. and Gugenheim, J.	mean age <55; not medicare eligible
0	Weight loss after bariatric surgery improves aortic elastic properties and left ventricular function in individuals with morbid obesity: A 3-year follow-up study	Journal of Hypertension	Ikonomidis, I. and Mazarakis, A. and Papadopoulos, C. and Patsouras, N. and Kalfarentzos, F. and Lekakis, J. and Kremastinos, D. T. and Alexopoulos, D.	mean age <55; not medicare eligible
25979364	Roux-en-Y gastric bypass for diabetes (the Diabetes Surgery Study): 2-year outcomes of a 5-year, randomised, controlled trial	Lancet Diabetes Endocrinol	Ikramuddin, S	mean age <55; not medicare eligible
27311493	Durability of Addition of Roux-en-Y Gastric Bypass to Lifestyle Intervention and Medical Management in Achieving Primary Treatment Goals for Uncontrolled Type 2 Diabetes in Mild to Moderate Obesity: A Randomized Control Trial	Diabetes Care	Ikramuddin, S	mean age <55; not medicare eligible
23736733	Roux-en-Y gastric bypass vs intensive medical management for the control of type 2 diabetes, hypertension, and hyperlipidemia: the Diabetes Surgery Study randomized clinical trial	Jama	Ikramuddin, S	mean age <55; not medicare eligible
0	Effect of reversible intermittent intra-abdominal vagal nerve blockade on morbid obesity: The	JAMA - Journal of the American Medical Association	Ikramuddin, S. and Blackstone, R. P. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	ReCharge randomized clinical trial		Brancatisano, A. and Toouli, J. and Shah, S. N. and Wolfe, B. M. and Fujioka, K. and Maher, J. W. and Swain, J. and Que, F. G. and Morton, J. M. and Leslie, D. B. and Brancatisano, R. and Kow, L. and O'Rourke, R. W. and Deveney, C. and Takata, M. and Miller, C. J. and Knudson, M. B. and Tweden, K. S. and Shikora, S. A. and Sarr, M. G. and Billington, C. J.	
22321517	Early outcomes of bariatric surgery in patients with metabolic syndrome: an analysis of the bariatric outcomes longitudinal database	J Am Coll Surg	Inabnet, W. B.	mean age <55; not medicare eligible
0	Effect of Significant Intermediate-term Weight Loss on Serum Leptin Levels and Body Composition in Severely Obese Subjects	Obesity Surgery	Infanger, D. and Baldinger, R. and Branson, R. and Barbier, T. and Steffen, R. and Horber, F. F.	mean age <55; not medicare eligible
15760505	Nutritional behavior as a predictor of early success after vertical gastropasty	Obes Surg	Israel, A.	mean age <55; not medicare eligible
25190520	When mood worsens after gastric bypass surgery: characterization of bariatric patients with increases in depressive symptoms following surgery	Obes Surg	Ivezaj, V., Grilo, C. M.	mean age <55; not medicare eligible
21113685	Failed restrictive surgery: is sleeve gastrectomy a good revisional procedure?	Obes Surg	Jacobs, M.	mean age <55; not medicare eligible
26655924	Bile Acids Increase Independently From Hypocaloric Restriction After Bariatric Surgery	Ann Surg	Jahansouza, C. and Xu, H. and Hertzal, A. V. and Serrot, F. J. and Kvalheim, N. and Cole, A. and Abraham, A. and Luthra, G. and Ewing, K. and Leslie, D. B. and Bernlohr, D. A. and Ikramuddin, S.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
0	Shorter than 24-h hospital stay for sleeve gastrectomy is safe and feasible	Surgical Endoscopy and Other Interventional Techniques	Jakob, T., Cal, P., Deluca, L., Fern��ndez, E.	mean age <55; not medicare eligible
0	Safety and effectiveness of bariatric surgery in dialysis patients and kidney transplantation candidates	Surgery for Obesity and Related Diseases	Jamal, M. H. and Corcelles, R. and Daigle, C. R. and Rogula, T. and Kroh, M. and Schauer, P. R. and Brethauer, S. A.	single arm study n<50
0	Impact of major co-morbidities on mortality and complications after gastric bypass	Surgery for Obesity and Related Diseases	Jamal, M. K. and DeMaria, E. J. and Johnson, J. M. and Carmody, B. J. and Wolfe, L. G. and Kellum, J. M. and Meador, J. G.	mean age <55; not medicare eligible
119773343. Language:	Bariatric Surgery and the Risk of New-Onset Atrial Fibrillation in Swedish�� Obese Subjects	Journal of the American College of Cardiology (JACC)	Jamaly, Shabbar, Carlsson, Lena, Peltonen, Markku, Jacobson, Peter, Sj��str��m, Lars, Karason, Kristjan	mean age <55; not medicare eligible
0	Patient-Reported Adherence to Empiric Vitamin/Mineral Supplementation and Related Nutrient Deficiencies After Roux-en-Y Gastric Bypass	Obesity Surgery	James, H., Lorentz, P., Collazo-Clavell, M. L.	mean age <55; not medicare eligible
0	A 7-Year Clinical Audit of 1107 Cases Comparing Sleeve Gastrectomy, Roux-En-Y Gastric Bypass, and Mini-Gastric Bypass, to Determine an Effective and Safe Bariatric and Metabolic Procedure	Obesity Surgery	Jammu, G. S.	mean age <55; not medicare eligible
0	Comparative study between laparoscopic adjustable gastric banding and laparoscopic gastric bypass: single-institution, 5-year experience in bariatric surgery	Surgery for Obesity and Related Diseases	Jan, J. C.	mean age <55; not medicare eligible
0	Laparoscopic adjustable gastric banding versus laparoscopic gastric bypass for morbid obesity: A single-institution comparison study of early results	Journal of Gastrointestinal Surgery	Jan, J. C.	mean age <55; not medicare eligible
23479088	Revisional laparoscopic Roux-en-Y gastric bypass following failed laparoscopic adjustable gastric banding	Obes Surg	Jennings, N. A.	mean age <55; not medicare eligible
22968072	Long-term effects of sleeve gastrectomy and Roux-en-Y gastric bypass surgery on type 2	Ann Surg	Jimenez, A.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	diabetes mellitus in morbidly obese subjects			
0	Bileopancreatic diversion with duodenal switch lowers both early and late phases of glucose, insulin and proinsulin responses after meal	Obesity Surgery	Johansson, H. E. and Haenni, A. and Anders Karlsson, F. and Eden-Engstr�m, B. and �hrvall, M. and Sundbom, M. and Zethelius, B.	mean age <55; not medicare eligible
19229660	Alterations in proinsulin and insulin dynamics, HDL Cholesterol and ALT after gastric bypass surgery. A 42-months follow-up study	Obes Surg	Johansson, H. E. and Haenni, A. and Ohrvall, M. and Sundbom, M. and Zethelius, B.	mean age <55; not medicare eligible
CN-01005190	Changes in dietary quality after gastric bypass surgery or intensive lifestyle intervention. A non-randomized clinical trial	Obesity facts	Johnson, Lk	Abstract only
0	Incidence of postoperative gallstone disease after antiobesity surgery: population-based study from Sweden	Surgery for Obesity and Related Diseases	Jonas, E. and Marsk, R. and Rasmussen, F. and Freedman, J.	mean age <55; not medicare eligible
CN-01007413	Preliminary results of a randomized, blinded, sham-controlled trial of transoral gastroplasty for the treatment of morbid obesity	Gastroenterology	Jonnalagadda, Ss and Gupta, N and Eagon, Jc and Bessler, M and Mull, Ln and DiGiorgi, M and Davis, D and Bhattacharya, K and Cave, Dr and Kelly, Jj and Perugini, Ra and Zivny, J	Abstract only
0	Laparoscopic Adjustable Gastric Banding: a Prospective Randomized Clinical Trial Comparing 5-Year Results of two Different Bands in 103 Patients	Obesity Surgery	Juodeikis, �½ and Abalik�ta, T. and Brimien�, V. and Brimas, G.	mean age <55; not medicare eligible
27876332	Long-term results after sleeve gastrectomy: A systematic review	Surg Obes Relat Dis	Juodeikis, Z.	No primary data
0	Improvement of type 2 diabetes mellitus (T2DM) after bariatric surgerywho fails in the early postoperative course?	Obesity Surgery	Jurowich, C.	mean age <55; not medicare eligible
HTA-32013000658	The clinical effectiveness and economic analysis of bariatric surgery for severe obesity (Structured abstract)	Health Technology Assessment Database	Jw, Kwon and Ys, Heo and Hj, Lee and Je, Choi and Sh, Oh and Hj, Song and Jy, Lee and Yj, Kim and Sm, Kim and Dj, Park and Jm, Park and Sk, Lee and Sm, Han	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
			and Kw, Shim and Yj, Lee	
0	Genetic risk score does not predict the outcome of obesity surgery	Obesity Surgery	KÅrkelÅr, P.	No outcome of interest
0	Remission of type 2 diabetes after Roux-en-Y gastric bypass is associated with greater weight loss	Surgery for Obesity and Related Diseases	Kadera, B. E.	mean age <55; not medicare eligible
24966185	Ventricular remodelling post-bariatric surgery: is the type of surgery relevant? A prospective study with 3D speckle tracking	Eur Heart J Cardiovasc Imaging	Kaier, T. E.	mean age <55; not medicare eligible
0	Are laparoscopic bariatric procedures safe in superobese (BMI <50 kg/m2) patients? An NSQIP data analysis	Surgery for Obesity and Related Diseases	Kakarla, V. R.	mean age <55; not medicare eligible
25443069	Self-report of gastrointestinal side effects after bariatric surgery	Surg Obes Relat Dis	Kalarchian, M. A.	mean age <55; not medicare eligible
18514586	Relationship of psychiatric disorders to 6-month outcomes after gastric bypass	Surg Obes Relat Dis	Kalarchian, M. A.	mean age <55; not medicare eligible
26569540	Psychiatric Disorders and Weight Change in a Prospective Study of Bariatric Surgery Patients: A 3-Year Follow-Up	Psychosom Med	Kalarchian, M. A.	No primary data
21719357	Optimizing long-term weight control after bariatric surgery: a pilot study	Surg Obes Relat Dis	Kalarchian, M. A. and Marcus, M. D. and Courcoulas, A. P. and Cheng, Y. and Levine, M. D. and Josbeno, D.	mean age <55; not medicare eligible
11433898	Weight loss following vertical banded gastroplasty: intermediate results of a prospective study	Obes Surg	Kalfarentzos, F.	mean age <55; not medicare eligible
16469216	A prospective comparison of vertical banded gastroplasty and Roux-en-Y gastric bypass in a non-superobese population	Obes Surg	Kalfarentzos, F.	mean age <55; not medicare eligible
21984052	Biliopancreatic diversion with Roux-en-Y gastric bypass and long limbs: advances in surgical treatment for super-obesity	Obes Surg	Kalfarentzos, F. and Skroubis, G. and Karamanakos, S. and Argentou, M. and Mead, N. and Kehagias, I. and Alexandrides, T. K.	mean age <55; not medicare eligible
CN-01027816	Results of laparoscopic sleeve gastrectomy and Roux-en-Y gastric bypass - A randomized prospectiv trial	Obesity surgery	Kalinowski, P	Abstract only
27692906	Ghrelin, leptin, and glycemic control after sleeve gastrectomy versus Roux-en-Y gastric	Surg Obes Relat Dis	Kalinowski, P.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	bypass-results of a randomized clinical trial			
0	Laparoscopic sleeve gastrectomy versus laparoscopic mini gastric bypass: One year outcomes	International Journal of Surgery	Kansou, G.	mean age <55; not medicare eligible
0	The role of bariatric surgery in obstructive sleep apnea syndrome	Turk Toraks Dergisi	Karak��se, F. and Bozkurt, S. and Akkoyunlu, M. E. and Co��kun, H. and Yakar, F. and Bayram, M. and Sezer, M. and ��zelik, H. K. and Kart, L.	mean age <55; not medicare eligible
18376181	Weight loss, appetite suppression, and changes in fasting and postprandial ghrelin and peptide-YY levels after Roux-en-Y gastric bypass and sleeve gastrectomy: a prospective, double blind study	Ann Surg	Karamanakos, S. N.	mean age <55; not medicare eligible
CN-01021399	Is sleeve gastrectomy more effective than Roux-en-Y gastric bypass? Results from a randomized clinical trial	Obesity surgery	Karamanakos, Sn	Abstract only
15761173	Effort-related calf pain in the obese and long-term changes after surgical obesity treatment	Obes Res	Karason, K. and Peltonen, M. and Lindroos, A. K. and Sjostrom, L. and Lonn, L. and Torgerson, J. S.	mean age <55; not medicare eligible
0	To band or not to band - Early results of banded sleeve gastrectomy	Obesity Surgery	Karcz, W. K.	mean age <55; not medicare eligible
23406190	Health related quality of life after gastric bypass or intensive lifestyle intervention: a controlled clinical study	Health Qual Life Outcomes	Karlsen, T. I.	mean age <55; not medicare eligible
0	Ten-year trends in health-related quality of life after surgical and conventional treatment for severe obesity: The SOS intervention study	International Journal of Obesity	Karlsson, J. and Taft, C. and Ryd��n, A. and Sj��str��m, L. and Sullivan, M.	mean age <55; not medicare eligible
106309337. Language:	The battle against the obesity epidemic: is bariatric surgery the perfect weapon?	Clinical & Investigative Medicine	Karmali, S. and Shaffer, E.	No primary data
0	Has laparoscopic bariatric surgery been accepted in Japan? The experience of a single surgeon	Obesity Surgery	Kasama, K. and Tagaya, N. and Kanahira, E. and Umezawa, A. and Kurosaki, T. and Oshiro, T. and Ishikawa, M. and Negishi, Y. and Kurokawa, Y. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Suzuki, N. and Kakiyara, Y. and Taketsuka, S. and Horie, K. and Nakazato, T. and Kikkawa, E. and Kabasawa, S. and Fukuda, Y. and Sonoda, K.	
26591099	A COMPARISON OF EFFECTIVENESS, AND AN ASSESSMENT OF THE QUALITY OF LIFE OF PATIENTS AFTER LAPAROSCOPIC SLEEVE GASTRECTOMY AND ROUX-EN-Y GASTRIC BYPASS	Ann Acad Med Stetin	Kaseja, K.	mean age <55; not medicare eligible
20029383	Acute effects of gastric bypass versus gastric restrictive surgery on beta-cell function and insulinotropic hormones in severely obese patients with type 2 diabetes	Int J Obes (Lond)	Kashyap, S. R.	mean age <55; not medicare eligible
23439632	Metabolic effects of bariatric surgery in patients with moderate obesity and type 2 diabetes: analysis of a randomized control trial comparing surgery with intensive medical treatment	Diabetes Care	Kashyap, S. R. and Bhatt, D. L. and Wolski, K. and Watanabe, R. M. and Abdul-Ghani, M. and Abood, B. and Pothier, C. E. and Brethauer, S. and Nissen, S. and Gupta, M. and Kirwan, J. P. and Schauer, P. R.	mean age <55; not medicare eligible
CN-01062185	Increased free testosterone levels following bariatric surgery are related to weight loss and glycaemic control in men with type 2 diabetes: Analysis from a RCT	Diabetologia	Kashyap, Sr	mean age <55; not medicare eligible
26240621	A prospective evaluation of the influence of three bariatric procedures on insulin resistance improvement. Should the extent of undiluted bile transit be considered a key postoperative factor altering glucose metabolism?	Wideochir Inne Tech Maloinwazyjne	Kaska, L.	mean age <55; not medicare eligible
0	Dynamics of type 2 diabetes mellitus laboratory remission after Roux-en-Y gastric bypass in patients with body mass index lower than 35 kg/m ² and higher than 35 kg/m ² in a 3-year observation period	Wideochirurgia I Inne Techniki Maloinwazyjne	Kaska, L., Proczko, M., Kobiela, J., Stefaniak, T. J., Iedziński, Z.	mean age <55; not medicare eligible
26620217	Laparoscopic Conversion of Vertical Banded Gastroplasty into Roux-en-Y Gastric Bypass	Obes Surg	Kassir, R., Blanc, P., Gugenheim, J., Amor, I. B., Debs, T., T. Iffet O	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
20589514	Analysis of poor outcomes after laparoscopic adjustable gastric banding	Surg Endosc	Kasza, J.	mean age <55; not medicare eligible
21818647	Randomized clinical trial of laparoscopic Roux-en-Y gastric bypass versus laparoscopic sleeve gastrectomy for the management of patients with BMI < 50 kg/m2	Obes Surg	Kehagias, I.	mean age <55; not medicare eligible
23765186	Roux-en-Y gastric bypass vs sleeve gastrectomy for obese patients with type 2 diabetes: a randomised trial	Diabetologia	Keidar, A.	mean age <55; not medicare eligible
HTA-32013000478	What is the relative clinical effectiveness, cost effectiveness and safety of different bariatric surgery techniques (gastric bypass, gastric banding and sleeve gastrectomy)? (Structured abstract)	Health Technology Assessment Database	Kelly, J	No primary data
0	Sleeve Gastrectomy in Different Age Groups: a Comparative Study of 5-Year Outcomes	Obesity Surgery	Keren, D.	single arm study n<50
0	Laparoscopic revision of bariatric procedures: Is it feasible?	American Surgeon	Khaitan, L. and Van Sickle, K. and Gonzalez, R. and Lin, E. and Ramshaw, B. and Smith, C. D. and Procter Sr, C. D. and Sarr, M. G. and Richards, W. O. and Scott, D.	mean age <55; not medicare eligible
18605357	Laparoscopic Roux-en-Y gastric bypass for the treatment of morbid obesity: experience with 50 patients	Isr Med Assoc J	Khalaileh, A.	mean age <55; not medicare eligible
0	The prevalence of iron deficiency anaemia in patients undergoing bariatric surgery	Obesity Research and Clinical Practice	Khanbhai, M. and Dubb, S. and Patel, K. and Ahmed, A. and Richards, T.	mean age <55; not medicare eligible
23732262	Effects of Roux-en-Y gastric bypass or diabetes support and education on insulin sensitivity and insulin secretion in morbidly obese patients with type 2 diabetes	Ann Surg	Khoo, C. M.	mean age <55; not medicare eligible
0	Predictors of postoperative aftercare attrition among gastric bypass patients	Bariatric Surgical Practice and Patient Care	Khorgami, Z., Zhang, C., Messiah, S. E., De La Cruz-MunÁpiz, N.	mean age <55; not medicare eligible
0	Sleeve gastrectomy or gastric bypass as revisional bariatric procedures: Retrospective evaluation of outcomes	Surgical Endoscopy and Other Interventional Techniques	Khoursheed, M.	mean age <55; not medicare eligible
0	Short-term outcomes of laparoscopic single	Obesity Surgery	Kim, M. J. and Hur, K. Y.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	anastomosis gastric bypass (LSAGB) for the treatment of type 2 diabetes in lower BMI (<30 kg/m ²) patients			medicare eligible
26847297	Short-Term Analysis of Food Tolerance and Quality of Life after Laparoscopic Greater Curvature Plication	Yonsei Med J	Kim, S. B.	mean age <55; not medicare eligible
20485144	Long-term follow-up of the metabolic profiles in obese patients with type 2 diabetes mellitus after Roux-en-Y gastric bypass	Ann Surg	Kim, S. B.	mean age <55; not medicare eligible
16341569	Early U.S. outcomes of laparoscopic gastric bypass versus laparoscopic adjustable silicone gastric banding for morbid obesity	Surg Endosc	Kim, T. H.	mean age <55; not medicare eligible
0	Laparoscopic vs. open biliopancreatic diversion with duodenal switch: A comparative study	Journal of Gastrointestinal Surgery	Kim, W. W.	mean age <55; not medicare eligible
0	Clinical course of diabetic retinopathy in Korean type 2 diabetes after bariatric surgery: A Pilot Study	Retina	Kim, Y. J., Seo, D. R., Kim, M. J., Lee, S. J., Hur, K. Y., Choi, K. S.	mean age <55; not medicare eligible
0	The Time to Weight-Loss Steady State After Gastric Bypass Predicts Weight-Loss Success	Obesity Surgery	Kindel, T.	mean age <55; not medicare eligible
0	High failure rate of the laparoscopic-Adjustable gastric band as a primary bariatric procedure	Surgery for Obesity and Related Diseases	Kindel, T. and Martin, E. and Hungness, E. and Nagle, A.	mean age <55; not medicare eligible
17217637	Psychosocial predictors of weight loss after bariatric surgery	Obes Surg	Kinzl, J. F.	mean age <55; not medicare eligible
21221498	Early improvement in type 2 diabetes mellitus post Roux-en-Y gastric bypass in Asian patients	Singapore Med J	Kiong, K. L.	N < 10 per arm
26808324	Laparoscopic adjustable gastric band removal and outcome of subsequent revisional bariatric procedures: A retrospective review of 214 consecutive patients	Int J Surg	Kirshtein, B.	Not about bariatric surgery
25644428	Meta-analysis of complication rates for single-loop versus dual-loop (Roux-en-Y) with isolated pancreaticojejunostomy reconstruction after pancreaticoduodenectomy	Br J Surg	Klaiber, U., Probst, P., Knebel, P., Contin, P., Diener, M. K., Buchler, M. W., Hackert, T.	No primary data
HTA-32008100448	Bariatric surgery for severe obesity: systematic review and economic evaluation (Structured abstract)	Health Technology Assessment Database	Klarenbach, S and Padwal, R and Wiebe, N and Hazel, M and Birch, D and Manns, B and Karmali, S and Sharma, A and Tonelli, M	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
26678846	Bariatric surgery improves female pelvic floor disorders	J Visc Surg	Knepfler, T., Valero, E., Triki, E., Chilintseva, N., Koensgen, S., Rohr, S.	mean age <55; not medicare eligible
0	Metabolic adaptation following massive weight loss is related to the degree of energy imbalance and changes in circulating leptin	Obesity	Knuth, N. D. and Johannsen, D. L. and Tamboli, R. A. and Marks-Shulman, P. A. and Huizenga, R. and Chen, K. Y. and Abumrad, N. N. and Ravussin, E. and Hall, K. D.	mean age <55; not medicare eligible
26464244	Relationship Between Bariatric Surgery and Bone Mineral Density: a Meta-analysis	Obes Surg	Ko, B. J.	No primary data
0	The relationship among food addiction, negative mood, and eating-disordered behaviors in patients seeking to have bariatric surgery	Surgery for Obesity and Related Diseases	Koball, A. M., Clark, M. M., Collazo-Clavell, M., Kellogg, T., Ames, G., Ebbert, J., Grothe, K. B.	mean age <55; not medicare eligible
22923313	Improvement in cardiovascular indices after Roux-en-Y gastric bypass or sleeve gastrectomy for morbid obesity	Obes Surg	Kokkinos, A.	mean age <55; not medicare eligible
19306822	Two-year changes in health-related quality of life in gastric bypass patients compared with severely obese controls	Surg Obes Relat Dis	Kolotkin, R. L.	mean age <55; not medicare eligible
0	Six-year changes in health-related quality of life in gastric bypass patients versus obese comparison groups	Surgery for Obesity and Related Diseases	Kolotkin, R. L.	mean age <55; not medicare eligible
0	Health-related quality of life in patients seeking gastric bypass surgery vs non-treatment-seeking controls	Obesity Surgery	Kolotkin, R. L. and Crosby, R. D. and Pendleton, R. and Strong, M. and Gress, R. E. and Adams, T.	mean age <55; not medicare eligible
CN-01040503	Psychological aspects of eating behavior as predictors of 10-y weight changes after surgical and conventional treatment of severe obesity: results from the Swedish Obese Subjects intervention study	The American journal of clinical nutrition	Kontinen, H and Peltonen, M and Sj��str��m, L and Carlsson, L and Karlsson, J	mean age <55; not medicare eligible
0	Laparoscopic gastric banding as a universal method for the treatment of patients with morbid obesity	Obesity Surgery	Korenkov, M. and Kneist, W. and Heintz, A. and Junginger, T.	mean age <55; not medicare eligible
19417773	Prospective study of gut hormone and metabolic changes after adjustable gastric	Int J Obes (Lond)	Korner, J.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	banding and Roux-en-Y gastric bypass			
17936091	Exaggerated glucagon-like peptide-1 and blunted glucose-dependent insulinotropic peptide secretion are associated with Roux-en-Y gastric bypass but not adjustable gastric banding	Surg Obes Relat Dis	Korner, J. and Bessler, M. and Inabnet, W. and Taveras, C. and Holst, J. J.	mean age <55; not medicare eligible
25417602	A comparative retrospective study of robotic sleeve gastrectomy vs robotic gastric bypass	Int J Med Robot	Kosanovic, R.	mean age <55; not medicare eligible
0	Looking into the profile of those who succeed in losing weight with an intragastric balloon	Journal of Laparoendoscopic and Advanced Surgical Techniques	Kotzampassi, K. and Shrewsbury, A. D. and Papakostas, P. and Penna, S. and Tsaousi, G. G. and Grosomanidis, V.	mean age <55; not medicare eligible
0	Pharmacotherapeutic profile of obese patients during the postoperative period after bariatric surgery	Jornal Vascular Brasileiro	Kovaleski, E. S. and Schroeder, H. and Krause, M. and Dani, C. and Bock, P. M.	mean age <55; not medicare eligible
0	Effects of Bariatric Surgery on Outcomes of Patients With Acute Pancreatitis	Clinical Gastroenterology and Hepatology	Krishna, S. G. and Behzadi, J. and Hinton, A. and El-Dika, S. and Groce, J. R. and Hussan, H. and Hart, P. A. and Conwell, D. L.	mean age <55; not medicare eligible
0	A bariatric surgery center of excellence: Operative trends and long-term outcomes	Journal of the American College of Surgeons	Kruger, R. S.	mean age <55; not medicare eligible
17135602	Increase in visfatin after weight loss induced by gastroplastic surgery	Obesity (Silver Spring)	Krzyzanowska, K.	mean age <55; not medicare eligible
0	Osteoarthritis in veterans undergoing bariatric surgery is associated with decreased excess weight loss: 5-year outcomes	Surgery for Obesity and Related Diseases	Kubat, E.	mean age <55; not medicare eligible
104169481. Language:	Medical weight loss versus bariatric surgery: Does method affect body composition and weight maintenance after 15% reduction in body weight?	Nutrition	Kulovitz, Michelle G. and Kolkmeier, Deborah and Conn, Carole A. and Cohen, Deborah A. and Ferraro, Robert T.	mean age <55; not medicare eligible
20001679	Ileal interposition with sleeve gastrectomy for control of type 2 diabetes	Diabetes Technol Ther	Kumar, K. V.	N < 10 per arm
26344204	Transoral outlet reduction for weight regain after gastric bypass: long-term follow-up	Gastrointest Endosc	Kumar, N., Thompson, C. C.	mean age <55; not medicare eligible
0	Fatty acid composition of adipose tissue	Physiological research / Academia	Kunešová, M. and	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	triglycerides in obese diabetic women after bariatric surgery: a 2-year follow up	Scientiarum Bohemoslovaca	Sedlář, O. and Bradnov, E. and Tvřick, B. and Stařkov, P. and řámkov, K. and Doleřalov, P. and Kalouskov, P. and Hlavat, P. and Hill, M. and Bendlov, B. and Fried, M. and Hainer, V. and Vrbřkov, J.	mean age <55; not medicare eligible
0	Insurance-mandated medical programs before bariatric surgery: Do good things come to those who wait?	Surgery for Obesity and Related Diseases	Kuwada, T. S.	mean age <55; not medicare eligible
DARE-12014021029	Bariatric surgery and its impact on cardiovascular disease and mortality: a systematic review and meta-analysis (Provisional abstract)	International Journal of Cardiology	Kwok, Cs and Pradhan, A and Khan, Ma and Anderson, Sg and Keavney, Bd and Myint, Pk and Mamas, Ma and Loke, Yk	No primary data
0	The Primary Obesity Surgery Endolumenal (POSE) procedure: One-year patient weight loss and safety outcomes	Surgery for Obesity and Related Diseases	López-Nava, G., Bautista-Castaño, I., Jimenez, A., De Grado, T., Fernandez-Corbelle, J. P.	mean age <55; not medicare eligible
0	Comparison between the results of laparoscopic sleeve gastrectomy and laparoscopic roux-en-y gastric bypass in the Indian population: A retrospective 1 year study	Obesity Surgery	Lakdawala, M. A.	mean age <55; not medicare eligible
0	Single-incision sleeve gastrectomy versus conventional laparoscopic sleeve gastrectomy- a randomised pilot study	Obesity Surgery	Lakdawala, M. A.	mean age <55; not medicare eligible
0	Risk of fracture after bariatric surgery in the United Kingdom: Population based, retrospective cohort study	BMJ (Online)	Lalmohamed, A. and De Vries, F. and Bazelier, M. T. and Cooper, A. and Van Staa, T. P. and Cooper, C. and Harvey, N. C.	mean age <55; not medicare eligible
0	Long-term outcomes in gastric bypass patients with and without type 2 diabetes-Waitemata District Health Board experience	New Zealand Medical Journal	Lam, A. H. L. and Kim, D. D. W. and Cutfield, R. and Walker, C. and Booth, M.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
18806945	Bands and bypasses: 30-day morbidity and mortality of bariatric surgical procedures as assessed by prospective, multi-center, risk-adjusted ACS-NSQIP data	Surg Endosc	Lancaster, R. T.	mean age <55; not medicare eligible
16105401	Sleeve gastrectomy and gastric banding: effects on plasma ghrelin levels	Obes Surg	Langer, F. B.	mean age <55; not medicare eligible
0	Prediction of long-term outcome after gastric bypass surgery	Obesity Surgery	Lanyon, R. I.	mean age <55; not medicare eligible
24122659	The relationship of pre-operative health status to sustained outcome in gastric bypass surgery	Obes Surg	Lanyon, R. I. and Maxwell, B. M. and Wershba, R. E.	mean age <55; not medicare eligible
25596938	High-Dose Vitamin D Supplementation is Necessary After Bariatric Surgery: A Prospective 2-Year Follow-up Study	Obes Surg	Lanzarini, E. and Nogues, X. and Goday, A. and Benaiges, D. and de Ramon, M. and Villatoro, M. and Pera, M. and Grande, L. and Ramon, J. M.	mean age <55; not medicare eligible
26154653	Effect of adjustable gastric banding on quality of life and weight loss in the Helping Evaluate Reduction in Obesity (HERO) registry study: 2 year analysis	Curr Med Res Opin	Lao, W. L.	mean age <55; not medicare eligible
0	Travel distance, age, and sex as factors in follow-up visit compliance in the post-gastric bypass population	Surgery for Obesity and Related Diseases	Lara, M. D.	mean age <55; not medicare eligible
25917783	Bariatric Surgery Reduces Features of Nonalcoholic Steatohepatitis in Morbidly Obese Patients	Gastroenterology	Lassailly, G. and Caiazzo, R. and Buob, D. and Pigeyre, M. and Verkindt, H. and Labreuche, J. and Raverdy, V. and Leteurtre, E. and Dharancy, S. and Louvet, A. and Romon, M. and Duhamel, A. and Pattou, F. and Mathurin, P.	mean age <55; not medicare eligible
CN-01160598	Are the postoperative outcomes of malabsorptive bariatric procedures truly superior to restrictive bariatric procedures?	Surgery for obesity and related diseases	Latin, L	Abstract only
24322189	Changes in quality of life after short and long term follow-up of Roux-en-Y gastric bypass for morbid obesity	Arq Gastroenterol	Laurino Neto, R. M.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
0	Bariatric Operations in Veterans Affairs and Selected University Medical Centers: Results of the Patient Safety in Surgery Study	Journal of the American College of Surgeons	Lautz, D. B.	mean age <55; not medicare eligible
0	Reduction in early mortality outcomes after bariatric surgery in France between 2007 and 2012: A nationwide study of 133,000 obese patients	Surgery (United States)	Lazzati, A.	mean age <55; not medicare eligible
0	Clinical outcomes of duodenal switch with a 200-cm common channel: a matched, controlled trial	Surgery for Obesity and Related Diseases	Lebel, S., Dion, G., Marceau, S., Biron, S., Robert, M., Biertho, L.	mean age <55; not medicare eligible
24908244	Iodine deficiency is higher in morbid obesity in comparison with late after bariatric surgery and non-obese women	Obes Surg	Lecube, A., Zafon, C., Gromaz, A., Fort, J. M., Caubet, E., Baena, J. A., Tortosa, F.	mean age <55; not medicare eligible
0	Prevalence of and risk factors for hypoglycemic symptoms after gastric bypass and sleeve gastrectomy	Obesity	Lee, C. J.	mean age <55; not medicare eligible
17356932	Vertical gastrectomy for morbid obesity in 216 patients: report of two-year results	Surg Endosc	Lee, C. M. and Cirangle, P. T. and Jossart, G. H.	mean age <55; not medicare eligible
0	Initial evaluation of Laparoscopic Roux-en-Y gastric bypass and adjustable gastric banding in Korea: A single institution study	Obesity Surgery	Lee, H.	mean age <55; not medicare eligible
23900467	Impact of bariatric surgery on the management of type 2 diabetes mellitus in Singapore	Singapore Med J	Lee, P. C. and Tham, K. W. and Tan, H. C. and Pasupathy, S.	mean age <55; not medicare eligible
0	Roux-en-Y gastric bypass vs. sleeve gastrectomy vs. gastric banding: The first multicenter retrospective comparative cohort study in obese Korean patients	Yonsei Medical Journal	Lee, S. K.	mean age <55; not medicare eligible
0	Effects of obesity surgery on the metabolic syndrome	Archives of Surgery	Lee, W. J.	Abstract only
25813754	Duodenal-jejunal bypass with sleeve gastrectomy versus the sleeve gastrectomy procedure alone: The role of duodenal exclusion	Surgery for Obesity and Related Diseases	Lee, W. J.	mean age <55; not medicare eligible
21996600	Changes in postprandial gut hormones after metabolic surgery: a comparison of gastric bypass and sleeve gastrectomy	Surg Obes Relat Dis	Lee, W. J.	mean age <55; not medicare eligible
23768444	Differential influences of gastric bypass and sleeve gastrectomy on plasma nesfatin-1 and obestatin levels in patients with type 2 diabetes mellitus	Curr Pharm Des	Lee, W. J.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
0	Effects of obesity surgery on type 2 diabetes mellitus Asian patients	World Journal of Surgery	Lee, W. J.	mean age <55; not medicare eligible
24965545	Laparoscopic sleeve gastrectomy versus single anastomosis (mini-) gastric bypass for the treatment of type 2 diabetes mellitus: 5-year results of a randomized trial and study of incretin effect	Obes Surg	Lee, W. J.	mean age <55; not medicare eligible
0	Gastric bypass vs sleeve gastrectomy for type 2 diabetes mellitus: A randomized controlled trial	Archives of Surgery	Lee, W. J.	mean age <55; not medicare eligible
15186629	Laparoscopic vertical banded gastroplasty and laparoscopic gastric bypass: a comparison	Obes Surg	Lee, W. J.	mean age <55; not medicare eligible
0	Gastrointestinal Metabolic Surgery for the Treatment of Diabetic Patients: A Multi-Institutional International Study	Journal of Gastrointestinal Surgery	Lee, W. J.	mean age <55; not medicare eligible
0	Laparoscopic single-anastomosis Duodenal-jejunal bypass with sleeve gastrectomy (SADJB-SG): Short-term result and comparison with gastric bypass	Obesity Surgery	Lee, W. J.	mean age <55; not medicare eligible
25443060	Laparoscopic adjustable gastric banding (LAGB) with gastric plication: Short-term results and comparison with LAGB alone and sleeve gastrectomy	Surgery for Obesity and Related Diseases	Lee, W. J.	mean age <55; not medicare eligible
18317853	Improvement of insulin resistance after obesity surgery: a comparison of gastric banding and bypass procedures	Obes Surg	Lee, W. J.	mean age <55; not medicare eligible
21159561	Revisonal surgery for laparoscopic minigastric bypass	Surg Obes Relat Dis	Lee, W. J.	mean age <55; not medicare eligible
23011462	Laparoscopic Roux-en-Y vs. mini-gastric bypass for the treatment of morbid obesity: a 10-year experience	Obes Surg	Lee, W. J.	mean age <55; not medicare eligible
15973097	Laparoscopic Roux-en-Y versus mini-gastric bypass for the treatment of morbid obesity: a prospective randomized controlled clinical trial	Ann Surg	Lee, W. J.	mean age <55; not medicare eligible
0	Gastrointestinal quality of life following laparoscopic vertical banded gastroplasty	Obesity Surgery	Lee, W. J.	mean age <55; not medicare eligible
0	Predictors of diabetes remission after bariatric surgery in Asia	Asian Journal of Surgery	Lee, W. J.	mean age <55; not medicare eligible
0	Gastrointestinal quality of life following bariatric surgery in Asian patients	Hepato-Gastroenterology	Lee, Y. C.	mean age <55; not medicare eligible
0	The Effect and Predictive Score of Gastric Bypass and Sleeve Gastrectomy on Type 2	Obesity Surgery	Lee, W. J. and Almulaifi, A. and Chong, K. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	Diabetes Mellitus Patients with BMI < 30Å kg/m2		Chen, S. C. and Tsou, J. J. and Ser, K. H. and Lee, Y. C. and Chen, J. C.	
25056233	Single-anastomosis gastric bypass (SAGB): appraisal of clinical evidence	Obes Surg	Lee, W. J. and Lin, Y. H.	No primary data
0	Clinical characteristics and outcome of morbidly obese bariatric patients with concurrent hepatitis B viral infection	Obesity Surgery	Lee, W. J. and Wang, W. and Lee, Y. C. and Huang, M. T.	mean age <55; not medicare eligible
25868836	Laparoscopic sleeve gastrectomy for type 2 diabetes mellitus: Predicting the success by ABCD score	Surgery for Obesity and Related Diseases	Lee, W. J., Almulaifi, A., Tsou, J. J., Ser, K. H., Lee, Y. C., Chen, S. C.	mean age <55; not medicare eligible
0	Predictors of anemia after bariatric surgery using multivariate adaptive regression splines	Hepato-Gastroenterology	Lee, Y. C.	mean age <55; not medicare eligible
CN-00968420	Intragastric balloon significantly improves nonalcoholic fatty liver disease activity score in obese patients with nonalcoholic steatohepatitis: a pilot study	Gastrointestinal endoscopy	Lee, Ym and Low, Hc and Lim, Lg and Dan, Yy and Aung, Mo and Cheng, Cl and Wee, A and Lim, Sg and Ho, Ky	mean age <55; not medicare eligible
CN-00699773	[Psychiatric comorbidity and quality of life in obese individuals--a prospective controlled study]	Psychotherapie, Psychosomatik, medizinische Psychologie	Legenbauer, T	mean age <55; not medicare eligible
0	Depression and anxiety: Their predictive function for weight loss in obese individuals	Obesity Facts	Legenbauer, T.	mean age <55; not medicare eligible
0	Influence of depressive and eating disorders on short- and long-term course of weight after surgical and nonsurgical weight loss treatment	Comprehensive Psychiatry	Legenbauer, T. and Petrak, F. and De Zwaan, M. and Herpertz, S.	mean age <55; not medicare eligible
0	Comparison of percentage excess weight loss after laparoscopic sleeve gastrectomy and laparoscopic adjustable gastric banding	Wideochirurgia I Inne Techniki Maloinwazyjne	Lehmann, A.	mean age <55; not medicare eligible
21625908	Laparoscopic sleeve gastrectomy in patients over 59 years: early recovery and 12-month follow-up.	Obes Surg	Leivonen	single arm study n<50
25614352	Five-year results after laparoscopic sleeve gastrectomy: a prospective study	Surg Obes Relat Dis	Lemanu, D. P.	mean age <55; not medicare eligible
0	Banded gastric bypass - four years follow up in a prospective multicenter analysis	BMC surgery	Lemmens, L., Karcz, W. K., Bukhari, W., Fink, J., Kuesters, S.	mean age <55; not medicare eligible
0	Internalized Weight Bias in Weight-Loss Surgery Patients: Psychosocial Correlates and Weight Loss Outcomes	Obesity Surgery	Lent, M. R.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
0	Laparoscopic Gastric Plication - One Year of Bariatric Surgery in the Emergency County Hospital of Baia Mare	Chirurgia (Bucharest, Romania : 1990)	Lese, M., Szasz, A., LeÅŸe, I.	mean age <55; not medicare eligible
21918925	Efficacy of the Roux-en-Y gastric bypass compared to medically managed controls in meeting the American Diabetes Association composite end point goals for management of type 2 diabetes mellitus	Obes Surg	Leslie, D. B. and Dorman, R. B. and Serrot, F. J. and Swan, T. W. and Kellogg, T. A. and Torres-Villalobos, G. and Buchwald, H. and Slusarek, B. M. and Sampson, B. K. and Bantle, J. P. and Ikramuddin, S.	mean age <55; not medicare eligible
26091811	Weight Loss with Sleeve Gastrectomy in Obese Type 2 Diabetes Mellitus: Impact on Cardiac Function	Obes Surg	Leung, M., Xie, M., Durmush, E., Leung, D. Y., Wong, V. W.	N < 10 per arm
26948451	Comparison of safety between 1-stage and 2-stage surgery: from laparoscopic adjustable gastric banding to laparoscopic sleeve gastrectomy	Surg Obes Relat Dis	Lewis, C. S.	mean age <55; not medicare eligible
0	Comparing medical costs and use after laparoscopic adjustable gastric banding and roux-en-Y gastric bypass	JAMA Surgery	Lewis, K. H. and Zhang, F. and Arterburn, D. E. and Ross-Degnan, D. and Gillman, M. W. and Frank Wharam, J.	mean age <55; not medicare eligible
20835778	Laparoscopic Roux-en-Y gastric bypass versus laparoscopic sleeve gastrectomy for the treatment of morbid obesity. A prospective study of 117 patients	Obes Surg	Leyba, J. L.	mean age <55; not medicare eligible
25012769	Laparoscopic Roux-en-Y gastric bypass versus laparoscopic sleeve gastrectomy for the treatment of morbid obesity. a prospective study with 5 years of follow-up	Obes Surg	Leyba, J. L.	mean age <55; not medicare eligible
24487151	Comparison of the long-term results of Roux-en-Y gastric bypass and sleeve gastrectomy for morbid obesity: a systematic review and meta-analysis of randomized and nonrandomized trials	Surg Laparosc Endosc Percutan Tech	Li, J. F.	No primary data
24284156	Comparison of laparoscopic Roux-en-Y gastric bypass with laparoscopic sleeve gastrectomy for morbid obesity or type 2 diabetes mellitus: a meta-analysis of randomized controlled trials	Can J Surg	Li, J. F.	No primary data

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0	Bariatric surgery results: Reporting clinical characteristics and adverse outcomes from an integrated healthcare delivery system	Surgery for Obesity and Related Diseases	Li, R. A.	mean age <55; not medicare eligible
19057954	Predictors of gallstone formation after bariatric surgery: a multivariate analysis of risk factors comparing gastric bypass, gastric banding, and sleeve gastrectomy	Surg Endosc	Li, V. K.	mean age <55; not medicare eligible
22944342	Laparoscopic Roux-en-Y gastric bypass vs. laparoscopic sleeve gastrectomy for morbid obesity and diabetes mellitus: a meta-analysis of sixteen recent studies	Hepatogastroenterology	Li, P.	No primary data
0	Roux-en-Y gastric bypass for Chinese type 2 diabetes mellitus patients with a BMI < 28 kg/m ² : A multi-institutional study	Journal of Biomedical Research	Liang, H., Guan, W., Yang, Y., Mao, Z., Mei, Y., Liu, H., Miao, Y.	mean age <55; not medicare eligible
23706413	Effect of laparoscopic Roux-en-Y gastric bypass surgery on type 2 diabetes mellitus with hypertension: a randomized controlled trial	Diabetes Res Clin Pract	Liang, Z. and Wu, Q. and Chen, B. and Yu, P. and Zhao, H. and Ouyang, X.	mean age <55; not medicare eligible
0	Intervertebral disc height changes after weight reduction in morbidly obese patients and its effect on quality of life and radicular and low back pain	Spine	Lidar, Z. and Behrbalk, E. and Regev, G. J. and Salame, K. and Keynan, O. and Schweiger, C. and Appelbaum, L. and Levy, Y. and Keidar, A.	mean age <55; not medicare eligible
0	Kidney stones are common after bariatric surgery	Kidney International	Lieske, J. C.	mean age <55; not medicare eligible
0	Revisional Bariatric Surgery	Obesity Surgery	Lim, C. S. H.	mean age <55; not medicare eligible
0	Comparison of laparoscopic sleeve gastrectomy to laparoscopic Roux-en-Y gastric bypass for morbid obesity in a military institution	Surgery for Obesity and Related Diseases	Lim, D. M.	mean age <55; not medicare eligible
26231823	Longitudinal Changes in Serum Levels of Angiopoietin-Like Protein 6 and Selenoprotein P After Gastric Bypass Surgery	Obes Surg	Lim, J., Park, H. S., Lee, S. K., Jang, Y. J., Lee, Y. J., Heo, Y.	mean age <55; not medicare eligible
0	Psychiatric disorders of patients seeking obesity treatment	BMC Psychiatry	Lin, H. Y. and Huang, C. K. and Tai, C. M. and Kao, Y. H. and Tsai, C. C. and Hsuan, C. F. and Lee, S. L. and Chi, S. C. and Yen, Y. C.	mean age <55; not medicare eligible
0	The influence of bariatric surgery on body	Hu li za zhi The journal of nursing	Lin, W. L., Su, S. F., Lee,	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	image in obesity patients		W. J., Lee, C. H.	medicare eligible
26045096	15-year follow-up of vertical banded gastroplasty: comparison with other restrictive procedures	Surg Endosc	Lin, Y. H.	mean age <55; not medicare eligible
16967129	[Roux en Y gastric bypass surgery or gastric band to the treatment of the morbid obesity?]	Rev Assoc Med Bras (1992)	Liorci, M. P. and Ilias, E. J. and Kassab, P. and Castro, O. A.	No primary data
CN-00910247	Autonomic nervous system activity in diabetic and healthy obese female subjects and the effect of distinct weight loss strategies	European Journal of Endocrinology	Lips, Ma and Groot, Gh and Kam, M and Berends, Fj and Wiezer, R and Wagenveld, Ba and Swank, Dj and Luijten, A and Pijl, H and Burggraaf, J	mean age <55; not medicare eligible
23836121	Revisional surgery after failed adjustable gastric banding: institutional experience with 90 consecutive cases	Surg Endosc	Liu, K. H.	mean age <55; not medicare eligible
0	[Long-term outcomes and cause of high rate of loss to follow-up after laparoscopic adjustable gastric banding in obese patients]	Zhonghua wei chang wai ke za zhi = Chinese journal of gastrointestinal surgery	Liu, P., Zheng, C.	Not about bariatric surgery
DARE-12011001459	Is social support associated with greater weight loss after bariatric surgery? A systematic review (Structured abstract)	Obesity Reviews	Livhits, M and Mercado, C and Yermilov, I and Parikh, Ja and Dutson, E and Mehran, A and Ko, Cy and Shekelle, Pg and Gibbons, Mm	No primary data
0	Behavioral factors associated with successful weight loss after gastric bypass	American Surgeon	Livhits, M.	mean age <55; not medicare eligible
11735279	Biexponential model for predicting weight loss after gastric surgery for obesity	J Surg Res	Livingston, E. H. and Sebastian, J. L. and Huerta, S. and Yip, I. and Heber, D.	mean age <55; not medicare eligible
0	Impact of bariatric surgery on pulmonary function and nitric oxide in asthmatic and non-asthmatic obese patients	Journal of Asthma	Lombardi, C.	mean age <55; not medicare eligible
26452483	Concurrent Large Para-oesophageal Hiatal Hernia Repair and Laparoscopic Adjustable Gastric Banding: Results from 5-year Follow Up	Obes Surg	Long, A. J., Burton, P. R., Laurie, C. P., Anderson, M. L., Hebbard, G. S., O'Brien, P. E., Brown, W. A.	mean age <55; not medicare eligible
26003549	Endoscopic Sleeve Gastroplasty: How I Do It?	Obes Surg	Lopez-Nava, G., Galvao, M. P., Bautista-Castano,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			I., Jimenez-Banos, A., Fernandez-Corbelle, J. P.	
25380508	Endoscopic sleeve gastroplasty for the treatment of obesity	Endoscopy	Lopez-Nava, G., Galvao, M. P., da Bautista-Castano, I., Jimenez, A., De Grado, T., Fernandez-Corbelle, J. P.	mean age <55; not medicare eligible
0	Obesity surgery mortality risk score for the prediction of complications after laparoscopic bariatric surgery	Cirug�a espa�ola	Lorente, L., Ram�n, J. M., Vidal, P., Goday, A., Parri, A., Lanzarini, E., Pera, M., Grande, L.	mean age <55; not medicare eligible
12839688	[A prospective randomized study on the method of reconstruction after total gastrectomy]	Zhonghua Zhong Liu Za Zhi	Lu, H. S. and Zhang, J. Z. and Wu, X. Y. and Huang, C. M. and Wang, C. and Zhang, X. F.	Not about bariatric surgery
0	Metformin in amnesic mild cognitive impairment: Results of a pilot randomized placebo controlled clinical trial	Journal of Alzheimer's Disease	Luchsinger, J. A., Perez, T., Chang, H., Mehta, P., Steffener, J., Pradabhan, G., Ichise, M., Manly, J., Devanand, D. P., Bagiella, E.	Not about bariatric surgery
15024302	Laparoscopic versus open gastric bypass in the treatment of morbid obesity: a randomized prospective study	Ann Surg	Lujan, J. A.	mean age <55; not medicare eligible
0	Predictors of success after laparoscopic gastric bypass: A multivariate analysis of socioeconomic factors	Surgical Endoscopy and Other Interventional Techniques	Lutfi, R.	mean age <55; not medicare eligible
DARE-12012044975	Bariatric surgery is effective and safe in patients over 55: a systematic review and meta-analysis (Structured abstract)	Obesity Surgery	Lynch, J and Belgaumkar, A	No primary data
CN-01037582	Gastric bypass surgery is associated with a marked reduction in circulating high sensitivity cardiac troponin i concentrations: Comparison with intensive lifestyle intervention	Circulation	Lyngbakken, Mn	Abstract only
CN-01153493	Effect of weight loss on subclinical myocardial injury: A clinical trial comparing gastric bypass surgery and intensive lifestyle intervention	European Journal of Preventive Cardiology	Lyngbakken, Mn	mean age <55; not medicare eligible
16989709	Predictors of weight status following laparoscopic gastric bypass	Obes Surg	Ma, Y.	mean age <55; not medicare eligible
0	High secondary failure rate of rebanding after	Surgical Endoscopy and Other	M�ller, M. K.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	failed gastric banding	Interventional Techniques		medicare eligible
0	Quality of life after bariatric surgery - A comparative study of laparoscopic banding vs. bypass	Obesity Surgery	Müller, M. K.	mean age <55; not medicare eligible
27579793	Bariatric Surgery and Long-term Durability of Weight Loss	JAMA Surg	Maciejewski, M. L.	mean age <55; not medicare eligible
0	Does Laparoscopic Sleeve Gastrectomy Improve Depression, Stress and Eating Behaviour? A 4-Year Follow-up Study	Obesity Surgery	Mack, I., Älschlager, S., Sauer, H., von Feilitzsch, M., Weimer, K., Junne, F., Peeraully, R., Enck, P., Zipfel, S., Teufel, M.	mean age <55; not medicare eligible
109820627. Language:	Bariatric surgery is associated with improved long-term survival in severely obese US veterans	Evidence Based Medicine	Maggard-Gibbons, Melinda, Dawes, Aaron J.	No primary data
15809466	Meta-analysis: surgical treatment of obesity	Ann Intern Med	Maggard, M. A.	mean age <55; not medicare eligible
106475637. Language:	Clinical guidelines. Meta-analysis: surgical treatment of obesity [corrected] [published erratum appears in ANN INTERN MED 2005 Sep 20;143(6):468]	Annals of Internal Medicine	Maggard, M. A.	No primary data
107946185. Language:	Bariatric surgery for weight loss and glycemic control in nonmorbidly obese adults with diabetes: a systematic review	JAMA: Journal of the American Medical Association	Maggard, M. A.	No primary data
26193177	Two-year outcomes on bone density and fracture incidence in patients with T2DM randomized to bariatric surgery versus intensive medical therapy	Obesity (Silver Spring)	Maghrabi, A. H.	mean age <55; not medicare eligible
CN-01061964	Two year follow-up on lean mass and bone density in moderately obese patients with type 2 diabetes from the stampede bariatric surgery study	Diabetes	Maghrabi, Ah	Abstract only
23865093	AHRQ Comparative Effectiveness Reviews	Bariatric Surgery and Nonsurgical Therapy in Adults With Metabolic Conditions and a Body Mass Index of 30.0 to 34.9 kg/m2	Maglione, M. A.	No primary data
CN-01092081	Comparative study between single stage (Mini-bypass) versus 2 staged operations (Sleeve gastrectomy followed by mini-bypass) for management of super-super obese patients with BMI over 60 KG/M2	Obesity Surgery	Mahfouz, M and Abdelhafez, Ah	Abstract only

ID	Title	Journal	Authors	Reason for Exclusion
102314597. Language:	Sa1417 The Endoscopic Management of Post-Operative Bariatric Complications: Single-Centre, Single-Operator Experience in a Bariatric Unit in the United Kingdom	Gastrointestinal Endoscopy	Mahmoud, Assem, Murray, Sam, Mannur, Kesava, Shidrawi, Ray	Abstract only
0	Bariatric surgery in 1119 patients with preoperative body mass index<35 (kg/m2): Results at 1 year	Surgery for Obesity and Related Diseases	Maiz, C.	mean age <55; not medicare eligible
0	Quality of Life After Bariatric Surgery	Obesity Surgery	Major, P.	mean age <55; not medicare eligible
0	Reported appetite, taste and smell changes following Roux-en-Y gastric bypass and sleeve gastrectomy: Effect of gender, type 2 diabetes and relationship to post-operative weight loss	Appetite	Makaronidis, J. M.	mean age <55; not medicare eligible
0	Laparoscopic Roux-en-Y gastric bypass for nonobese type II diabetes mellitus in Asian patients	Surgery for Obesity and Related Diseases	Malapan, K., Goel, R., Tai, C. M., Kao, Y. H., Chang, P. C., Huang, C. K.	single arm study n<50
CN-01167760	Sleeve gastrectomy and Roux-en-Y gastric bypass in the treatment of type 2 diabetes mellitus. Results of a multicenter, randomised controlled study	Obesity facts	Maleckas, A	Abstract only
25623915	Surgery in the treatment of type 2 diabetes mellitus	Scand J Surg	Maleckas, A. and Venclauskas, L. and Wallenius, V. and Lonroth, H. and Fandriks, L.	No primary data
24166065	Improved acylated ghrelin suppression at 2 years in obese patients with type 2 diabetes: effects of bariatric surgery vs standard medical therapy	Int J Obes (Lond)	Malin, S. K.	mean age <55; not medicare eligible
25132119	Attenuated improvements in adiponectin and fat loss characterize type 2 diabetes non-remission status after bariatric surgery	Diabetes Obes Metab	Malin, S. K.	mean age <55; not medicare eligible
26627222	Differences in Weight Loss and Gut Hormones: Rouen-Y Gastric Bypass and Sleeve Gastrectomy Surgery	Curr Obes Rep	Malin, S. K.	No primary data
25002324	Temporal changes in glucose homeostasis and incretin hormone response at 1 and 6 months after laparoscopic sleeve gastrectomy	Surg Obes Relat Dis	Mallipedhi, A. and Prior, S. L. and Barry, J. D. and Caplin, S. and Baxter, J. N. and Stephens, J. W.	mean age <55; not medicare eligible
0	Association between the preoperative fasting and postprandial C-peptide AUC with	Metabolism: Clinical and Experimental	Mallipedhi, A., Min, T., Prior, S. L., MacIver, C.,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	resolution of type 2 diabetes 6 months following bariatric surgery		Luzio, S. D., Dunseath, G., Bracken, R. M., Islam, S., Barry, J. D., Caplin, S., Stephens, J. W.	
0	Formal Nutritional Education Improves Weight Loss in Bariatric Patients Following Laparoscopic Sleeve Gastrectomy	Obesity Surgery	Mangieri, C. W., Strode, M. A.	mean age <55; not medicare eligible
0	Smoking Habit in Severe Obese after bariatric procedures	Tobacco Induced Diseases	Maniscalco, M.	mean age <55; not medicare eligible
26217504	Age- and sex-specific effects on weight loss outcomes in a comparison of sleeve gastrectomy and Roux-en-Y gastric bypass: a retrospective cohort study	BMC Obes	Manning, S.	mean age <55; not medicare eligible
0	Duodenal switch improved standard biliopancreatic diversion: a retrospective study	Surgery for Obesity and Related Diseases	Marceau, P.	mean age <55; not medicare eligible
0	Biliopancreatic Diversion-Duodenal Switch: Independent Contributions of Sleeve Resection and Duodenal Exclusion	Obesity Surgery	Marceau, P.	mean age <55; not medicare eligible
CN-01172338	Quality of life after gastric banding and gastric bypass for morbid obesity: A prospective comparison	Digestive and Liver Disease. Conference: 22nd National Congress of Digestive Diseases, Italian Federation of Societies of Digestive Diseases, FISMAD 2016 Naples Italy. Conference Start: 20160224 Conference End: 20160227. Conference Publication: (var.pagings)	Marchesi, F	Abstract only
26003898	Using presurgical psychological testing to predict 1-year appointment adherence and weight loss in bariatric surgery patients: predictive validity and methodological considerations	Surg Obes Relat Dis	Marek, R. J.	mean age <55; not medicare eligible
0	Comparison of the benefits and complications between laparoscopic and open Roux-en-Y gastric bypass surgeries	Surgical Endoscopy	Marema, R. T.	mean age <55; not medicare eligible
15952085	Transient increase of plasma ghrelin after laparoscopic adjustable gastric banding in morbid obesity	Horm Metab Res	Mariani, L. M.	mean age <55; not medicare eligible
24469622	Outcomes after laparoscopic conversion of failed adjustable gastric banding to sleeve gastrectomy or Roux-en-Y gastric bypass	Br J Surg	Marin-Perez, P.	mean age <55; not medicare eligible
0	Changes in sleep duration and changes in	Sleep and Biological Rhythms	Marshall, N. S. and	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	weight in obese patients: The swedish obese subjects study		Grunstein, R. R. and Peltonen, M. and Stenlof, K. and Hedner, J. and Sjostrom, L. V.	medicare eligible
20495972	Nationwide cohort study of post-gastric bypass hypoglycaemia including 5,040 patients undergoing surgery for obesity in 1986-2006 in Sweden	Diabetologia	Marsk, R.	mean age <55; not medicare eligible
0	Bariatric surgery reduces mortality in Swedish men	British Journal of Surgery	Marsk, R. and N��slund, E. and Freedman, J. and Tynelius, P. and Rasmussen, F.	mean age <55; not medicare eligible
0	Impact of bariatric surgery on N-terminal fragment of the prohormone brain natriuretic peptide and left ventricular diastolic function	Canadian Journal of Cardiology	Martin, J. and Bergeron, S. and Pibarot, P. and Bastien, M. and Biertho, L. and Lescelleur, O. and Bertrand, F. and Simard, S. and Poirier, P.	mean age <55; not medicare eligible
17693278	Treating morbid obesity with laparoscopic adjustable gastric banding	Am J Surg	Martin, L. F. and Smits, G. J. and Greenstein, R. J.	mean age <55; not medicare eligible
0	Socioeconomic disparities in eligibility and access to bariatric surgery: a national population-based analysis	Surgery for Obesity and Related Diseases	Martin, M. and Beekley, A. and Kjorstad, R. and Sebesta, J.	mean age <55; not medicare eligible
15135688	A case-match analysis of failed prior bariatric procedures converted to resectional gastric bypass	Am J Surg	Martin, M. J. and Mullenix, P. S. and Steele, S. R. and See, C. S. and Cuadrado, D. G. and Carter, P. L.	mean age <55; not medicare eligible
CN-00891316	Bariatric surgery versus lifestyle interventions for morbid obesity - Changes in body weight, risk factors and comorbidities at 1 year	Obesity surgery	Martins, C	mean age <55; not medicare eligible
25970510	Decreased Escitalopram Concentrations Post-Roux-en-Y Gastric Bypass Surgery	Ther Drug Monit	Marzinke, M. A., Petrides, A. K., Steele, K., Schweitzer, M. A., Magnuson, T. H., Reinblatt, S. P., Coughlin, J. W., Clarke, W.	N < 10 per arm
24841951	Impact of different criteria on type 2 diabetes remission rate after bariatric surgery	Obes Surg	Mas-Lorenzo, A.	mean age <55; not medicare eligible
17299109	Impact of surgically induced weight loss on	Obesity (Silver Spring)	Maser, R. E. and	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	cardiovascular autonomic function: one-year follow-up		Lenhard, M. J. and Irgau, I. and Wynn, G. M.	medicare eligible
0	The prognostic significance of depressive symptoms for predicting quality of life 12 months after gastric bypass	Comprehensive Psychiatry	Masheb, R. M.	mean age <55; not medicare eligible
0	Factors predictive of venous thromboembolism in bariatric surgery	American Surgeon	Masoomi, H.	mean age <55; not medicare eligible
0	Risk factors for acute respiratory failure in bariatric surgery: Data from the Nationwide Inpatient Sample, 2006-2008	Surgery for Obesity and Related Diseases	Masoomi, H.	mean age <55; not medicare eligible
0	Bariatric Surgery Outcomes in Sarcopenic Obesity	Obesity Surgery	Mastino, D., Robert, M., Betry, C., Laville, M., Gouillat, C., Disse, E.	mean age <55; not medicare eligible
0	Metabolic effects of three different bariatric procedures-a retrospective study	International Journal of Pharmacy and Pharmaceutical Sciences	Mathew, L.	mean age <55; not medicare eligible
0	Intestinal methane production is associated with decreased weight loss following bariatric surgery	Obesity Research and Clinical Practice	Mathur, R., Mundi, M. S., Chua, K. S., Lorentz, P. A., Barlow, G. M., Lin, E., Burch, M., Youdim, A., Pimentel, M.	mean age <55; not medicare eligible
17132418	Long-term weight loss after bariatric surgery in patients visited at home outside the study environment	Obes Surg	Mathus-Vliegen, E. M.	mean age <55; not medicare eligible
17310505	Health-related quality of life after gastric banding	Br J Surg	Mathus-Vliegen, E. M.	mean age <55; not medicare eligible
12465720	Gastro-oesophageal reflux in obese subjects: influence of overweight, weight loss and chronic gastric balloon distension	Scand J Gastroenterol	Mathus-Vliegen, E. M. and Tygat, G. N.	mean age <55; not medicare eligible
27074693	Reduction of the risk of rhabdomyolysis after bariatric surgery with lower fluid administration in the perioperative period: a cohort study	Pol Arch Med Wewn	Matlok, M. and Major, P. and Malczak, P. and Wysocki, M. and Hynnekleiv, L. and Nowak, M. and Karcz, K. and Pedziwiatr, M. and Budzynski, A.	mean age <55; not medicare eligible
0	Short bowel syndrome after laparoscopic procedures	American Surgeon	McBride, C. L., Oleynikov, D., Sudan, D., Thompson, J. S.	mean age <55; not medicare eligible
0	Bariatric surgery improves cardiac function in morbidly obese patients with severe cardiomyopathy	Surgery for Obesity and Related Diseases	McCloskey, C. A. and Ramani, G. V. and Mathier, M. A. and Schauer, P. R. and Eid,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			G. M. and Mattar, S. G. and Courcoulas, A. P. and Ramanathan, R.	
15862492	Common channel length predicts outcomes of biliopancreatic diversion alone and with the duodenal switch surgery	Am J Surg	McConnell, D. B.	mean age <55; not medicare eligible
20446053	The cost, quality of life impact, and cost-utility of bariatric surgery in a managed care population	Obes Surg	McEwen, L. N. and Coelho, R. B. and Baumann, L. M. and Bilik, D. and Nota-Kirby, B. and Herman, W. H.	mean age <55; not medicare eligible
0	Revisional bariatric surgery is more effective for improving obesity-related co-morbidities than it is for reinducing major weight loss	Surgery for Obesity and Related Diseases	McKenna, D.	mean age <55; not medicare eligible
0	10-year outcomes after Roux-en-Y gastric bypass	Annals of Surgery	Mehaffey, J. H.	mean age <55; not medicare eligible
21690453	Bariatric surgery as a novel treatment for type 2 diabetes mellitus: a systematic review	Arch Surg	Meijer, R. I.	No primary data
25589017	Incidence of Gallstone Formation and Cholecystectomy 10 Years After Bariatric Surgery	Obesity Surgery	Melmer, A.	mean age <55; not medicare eligible
0	Functional lung rejuvenation in obese patients after bariatric surgery	Revista da Associacao Medica Brasileira	Melo, S. M. D. and Argentino, P. A. and Oliveira, M. M. D. S. and Melo, G. N. C. and Neto, G. L. S.	mean age <55; not medicare eligible
0	Adenocarcinoma of the gastroesophageal junction after bariatric surgery	American Journal of Surgery	Melstrom, L. G. and Bentrem, D. J. and Salvino, M. J. and Blum, M. G. and Talamonti, M. S. and Priten, K. J.	N < 10 per arm
25594659	The use of serum uric acid concentration as an indicator of laparoscopic sleeve gastrectomy success	Int Surg	Menenakos, E., Doulami, G., Tzanetakou, I. P., Natoudi, M., Kokoroskos, N., Almpantopoulos, K., Leandros, E., Zografos, G., Theodorou, D.	mean age <55; not medicare eligible
DARE-12014066147	Effectiveness of surgical weight loss on the remission of type 2 diabetes mellitus: a systematic review (Provisional abstract)	Database of Abstracts of Reviews of Effects	Merrill, A and Jones, S	No primary data
17894148	Gastro-esophageal reflux and esophageal motility disorders in morbidly obese patients	Obes Surg	Merrouche, M. and Sabate, J. M. and Jouet,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	before and after bariatric surgery		P. and Harnois, F. and Scaringi, S. and Coffin, B. and Msika, S.	
0	Single Anastomosis Gastric Bypassâ€Comparative Short-Term Outcome Study of Conversional and Primary Procedures	Obesity Surgery	Meydan, C., Raziell, A., Sakran, N., Gottfried, V., Goitein, D.	mean age <55; not medicare eligible
0	Dietary Iodine Absorption is not Influenced by Malabsorptive Bariatric Surgery	Obesity Surgery	Michalaki, M. and Volonakis, S. and Mamali, I. and Kalfarentzos, F. and Vagenakis, A. G. and Markou, K. B.	mean age <55; not medicare eligible
0	A 5-year experience with laparoscopic adjustable gastric banding-focus on outcomes, complications, and their management	Obesity Surgery	Michalik, M. and Lech, P. and Bobowicz, M. and Orlowski, M. and Lehmann, A.	mean age <55; not medicare eligible
21108021	Erosive esophagitis after bariatric surgery: banded vertical gastrectomy versus banded Roux-en-Y gastric bypass	Obes Surg	Miguel, G. P.	mean age <55; not medicare eligible
0	Should We Perform Preoperative Endoscopy Routinely in Obese Patients Undergoing Bariatric Surgery?	Bariatric Surgical Practice and Patient Care	Mihmanli, M. and Yazici, P. and Isil, G. and Tanik, C.	mean age <55; not medicare eligible
12529816	[Restrictive procedures in the treatment of morbid obesity -- vertical banded gastroplasty vs. adjustable gastric banding]	Zentralbl Chir	Miller, K.	mean age <55; not medicare eligible
17116427	Vertical banded gastroplasty versus adjustable gastric banding: prospective long-term follow-up study	Surg Obes Relat Dis	Miller, K.	mean age <55; not medicare eligible
0	Laparoscopic sleeve gastrectomy is superior to endoscopic intragastric balloon as a first stage procedure for super-obese patients (BMI â‰¥50)	Obesity Surgery	Milone, L.	mean age <55; not medicare eligible
0	Bariatric surgery and diabetes remission: Sleeve gastrectomy or mini-gastric bypass?	World Journal of Gastroenterology	Milone, M.	mean age <55; not medicare eligible
25576760	Lipid profile changes in patients undergoing bariatric surgery: a comparative study between sleeve gastrectomy and mini-gastric bypass	Int J Surg	Milone, M.	mean age <55; not medicare eligible
103958872. Language:	Wernicke Encephalopathy in Subjects Undergoing Restrictive Weight Loss Surgery: A Systematic Review of Literature Data	European Eating Disorders Review	Milone, M.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
26369473	Bariatric-metabolic surgery versus conventional medical treatment in obese patients with type 2 diabetes: 5 year follow-up of an open-label, single-centre, randomised controlled trial	Lancet	Mingrone, G.	mean age <55; not medicare eligible
22449317	Bariatric surgery versus conventional medical therapy for type 2 diabetes	N Engl J Med	Mingrone, G.	mean age <55; not medicare eligible
0	The impact of bariatric surgery on estimated glomerular filtration rate in patients with type 2 diabetes: A retrospective cohort study	Surgery for Obesity and Related Diseases	Mirajkar, N. and Bellary, S. and Ahmed, M. and Singhal, R. and Daskalakis, M. and Tahrani, A. A.	mean age <55; not medicare eligible
25053582	Psychological characteristics, eating behavior, and quality of life assessment of obese patients undergoing weight loss interventions	Scand J Surg	Miras, A. D.	mean age <55; not medicare eligible
24801197	Long-term quality of life after laparoscopic distal gastrectomy for early gastric cancer: results of a prospective multi-institutional comparative trial	Gastric Cancer	Misawa, K., Fujiwara, M., Ando, M., Ito, S., Mochizuki, Y., Ito, Y., Onishi, E., Ishigure, K., Morioka, Y., Takase, T., Watanabe, T., Yamamura, Y., Morita, S., Kodera, Y.	Not about bariatric surgery
26910024	Prevalence of Cholelithiasis and Choledocholithiasis in Morbidly Obese South Indian Patients and the Further Development of Biliary Calculus Disease After Sleeve Gastrectomy, Gastric Bypass and Mini Gastric Bypass	Obes Surg	Mishra, T.	mean age <55; not medicare eligible
27096225	Postoperative Behavioral Variables and Weight Change 3 Years After Bariatric Surgery	JAMA Surg	Mitchell, J. E.	mean age <55; not medicare eligible
25862182	Addictive disorders after Roux-en-Y gastric bypass	Surg Obes Relat Dis	Mitchell, J. E., Steffen, K., Engel, S., King, W. C., Chen, J. Y., Winters, K., Sogg, S., Sondag, C., Kalarchian, M., Elder, K.	mean age <55; not medicare eligible
19093625	[Comparision between a bilio-pacraetic diversion with or without gastrectomy after 2 years of follow-up in the treatment of the pathological obesity]	Ann Ital Chir	Mitterpergher, F.	mean age <55; not medicare eligible
12841903	Laparoscopic Swedish adjustable gastric banding: 6-year follow-up and comparison to	Obes Surg	Mittermair, R. P.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	other laparoscopic bariatric procedures			
0	Single-incision laparoscopic sleeve gastrectomy	American Surgeon	Mittermair, R. P.	mean age <55; not medicare eligible
0	In search of the ideal patient for the intragastric balloon - Short- and long-term results in 70 obese patients	Wideochirurgia I Inne Techniki Maloinwazyjne	Mitura, K., Garnysz, K.	mean age <55; not medicare eligible
0	Stomach Intestinal Pylorus Sparing (SIPS) Surgery for Morbid Obesity: Retrospective Analyses of Our Preliminary Experience	Obesity Surgery	Mitzman, B., Cottam, D., Goriparthi, R., Cottam, S., Zaveri, H., Surve, A., Roslin, M. S.	mean age <55; not medicare eligible
25394586	Ultrasound evaluation of visceral and subcutaneous fat reduction in morbidly obese subjects undergoing laparoscopic gastric banding, sleeve gastrectomy, and Roux-en-Y gastric bypass: a prospective comparison study	Obes Surg	Mizrahi, I.	mean age <55; not medicare eligible
0	Effects of sleeve gastrectomy versus gastric bypass on type 2 diabetes mellitus remission in obese patients	Romanian Journal of Diabetes, Nutrition and Metabolic Diseases	MoanÄÇZ, M. L.	mean age <55; not medicare eligible
0	Women at extreme risk for obesity-related carcinogenesis: Baseline endometrial pathology and impact of bariatric surgery on weight, metabolic profiles and quality of life	Gynecologic Oncology	Modesitt, S. C. and Hallowell, P. T. and Slack-Davis, J. K. and Michalek, R. D. and Atkins, K. A. and Kelley, S. L. and Arapovic, S. and Shupnik, M. A. and Hoehn, K.	mean age <55; not medicare eligible
0	Roux-en-Y gastric bypass after failed vertical banded gastroplasty	Obesity Surgery	Mognol, P.	mean age <55; not medicare eligible
27639984	Efficiency of preoperative esophagogastroduodenoscopy in identifying operable hiatal hernia for bariatric surgery patients	Surg Obes Relat Dis	Mohammed, R. and Fei, P. and Phu, J. and Asai, M. and Antanavicius, G.	mean age <55; not medicare eligible
0	Quality of life parameters, weight change and improvement of co-morbidities after laparoscopic roux y gastric bypass and laparoscopic gastric sleeve resection-comparative study	Obesity Surgery	Mohos, E.	mean age <55; not medicare eligible
23438491	Long-term dietary intake and nutritional deficiencies following sleeve gastrectomy or Roux-En-Y gastric bypass in a mediterranean population	J Acad Nutr Diet	Moize, V.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
0	Gastric Bypass in Older Patients: Complications, Weight Loss, and Resolution of Comorbidities at 2 Years in a Matched Controlled Study	Obesity Surgery	Montastier, E., Becouarn, G., BÃ©rard, E., Guyonnet, S., Topart, P., Ritz, P.	single arm study n<50
0	Comparison of cholecystectomy cases after Roux-en-Y gastric bypass, sleeve gastrectomy, and gastric banding	Surgery for Obesity and Related Diseases	Moon, R. C.	mean age <55; not medicare eligible
0	Conversion of failed laparoscopic adjustable gastric banding: Sleeve gastrectomy or Roux-en-Y gastric bypass?	Surgery for Obesity and Related Diseases	Moon, R. C.	mean age <55; not medicare eligible
24748475	Vitamin D supplementation efficacy: sleeve gastrectomy versus gastric bypass surgery	Obes Surg	Moore, C. E. and Sherman, V.	mean age <55; not medicare eligible
25270794	Effectiveness of B vitamin supplementation following bariatric surgery: rapid increases of serum vitamin B12	Obes Surg	Moore, C. E. and Sherman, V.	mean age <55; not medicare eligible
22920966	Weight loss at first postoperative visit predicts long-term outcome of Roux-en-Y gastric bypass using Duke weight loss surgery chart	Surg Obes Relat Dis	Mor, A.	mean age <55; not medicare eligible
23306619	Changes in GIP gene expression following bariatric surgery	Surg Endosc	Moran-Atkin, E. and Brody, F. and Fu, S. W. and Rojkind, M.	mean age <55; not medicare eligible
109281231. Language:	Qualidade de vida entre obesos mÃ³rbidos e pacientes submetidos Ã cirurgia bariÃ¡trica...eti Quality of life among morbid obese and patients submitted to bariatric surgery	Revista Eletronica de Enfermagem	Moreira Barros, LÃ¡via and Aparecida Nogueira Moreira, Rosa and Marques Frota, Natasha and Moura de AraÃºjo, Thiago and Ã ffo Caetano, Joselany	mean age <55; not medicare eligible
0	Effect of bariatric surgery on liver fibrosis	Obesity Surgery	Moretto, M. and Kupski, C. and Da Silva, V. D. and Padoin, A. V. and Mottin, C. C.	mean age <55; not medicare eligible
14631220	Laparoscopic adjustable silicone gastric banding versus vertical banded gastroplasty in morbidly obese patients: a prospective randomized controlled clinical trial	Ann Surg	Morino, M.	mean age <55; not medicare eligible
0	Mortality after bariatric surgery: Analysis of 13,871 morbidly obese patients from a National Registry	Annals of Surgery	Morino, M.	mean age <55; not medicare eligible
0	Self-Reported Eating Disorder Symptoms Before and After Gastric Bypass and Duodenal Switch for Super Obesityâ€™a 5-Year Follow-	Obesity Surgery	Morseth, M. S.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	Up Study			
0	Effect of Vagal Nerve Blockade on Moderate Obesity with an Obesity-Related Comorbid Condition: the ReCharge Study	Obesity Surgery	Morton, J. M. and Shah, S. N. and Wolfe, B. M. and Apovian, C. M. and Miller, C. J. and Tweden, K. S. and Billington, C. J. and Shikora, S. A.	mean age <55; not medicare eligible
0	Impact of frailty on approach to colonic resection: Laparoscopy vs open surgery	World Journal of Gastroenterology	Mosquera, C., Spaniolas, K., Fitzgerald, T. L.	Not about bariatric surgery
0	Laparoscopic omega-loop gastric bypass for the conversion of failed sleeve gastrectomy: early experience	Journal of visceral surgery	Moszkowicz, D.	mean age <55; not medicare eligible
26275543	Weight-loss outcomes of SPIDER((R)) sleeve gastrectomy at 6 months compared to traditional laparoscopic technique	Surg Endosc	Muir, K. B.	mean age <55; not medicare eligible
DARE-12009102007	Effect of bariatric surgery on nonalcoholic fatty liver disease: systematic review and meta-analysis (Structured abstract)	Clinical Gastroenterology and Hepatology	Mummadi, R R and Kasturi, K S and Chennareddygar, S and Sood, G K	No primary data
0	Moderate physical activity as predictor of weight loss after bariatric surgery	Obesity Surgery	Mundi, M. S.	mean age <55; not medicare eligible
CN-00919804	Acylation stimulating protein reduction precedes insulin sensitization after BPD-DS bariatric surgery in severely obese women	Nutrition and Diabetes	Munkonda, Mn	mean age <55; not medicare eligible
27377635	Sleeve gastrectomy versus Roux-en-Y gastric bypass for type 2 diabetes and morbid obesity: double-blind randomised clinical trial protocol	BMJ Open	Murphy, R.	mean age <55; not medicare eligible
0	Progression of diabetic retinopathy after bariatric surgery	Diabetic Medicine	Murphy, R., Jiang, Y., Booth, M., Babor, R., Maccormick, A., Hammodat, H., Beban, G., Barnes, R. M., Vincent, A. L.	mean age <55; not medicare eligible
0	Differential effect of weight loss on insulin resistance in surgically treated obese patients	American Journal of Medicine	Muscelli, E.	mean age <55; not medicare eligible
25490275	Sclerostin levels and changes in bone metabolism after bariatric surgery	J Clin Endocrinol Metab	Muschitz, C. and Kocijan, R. and Marterer, C. and Nia, A. R. and Muschitz, G. K. and Resch, H. and Pietschmann, P.	mean age <55; not medicare eligible
26341086	Efficacy of Bariatric Surgery in Type 2	Obes Surg	Musella, M.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	Diabetes Mellitus Remission: the Role of Mini Gastric Bypass/One Anastomosis Gastric Bypass and Sleeve Gastrectomy at 1 Year of Follow-up. A European survey			medicare eligible
0	Bariatric surgery in elderly patients. A comparison between gastric banding and sleeve gastrectomy with five years of follow up	International Journal of Surgery	Musella, M.	N < 10 per arm
0	A decade of bariatric surgery. What have we learned? Outcome in 520 patients from a single institution	International journal of surgery (London, England)	Musella, M., Milone, M., Gaudioso, D., Bianco, P., Palumbo, R., Galloro, G., Bellini, M., Milone, F.	mean age <55; not medicare eligible
0	Treatment of massive super-obesity with laparoscopic adjustable gastric banding	Surgery for Obesity and Related Diseases	Myers, J. A.	mean age <55; not medicare eligible
25174289	Improved quality of life after bariatric surgery in morbidly obese patients. Interdisciplinary group of bariatric surgery of Verona (G.I.C.O.V.)	G Chir	Nadalini, L.	mean age <55; not medicare eligible
10840616	[Mason vertical gastropasty in treatment of morbid obesity. Results of a prospective clinical study]	Chirurg	Naef, M.	mean age <55; not medicare eligible
25457159	Self-reported remission of obstructive sleep apnea following bariatric surgery: cohort study	Surg Obes Relat Dis	Nagendran, M.	mean age <55; not medicare eligible
0	Fracture risk following bariatric surgery: A population-based study	Osteoporosis International	Nakamura, K. M. and Haglind, E. G. C. and Clowes, J. A. and Achenbach, S. J. and Atkinson, E. J. and Melton, L. J. and Kennel, K. A.	mean age <55; not medicare eligible
23001571	Effectiveness of the Transoral Endoscopic Vertical Gastropasty (TOGa(R)): a good balance between weight loss and complications, if compared with gastric bypass and biliopancreatic diversion	Obes Surg	Nanni, G.	mean age <55; not medicare eligible
0	Bariatric surgery and progression of chronic kidney disease	Surgery for Obesity and Related Diseases	Navaneethan, S. D. and Yehnert, H.	single arm study n<50
17063298	Palliative antecolic isoperistaltic gastrojejunostomy: a randomized controlled trial comparing open and laparoscopic approaches	Surg Endosc	Navarra, G. and Musolino, C. and Venneri, A. and De Marco, M. L. and Bartolotta, M.	Not about bariatric surgery
0	Common Limb Length Does Not Influence	Obesity Surgery	Navez, B., Thomopoulos,	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
25403776	Roux-en-Y gastric bypass decreases pro-inflammatory and thrombotic biomarkers in individuals with extreme obesity	Obes Surg	Netto, B. D., Bettini, S. C., Clemente, A. P., Ferreira, J. P., Boritza, K., Souza Sde, F., Von der Heyde, M. E., Earthman, C. P., Damaso, A. R.	mean age <55; not medicare eligible
0	Ethnic variation in weight loss, but not co-morbidity remission, after laparoscopic gastric banding and Roux-en-Y gastric bypass	Surgery for Obesity and Related Diseases	Ng, J.	mean age <55; not medicare eligible
0	Laparoscopic Adjustable Gastric Banding Revisions in Singapore: a 10-Year Experience	Obesity Surgery	Ngiam, K. Y.	mean age <55; not medicare eligible
25901097	Preserved Insulin Secretory Capacity and Weight Loss Are the Predominant Predictors of Glycemic Control in Patients With Type 2 Diabetes Randomized to Roux-en-Y Gastric Bypass	Diabetes	Nguyen, K. T.	mean age <55; not medicare eligible
0	Outcomes of Roux-en-Y gastric bypass and laparoscopic adjustable gastric banding	World Journal of Gastroenterology	Nguyen, N. Q.	mean age <55; not medicare eligible
25502436	Effects of Posture and Meal Volume on Gastric Emptying, Intestinal Transit, Oral Glucose Tolerance, Blood Pressure and Gastrointestinal Symptoms After Roux-en-Y Gastric Bypass	Obes Surg	Nguyen, N. Q., Debrececi, T. L., Burgstad, C. M., Wishart, J. M., Bellon, M., Rayner, C. K., Wittert, G. A., Horowitz, M.	mean age <55; not medicare eligible
12022597	Systemic stress response after laparoscopic and open gastric bypass	J Am Coll Surg	Nguyen, N. T.	mean age <55; not medicare eligible
11294404	Comparison of pulmonary function and postoperative pain after laparoscopic versus open gastric bypass: a randomized trial	J Am Coll Surg	Nguyen, N. T.	mean age <55; not medicare eligible
19730234	A prospective randomized trial of laparoscopic gastric bypass versus laparoscopic adjustable gastric banding for the treatment of morbid obesity: outcomes, quality of life, and costs	Ann Surg	Nguyen, N. T.	mean age <55; not medicare eligible
12152151	Laparoscopic versus open gastric bypass	Semin Laparosc Surg	Nguyen, N. T.	No primary data
11524581	Laparoscopic versus open gastric bypass: a randomized study of outcomes, quality of life, and costs	Ann Surg	Nguyen, N. T. and Goldman, C. and Rosenquist, C. J. and Arango, A. and Cole, C. J. and Lee, S. J. and Wolfe, B. M.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
11961610	Cardiac function during laparoscopic vs open gastric bypass	Surg Endosc	Nguyen, N. T. and Ho, H. S. and Fleming, N. W. and Moore, P. and Lee, S. J. and Goldman, C. D. and Cole, C. J. and Wolfe, B. M.	mean age <55; not medicare eligible
0	Proposal for a bariatric mortality risk classification system for patients undergoing bariatric surgery	Surgery for Obesity and Related Diseases	Nguyen, N. T. and Nguyen, B. and Smith, B. and Reavis, K. M. and Elliott, C. and Hohmann, S.	mean age <55; not medicare eligible
0	Result of a National Audit of Bariatric Surgery Performed at Academic Centers: A 2004 University HealthSystem Consortium Benchmarking Project	Archives of Surgery	Nguyen, N. T. and Silver, M. and Robinson, M. and Needleman, B. and Hartley, G. and Cooney, R. and Catalano, R. and Dostal, J. and Sama, D. and Blankenship, J. and Burg, K. and Stemmer, E. and Wilson, S. E. and Schwesinger, W. H. and DeBord, J. R. and Stellato, T. A. and Moonka, R.	No primary data
0	Strategic laparoscopic surgery for improved cosmesis in general and bariatric surgery: Analysis of initial 127 cases	Journal of Laparoendoscopic and Advanced Surgical Techniques	Nguyen, N. T. and Smith, B. R. and Reavis, K. M. and Nguyen, X. M. T. and Nguyen, B. and Stamos, M. J.	mean age <55; not medicare eligible
0	Postoperative grazing as a risk factor for negative outcomes after bariatric surgery	Eating Behaviors	Nicolau, J., Ayala, L., Rivera, R., Speranskaya, A., Sanch�s, P., Julian, X., Fortuny, R., Masmiquel, L.	mean age <55; not medicare eligible
CN-01083227	Initial weight loss after restrictive bariatric procedures may predict mid-term weight maintenance: Results from a 12-month pilot trial	Bariatric Surgical Practice and Patient Care	Nikolic, M	mean age <55; not medicare eligible
11560385	Prospective randomised comparison of adjustable gastric banding and vertical banded gastroplasty for morbid obesity	Eur J Surg	Nilsell, K.	mean age <55; not medicare eligible
0	Are results of bariatric surgery different in the	Journal of the American College of	Nimeri, A.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	middle east? Early experience of an international Bariatric surgery program and an ACS NSQIP outcomes comparison	Surgeons		medicare eligible
21468625	Impact of laparoscopic sleeve gastrectomy and laparoscopic gastric bypass on HbA1c blood level and pharmacological treatment of type 2 diabetes mellitus in severe or morbidly obese patients. Results of a multicenter prospective study at 1 year	Obes Surg	Nocca, D.	mean age <55; not medicare eligible
20619402	[Bone mass loss after sleeve gastrectomy: a prospective comparative study with gastric bypass]	Cir Esp	Nogues, X.	mean age <55; not medicare eligible
21512818	Metabolic laparoscopic gastric bypass for obese patients with type 2 diabetes	Obes Surg	Nora, M.	mean age <55; not medicare eligible
CN-01003435	Nocturnal hypertension and systolic blood pressure dip in morbidly obese subjects: The effect of bariatric surgery and lifestyle intervention therapy	Obesity reviews	Nordstrand, N	Abstract only
22261295	A controlled clinical trial of the effect of gastric bypass surgery and intensive lifestyle intervention on nocturnal hypertension and the circadian blood pressure rhythm in patients with morbid obesity	Surgery	Nordstrand, N.	mean age <55; not medicare eligible
0	Comparative Effects of Roux-en-Y Gastric Bypass and Sleeve Gastrectomy on Glucose Homeostasis and Incretin Hormones in Obese Type 2 Diabetic Patients: A One-Year Prospective Study	Hormone and Metabolic Research	Nosso, G.	mean age <55; not medicare eligible
0	Metabolic syndrome after laparoscopic bariatric surgery	Obesity Surgery	Nugent, C. and Bai, C. and Elariny, H. and Gopalakrishnan, P. and Quigley, C. and Garone Jr, M. and Afendy, M. and Chan, O. and Wheeler, A. and Afendy, A. and Younossi, Z. M.	mean age <55; not medicare eligible
23760764	Intensive medical weight loss or laparoscopic adjustable gastric banding in the treatment of mild to moderate obesity: long-term follow-up of a prospective randomised trial	Obes Surg	O'Brien, P. E.	mean age <55; not medicare eligible
16670131	Treatment of mild to moderate obesity with laparoscopic adjustable gastric banding or an	Ann Intern Med	O'Brien, P. E.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	intensive medical program: a randomized trial			
23235396	Long-term outcomes after bariatric surgery: fifteen-year follow-up of adjustable gastric banding and a systematic review of the bariatric surgical literature	Ann Surg	O'Brien, P. E.	No primary data
14561255	Lap-band: outcomes and results	J Laparoendosc Adv Surg Tech A	O'Brien, P. E. and Dixon, J. B.	No primary data
0	Perioperative morbidity associated with bariatric surgery: An academic center experience	Archives of Surgery	O'Rourke, R. W.	mean age <55; not medicare eligible
0	The Effect of Bariatric Surgery on Urinary Incontinence in Women	Obesity Surgery	O'Boyle, C. J. and O'Sullivan, O. E. and Shabana, H. and Boyce, M. and O'Reilly, B. A.	mean age <55; not medicare eligible
26307420	Weight loss outcomes among patients referred after primary bariatric procedure	Am J Surg	Obeid, N. R.	mean age <55; not medicare eligible
0	Long-term outcomes after Roux-en-Y gastric bypass: 10- to 13-year data	Surgery for Obesity and Related Diseases	Obeid, N. R. and Malick, W. and Concors, S. J. and Fielding, G. A. and Kurian, M. S. and Ren-Fielding, C. J.	mean age <55; not medicare eligible
0	GERD Is Associated with Higher Long-Term Reoperation Rates After Bariatric Surgery	Journal of gastrointestinal surgery : official journal of the Society for Surgery of the Alimentary Tract	Obeid, T., Krishnan, A., Abdalla, G., Schweitzer, M., Magnuson, T., Steele, K. E.	mean age <55; not medicare eligible
27864670	Relationship Between Vitamin D Deficiency and the Components of Metabolic Syndrome in Patients with Morbid Obesity, Before and 1 Year After Laparoscopic Roux-en-Y Gastric Bypass or Sleeve Gastrectomy	Obes Surg	Obispo Entrenas, A.	mean age <55; not medicare eligible
0	Effect of preoperative body mass index on weight loss after obesity surgery	Surgery for Obesity and Related Diseases	Ochner, C. N.	mean age <55; not medicare eligible
19554382	Behavioral predictors of weight regain after bariatric surgery	Obes Surg	Odom, J. and Zalesin, K. C. and Washington, T. L. and Miller, W. W. and Hakmeh, B. and Zaremba, D. L. and Altattan, M. and Balasubramaniam, M. and Gibbs, D. S. and Krause, K. R. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Chengelis, D. L. and Franklin, B. A. and McCullough, P. A.	
0	Exploring the impact of obesity surgery on patients' health status: A quantitative and qualitative study	Obesity Surgery	Ogden, J. and Clementi, C. and Aylwin, S. and Patel, A.	mean age <55; not medicare eligible
22776278	Results of a national survey on laparoscopic bariatric surgery in Japan, 2000-2009	Asian J Endosc Surg	Ohta, M.	mean age <55; not medicare eligible
0	Effect of vagotomy during Roux-en-Y gastric bypass surgery on weight loss outcomes	Obesity Research and Clinical Practice	Okafor, P. N.	mean age <55; not medicare eligible
19747401	Outcome of gastroplasty and gastric bypass in a single centre in the UK	BMC Res Notes	Okoro, T.	mean age <55; not medicare eligible
17060764	Body composition, dietary intake, and energy expenditure after laparoscopic Roux-en-Y gastric bypass and laparoscopic vertical banded gastroplasty: a randomized clinical trial	Ann Surg	Olbers, T.	mean age <55; not medicare eligible
15810049	Randomized clinical trial of laparoscopic Roux-en-Y gastric bypass versus laparoscopic vertical banded gastroplasty for obesity	Br J Surg	Olbers, T.	mean age <55; not medicare eligible
CN-00901735	Respiratory function in superobese patients before and after bariatric surgery- a randomised controlled trial	Open obesity journal	Olsen, Mf and Wiklund, M and Lonroth, H and Olbers, T	mean age <55; not medicare eligible
20339873	Comparison of comorbidity resolution and improvement between laparoscopic sleeve gastrectomy and laparoscopic adjustable gastric banding	Surg Endosc	Omana, J. J.	mean age <55; not medicare eligible
CN-01165474	Gastric bypass significantly improves quality of life in morbidly obese patients with type 2 diabetes	Surgical Endoscopy and Other Interventional Techniques	Omosho, P	mean age <55; not medicare eligible
15186631	Vertical banded gastroplasty converted to Roux-en-Y gastric bypass: little impact on nutritional status after 5-year follow-up	Obes Surg	Ortega, J.	mean age <55; not medicare eligible
15479598	Outcome of esophageal function and 24-hour esophageal pH monitoring after vertical banded gastroplasty and Roux-en-Y gastric bypass	Obes Surg	Ortega, J.	mean age <55; not medicare eligible
22722236	What are obese patients able to eat after Roux-en-Y gastric bypass?	Obes Facts	Ortega, J. and Ortega-Evangelio, G. and Cassinello, N. and Sebastia, V.	mean age <55; not medicare eligible
26894908	Postoperative Early Major and Minor Complications in Laparoscopic Vertical Sleeve	Obes Surg	Osland, E.	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
	Gastrectomy (LVSG) Versus Laparoscopic Roux-en-Y Gastric Bypass (LRYGB) Procedures: A Meta-Analysis and Systematic Review			
27623997	Diabetes improvement and resolution following laparoscopic vertical sleeve gastrectomy (LVSG) versus laparoscopic Roux-en-Y gastric bypass (LRYGB) procedures: a systematic review of randomized controlled trials	Surg Endosc	Osland, E.	No primary data
27896647	Changes in Non-Diabetic Comorbid Disease Status Following Laparoscopic Vertical Sleeve Gastrectomy (LVSG) Versus Laparoscopic Roux-En-Y Gastric Bypass (LRYGB) Procedures: a Systematic Review of Randomized Controlled Trials	Obes Surg	Osland, E.	No primary data
27258909	Late Postoperative Complications in Laparoscopic Sleeve Gastrectomy (LVSG) Versus Laparoscopic Roux-en-y Gastric Bypass (LRYGB): Meta-analysis and Systematic Review	Surg Laparosc Endosc Percutan Tech	Osland, E.	No primary data
CN-01027539	Laparoscopic sleeve gastroplication versus laparoscopic sleeve gastrectomy: Preliminary results	Surgical Endoscopy and Other Interventional Techniques	Ospanov, Ob	Abstract only
23716012	Increased admission for alcohol dependence after gastric bypass surgery compared with restrictive bariatric surgery	JAMA Surg	Ostlund, M. P.	mean age <55; not medicare eligible
0	Sleeve Gastrectomy and Roux-en-Y Gastric Bypass Lead to Comparable Changes in Body Composition after Adjustment for Initial Body Mass Index	Obesity Surgery	Otto, M.	mean age <55; not medicare eligible
0	Is preoperative esophagoduodenoscopy required in all patients prior to bariatric surgery?	Bariatric Surgical Practice and Patient Care	Otto, M. and Ronellenfitsch, U. and TrÄ¶ndle, S. and Kienle, P. and KÄ¶hler, G. and Hasenberg, T.	mean age <55; not medicare eligible
CN-01064647	Changes in body weight, risk factors and comorbidities 5 years after bariatric surgery or three lifestyle interventions in the morbidly obese	Obesity facts	Ovebro	Abstract only
22170392	Food tolerance and gastrointestinal quality of life following three bariatric procedures: adjustable gastric banding, Roux-en-Y gastric	Obes Surg	Overs, S. E.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	bypass, and sleeve gastrectomy			
21438991	Bariatric surgery: a systematic review and network meta-analysis of randomized trials	Obes Rev	Padwal, R.	mean age <55; not medicare eligible
21538168	Bariatric surgery: a systematic review of the clinical and economic evidence	J Gen Intern Med	Padwal, R.	mean age <55; not medicare eligible
19493300	A systematic review of drug absorption following bariatric surgery and its theoretical implications	Obes Rev	Padwal, R. and Brocks, D. and Sharma, A. M.	No primary data
107885836. Language:	Weight Loss and Outcomes in Wait-listed, Medically Managed, and Surgically Treated Patients Enrolled in a Population-based Bariatric Program: Prospective Cohort Study	Medical Care	Padwal, Raj S. and Rueda-Clausen, Christian F. and Sharma, Arya M. and Agborsangaya, Calypse B. and Klarenbach, Scott and Birch, Dan W. and Karmali, Shahzeer and McCargar, Linda and Majumdar, Sumit R.	mean age <55; not medicare eligible
17658018	Follow-up of Roux-en-Y gastric bypass patients at 5 or more years postoperatively	Obes Surg	Pajeccki, D. and Dalcanalle, L. and Souza de Oliveira, C. P. and Zilberstein, B. and Halpern, A. and Garrido, A. B., Jr. and Cecconello, I.	mean age <55; not medicare eligible
CN-01008697	Intragastric balloon (IGB) for morbidly obese (MOP) and super obese patients (SOP) : Systematic review (SR) and health technology assessment (HTA)	Value in health	Paladini, Lm and Clark, Lgo and Clark, O and Pegoretti, B and Engel, T and Faleiros, Ejm	Abstract only
25868781	Laparoscopic sleeve gastrectomy effects on overactive bladder symptoms	J Surg Res	Palleschi, G., Pastore, A. L., Rizzello, M., Cavallaro, G., Silecchia, G., Carbone, A.	mean age <55; not medicare eligible
25845353	Preoperative Predictive Factors of Successful Weight Loss and Glycaemic Control 1 Year After Gastric Bypass for Morbid Obesity	Obes Surg	Palmisano, S.	mean age <55; not medicare eligible
23362420	Prospective randomized clinical trial of laparoscopic sleeve gastrectomy versus open Roux-en-Y gastric bypass for the management of patients with morbid obesity	Wideochir Inne Tech Maloinwazyjne	Paluszkiewicz, R.	mean age <55; not medicare eligible
27555097	Physical Activity in Obese Type 2 Diabetes After Gastric Bypass or Medical Management	Am J Med	Panosian, J.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
0	[Bone mineral density disminution post Roux-Y bypass surgery]	Nutrici�n hospitalaria	Papapietro, K., Massardo, T., Riffo, A., D�az, E., Araya, A. V., Adjemian, D., Montesinos, G., Castro, G.	mean age <55; not medicare eligible
CN-01022630	Randomized pilot trial of bariatric surgery versus intensive medical weight management on diabetes remission in type 2 diabetic patients who do NOT meet NIH criteria for surgery and the role of soluble RAGE as a novel biomarker of success	Annals of surgery	Parikh, M	mean age <55; not medicare eligible
0	Comparison of Rates of Resolution of Diabetes Mellitus after Gastric Banding, Gastric Bypass, and Biliopancreatic Diversion	Journal of the American College of Surgeons	Parikh, M.	mean age <55; not medicare eligible
0	Laparoscopic gastric bypass vs sleeve gastrectomy in obese Korean patients	World Journal of Gastroenterology	Park, J. Y.	mean age <55; not medicare eligible
24949320	Causes and outcomes of revisional bariatric surgery: initial experience at a single center	Ann Surg Treat Res	Park, J. Y.	mean age <55; not medicare eligible
0	Prediction of Diabetes Remission in Morbidly Obese Patients After Roux-en-Y Gastric Bypass	Obesity Surgery	Park, J. Y.	mean age <55; not medicare eligible
25913478	Laparoscopic Roux-en-Y gastric bypass in obese Korean patients: efficacy and potential adverse events	Surg Today	Park, J. Y., Kim, Y. J.	mean age <55; not medicare eligible
25631913	Preoperative predictors of weight loss at 4 years following bariatric surgery	Nutr Clin Pract	Parri, A.	mean age <55; not medicare eligible
0	Vertical banded gastroplasty: 6 Years experience at a center in Poland	Obesity Surgery	Pasnik, K. and Krupa, J. and Stanowski, E.	mean age <55; not medicare eligible
0	Biliopancreatic diversion with transient gastroplasty and duodenal switch: Long-term results of a multicentric study	Surgery (United States)	Pata, G.	mean age <55; not medicare eligible
0	Combining laparoscopic giant paraesophageal hernia repair with sleeve gastrectomy in obese patients	Surgical Endoscopy and Other Interventional Techniques	Patel, A. D., Lin, E., Lytle, N. W., Toro, J. P., Srinivasan, J., Singh, A., Sweeney, J. F., Scott Davis, S.	single arm study n<50
CN-01160226	A comparative effectiveness trial of laparoscopic gastric banding versus CPAP for obstructive sleep apnea	Sleep	Patel, Sr	Abstract only
109825719. Language:	Postoperative Complications and Emergency Care for Patients Following Bariatric Surgery	MEDSURG Nursing	Patil, Rashmi, Melander, Sheila	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
27684382	Assessing the real-world effect of laparoscopic bariatric surgery on the management of obesity-related comorbidities: A retrospective matched cohort study using a US Claims Database	Diabetes Obes Metab	Patkar, A. and Fegelman, E. and S, R. Kashyap and Brethauer, S. and Bour, E. and Yoo, A. and Li, G.	mean age <55; not medicare eligible
12648689	A comparison of diet and exercise therapy versus laparoscopic Roux-en-Y gastric bypass surgery for morbid obesity: a decision analysis model	J Am Coll Surg	Patterson, E. J. and Urbach, D. R. and Swanstrom, L. L.	No primary data
25539691	Early post-operative weight loss after laparoscopic sleeve gastrectomy correlates with the volume of the excised stomach and not with that of the sleeve! Preliminary data from a multi-detector computed tomography-based study	Surg Endosc	Pawanindra, L., Vindal, A., Midha, M., Nagpal, P., Manchanda, A., Chander, J.	mean age <55; not medicare eligible
21612448	Comparison of results of laparoscopic gastric banding and consecutive intragastric balloon application at 18 months: a clinical prospective study	J Laparoendosc Adv Surg Tech A	Peker, Y.	mean age <55; not medicare eligible
0	Long-Term Effect of Gastric Bypass and Sleeve Gastrectomy on Severe Obesity: Do Preoperative Weight Loss and Binge Eating Behavior Predict the Outcome of Bariatric Surgery?	Obesity Surgery	Pekkarinen, T.	mean age <55; not medicare eligible
0	Should we wait for metabolic complications before operating on obese patients? Gastric bypass outcomes in metabolically healthy obese individuals	Surgery for Obesity and Related Diseases	Pelascini, E., Disse, E., Pasquer, A., Poncet, G., Gouillat, C., Robert, M.	mean age <55; not medicare eligible
23946276	IGF1 modifications after bariatric surgery in morbidly obese patients: potential implications of nutritional status according to specific surgical technique	Eur J Endocrinol	Pellitero, S.	mean age <55; not medicare eligible
0	Musculoskeletal pain in the obese: A comparison with a general population and long-term changes after conventional and surgical obesity treatment	Pain	Peltonen, M. and Lindroos, A. K. and Torgerson, J. S.	mean age <55; not medicare eligible
24852693	Bariatric surgery-induced weight loss causes remission of food addiction in extreme obesity	Obesity (Silver Spring)	Pepino, M. Y. and Stein, R. I. and Eagon, J. C. and Klein, S.	mean age <55; not medicare eligible
0	Is sleeve gastrectomy still contraindicated for patients aged ≥60 years? A case-matched study with 24 months of follow-up	Surgery for Obesity and Related Diseases	Pequignot, A., Prevot, F., Dhahri, A., Rebibo, L., Badaoui, R., Regimbeau,	single arm study n<50

ID	Title	Journal	Authors	Reason for Exclusion
			J. M.	
0	Long-term follow-up evaluation of revisional gastric bypass after failed adjustable gastric banding	Surgical Endoscopy and Other Interventional Techniques	Perathoner, A.	mean age <55; not medicare eligible
118101867. Language:	SUN-P206: Reduction of the Carotid Intima-Media Thickness 6 Months After Gastric Bypass Surgery in Obese Diabetic Patients	Clinical Nutrition	Pereira, A. Z., Marchini, J. S., Arasaki, C. H., Zanella, M. T.	Abstract only
26033435	Gender Influence on Long-Term Weight Loss and Comorbidities After Laparoscopic Sleeve Gastrectomy and Roux-en-Y Gastric Bypass: a Prospective Study With a 5-Year Follow-up	Obes Surg	Perrone, F.	mean age <55; not medicare eligible
CN-01174253	Age as a risk factor for the surgical outcome of laparoscopic gastric banding	Surgical Endoscopy and Other Interventional Techniques. Conference: 23rd International Congress of the European Association for Endoscopic Surgery, EAES 2015 Bucharest Romania. Conference Start: 20150603 Conference End: 20150606. Conference Publication: (var.pagings)	Perry, Z and Sela, T and Netz, U and Atias, S and Mizrahi, S and Glazer, Y and Kirshtein, B and Rivin, M and Lantsberg, L and Avinoh, E	Abstract only
0	Gastrointestinal symptoms and eating behavior among morbidly obese patients undergoing Roux-en-Y gastric bypass	Medicina (Kaunas, Lithuania)	Petereit, R., Jonaitis, L., KupÅinskas, A. Maleckas, A.	mean age <55; not medicare eligible
CN-01130501	Sleeve and bypass equally effective up to three years. Results of the PRT Swiss multicentre bypass or sleeve study (SM-BOSS)	Obesity surgery	Peterli, R	Abstract only
23989054	Early results of the Swiss Multicentre Bypass or Sleeve Study (SM-BOSS): a prospective randomized trial comparing laparoscopic sleeve gastrectomy and Roux-en-Y gastric bypass	Ann Surg	Peterli, R	mean age <55; not medicare eligible
22354457	Metabolic and hormonal changes after laparoscopic Roux-en-Y gastric bypass and sleeve gastrectomy: a randomized, prospective trial	Obes Surg	Peterli, R	mean age <55; not medicare eligible
19638921	Improvement in glucose metabolism after bariatric surgery: comparison of laparoscopic Roux-en-Y gastric bypass and laparoscopic sleeve gastrectomy: a prospective randomized trial	Ann Surg	Peterli, R	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
25840532	Feasibility and impact of an evidence-based program for gastric bypass surgery	J Am Coll Surg	Petrick, A. T., Still, C. D., Wood, C. G., Vitunac, M. A., Plank, M., McGrail, L., Strodel, W. E., Gabrielsen, J. D., Rogers, J., Benotti, P.	mean age <55; not medicare eligible
26414562	Effect of Duodenal-jejunal Bypass Surgery on Glycemic Control in Type 2 Diabetes: A Randomized Controlled Trial	Obesity (Silver Spring)	Petry, T. Z. and Fabbrini, E. and Otoch, J. P. and Carmona, M. A. and Caravatto, P. P. and Salles, J. E. and Sarian, T. and Correa, J. L. and Schiavon, C. A. and Patterson, B. W. and Cohen, R. and Klein, S.	mean age <55; not medicare eligible
23549964	Evaluation of weight loss on a low-calorie meal replacement diet as a potential predictor of weight loss after laparoscopic adjustable gastric banding surgery in adolescents	Obes Surg	Phan, T. L.	mean age <55; not medicare eligible
0	Artificial neural networks in the outcome prediction of adjustable gastric banding in obese women	PLoS ONE	Piaggi, P.	mean age <55; not medicare eligible
DARE-12012045042	Weight loss surgery for mild to moderate obesity: a systematic review and economic evaluation (Provisional abstract)	Obesity Surgery	Picot, J and Jones, J and Colquitt, JI and Loveman, E and Clegg, Aj	No primary data
19726018	The clinical effectiveness and cost-effectiveness of bariatric (weight loss) surgery for obesity: a systematic review and economic evaluation	Health Technol Assess	Picot, J.	No primary data
25892342	Increased risk of OGTT-induced hypoglycemia after gastric bypass in severely obese patients with normal glucose tolerance	Surg Obes Relat Dis	Pigeyre, M., Vours, C., Raverdy, V., Hanaire, H., Ritz, P., Pattou, F.	mean age <55; not medicare eligible
22398112	Improvement in health-related quality of life in first year after laparoscopic adjustable gastric banding	Surg Obes Relat Dis	Pilone, V.	mean age <55; not medicare eligible
116295142. Language:	Laparoscopic Adjustable Gastric Banding (LAGB) Plus Anterior Fundoplication Versus LAGB Alone: A Prospective Comparative Study	Surgical Laparoscopy, Endoscopy & Percutaneous Techniques	Pilone, Vincenzo, Vitiello, Antonio, Monda, Angela, Giglio, Francesco, Forestieri, Pietro	mean age <55; not medicare eligible
0	Increased admission for alcohol dependence after gastric bypass surgery compared with restrictive bariatric surgery	JAMA Surgery	PleckaÅ–stlund, M.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
27313191	Conversion of sleeve gastrectomy to Roux-en-Y gastric bypass: an audit of 34 patients	Surg Obes Relat Dis	Poghosyan, T.	mean age <55; not medicare eligible
0	Age and gender exert differential effects on blood lipids in patients after LAGB and LRYGB	Surgery for Obesity and Related Diseases	Pohle-Krauza, R. J.	mean age <55; not medicare eligible
0	Serum amyloid A and obstructive sleep apnea syndrome before and after surgically-induced weight loss in morbidly obese subjects	Obesity Surgery	Poitou, C. and Coupaye, M. and Laaban, J. P. and Coussieu, C. and Bedel, J. F. and Bouillot, J. L. and Basdevant, A. and Clément, K. and Oppert, J. M.	mean age <55; not medicare eligible
CN-01019446	Gastric bypass or biliopancreatic diversion increases remission from type 2 diabetes in obese adults	Annals of internal medicine	Pokala, S	Abstract only
15935788	[Are there predictive items of successful surgery in morbid obesity treated by adjustable gastric banding: a prospective study]	Ann Chir	Polliand, C.	mean age <55; not medicare eligible
CN-00908327	Prospective, randomized, multicenter study evaluating safety and efficacy of intragastric dual-balloon in obesity	Surgery for Obesity and Related Diseases	Ponce, J and Quebbemann, Bb and Patterson, Ej	mean age <55; not medicare eligible
20947444	New adjustable gastric bands available in the United States: a comparative study	Surg Obes Relat Dis	Ponce, J. and Lindsey, B. and Pritchett, S. and Bleech, M. and Marlowe, K.	mean age <55; not medicare eligible
25868829	The REDUCE pivotal trial: a prospective, randomized controlled pivotal trial of a dual intragastric balloon for the treatment of obesity	Surg Obes Relat Dis	Ponce, J. and Woodman, G. and Swain, J. and Wilson, E. and English, W. and Ikramuddin, S. and Bour, E. and Edmundowicz, S. and Snyder, B. and Soto, F. and Sullivan, S. and Holcomb, R. and Lehmann, J.	mean age <55; not medicare eligible
12194555	Laparoscopic adjustable gastric banding: a prospective comparison of two commonly used bands	Obes Surg	Ponson, A. E.	mean age <55; not medicare eligible
0	Laparoscopic gastric banding prevents type 2 diabetes and arterial hypertension and induces their remission in morbid obesity: A 4-year case-controlled study	Diabetes Care	Pontiroli, A. E.	mean age <55; not medicare eligible
0	Biliary pancreatic diversion and laparoscopic	Cardiovascular Diabetology	Pontiroli, A. E.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	adjustable gastric banding in morbid obesity: Their long-term effects on metabolic syndrome and on cardiovascular parameters			medicare eligible
21245741	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	Ann Surg	Pontiroli, A. E.	mean age <55; not medicare eligible
0	Early effects of gastric banding (LGB) and of biliopancreatic diversion (BPD) on insulin sensitivity and on glucose and insulin response after OGTT	Obesity Surgery	Pontiroli, A. E. and Gnili, D. and Mingrone, G.	mean age <55; not medicare eligible
0	Long-term mortality and incidence of cardiovascular diseases and type 2 diabetes in diabetic and nondiabetic obese patients undergoing gastric banding: A controlled study	Cardiovascular Diabetology	Pontiroli, A. E. and Zakaria, A. S. and Mantegazza, E. and Morabito, A. and Saibene, A. and Mozzi, E. and Micheletto, G. and Veronelli, A. and Zecchini, B. and Zakaria, A. and FrigÅ©, F. and Rossetti, L. and Benetti, A. and Cristina, M. and Paganelli, M. and Vedani, P. and Ceriani, V. and Angeletti, M. G. and Autelitano, M. and d'Oro, L. C. and Berni, P. and Russo, A. G.	mean age <55; not medicare eligible
27686234	Prospective Comparison and Quality of Life for Single-Incision and Conventional Laparoscopic Sleeve Gastrectomy in a Series of Morbidly Obese Patients	Obes Surg	Porta, A.	mean age <55; not medicare eligible
18327626	Bowel habits after bariatric surgery	Obes Surg	Potoczna, N.	mean age <55; not medicare eligible
0	Remission of type 2 diabetes after gastric bypass and banding: Mechanisms and 2 year outcomes	Annals of Surgery	Pournaras, D. J.	mean age <55; not medicare eligible
0	Effect of the definition of type II diabetes remission in the evaluation of bariatric surgery for metabolic disorders	British Journal of Surgery	Pournaras, D. J. and Aasheim, E. T. and SÅvik, T. T. and Andrews, R. and Mahon, D. and Welbourn, R. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Olbers, T. and Le Roux, C. W.	
0	Gastrointestinal quality of life after laparoscopic Roux-en-Y gastric bypass	Obesity Surgery	Poves, I. and Cabrera, M. and Maristany, C. and Coma, A. and Ballesta-López, C.	mean age <55; not medicare eligible
22030148	Is biliopancreatic diversion with duodenal switch a solution for patients after laparoscopic gastric banding failure?	Surg Obes Relat Dis	Poyck, P. P.	mean age <55; not medicare eligible
0	Duodenal switch provides superior weight loss in the super-obese (BMI ≥50kg/m2) compared with gastric bypass	Annals of Surgery	Prachand, V. N.	mean age <55; not medicare eligible
26506567	Hospital variation in perioperative complications for laparoscopic sleeve gastrectomy in Michigan	Surgery	Pradarelli, J. C., Varban, O. A., Ghaferi, A. A., Weiner, M., Carlin, A. M., Dimick, J. B.	mean age <55; not medicare eligible
21870050	Is laparoscopic duodenojejunal bypass with sleeve an effective alternative to Roux en Y gastric bypass in morbidly obese patients: preliminary results of a randomized trial	Obes Surg	Praveen Raj, P. and Kumaravel, R. and Chandramaliteeswaran, C. and Rajpandian, S. and Palanivelu, C.	mean age <55; not medicare eligible
0	The effect of surgically induced weight loss on nonalcoholic fatty liver disease in morbidly obese Indians: 'nASHOST' prospective observational trial	Surgery for Obesity and Related Diseases	Praveen Raj, P., Gomes, R. M., Kumar, S., Senthilnathan, P., Karthikeyan, P., Shankar, A., Palanivelu, C.	mean age <55; not medicare eligible
24927692	Coronary calcium scores 6 years after bariatric surgery	Obes Surg	Priester, T., Ault, T. G., Davidson, L., Gress, R., Adams, T. D., Hunt, S. C., Litwin, S. E.	mean age <55; not medicare eligible
CN-01098598	Roux-en-Y gastric bypass produces superior 2-year weight-loss outcomes compared to sleeve gastrectomy in severely obese patients with type 2 diabetes: Results from a singlecentre	Obesity surgery	Pucci, A	Abstract only
27289123	Type 2 Diabetes Remission Rates After Laparoscopic Gastric Bypass and Gastric Banding: Results of the Longitudinal Assessment of Bariatric Surgery Study	Diabetes Care	Purnell, J. Q.	mean age <55; not medicare eligible
24380645	Metabolic syndrome prevalence and associations in a bariatric surgery cohort from	Metab Syndr Relat Disord	Purnell, J. Q. and Selzer, F. and Smith, M. D. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	the Longitudinal Assessment of Bariatric Surgery-2 study		Berk, P. D. and Courcoulas, A. P. and Inabnet, W. B. and King, W. C. and Pender, J. and Pomp, A. and Raum, W. J. and Schrope, B. and Steffen, K. J. and Wolfe, B. M. and Patterson, E. J.	
DARE-12014055493	Long-term follow-up after bariatric surgery: a systematic review (Provisional abstract)	Database of Abstracts of Reviews of Effects	Puzziferri, N and Roshek, Tb and Mayo, Hg and Gallagher, R and Belle, Sh and Livingston, Eh	No primary data
16432350	Three-year follow-up of a prospective randomized trial comparing laparoscopic versus open gastric bypass	Ann Surg	Puzziferri, N.	mean age <55; not medicare eligible
18650633	Variations of weight loss following gastric bypass and gastric band	Ann Surg	Puzziferri, N.	mean age <55; not medicare eligible
27706459	LONG-TERM POSTOPERATIVE ENDOSCOPIC FINDINGS AFTER GASTRIC BYPASS PROCEDURE: a co-occurrence analysis	Arq Gastroenterol	Quadros, L. G., Kaiser, R. L. Junior, Galvao, M. D. Neto, Campos, J. M., Santana, M. F., Ferraz, A. A.	mean age <55; not medicare eligible
27521255	Laparoscopic sleeve gastrectomy conversion to Roux-en-Y gastric bypass: experience in 50 patients after 1 to 3 years of follow-up	Surg Obes Relat Dis	Quezada, N.	mean age <55; not medicare eligible
20702147	Revisional bariatric surgery: who, what, where, and when?	Surg Obes Relat Dis	Radtka, J. F., 3rd	mean age <55; not medicare eligible
0	Bariatric surgery is associated with a significant reduction in 10-year cardiovascular risk	Bariatric Surgical Practice and Patient Care	Radwan, R. and Al-Momani, H. and Eyre, N. and Stephens, J. W. and Caplin, S. and Barry, J. D.	mean age <55; not medicare eligible
23979288	Effect of gastric bypass versus diet on cardiovascular risk factors	Ann Surg	Raffaelli, M.	mean age <55; not medicare eligible
27842762	[Evolution of type 2 diabetes and carbohydrate intolerance following bariatric surgery in a Mexican mestizo population]	Cir Cir	Ramirez-Aviles, E.	mean age <55; not medicare eligible
22402955	Effect of Roux-en-Y gastric bypass vs sleeve gastrectomy on glucose and gut hormones: a prospective randomised trial	J Gastrointest Surg	Ramon, J. M.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
22196519	[Quality of food intake after bariatric surgery: vertical gastrectomy versus gastric bypass]	Cir Esp	Ramon, J. M. and Gonzalez, C. G. and Dorcaratto, D. and Goday, A. and Benaiges, D. and Gonzalez, S. and Pera, M. and Grande, L.	mean age <55; not medicare eligible
0	Diagnosis of diabetes remission after bariatric surgery may be jeopardized by remission criteria and previous hypoglycemic treatment	Obesity Surgery	Ramos-Levi, A. and Sanchez-Pernaute, A. and Matia, P. and Cabrerizo, L. and Barabash, A. and Hernandez, C. and Calle-Pascual, A. and Torres, A. and Rubio, M.	mean age <55; not medicare eligible
25566743	Health-Related Quality-of-Life (HRQoL) on an Average of 12 Years After Gastric Bypass Surgery	Obes Surg	Raouf, M. and Naslund, I. and Rask, E. and Karlsson, J. and Sundbom, M. and Edholm, D. and Karlsson, F. A. and Svensson, F. and Szabo, E.	mean age <55; not medicare eligible
0	Effect of Bariatric Surgery-Induced Weight Loss on Platelet Count and Mean Platelet Volume: a 12-Month Follow-Up Study	Obesity Surgery	Raoux, L. and Moszkowicz, D. and Vychnevskaya, K. and Poghosyan, T. and Beauchet, A. and Clauser, S. and Bretault, M. and Czernichow, S. and Carette, C. and Bouillot, J. L.	mean age <55; not medicare eligible
0	Sleeve gastrectomy: 5-year outcomes of a single institution	Surgery for Obesity and Related Diseases	Rawlins, L.	single arm study n<50
20676689	Gastroesophageal reflux disease and esophageal motility in morbidly obese patients submitted to laparoscopic adjustable silicone gastric banding or laparoscopic vertical banded gastroplasty	Surg Endosc	Rebecchi, F. and Rocchietto, S. and Giaccone, C. and Talha, A. and Morino, M.	mean age <55; not medicare eligible
0	Does longitudinal sleeve gastrectomy have a family 'halo effect'? A case-matched study	Surgical Endoscopy and Other Interventional Techniques	Rebibo, L. and Verhaeghe, P. and Cosse, C. and Dhahri, A. and MarÃ©chal, V. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Regimbeau, J. M.	
0	The effects of bariatric surgery on asthma severity	Obesity Surgery	Reddy, R. C. and Baptist, A. P. and Fan, Z. and Carlin, A. M. and Birkmeyer, N. J. O.	mean age <55; not medicare eligible
26490082	Efficacy and acceptability of very low energy diets in overweight and obese people with Type 2 diabetes mellitus: a systematic review with meta-analyses	Diabet Med	Rehackova, L., Arnott, B., Araujo-Soares, V., Adamson, A. A., Taylor, R., Sniehotta, F. F.	No primary data
0	The effect of bariatric surgery on renal function	Surgery for Obesity and Related Diseases	Reid, T. J. and Saeed, S. and McCoy, S. and Osewa, A. A. and Persaud, A. and Ahmed, L.	mean age <55; not medicare eligible
0	Bariatric surgery in obese older people: Useful or not?	Cardiovascular Endocrinology	Reijntjes, S. J. and Viljoen, A. and Wierzbicki, A. S. and Hardman, T. C.	No primary data
CN-00772115	Erectile dysfunction and hormonal imbalance in morbidly obese male is reversed after gastric bypass surgery: a prospective randomized controlled trial	International journal of andrology	Reis, Lo and Favaro, Wj and Barreiro, Gc and Oliveira, Lc and Chaim, Ea and Fregonesi, A and Ferreira, U	Abstract only
DARE-12011007457	Safety of laparoscopic vs open bariatric surgery: a systematic review and meta-analysis (Structured abstract)	Archives of Surgery	Reoch, J and Mottillo, S and Shimony, A and Filion, Kb and Christou, Nv and Joseph, L and Poirier, P and Eisenberg, Mj	No primary data
26699417	Esophageal reconstruction by colon interposition after esophagectomy for cancer analysis of current indications, operative outcomes, and long-term survival	J Surg Oncol	Reslinger, V., Tranchart, H., D'Annunzio, E., Poghosyan, T., Quero, L., Munoz-Bongrand, N., Corte, H., Sarfati, E., Cattani, P., Chirica, M.	Not about bariatric surgery
DARE-12014001109	Diabetes and weight in comparative studies of bariatric surgery vs conventional medical therapy: a systematic review and meta-analysis (Provisional abstract)	Obesity Surgery	Ribaric, G and Buchwald, Jn and McGlennon, Tw	No primary data
20922498	NAFLD and insulin resistance do not increase the risk of postoperative complications among patients undergoing bariatric surgery--a	Obes Surg	Ribeiro, T.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	prospective analysis			
DARE-12013066676	Early impact of bariatric surgery on type II diabetes, hypertension, and hyperlipidemia: a systematic review, meta-analysis and meta-regression on 6,587 patients (Provisional abstract)	Obesity Surgery	Ricci, C and Gaeta, M and Rausa, E and Macchitella, Y and Bonavina, L	No primary data
0	Outcomes after open versus laparoscopic gastric bypass	Surgical Laparoscopy, Endoscopy and Percutaneous Techniques	Ricciardi, R.	mean age <55; not medicare eligible
27338582	Early discharge in the bariatric population does not increase post-discharge resource utilization	Surg Endosc	Rickey, J. and Gersin, K. and Yang, W. and Stefanidis, D. and Kuwada, T.	mean age <55; not medicare eligible
25650964	Five-year outcomes after laparoscopic gastric bypass and laparoscopic duodenal switch in patients with body mass index of 50 to 60: a randomized clinical trial	JAMA Surg	Risstad, H.	mean age <55; not medicare eligible
15811137	Metabolic risk factors in formerly obese women--effects of a pronounced weight loss by gastric band operation compared with weight loss by diet alone	Diabetes Obes Metab	Ritt, M.	mean age <55; not medicare eligible
24752618	Gastric bypass for obesity in the elderly: is it as appropriate as for young and middle-aged populations?	Obes Surg	Robert	single arm study n<50
0	Should metabolic surgery be offered in morbidly obese patients with type i diabetes?	Surgery for Obesity and Related Diseases	Robert, M.	mean age <55; not medicare eligible
0	Predictive factors of type 2 diabetes remission 1 year after bariatric surgery: Impact of surgical techniques	Obesity Surgery	Robert, M.	mean age <55; not medicare eligible
0	Preoperative fat-free mass: A predictive factor of weight loss after gastric bypass	Obesity Surgery	Robert, M.	mean age <55; not medicare eligible
0	Impact of sleeve gastrectomy volumes on weight loss results: a prospective study	Surgery for Obesity and Related Diseases	Robert, M., Pasquer, A., Pelascini, E., Valette, P. J., Gouillat, C., Disse, E.	mean age <55; not medicare eligible
25500226	Relevance of Roux-en-Y gastric bypass volumetry using 3-dimensional gastric computed tomography with gas to predict weight loss at 1 year	Surg Obes Relat Dis	Robert, M., Pechoux, A., Marion, D., Laville, M., Gouillat, C., Disse, E.	mean age <55; not medicare eligible
25110331	Bone mineral density after bariatric surgery. A systematic review	Int J Surg	Rodriguez-Carmona, Y.	mean age <55; not medicare eligible
24817374	Laparoscopic bariatric surgery can be performed through a single incision: a	Obes Surg	Rogula, T. and Daigle, C. and Dua, M. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	comparative study		Shimizu, H. and Davis, J. and Lavryk, O. and Aminian, A. and Schauer, P.	
0	C-reactive protein level in morbidly obese patients before and after bariatric surgery	Revista de gastroenterologÃa de MÃ©xico	Rojano-RodrÃguez, M. E., Valenzuela-Salazar, C., CÃ¡rdenas-Lailson, L. E., Romero Loera, L. S., Torres-Olalde, M., Moreno-Portillo, M.	mean age <55; not medicare eligible
0	Laparoscopic Roux-en-Y gastric bypass in patients with body mass index >70 kg/m2	Surgery for Obesity and Related Diseases	Roland, J. C. and Needleman, B. J. and Muscarella, P. and Cook, C. H. and Narula, V. K. and Mikami, D. J.	mean age <55; not medicare eligible
CN-00899162	Cardiovascular events after bariatric surgery in obese subjects with type 2 diabetes	Diabetes care	Romeo, S	mean age <55; not medicare eligible
0	Psoriasis improvement after bariatric surgery	Surgery for Obesity and Related Diseases	Romero-TalamÃ¡s, H.	mean age <55; not medicare eligible
0	The effect of bariatric surgery on gout: A comparative study	Surgery for Obesity and Related Diseases	Romero-TalamÃ¡s, H.	mean age <55; not medicare eligible
26686304	Comprehensive evaluation of the effect of bariatric surgery on pelvic floor disorders	Surg Obes Relat Dis	Romero-Talamas, H., Unger, C. A., Aminian, A., Schauer, P. R., Barber, M., Brethauer, S.	mean age <55; not medicare eligible
0	Sexual hormones and erectile function more than 6 years after bariatric surgery	Surgery for Obesity and Related Diseases	Rosenblatt, A. and Faintuch, J. and Ceconello, I.	mean age <55; not medicare eligible
24018763	Response to glucose tolerance testing and solid high carbohydrate challenge: comparison between Roux-en-Y gastric bypass, vertical sleeve gastrectomy, and duodenal switch	Surg Endosc	Roslin, M. S.	mean age <55; not medicare eligible
22684853	Comparison between RYGB, DS, and VSG effect on glucose homeostasis	Obes Surg	Roslin, M. S.	mean age <55; not medicare eligible
18521699	Ghrelin and obestatin levels in severely obese women before and after weight loss after Roux-en-Y gastric bypass surgery	Obes Surg	Roth, C. L.	mean age <55; not medicare eligible
27126622	Outcome of bariatric surgery in patients with type 1 diabetes mellitus: our experience and review of the literature	Surg Endosc	Rottenstreich, A.	No primary data
27444858	Abdominal thrombotic complications following bariatric surgery	Surg Obes Relat Dis	Rottenstreich, A. and Elazary, R. and Kalish,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Y.	
27814663	Change in fracture risk and fracture pattern after bariatric surgery: nested case-control study	Bmj	Rousseau, C. and Jean, S. and Gamache, P. and Lebel, S. and Mac-Way, F. and Biertho, L. and Michou, L. and Gagnon, C.	mean age <55; not medicare eligible
0	The Risk-Stratified Osteoporosis Strategy Evaluation study (ROSE): A Randomized Prospective Population-Based Study. Design and Baseline Characteristics	Calcified Tissue International	Rubin, K. H., Holmberg, T., Rothmann, M. J., HÅ,iberg, M., Barkmann, R., Gram, J., Hermann, A. P., Bech, M., Rasmussen, O., GlÅ¼er, C. C., Brixen, K.	Not about bariatric surgery
2002-15630-010	Cambios psicolÃ³gicos tras cirugÃa bariÅtrica en personas con obesidad mÃrbida. = Psychological effects of bariatric surgery on subjects with morbid obesity	Psicothema	Ruiz Moreno, Modesto A. and Berrocal Montiel, Carmen and Valero Aguayo, Luis	mean age <55; not medicare eligible
25385417	Laparoscopic sleeve gastrectomy prevents the deterioration of renal function in morbidly obese patients over 40 years	Obes Surg	Ruiz-Tovar, J., Giner, L., Sarro-Sobrin, F., Alsina, M. E., Marco, M. P., Craver, L.	mean age <55; not medicare eligible
26153469	Long-term Weight and Metabolic Effects of Laparoscopic Sleeve Gastrectomy Calibrated with a 50-Fr Bougie	Obes Surg	Ruiz-Tovar, J., Martinez, R., Bonete, J. M., Rico, J. M., Zubiaga, L., Diez, M., Llaverro, C.	mean age <55; not medicare eligible
0	Downgrading of Type 2 Diabetes Mellitus (T2DM) after Obesity Surgery: Duration and Severity Matter	Obesity Surgery	Runkel, M.	mean age <55; not medicare eligible
0	Psychiatric factors and weight loss patterns following gastric bypass surgery in a veteran population	Obesity Surgery	Rutledge, T.	mean age <55; not medicare eligible
22952172	Heme- and nonheme-iron absorption and iron status 12 mo after sleeve gastrectomy and Roux-en-Y gastric bypass in morbidly obese women	Am J Clin Nutr	Ruz, M. and Carrasco, F. and Rojas, P. and Codoceo, J. and Inostroza, J. and Basfi-Fer, K. and Valencia, A. and Csendes, A. and Papapietro, K. and Pizarro, F. and Olivares, M. and Westcott, J. L. and Hambidge, K. M.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			and Krebs, N. F.	
12764217	Coping and distress: what happens after intervention? A 2-year follow-up from the Swedish Obese Subjects (SOS) study	Psychosom Med	Ryden, A. and Karlsson, J. and Sullivan, M. and Torgerson, J. S. and Taft, C.	mean age <55; not medicare eligible
26048517	Single-anastomosis duodenoileal bypass with sleeve gastrectomy (SADI-S) for obese diabetic patients	Surgery for Obesity and Related Diseases	Sánchez-Pernaute, A., Rubio, M. Á L., Ramos-Leví, A., Páez-Aguirre, E., Torres, A.	mean age <55; not medicare eligible
19902316	Two-year results on morbidity, weight loss and quality of life of sleeve gastrectomy as first procedure, sleeve gastrectomy after failure of gastric banding and gastric banding	Obes Surg	Sabbagh, C. and Verhaeghe, P. and Dhahri, A. and Brehant, O. and Fuks, D. and Badaoui, R. and Regimbeau, J. M.	mean age <55; not medicare eligible
24442423	Predictors of weight loss at 1 year after laparoscopic adjustable gastric banding and the role of presurgical quality of life	Obes Surg	Saboor Aftab, S. A.	mean age <55; not medicare eligible
26259981	FGF 19 and Bile Acids Increase Following Roux-en-Y Gastric Bypass but Not After Medical Management in Patients with Type 2 Diabetes	Obes Surg	Sachdev, S. and Wang, Q. and Billington, C. and Connett, J. and Ahmed, L. and Inabnet, W. and Chua, S. and Ikramuddin, S. and Korner, J.	mean age <55; not medicare eligible
CN-01130511	Comparison 2 year follow up result of sleeve gastrectomy (SG) and gastric plication (Prospective clinical trial)	Obesity surgery	Sadid, D	Abstract only
0	Dexamethasone-suppressed corticotropin-releasing hormone stimulation test in morbid obese adults	Obesity Research and Clinical Practice	Saiegh, L., Keren, D., Rainis, T., Sheikh-Ahmad, M., Reut, M., Nakhleh, A., Wirsansky, I., Chen-Konak, L., Schiff, E., Shechner, C.	mean age <55; not medicare eligible
22398110	Evaluation of nutrient status after laparoscopic sleeve gastrectomy 1, 3, and 5 years after surgery	Surg Obes Relat Dis	Saif, T. and Strain, G. W. and Dakin, G. and Gagner, M. and Costa, R. and Pomp, A.	mean age <55; not medicare eligible
0	Body mass index as a predictor of postoperative complications in loop ileostomy closure after rectal resection in japanese	Hiroshima Journal of Medical Sciences	Saito, Y., Takakura, Y., Hinop, T., Egg, H., Tashiro, H., Ohdan, H.	Not about bariatric surgery

ID	Title	Journal	Authors	Reason for Exclusion
	patients			
25229900	Perception of quality of life of a group of individuals subjected to bariatric surgery	Invest Educ Enferm	Salazar-Maya, A. M. and Hoyos-Duque, T. N. and Bojanini-Acevedo, L.	mean age <55; not medicare eligible
27730102	Outcomes the Ontario Bariatric Network: a cohort study	CMAJ Open	Saleh, F. and Doumouras, A. G. and Gmora, S. and Anvari, M. and Hong, D.	mean age <55; not medicare eligible
25924695	Periodontal status and pathogenic bacteria after gastric bypass: a cohort study	J Clin Periodontol	Sales-Peres, S. H., de Moura-Grec, P. G., Yamashita, J. M., Torres, E. A., Dionisio, T. J., Leite, C. V., Sales-Peres, A., Ceneviva, R.	mean age <55; not medicare eligible
HTA-32008100180	Effectiveness and safety of intragastric balloon for the management of obese and overweight patients. Systematic review and case registry (Structured abstract)	Health Technology Assessment Database	Salgado, Barreira A and Queiro, Verdes Mt	Abstract only
0	Zinc deficiency: A frequent and underestimated complication after bariatric surgery	Obesity Surgery	Sall��, A. and Demarsy, D. and Poirier, A. L. and Leli��vre, B. and Topart, P. and Guilloteau, G. and B��couarn, G. and Rohmer, V.	mean age <55; not medicare eligible
0	Safety and efficacy of single-stage conversion of failed adjustable gastric band to laparoscopic Roux-en-Y gastric bypass: a case��control study	Surgical Endoscopy and Other Interventional Techniques	Samakar, K., McKenzie, T. J., Kaberna, J., Tavakkoli, A., Vernon, A. H., Madenci, A. L., Shikora, S. A., Robinson, M. K.	mean age <55; not medicare eligible
0	The Effect of Laparoscopic Sleeve Gastrectomy with Concomitant Hiatal Hernia Repair on Gastroesophageal Reflux Disease in the Morbidly Obese	Obesity Surgery	Samakar, K., McKenzie, T. J., Tavakkoli, A., Vernon, A. H., Robinson, M. K., Shikora, S. A.	mean age <55; not medicare eligible
15329183	The impact of weight reduction surgery on health-care costs in morbidly obese patients	Obes Surg	Sampalis, J. S. and Liberman, M. and Auger, S. and Christou, N. V.	mean age <55; not medicare eligible
0	Impact of bariatric surgery on cardiovascular and musculoskeletal morbidity	Surgery for Obesity and Related Diseases	Sampalis, J. S. and Sampalis, F. and Christou, N.	mean age <55; not medicare eligible
16687025	Long-term health-related quality of life following gastric bypass: influence of	Obes Surg	Sanchez-Santos, R.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	depression			
25115863	Postoperative complications in bariatric surgery using age and BMI stratification: a study using ACS-NSQIP data	Surg Endosc	Sanni, A.	mean age <55; not medicare eligible
0	Effect of bariatric surgery on weight loss, inflammation, iron metabolism, and lipid profile	Scandinavian journal of surgery : SJS : official organ for the Finnish Surgical Society and the Scandinavian Surgical Society	Santos, J., Salgado, P., Santos, C., Mendes, P., Saavedra, J., Baldaque, P., Monteiro, L., Costa, E.	mean age <55; not medicare eligible
19083071	Association of carotid intima-media thickness and cardiovascular risk factors in women pre- and post-bariatric surgery	Obes Surg	Sarmento, P. L. and Plavnik, F. L. and Zanella, M. T. and Pinto, P. E. and Miranda, R. B. and Ajzen, S. A.	mean age <55; not medicare eligible
22551576	A pilot study investigating the efficacy of postoperative dietary counseling to improve outcomes after bariatric surgery	Surg Obes Relat Dis	Sarwer, D. B.	mean age <55; not medicare eligible
24190440	Changes in sexual functioning and sex hormone levels in women following bariatric surgery	JAMA Surg	Sarwer, D. B.	mean age <55; not medicare eligible
25868832	Sexual functioning and sex hormones in men who underwent bariatric surgery	Surg Obes Relat Dis	Sarwer, D. B., Spitzer, J. C., Wadden, T. A., Rosen, R. C., Mitchell, J. E., Lancaster, K., Courcoulas, A., Gourash, W., Christian, N. J.	mean age <55; not medicare eligible
0	Six and 12 weeks of caloric restriction increases β^2 cell function and lowers fasting and postprandial glucose concentrations in people with type 2 diabetes	Journal of Nutrition	Sathananthan, M., Shah, M., Edens, K. L., Grothe, K. B., Piccinini, F., Farrugia, L. P., Micheletto, F., Man, C. D., Cobelli, C., Rizza, R. A., Camilleri, M., Vella, A.	N < 10 per arm
CN-01126763	Effects of bariatric surgery on long-term quality of life outcomes for obese patients with osteoarthritis	Arthritis and Rheumatology	Satpute, A	Abstract only
0	Bariatric surgery history among substance abuse treatment patients: Prevalence and associated features	Surgery for Obesity and Related Diseases	Saules, K. K. and Wiedemann, A. and Ivezaj, V. and Hopper, J. A. and Foster-Hartsfield, J. and Schwarz, D.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
22746302	Vitamin, mineral, and drug absorption following bariatric surgery	Curr Drug Metab	Sawaya, R. A. and Jaffe, J. and Friedenberg, L. and Friedenberg, F. K.	No primary data
0	Report on bariatric surgery in the Ukraine	Obesity Surgery	Sayenko, V. F.	mean age <55; not medicare eligible
DARE-12014032942	Incidence of cancer following bariatric surgery: systematic review and meta-analysis (Provisional abstract)	Database of Abstracts of Reviews of Effects	Schaan, Casagrande D and Dornelles, Rosa D and Umpierre, D and Aguiar, Sarmento R and Garcia, Rodrigues C and Schaan, Bd	No primary data
115983152. Language:	The Role of Managed Care Organizations in Obesity Management	American Journal of Managed Care	Schaecher, Kenneth L.	No primary data
25640580	Intestinal Calcium Absorption Decreases Dramatically After Gastric Bypass Surgery Despite Optimization of Vitamin D Status	J Bone Miner Res	Schafer, A. L., Weaver, C. M., Black, D. M., Wheeler, A. L., Chang, H., Szefc, G. V., Stewart, L., Rogers, S. J., Carter, J. T., Posselt, A. M., Shoback, D. M., Sellmeyer, D. E.	mean age <55; not medicare eligible
0	The impact of impulsivity on weight loss four years after bariatric surgery	Nutrients	Schag, K., Mack, I., Giel, K. E., Å–IschlÅ–ger, S., Skoda, E. M., von Feilitzsch, M., Zipfel, S., Teufel, M.	mean age <55; not medicare eligible
24679060	Bariatric surgery versus intensive medical therapy for diabetes--3-year outcomes	N Engl J Med	Schauer, P. R.	mean age <55; not medicare eligible
22449319	Bariatric surgery versus intensive medical therapy in obese patients with diabetes	N Engl J Med	Schauer, P. R.	mean age <55; not medicare eligible
106922471. Language:	Bariatric surgery for treatment of sleep apnea syndrome in 15 morbidly obese patients: long-term results	Otolaryngology-Head & Neck Surgery	Scheuller, M. and Weider, D.	mean age <55; not medicare eligible
25200559	Effects of gastric bypass surgery in patients with hypertension: rationale and design for a randomised controlled trial (GATEWAY study)	BMJ Open	Schiavon, C. A. and Ikeoka, D. T. and de Sousa, M. G. and Silva, C. R. and Bersch-Ferreira, A. C. and de Oliveira, J. D. and Noujaim, P. M. and Cohen, R. V. and Amodeo, C. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Berwanger, O.	
CN-01065121	The effect of Roux-en-Y gastric bypass surgery on energy expenditure and Appetite: A Randomized Human Study including 'Pair fed' control subjects	Obesity facts	Schmidt, Jbs and Gregersen, Ntg and Pedersen, Sp and Nielsen, Msn and Nielsen, Lvn and Holst, Jjh and Hansen, Dlh and Dorm, Dw and Madsbad, Sm and Clausen, Trc and Ritz, Cr and Astrup, Aa and Sjodin, As	Abstract only
26656669	Laparoscopic sleeve gastrectomy and Roux-en-Y gastric bypass lead to equal changes in body composition and energy metabolism 17 months postoperatively: a prospective randomized trial	Surg Obes Relat Dis	Schneider, J.	mean age <55; not medicare eligible
25502068	Markers of Bone Metabolism in Obese Individuals Undergoing Laparoscopic Sleeve Gastrectomy	Obes Surg	Schollenberger, A. E., Heinze, J. M., Meile, T., Peter, A., Konigsrainer, A., Bischoff, S. C.	mean age <55; not medicare eligible
20563663	Long-term results of bariatric restrictive procedures: a prospective study	Obes Surg	Schouten, R.	mean age <55; not medicare eligible
21221834	Influence of reoperations on long-term quality of life after restrictive procedures: a prospective study	Obes Surg	Schouten, R.	mean age <55; not medicare eligible
18214630	Changes in depression following gastric banding: a 5- to 7-year prospective study	Obes Surg	Schowalter, M.	mean age <55; not medicare eligible
104540671. Language:	Laparoscopyâ€assisted versus balloon enteroscopyâ€assisted ERCP in bariatric postâ€Roux-en-Y gastric bypass patients	Gastrointestinal Endoscopy	Schreiner, Mitchal A. and Chang, Lily and Gluck, Michael and Irani, Shayan and Gan, S. Ian and Brandabur, John J. and Thirlby, Richard and Moonka, Ravi and Kozarek, Richard A. and Ross, Andrew S.	mean age <55; not medicare eligible
111924395. Language:	Treatment of Adult Obesity with Bariatric Surgery	American Family Physician	Schroeder, Robin, Harrison, T. Daniel, McGraw, Shaniqua L.	mean age <55; not medicare eligible
0	Effect of bariatric surgery on normal and abnormal renal function	Surgery for Obesity and Related Diseases	Schuster, D. P. and Teodorescu, M. and Mikami, D. and Foreman,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			K. and Rogers, P. and Needleman, B. J.	
20680506	Effect of different bariatric operations on food tolerance and quality of eating	Obes Surg	Schweiger, C.	mean age <55; not medicare eligible
19513797	Laparoscopic adjustable silicone gastric banding vs laparoscopic vertical banded gastroplasty in morbidly obese patients: long-term results of a prospective randomized controlled clinical trial	Obes Surg	Scozzari, G.	mean age <55; not medicare eligible
25394587	Comparability of weight loss reporting after gastric bypass and sleeve gastrectomy using BOLD data 2008-2011	Obes Surg	Sczepaniak, J. P. and Owens, M. L. and Shukla, H. and Perlegos, J. and Garner, W.	mean age <55; not medicare eligible
27718176	LSG vs OAGB-1 Year Follow-up Data-a Randomized Control Trial	Obes Surg	Seetharamaiah, S.	mean age <55; not medicare eligible
0	Comparative physiogenomic analyses of weight loss in response to 2 modes of bariatric surgery: Demonstration with candidate neuropsychiatric and cardiometabolic genes	Surgery for Obesity and Related Diseases	Seip, R. L.	mean age <55; not medicare eligible
0	A comparison of 399 open and 568 laparoscopic gastric bypasses performed during a 4-year period	Surgical Endoscopy and Other Interventional Techniques	Sekhar, N. and Torquati, A. and Youssef, Y. and Wright, J. K. and Richards, W. O.	mean age <55; not medicare eligible
0	Five-Year-Results of Laparoscopic Sleeve Gastrectomy with Duodenojejunal Bypass for Weight Loss and Type 2 Diabetes Mellitus	Obesity Surgery	Seki, Y.	mean age <55; not medicare eligible
21082559	Current status of laparoscopic bariatric surgery	Surg Technol Int	Seki, Y. and Kasama, K.	No primary data
25986429	Long-Term Outcome of Laparoscopic Sleeve Gastrectomy in Morbidly Obese Japanese Patients	Obes Surg	Seki, Y., Kasama, K., Hashimoto, K.	mean age <55; not medicare eligible
0	Laparoscopic Sleeve Gastrectomy with Duodenojejunal Bypass for Type 2 Diabetes Mellitus	Obesity Surgery	Seki, Y., Kasama, K., Umezawa, A., Kurokawa, Y.	mean age <55; not medicare eligible
20189470	Mood disorders in laparoscopic sleeve gastrectomy patients: does it affect early weight loss?	Surg Obes Relat Dis	Semanscin-Doerr, D. A.	mean age <55; not medicare eligible
19683804	The effect of gastric banding on kidney stone disease	Urology	Semins, M. J. and Matlaga, B. R. and Shore, A. D. and Steele, K. and Magnuson, T. and Johns, R. and Makary,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			M. A.	
0	The longitudinal trajectory of post-surgical % total weight loss among middle-aged women who had undergone bariatric surgery	Preventive Medicine Reports	Seo, D. C., Lee, C. G., Torabi, M. R., Lohrmann, D. K.	mean age <55; not medicare eligible
26304105	Weight loss outcomes and complications from bariatric surgery in the super super obese	Surg Endosc	Serrano, O. K.	mean age <55; not medicare eligible
0	Excess Weight Loss and Cardiometabolic Parameter Reduction Diminished among Hispanics Undergoing Bariatric Surgery: Outcomes in More than 2,000 Consecutive Hispanic Patients at a Single Institution	Journal of the American College of Surgeons	Serrano, O. K.	mean age <55; not medicare eligible
27425842	Long-term outcomes after biliopancreatic diversion with and without duodenal switch: 2-, 5-, and 10-year data	Surg Obes Relat Dis	Sethi, M.	mean age <55; not medicare eligible
0	Previous weight loss as a predictor of weight loss outcomes after laparoscopic adjustable gastric banding	Surgical Endoscopy and Other Interventional Techniques	Sethi, M.	mean age <55; not medicare eligible
2016-46081-026	Food addiction and the outcome of bariatric surgery at 1-year: Prospective observational study	Psychiatry Research	SevinÅşer, GÅ¼zin Mukaddes, Konuk, Numan, Bozkurt, SÅ¼leyman, CoÅkun, Halil	mean age <55; not medicare eligible
0	LONG-TERM, SUSTAINED, LIFESTYLE-INDUCED WEIGHT LOSS IN SEVERE OBESITY: THE GET-ReAL PROGRAM	Endocrine practice : official journal of the American College of Endocrinology and the American Association of Clinical Endocrinologists	Shadid, S., Jakob, R. C., Jensen, M. D.	mean age <55; not medicare eligible
0	Long-term effects of laparoscopic Roux-en-Y gastric bypass on metabolic syndrome in patients with morbid obesity	Surgery for Obesity and Related Diseases	Shah, K., Johnny Nergard, B., Stray Frazier, K., Geir Leifsson, B., Aghajani, E., Gislason, H.	mean age <55; not medicare eligible
16954156	Review: long-term impact of bariatric surgery on body weight, comorbidities, and nutritional status	J Clin Endocrinol Metab	Shah, M.	No primary data
0	Weight loss after bariatric surgery: A propensity score analysis	Journal of Surgical Research	Shah, N.	mean age <55; not medicare eligible
0	Surgical Elimination of the Gastric Digestion by Roux-en-Y Gastric Bypass Impacts on Food Sensitisationâ€™a Pilot Study	Obesity Surgery	Shakeri-LeidenmÅ¼hler, S., Lukschal, A., Schultz, C., Bohdjalian, A., Langer, F., Birsan, T., Diesner, S. C.,	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Greisenegger, E. K., Scheiner, O., Kopp, T., Jensen-Jarolim, E., Prager, G., Untersmayr, E.	
25428511	Randomized double-blinded trial of laparoscopic gastric imbrication v laparoscopic sleeve gastrectomy at a single Indian institution	Obes Surg	Sharma, S	mean age <55; not medicare eligible
23443480	Comparison of short-term outcomes between laparoscopic greater curvature plication and laparoscopic sleeve gastrectomy	Surg Endosc	Shen, D.	mean age <55; not medicare eligible
25638595	Long-term complications requiring reoperations after laparoscopic adjustable gastric banding: a systematic review	Surg Obes Relat Dis	Shen, X.	No primary data
26421248	Does Preoperative Weight Change Predict Postoperative Weight Loss After Laparoscopic Sleeve Gastrectomy?	Bariatr Surg Pract Patient Care	Sherman, W. E.	mean age <55; not medicare eligible
0	Implantable gastric stimulation for the treatment of clinically severe obesity: results of the SHAPE trial	Surgery for Obesity and Related Diseases	Shikora, S. A. and Bergenstal, R. and Bessler, M. and Brody, F. and Foster, G. and Frank, A. and Gold, M. and Klein, S. and Kushner, R. and Sarwer, D. B.	mean age <55; not medicare eligible
CN-00560273	'What are the yanks doing?' the U.S. experience with implantable gastric stimulation (IGS) for the treatment of obesity - update on the ongoing clinical trials	Obesity surgery	Shikora, Sa	mean age <55; not medicare eligible
112946043. Language:	Bariatric Surgery and Emergency Department Visits and Hospitalizations for Heart Failure Exacerbation: Population-Based, Self-Controlled Series	Journal of the American College of Cardiology (JACC)	Shimada, Yuichi J., Tsugawa, Yusuke, Brown, David F. M., Hasegawa, Kohei	mean age <55; not medicare eligible
0	Revisional bariatric surgery for unsuccessful weight loss and complications	Obesity Surgery	Shimizu, H.	mean age <55; not medicare eligible
0	Long-term reflux-related symptoms after bariatric surgery: Comparison of sleeve gastrectomy versus laparoscopic adjustable gastric banding	Lung	Shitrit, A. B. G.	mean age <55; not medicare eligible
CN-00623018	Effect of laparoscopic versus open gastric bypass surgery on postoperative pain and	Obesity surgery	Shobary, H	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	bowel function			
22551575	Medical versus surgical treatment of type 2 diabetes: the search for level 1 evidence	Surg Obes Relat Dis	Shukla, A. P. and Moreira, M. and Dakin, G. and Pomp, A. and Brillon, D. and Sinha, N. and Strain, G. W. and Lebovitz, H. and Rubino, F.	No primary data
0	Five-year results of laparoscopic sleeve gastrectomy	Surgery for Obesity and Related Diseases	Sieber, P.	mean age <55; not medicare eligible
0	Results and post-operative complications in the surgical treatment of morbid obesity	Advances in Clinical and Experimental Medicine	Sierzantowicz, R.	mean age <55; not medicare eligible
0	Respiratory medication prescriptions before and after bariatric surgery	Annals of Allergy, Asthma and Immunology	Sikka, N. and Wegienka, G. and Havstad, S. and Genaw, J. and Carlin, A. M. and Zoratti, E.	mean age <55; not medicare eligible
15826468	Results after laparoscopic adjustable gastric banding in patients over 55 years of age	Obes Surg	Silecchia	single arm study n<50
0	Bariatric surgery reverses metabolic risk in patients treated in outpatient level	Arquivos brasileiros de cirurgia digestiva : ABCD = Brazilian archives of digestive surgery	Silva-Neto, E. F., VÃ¡zquez, C. M., Soares, F. M., Silva, D. G., Souza, M. F., Barbosa, K. B.	mean age <55; not medicare eligible
27683779	SERUM VITAMIN B12, IRON AND FOLIC ACID DEFICIENCIES IN OBESE INDIVIDUALS SUBMITTED TO DIFFERENT BARIATRIC TECHNIQUES	Arq Bras Cir Dig	Silva, R. A. and Malta, F. M. and Correia, M. F. and Burgos, M. G.	N < 10 per arm
113725376. Language:	MIDDLE OR OLDER AGE AT THE TIME OF BARIATRIC SURGERY FOR MORBID OBESITY IS ASSOCIATED WITH A HIGHER RISK FOR CARDIOVASCULAR EVENTS	Journal of the American College of Cardiology (JACC)	Singh, Maharaj, Dalmar, Ahmed, Heis, Zoe, Katzoff, Michael N., Chua, Thomas Y., Tajik, A. Jamil, Jahangir, Arshad	Abstract only
CN-01065598	Ophthalmic outcomes of bariatric surgery vs. Intensive medical therapy on obese patients with diabetes	Diabetes	Singh, Rp and Gans, R and Kashyap, Sr and Kirwan, Jp and Bedi, R and Wolski, K and Brethauer, Sa and Nissen, Se and Bhatt, DI and Schauer, P	Abstract only
0	30-day readmissions after sleeve gastrectomy versus Roux-en-Y gastric bypass	Surgery for Obesity and Related Diseases	Sippey, M.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
0	Six months results of laparoscopic sleeve gastrectomy in treatment of obesity and its metabolic complications	Chirurgia (Bucharest, Romania : 1990)	Sirbu, A.	mean age <55; not medicare eligible
0	Incidence and remission of type 2 diabetes in relation to degree of obesity at baseline and 2 Å year weight change: the Swedish Obese Subjects (SOS) study	Diabetologia	SjÅ¶holm, K.	mean age <55; not medicare eligible
0	Effects of bariatric surgery on mortality in Swedish obese subjects	New England Journal of Medicine	SjÅ¶holm, K.	mean age <55; not medicare eligible
0	Association of bariatric surgery with long-term remission of type 2 diabetes and with microvascular and macrovascular complications	JAMA - Journal of the American Medical Association	SjÅ¶holm, K.	mean age <55; not medicare eligible
114012425. Language:	Weight Change-Adjusted Effects of Gastric Bypass Surgery on Glucose Metabolism: 2- and 10-Year Results From the Swedish Obese Subjects (SOS) Study	Diabetes Care	SjÅ¶holm, Kajsa, SjÅ¶strÅ¶m, Elisabeth, Carlsson, Lena M. S., Peltonen, Markku	mean age <55; not medicare eligible
0	Effects of bariatric surgery on cancer incidence in obese patients in Sweden (Swedish Obese Subjects Study): a prospective, controlled intervention trial	The Lancet Oncology	SjÅ¶strÅ¶m, L. and Gummesson, A. and SjÅ¶strÅ¶m, C. D. and Narbro, K. and Peltonen, M. and Wedel, H. and Bengtsson, C. and Bouchard, C. and Carlsson, B. and Dahlgren, S. and Jacobson, P. and Karason, K. and Karlsson, J. and Larsson, B. and Lindroos, A. K. and LÅ¶nroth, H. and NÅ¶slund, I. and Olbers, T. and StenlÅ¶f, K. and Torgerson, J. and Carlsson, L. M.	mean age <55; not medicare eligible
23359358	Evaluation of current eligibility criteria for bariatric surgery: diabetes prevention and risk factor changes in the Swedish obese subjects (SOS) study	Diabetes Care	Sjoholm, K. and Anveden, A. and Peltonen, M. and Jacobson, P. and Romeo, S. and Svensson, P. A. and Sjostrom, L. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			KutaniĀY, R.	
21893621	Weight loss, cardiovascular risk factors, and quality of life after gastric bypass and duodenal switch: a randomized trial	Ann Intern Med	Sovik, T. T.	mean age <55; not medicare eligible
20035530	Randomized clinical trial of laparoscopic gastric bypass versus laparoscopic duodenal switch for superobesity	Br J Surg	Sovik, T. T.	mean age <55; not medicare eligible
22951078	Gastrointestinal function and eating behavior after gastric bypass and duodenal switch	Surg Obes Relat Dis	Sovik, T. T. and Karlsson, J. and Aasheim, E. T. and Fagerland, M. W. and Bjorkman, S. and Engstrom, M. and Kristinsson, J. and Olbers, T. and Mala, T.	mean age <55; not medicare eligible
109839045. Language:	Alcohol and Drug Use Among Postoperative Bariatric Patients: A Systematic Review of the Emerging Research and Its Implications	Alcoholism: Clinical & Experimental Research	Spadola, Christine E., Wagner, Eric F., Dillon, Frank R., Trepka, Mary Jo, De La Cruz-Munoz, Nestor, Messiah, Sarah E.	No primary data
112295464. Language:	Impact of Bariatric Surgery on Patients With Rheumatoid Arthritis	Arthritis Care & Research	Sparks, Jeffrey A., Halperin, Florencia, Karlson, Jonathan C., Karlson, Elizabeth W., Bermas, Bonnie L.	mean age <55; not medicare eligible
111238761. Language:	Neurocognitive Effects of Obesity and Bariatric Surgery	European Eating Disorders Review	Spitznagel, Mary Beth, Hawkins, Misty, Alosco, Michael, Galimoto, Rachel, Garcia, Sarah, Miller, Lindsay, Gunstad, John	No primary data
0	Long-term outcomes of laparoscopic adjustable gastric banding and laparoscopic Roux-en-Y gastric bypass in the United States	Surgical Endoscopy and Other Interventional Techniques	Spivak, H.	mean age <55; not medicare eligible
CN-01080956	Randomized clinical study comparing the effect of roux-en-y gastric bypass and sleeve gastrectomy on reactive hypoglycemia	Digestive and liver disease	Spuntarelli, V	Abstract only
0	Management of gastrointestinal leaks after surgery for clinically severe obesity	Surgery for Obesity and Related Diseases	Spyropoulos, C. and Argentou, M. I. and Petsas, T. and Thomopoulos, K. and Kehagias, I. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Kalfarentzos, F.	
CN-01066071	Long term results of bariatric surgery in T2DM obese women	Obesity reviews	Sramkova, P	Abstract only
15723998	Impact of advanced age on weight loss and health benefits after laparoscopic gastric bypass	Arch Surg.	St Peter	single arm study n<50
0	Comparison of warfarin dosages and international normalized ratios before and after Roux-en-Y gastric bypass surgery	Pharmacotherapy	Steffen, K. J., Wonderlich, J. A., Erickson, A. L., Strawsell, H., Mitchell, J. E., Crosby, R. D.	mean age <55; not medicare eligible
23295461	Bariatric surgery results in cortical bone loss	J Clin Endocrinol Metab	Stein, E. M.	mean age <55; not medicare eligible
DARE-12014048127	Review article: the nutritional and pharmacological consequences of obesity surgery (Provisional abstract)	Database of Abstracts of Reviews of Effects	Stein, J and Stier, C and Raab, H and Weiner, R	mean age <55; not medicare eligible
0	Reversal of Type 2 diabetes after bariatric surgery is determined by the degree of achieved weight loss in both short- and long-duration diabetes	Diabetic Medicine	Steven, S.	mean age <55; not medicare eligible
26628414	Weight Loss Decreases Excess Pancreatic Triacylglycerol Specifically in Type 2 Diabetes	Diabetes Care	Steven, S., Hollingsworth, K. G., Small, P. K., Woodcock, S. A., Pucci, A., Aribisala, B., Al-Mrabeh, A., Daly, A. K., Batterham, R. L., Taylor, R.	mean age <55; not medicare eligible
23804287	Clinical factors associated with weight loss outcomes after Roux-en-Y gastric bypass surgery	Obesity (Silver Spring)	Still, C. D.	mean age <55; not medicare eligible
17938314	Outcomes of preoperative weight loss in high-risk patients undergoing gastric bypass surgery	Arch Surg	Still, C. D.	single arm study n<50
17116424	Comparison of effects of gastric bypass and biliopancreatic diversion with duodenal switch on weight loss and body composition 1-2 years after surgery	Surg Obes Relat Dis	Strain, G. W.	mean age <55; not medicare eligible
19560983	Comparison of weight loss and body composition changes with four surgical procedures	Surg Obes Relat Dis	Strain, G. W.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
0	The Impact of Biliopancreatic Diversion with Duodenal Switch (BPD/DS) Over 9 Years	Obesity Surgery	Strain, G. W.	mean age <55; not medicare eligible
22848807	Actual situation of thromboembolic prophylaxis in obesity surgery: data of quality assurance in bariatric surgery in Germany	Thrombosis	Stroh, C.	mean age <55; not medicare eligible
27112588	Risk of thrombosis and thromboembolic prophylaxis in obesity surgery: data analysis from the German Bariatric Surgery Registry	Obes Surg	Stroh, C.	mean age <55; not medicare eligible
23824622	[Nutrient Deficiencies after Bariatric Surgery - Systematic Literature Review and Suggestions for Diagnostics and Treatment]	Zentralbl Chir	Stroh, C. and Benedix, F. and Meyer, F. and Manger, T.	No primary data
18941846	A nationwide survey on bariatric surgery in Germany--results 2005-2007	Obes Surg	Stroh, C. and Birk, D. and Flade-Kuthe, R. and Frenken, M. and Herbig, B. and Hohne, S. and Kohler, H. and Lange, V. and Ludwig, K. and Matkowitz, R. and Meyer, G. and Meyer, F. and Pick, P. and Horbach, T. and Krause, S. and Schafer, L. and Schlensak, M. and Shang, E. and Sonnenberg, T. and Susewind, M. and Voigt, H. and Weiner, R. and Wolff, S. and Lippert, H. and Wolf, A. M. and Schmidt, U. and Manger, T.	mean age <55; not medicare eligible
0	Are there gender-specific aspects in obesity and metabolic surgery? Data analysis from the german bariatric surgery registry	Viszeralmedizin: Gastrointestinal Medicine and Surgery	Stroh, C. and Weiner, R. and Wolff, S. and Knoll, C. and Manger, T.	mean age <55; not medicare eligible
24338802	[Current Situation of Antibiotic Prophylaxis in Obesity and Metabolic Surgery - Data Analysis from the Study for Quality Assurance in Operative Treatment of Obesity in Germany]	Zentralbl Chir	Stroh, C., Wilhelm, B., Weiner, R., Ludwig, K., Benedix, F., Knoll, C., Lippert, H., Manger, T., Adipositas, K.	mean age <55; not medicare eligible
26262700	PROTEIN MALNUTRITION INCIDENCE COMPARISON AFTER GASTRIC BYPASS VERSUS BILIOPANCREATIC DIVERSION	Nutr Hosp	Suarez Llanos, J. P.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
109611229. Language:	Urinary Incontinence Before and After Bariatric Surgery	JAMA Internal Medicine	Subak, Leslee L., King, Wendy C., Belle, Steven H., Chen, Jia-Yuh, Courcoulas, Anita P., Ebel, Faith E., Flum, David R., Khandelwal, Saurabh, Pender, John R., Pierson, Sheila K., Pories, Walter J., Steffen, Kristine J., Strain, Gladys W., Wolfe, Bruce M., Huang, Alison J.	mean age <55; not medicare eligible
24678475	Comparison of vertical sleeve gastrectomy versus biliopancreatic diversion	N Am J Med Sci	Sucandy, I.	mean age <55; not medicare eligible
0	Gastroesophageal reflux symptoms after laparoscopic sleeve gastrectomy for morbid obesity. The importance of preoperative evaluation and selection	North American Journal of Medical Sciences	Sucandy, I., Chrestiana, D., Bonanni, F., Antanavicius, G.	mean age <55; not medicare eligible
24101449	Influence of ethnicity on the efficacy and utilization of bariatric surgery in the USA	J Gastrointest Surg	Sudan, R. and Winegar, D. and Thomas, S. and Morton, J.	mean age <55; not medicare eligible
0	Five-year outcomes of patients with type 2 diabetes who underwent laparoscopic adjustable gastric banding	Surgery for Obesity and Related Diseases	Sultan, S.	mean age <55; not medicare eligible
0	Mid-term outcomes of gastric bypass weight loss failure to duodenal switch	Surgery for Obesity and Related Diseases	Surve, A., Zaveri, H., Cottam, D., Belnap, L., Medlin, W., Cottam, A.	mean age <55; not medicare eligible
CN-01021396	Lapband versus SAGB for morbid obesity. Long-term results of a prospective randomized trial	Obesity surgery	Suter, M	Abstract only
0	A 3-year experience with laparoscopic gastric banding for obesity	Surgical Endoscopy	Suter, M	mean age <55; not medicare eligible
19380643	Results of Roux-en-Y gastric bypass in morbidly obese vs superobese patients: similar body weight loss, correction of comorbidities, and improvement of quality of life	Arch Surg	Suter, M	mean age <55; not medicare eligible
0	Laparoscopic Roux-en-Y gastric bypass: Initial 2-year experience	Surgical Endoscopy	Suter, M	mean age <55; not medicare eligible
15621991	Laparoscopic gastric banding: a prospective, randomized study comparing the Lapband and the SAGB: early results	Ann Surg	Suter, M	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
17355761	A new questionnaire for quick assessment of food tolerance after bariatric surgery	Obes Surg	Suter, M. and Calmes, J. M. and Paroz, A. and Giusti, V.	mean age <55; not medicare eligible
21772127	Laparoscopic Roux-en-Y gastric bypass: significant long-term weight loss, improvement of obesity-related comorbidities and quality of life	Ann Surg	Suter, M. and Donadini, A. and Romy, S. and Demartines, N. and Giusti, V.	mean age <55; not medicare eligible
16671063	European experience with laparoscopic Roux-en-Y gastric bypass in 466 obese patients	Br J Surg	Suter, M. and Paroz, A. and Calmes, J. M. and Giusti, V.	mean age <55; not medicare eligible
25761943	Perioperative Outcomes of Proximal and Distal Gastric Bypass in Patients with BMI Ranged 50-60 kg/m(2)--A Double-Blind, Randomized Controlled Trial	Obes Surg	Svanevik, M., Risstad, H., Hofso, D., Schou, C. F., Solheim, B., Sovik, T. T., Kristinsson, J., Hjelmessaeth, J., Mala, T., Sandbu, R.	mean age <55; not medicare eligible
CN-00961547	Alcohol consumption and alcohol problems after bariatric surgery in the swedish obese subjects study	Obesity (Silver Spring, Md.)	Svensson, P-A	mean age <55; not medicare eligible
CN-01100820	Long-term albuminuria remission after bariatric surgery in swedish obese subjects (SOS)	Obesity facts	Svensson, Pa and Pelttonen, M and Roux, Cw and Sjolholm, K and Sjostrom, L and Carlsson, Lm	Abstract only
14980041	Laparoscopic gastric bypass in patients on thyroid replacement therapy for subnormal thyroid function - prevalence and short-term outcome	Obes Surg	Szomstein, S. and Avital, S. and Brasesco, O. and Mehran, A. and Cabral, J. M. and Rosenthal, R.	mean age <55; not medicare eligible
0	Rare Neurological Complications After Sleeve Gastrectomy	Obesity Surgery	Tabbara, M., Carandina, S., Bossi, M., Polliand, C., Genser, L., Barrat, C.	mean age <55; not medicare eligible
0	The 'weekend effect' in plastic surgery: Analyzing weekday versus weekend admissions in body contouring procedures from 2000 to 2010	Aesthetic Surgery Journal	Tadisina, K. K., Chopra, K., Singh, D. P.	Not about bariatric surgery
0	Impact of bariatric surgery on depression and anxiety symptoms, bulimic behaviors and quality of life	Revista do Col�gio Brasileiro de Cirurgi�es	Tae, B. and Pelaggi, E. R. and Moreira, J. G. and Waisberg, J. and de Matos, L. L. and D'Elia, G.	mean age <55; not medicare eligible
0	Experience with laparoscopic sleeve gastrectomy for morbid versus super morbid	Obesity Surgery	Tagaya, N.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	obesity			
0	Bariatric surgery improves histological features of nonalcoholic fatty liver disease and liver fibrosis	Journal of gastrointestinal surgery : official journal of the Society for Surgery of the Alimentary Tract	Taitano, A. A., Markow, M., Finan, J. E., Wheeler, D. E., Gonzalvo, J. P., Murr, M. M.	mean age <55; not medicare eligible
0	Factors associated with malnutrition in patients with head and neck cancer	Acta Oto-Laryngologica	Takenaka, Y., Yamamoto, M., Nakahara, S., Yamamoto, Y., Yasui, T., Hanamoto, A., Takemoto, N., Fukusumi, T., Michiba, T., Cho, H., Inohara, H.	Not about bariatric surgery
21993852	A comparison of postoperative quality of life and dysfunction after Billroth I and Roux-en-Y reconstruction following distal gastrectomy for gastric cancer: results from a multi-institutional RCT	Gastric Cancer	Takiguchi, S. and Yamamoto, K. and Hirao, M. and Imamura, H. and Fujita, J. and Yano, M. and Kobayashi, K. and Kimura, Y. and Kurokawa, Y. and Mori, M. and Doki, Y.	Not about bariatric surgery
CN-01071713	Comparison of intragastric balloon therapy and intensive lifestyle modification therapy with respect to weight reduction and abdominal fat distribution in super-obese Japanese patients	Obesity research & clinical practice	Takahata, M and Nakamura, A and Aoki, K and Kimura, M and Sekino, Y and Inamori, M and Maeda, S and Gotoh, E and Nakajima, A and Terauchi, Y	mean age <55; not medicare eligible
25692377	Predictors of weight loss after laparoscopic gastric plication: a prospective study	J Laparoendosc Adv Surg Tech A	Talebpour, A.	mean age <55; not medicare eligible
0	Postabdominoplasty Wound Dehiscence in Bariatric Patients: Biliopancreatic Diversion Versus Gastric Bypass: A Preliminary Study	Annals of plastic surgery	Tambasco, D., D'Ettorre, M., Gentileschi, S., Colletti, R., Mingrone, G., Bracaglia, R.	mean age <55; not medicare eligible
0	The Effects of Sleeve Gastrectomy and Gastric Bypass on Branched-Chain Amino Acid Metabolism 1Â Year After Bariatric Surgery	Obesity Surgery	Tan, H. C.	mean age <55; not medicare eligible
CN-01098609	Roux-en-y gastric bypass vs. Best medical treatment for type 2 diabetes with BMI 27 to 32-early result of a randomised controlled trial	Obesity surgery	Tan, Lt and Cheng, Ksa and Lim, Sc	Abstract only

ID	Title	Journal	Authors	Reason for Exclusion
27196454	Cost-Effectiveness of Bariatric Surgery for Type 2 Diabetes Mellitus: A Randomized Controlled Trial in China	Medicine (Baltimore)	Tang, Q.	mean age <55; not medicare eligible
26311494	Comparative Efficacy and Safety of Laparoscopic Greater Curvature Plication and Laparoscopic Sleeve Gastrectomy: A Meta-analysis	Obes Surg	Tang, Y.	No primary data
26682541	Specific Features of Dumping Syndrome after Various Types of Gastrectomy as Assessed by a Newly Developed Integrated Questionnaire, the PGSAS-45	Dig Surg	Tanizawa, Y. and Tanabe, K. and Kawahira, H. and Fujita, J. and Takiguchi, N. and Takahashi, M. and Ito, Y. and Mitsumori, N. and Namikawa, T. and Oshio, A. and Nakada, K.	Not about bariatric surgery
0	Causes and risk factors for mortality within 1 year after obesity surgery in a population-based cohort study	Surgery for Obesity and Related Diseases	Tao, W.	mean age <55; not medicare eligible
0	Open label, prospective, randomized controlled trial of an endoscopic duodenal-jejunal bypass sleeve versus low calorie diet for pre-operative weight loss in bariatric surgery	Surgical Endoscopy and Other Interventional Techniques	Tarnoff, M. and Rodriguez, L. and Escalona, A. and Ramos, A. and Neto, M. and Alamo, M. and Reyes, E. and Pimentel, F. and Ibanez, L.	mean age <55; not medicare eligible
0	Examining Nutrition Knowledge of Bariatric Surgery Patients: What Happens to Dietary Knowledge over Time?	Obesity Surgery	Taube-Schiff, M., Chaparro, M., Gougeon, L., Shakory, S., Weiland, M., Warwick, K., Plummer, C., Sockalingam, S.	mean age <55; not medicare eligible
17217633	Laparoscopic adjustable gastric banding in patients . or =60 years old: is it worthwhile	Obes Surg	Taylor	single arm study n<50
22064339	Short-term outcome and quality of life of endoscopically placed gastric balloon and laparoscopic adjustable gastric band	Saudi J Gastroenterol	Tayyem, R. M.	mean age <55; not medicare eligible
0	A prior history of substance abuse in veterans undergoing bariatric surgery	Journal of Obesity	Tedesco, M. and Hua, W. Q. and Lohnberg, J. A. and Bellatorre, N. and Eisenberg, D.	mean age <55; not medicare eligible
DARE-12013050591	Effect of bariatric surgery on oncologic outcomes: a systematic review and meta-	Surgical Endoscopy	Tee, Mc and Cao, Y and Warnock, GI and Hu, Fb	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
	analysis (Provisional abstract)		and Chavarro, Je	
0	Associations of surgical and nonsurgical weight loss with knee musculature: A cohort study of obese adults	Surgery for Obesity and Related Diseases	Teichtahl, A. J., Wluka, A. E., Wang, Y., Wijethilake, P. N., Strauss, B., Proietto, J., Dixon, J. B., Jones, G., Forbes, A., Cicuttini, F. M.	mean age <55; not medicare eligible
25294523	Hospital admissions greater than 30 days following bariatric surgery: patient and procedure matter	Surg Endosc	Telem, D. A. and Talamini, M. and Gesten, F. and Patterson, W. and Peoples, B. and Gracia, G. and Yang, J. and Zhang, Q. and Altieri, M. and Pryor, A. D.	mean age <55; not medicare eligible
16925305	Band versus bypass: randomization and patients' choices and perceptions	Surg Obes Relat Dis	Ternovits, C. A.	mean age <55; not medicare eligible
106543885. Language:	A controlled study of peripheral neuropathy after bariatric surgery	Neurology	Thaisethawatkul, P. and Collazo-Clavell, M. L. and Sarr, M. G. and Norell, J. E. and Dyck, P. J. B.	mean age <55; not medicare eligible
0	Predictability of outcome in laparoscopic gastric banding	Obesity Facts	Thalheimer, A.	mean age <55; not medicare eligible
119417377. Language:	OL06-6 - Durability of diabetes remission after bariatric surgery: A 5-year prospective follow-up in a multi-ethnic Asian population	Diabetes Research & Clinical Practice	Tham, Kwang Wei, Lee, Phong Ching, Tan, Hong Chang, Eng, Alvin Kim Hock, Chan, Weng Hoong, Lim, Eugene Kee Wee, Ganguly, Sonali	Abstract only
25772132	Midterm outcomes of gastric bypass for elderly (aged ≥60 yr) patients: a comparative study	Surg Obes Relat Dis.	Thereaux	single arm study n<50
25771441	Comparison of results after one year between sleeve gastrectomy and gastric bypass in patients with BMI ≥/ 50 kg/m(2)	Surg Obes Relat Dis	Thereaux, J.	mean age <55; not medicare eligible
0	Toronto Bariatric Interprofessional Psychosocial Assessment Suitability Scale: Evaluating A New Clinical Assessment Tool for Bariatric Surgery Candidates	Psychosomatics	Thiara, G., Yanofsky, R., Abdul-Kader, S., Santiago, V. A., Cassin, S., Okrainec, A., Jackson, T., Hawa, R., Sockalingam, S.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
24863156	Recruitment and screening for a randomized trial investigating Roux-en-Y gastric bypass versus intensive medical management for treatment of type 2 diabetes	Obes Surg	Thomas, A. J.	No outcome of interest
DARE-12012033152	Systematic review of obesity surgery mortality risk score: preoperative risk stratification in bariatric surgery (Provisional abstract)	Obesity Surgery	Thomas, H and Agrawal, S	No primary data
0	Prospective study of psychiatric illness as a predictor of weight loss and health related quality of life one year after bariatric surgery	Journal of Psychosomatic Research	Thomson, L.	mean age <55; not medicare eligible
26803902	The risk of kidney stones following bariatric surgery: a systematic review and meta-analysis	Ren Fail	Thongprayoon, C.	mean age <55; not medicare eligible
18823860	Gastric banding or bypass? A systematic review comparing the two most popular bariatric procedures	Am J Med	Tice, J. A.	mean age <55; not medicare eligible
16925376	Taste change after laparoscopic Roux-en-Y gastric bypass and laparoscopic adjustable gastric banding	Surg Obes Relat Dis	Tichansky, D. S.	mean age <55; not medicare eligible
0	Risk factors for secondary hyperparathyroidism after bariatric surgery: A comparison of 4 different operations and of vitamin D-receptor-polymorphism	Experimental and Clinical Endocrinology and Diabetes	Toelle, P.	mean age <55; not medicare eligible
27143964	Laparoscopic Sleeve Gastrectomy versus Laparoscopic Banded Sleeve Gastrectomy: First Prospective Pilot Randomized Study	Gastroenterol Res Pract	Tognoni, V.	mean age <55; not medicare eligible
19487104	Prevalence of nutrient deficiencies in bariatric patients	Nutrition	Toh, S. Y. and Zarshenas, N. and Jorgensen, J.	mean age <55; not medicare eligible
104918453. Language:	Quality of Life in the Late Postoperative Period of Patients Undergoing Bariatric Surgery	Revista de Atencao Primaria a Saude	Toledo, C. C. and Camilo, G. B. and de GuimarÃes, R. L. and Moraes, F. R. and JÃnior, C. S.	mean age <55; not medicare eligible
22101850	Sleep quality and duration before and after bariatric surgery	Obes Surg	Toor, P. and Kim, K. and Buffington, C. K.	mean age <55; not medicare eligible
0	One-year weight loss after primary or revisional Roux-en-Y gastric bypass for failed adjustable gastric banding	Surgery for Obesity and Related Diseases	Topart, P.	mean age <55; not medicare eligible
0	Biliopancreatic diversion with duodenal switch or gastric bypass for failed gastric banding: retrospective study from two institutions with	Surgery for Obesity and Related Diseases	Topart, P.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	preliminary results			
0	Weight loss is more sustained after biliopancreatic diversion with duodenal switch than Roux-en-Y gastric bypass in superobese patients	Surgery for Obesity and Related Diseases	Topart, P.	mean age <55; not medicare eligible
CN-01174254	Redo surgery for failed or complicated vertical banded gastroplasty for morbid obesity: A literature review	Surgical Endoscopy and Other Interventional Techniques. Conference: 23rd International Congress of the European Association for Endoscopic Surgery, EAES 2015 Bucharest Romania. Conference Start: 20150603 Conference End: 20150606. Conference Publication: (var.pagings)	Toppino, M and Benvenga, R and Genzone, A and Benedetto, G and Morino, M	Abstract only
11501353	The role of early radiological studies after gastric bariatric surgery	Obes Surg	Toppino, M. and Cesarani, F. and Comba, A. and Denegri, F. and Mistrangelo, M. and Gandini, G. and Morino, F.	No primary data
109611996. Language:	Observed Variability in Sleeve Gastrectomy Volume and Compliance Does Not Correlate to Postoperative Outcomes	Surgical Laparoscopy, Endoscopy & Percutaneous Techniques	Toro, Juan P., Patel, Ankit D., Lytle, Nathaniel W., Perez, Sebastian, Edward, Lin, Singh, Arvinpal, Davis Jr, S. Scott, Davis, S. Scott, Jr.	mean age <55; not medicare eligible
17368291	Predictors of early quality-of-life improvement after laparoscopic gastric bypass surgery	Am J Surg	Torquati, A.	mean age <55; not medicare eligible
CN-01130499	Closed-loop gastric electrical stimulation (CLGES) with behavioral feedback for treatment of obesity: Prospective multicenter trial with 18 month follow-up	Obesity surgery	Torres, A	Abstract only
19375553	Body weight, insulin resistance, and serum adipokine levels 2 years after 2 types of bariatric surgery	Am J Med	Trakhtenbroit, M. A.	mean age <55; not medicare eligible
0	Revisional weight loss surgery after failed laparoscopic gastric banding: An institutional experience	Surgical Endoscopy and Other Interventional Techniques	Tran, T. T.	mean age <55; not medicare eligible
23993246	Laparoscopic sleeve gastrectomy compared with other bariatric surgical procedures: a systematic review of randomized trials	Surg Obes Relat Dis	Trastulli, S.	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
23466015	Hormone changes and diabetes resolution after biliopancreatic diversion and laparoscopic sleeve gastrectomy: a comparative prospective study	Surg Obes Relat Dis	Tsoli, M.	mean age <55; not medicare eligible
0	Impact of gastrectomy on high-density lipoprotein cholesterol elevation in nonobese patients during a 10-Year follow-up	Journal of Atherosclerosis and Thrombosis	Tsuji, S., Nohara, A., Hayashi, Y., Yoshida, I., Oka, R., Moriuchi, T., Hagishita, T., Miyamoto, S., Suzuki, A., Okada, T., Yamagishi, M.	mean age <55; not medicare eligible
0	Baseline of visceral fat area and decreased body weight correlate with improved pulmonary function after Roux-en-Y Gastric Bypass in Chinese obese patients with BMI 28-35 kg/m ² and Type 2 diabetes: A 6-month follow-up	BMC Endocrine Disorders	Tu, Y., Yu, H., Bao, Y., Zhang, P., Di, J., Han, X., Jia, W.	mean age <55; not medicare eligible
27431666	Early Reverse Cardiac Remodeling Effect of Laparoscopic Sleeve Gastrectomy	Obes Surg	Tuluçe, K. and Kara, C. and Tuluçe, S. Y. and Cetin, N. and Topaloglu, C. and Bozkaya, Y. T. and Saklamaz, A. and Cinar, C. S. and Ergene, O.	mean age <55; not medicare eligible
25975201	Roux-en-Y Gastric Bypass Surgery in Patients with Polycystic Ovary Syndrome and Metabolic Syndrome	Obes Surg	Turkmen, S., Ahangari, A., Backstrom, T.	mean age <55; not medicare eligible
25426451	Prediction of remission after metabolic surgery using a novel scoring system in type 2 diabetes - a retrospective cohort study	J Diabetes Metab Disord	Ugale, S.	mean age <55; not medicare eligible
CN-00726273	Midterm results of primary vs. secondary laparoscopic sleeve gastrectomy (LSG) as an isolated operation	Obesity surgery	Uglioni, B and Wolnerhanssen, B and Peters, T and Christoffel, Court and Kern, B and Peterli, R	mean age <55; not medicare eligible
27412671	Laparoscopic Adjustable Gastric Banding After Failed Roux-En-Y Gastric Bypass	Obes Surg	Uittenbogaart, M.	mean age <55; not medicare eligible
0	Major Esophageal Dilation After Laparoscopic Adjustable Gastric Banding in Symptomatic Patients: Does It Prevent Effective Weight Loss and How Should It be Treated?	World journal of surgery	Ulmer, T. F., Ambe, P., Alizai, H. P., Lambertz, A., Rheinwald, K., Plamper, A., Son, M., Tuerler, A., Gärtnertner, D., Neumann, U.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
27396545	Risk of nephrolithiasis, hyperoxaluria, and calcium oxalate supersaturation increased after Roux-en-Y gastric bypass surgery: a systematic review and meta-analysis	Surg Obes Relat Dis	Upala, S. and Jaruvongvanich, V. and Sanguankeo, A.	No primary data
21347823	Effects of sleeve gastrectomy and medical treatment for obesity on glucagon-like peptide 1 levels and glucose homeostasis in non-diabetic subjects	Obes Surg	Valderas, J. P.	mean age <55; not medicare eligible
CN-01054896	Pain, nausea and vomiting after laparoscopic bariatric surgery	European journal of anaesthesiology	Valdoleiros, I and Midoes, Ac and Sa, Ac and Reis, P and Abelha, F and Santos, A	mean age <55; not medicare eligible
23526083	Weight loss outcome after Roux-en-Y gastric bypass: 10 years of follow-up	Obes Surg	Valezi, A. C.	mean age <55; not medicare eligible
21971856	Weight loss eight years after gastric bypass	Rev Col Bras Cir	Valezi, A. C.	mean age <55; not medicare eligible
0	Relationships between type 2 diabetes remission after gastric bypass and different weight loss metrics: Arguments against excess weight loss in metabolic surgery	Surgery for Obesity and Related Diseases	Van De Laar, A. W., De Brauw, L. M., Meesters, E. W.	mean age <55; not medicare eligible
0	Which Baseline Weight Should Be Preferred as Reference for Weight Loss Results? Insights in Bariatric Weight Loss Mechanisms by Comparing Primary and Revision Gastric Bypass Patients	Obesity Surgery	van de Laar, A. W., DollÃ©, M. H., de Brauw, L. M., Bruin, S. C., Acherman, Y. I.	mean age <55; not medicare eligible
25330868	Nutritional deficiencies in gastric bypass patients; incidence, time of occurrence and implications for post-operative surveillance	Obes Surg	van der Beek, E. S., Monpellier, V. M., Eland, I., Tromp, E., van Ramshorst, B.	mean age <55; not medicare eligible
16259890	Laparoscopic adjustable gastric banding versus open vertical banded gastroplasty: a prospective randomized trial	Obes Surg	van Dielen, F. M.	mean age <55; not medicare eligible
0	Health-related quality of life following vertical banded gastroplasty	Surgical Endoscopy and Other Interventional Techniques	Van Hout, G. C. M. and Fortuin, F. A. M. and Pelle, A. J. M. and Blokland-Koomen, M. E. and Van Heck, G. L.	mean age <55; not medicare eligible
23515977	Pulmonary function testing and complications of laparoscopic bariatric surgery	Obes Surg	van Huisstede, A. and Biter, L. U. and Luitwieler, R. and Castro Cabezas, M. and Mannaerts, G. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Birnie, E. and Taube, C. and Hiemstra, P. S. and Braunstahl, G. J.	
0	Effect of bariatric surgery on asthma control, lung function and bronchial and systemic inflammation in morbidly obese subjects with asthma	Thorax	Van Huisstede, A. and Rudolphus, A. and Cabezas, M. C. and Biter, L. U. and Van De Geijn, G. J. and Taube, C. and Hiemstra, P. S. and Braunstahl, G. J.	mean age <55; not medicare eligible
21188545	Long-term results of a prospective study on laparoscopic adjustable gastric banding for morbid obesity	Obes Surg	Van Nieuwenhove, Y.	mean age <55; not medicare eligible
0	The health-related quality of life of obese persons seeking or not seeking surgical or non-surgical treatment: A meta-analysis	Obesity Surgery	Van Nunen, A. M. A.	mean age <55; not medicare eligible
27890342	Impact of laparoscopic Roux-en-Y Gastric bypass versus sleeve gastrectomy on postoperative lipid values	Surg Obes Relat Dis	Van Osdol, A. D.	mean age <55; not medicare eligible
0	Revision of failed laparoscopic adjustable gastric banding to Roux-en-Y gastric bypass	Obesity Surgery	Van Wageningen, B.	mean age <55; not medicare eligible
27022451	Long-term results after revisions of failed primary vertical banded gastroplasty	World J Gastrointest Surg	van Wezenbeek, M. R.	mean age <55; not medicare eligible
27259684	Conversion to Gastric Bypass After Either Failed Gastric Band or Failed Sleeve Gastrectomy	Obes Surg	van Wezenbeek, M. R.	mean age <55; not medicare eligible
24981934	Variation in utilization of acid-reducing medication at 1 year following bariatric surgery: results from the Michigan Bariatric Surgery Collaborative	Surg Obes Relat Dis	Varban, O. A.	mean age <55; not medicare eligible
22643503	Laparoscopic sleeve gastrectomy versus laparoscopic adjustable gastric banding for the treatment severe obesity in high risk patients	Journal of the Society of Laparoendoscopic Surgeons	Varela, E.J.	mean age <55; not medicare eligible
22643503	Laparoscopic sleeve gastrectomy versus laparoscopic adjustable gastric banding for the treatment severe obesity in high risk patients	Jsls	Varela, J. E.	mean age <55; not medicare eligible
0	Need for parenteral iron therapy after bariatric surgery	Surgery for Obesity and Related Diseases	Varma, S. and Baz, W. and Badine, E. and Nakhil, F. and McMullen, H. and Nicastro, J. and Forte, F. and Terjanian, T. and Dai, Q.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
26022386	Determinants of changes in muscle mass after bariatric surgery	Diabetes Metab	Vaurs, C., Dimeglio, C., Charras, L., Anduze, Y., Chalret du Rieu, M., Ritz, P.	mean age <55; not medicare eligible
16925260	Weight loss, quality of life and employment status after Roux-en-Y gastric bypass: 5-year analysis	Surg Obes Relat Dis	Velcu, L. M.	mean age <55; not medicare eligible
0	Laparoscopic Gastric Plication (LGCP) Vs Sleeve Gastrectomy (LSG): A Single Institution Experience	Obesity Surgery	Verdi, D.	mean age <55; not medicare eligible
26205215	Micronutrient and Protein Deficiencies After Gastric Bypass and Sleeve Gastrectomy: a 1-year Follow-up	Obes Surg	Verger, E. O.	mean age <55; not medicare eligible
25085333	Endoscopic gastric volume reduction with a novel articulating plication device is safe and effective in the treatment of obesity (with video)	Gastrointest Endosc	Verlaan, T., Paulus, G. F., Mathus-Vliegen, E. M., Veldhuyzen, E. A., Conchillo, J. M., Bouvy, N. D., Fockens, P.	mean age <55; not medicare eligible
0	Clinical and Echocardiographic Outcomes after Bariatric Surgery in Obese Patients with Left Ventricular Systolic Dysfunction	Circulation: Heart Failure	Vest, A. R. and Patel, P. and Schauer, P. R. and Satava, M. E. and Cavalcante, J. L. and Brethauer, S. and Young, J. B.	mean age <55; not medicare eligible
23475776	Gastric bypass and sleeve gastrectomy: the same impact on IL-6 and TNF-alpha. Prospective clinical trial	Obes Surg	Viana, E. C. and Araujo-Dasilio, K. L. and Miguel, G. P. and Bressan, J. and Lemos, E. M. and Moyses, M. R. and de Abreu, G. R. and de Azevedo, J. L. and Carvalho, P. S. and Passos-Bueno, M. R. and Errera, F. I. and Bissoli, N. S.	mean age <55; not medicare eligible
24079901	Mean fourteen-year, 100% follow-up of laparoscopic adjustable gastric banding for morbid obesity	Surg Obes Relat Dis	Victorzon, M.	mean age <55; not medicare eligible
0	Short-term effects of sleeve gastrectomy on type 2 diabetes mellitus in severely obese subjects	Obesity Surgery	Vidal, J.	mean age <55; not medicare eligible
18521701	Type 2 diabetes mellitus and the metabolic	Obes Surg	Vidal, J.	mean age <55; not

ID	Title	Journal	Authors	Reason for Exclusion
	syndrome following sleeve gastrectomy in severely obese subjects			medicare eligible
0	Laparoscopic gastric bypass versus laparoscopic sleeve gastrectomy as a definitive surgical procedure for morbid obesity. Mid-term results	Obesity Surgery	Vidal, P.	mean age <55; not medicare eligible
0	Effect of bariatric surgery on bone mineral density: Comparison of gastric bypass and sleeve gastrectomy	Obesity Surgery	Vilarrasa, N.	mean age <55; not medicare eligible
19412643	Evaluation of bone disease in morbidly obese women after gastric bypass and risk factors implicated in bone loss	Obes Surg	Vilarrasa, N.	mean age <55; not medicare eligible
0	Body mass index is predictive of higher in-hospital mortality in patients undergoing laparoscopic gastric bypass but not laparoscopic sleeve gastrectomy or gastric banding	American Surgeon	Villamere, J.	mean age <55; not medicare eligible
25318362	Utilization and outcome of laparoscopic versus robotic general and bariatric surgical procedures at Academic Medical Centers	Surg Endosc	Villamere, J., Gebhart, A., Vu, S., Nguyen, N. T.	mean age <55; not medicare eligible
0	Rapid changes in gait, musculoskeletal pain, and quality of life after bariatric surgery	Surgery for Obesity and Related Diseases	Vincent, H. K. and Ben-David, K. and Conrad, B. P. and Lamb, K. M. and Seay, A. N. and Vincent, K. R.	mean age <55; not medicare eligible
26712493	Bariatric Surgery Among Obese Veterans: a Retrospective Review of Complications and Intermediate Term Results from a Single Institution	Obes Surg	Vitello, D. J.	mean age <55; not medicare eligible
0	Heterozygosity for the rs696217 SNP in the Proghrelin Gene Predicts Weight Loss After Bariatric Surgery in Severely Obese Individuals	Obesity Surgery	Vitolo, E.	mean age <55; not medicare eligible
CN-01063845	Iron metabolism after roux-en-y gastric bypass or sleeve gastrectomy. Results from a prospective randomized clinical trial	Surgical Endoscopy and Other Interventional Techniques	Vix, M	Abstract only
CN-01063841	Impact of roux-en Y gastric bypass vs. sleeve gastrectomy on vitamin D metabolism: Short term results from a prospective randomized clinical trial	Surgical Endoscopy and Other Interventional Techniques	Vix, M	mean age <55; not medicare eligible
23207829	Evolution of glycolipid profile after sleeve gastrectomy vs. Roux-en-Y gastric bypass:	Obes Surg	Vix, M	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	results of a prospective randomized clinical trial			
24196556	Impact of Roux-en-Y gastric bypass versus sleeve gastrectomy on vitamin D metabolism: short-term results from a prospective randomized clinical trial	Surg Endosc	Vix, M	mean age <55; not medicare eligible
113725369. Language:	DOES PREOPERATIVE CARDIOVASCULAR DISEASE INFLUENCE POSTOPERATIVE RESOLUTION OF CARDIOVASCULAR RISK FACTORS AFTER BARIATRIC SURGERY?	Journal of the American College of Cardiology (JACC)	Voller, Lindsey, Deb, Sayantan, Dudley, Kaci, Turner, Wes, Derby, Michaela, Ichter, Zachary, Azagury, Dan, Morton, John	Abstract only
0	Changes in bone mineral content after surgical treatment of morbid obesity	Metabolism: Clinical and Experimental	Von Mach, M. A.	mean age <55; not medicare eligible
0	Is sleeve gastrectomy a therapeutic procedure for all obese patients?	International Journal of Surgery	Vuolo, G. and Voglino, C. and Tirone, A. and Colasanto, G. and Gaggelli, I. and Ciuoli, C. and Ferrara, F. and Marrelli, D.	mean age <55; not medicare eligible
0	Binge eating disorder and the outcome of bariatric surgery at one year: A prospective, observational study	Obesity	Wadden, T. A. and Faulconbridge, L. F. and Jones-Corneille, L. R. and Sarwer, D. B. and Fabricatore, A. N. and Thomas, J. G. and Wilson, G. T. and Alexander, M. G. and Pulcini, M. E. and Webb, V. L. and Williams, N. N.	mean age <55; not medicare eligible
26508824	Laparoscopic Greater Curve Plication as an Outpatient Weight Loss Procedure	Jsls	Waldrep, D. J., Pacheco, I.	mean age <55; not medicare eligible
110557831. Language:	Variation in Patient-reported Outcomes Across Hospitals Following Surgery	Medical Care	Waljee, Jennifer F., Ghaferi, Amir, Finks, Jonathan F., Cassidy, Ruth, Varban, Oliver, Carlin, Arthur, Carlozzi, Noelle, Dimick, Justin	mean age <55; not medicare eligible
0	Utility of barium studies for patients with recurrent weight gain after Roux-en-Y gastric bypass	Clinical Radiology	Wang, B. and Levine, M. S. and Rubesin, S. E. and Williams, N. N. and Dumon, K. and Raper, S.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
25642879	Laparoscopic Roux-en-Y gastric bypass versus sleeve gastrectomy for obese patients with Type 2 diabetes: a meta-analysis of randomized controlled trials	Am Surg	Wang, M. C.	No primary data
0	Laparoscopic mini-gastric bypass for failed vertical banded gastroplasty	Obesity Surgery	Wang, W.	mean age <55; not medicare eligible
27714526	The Effectiveness and Safety of Sleeve Gastrectomy in the Obese Elderly Patients: a Systematic Review and Meta-Analysis	Obes Surg	Wang, Y. and Yi, X. and Li, Q. and Zhang, J. and Wang, Z.	No primary data
0	Bariatric surgery decreases the risk of uterine malignancy	Gynecologic Oncology	Ward, K. K. and Roncancio, A. M. and Shah, N. R. and Davis, M. A. and Saenz, C. C. and McHale, M. T. and Plaxe, S. C.	mean age <55; not medicare eligible
20970524	Improved heart rate recovery after marked weight loss induced by gastric bypass surgery: two-year follow up in the Utah Obesity Study	Heart Rhythm	Wasmund, S. L.	mean age <55; not medicare eligible
18752029	Bowel habits after gastric bypass versus the duodenal switch operation	Obes Surg	Wasserberg, N.	mean age <55; not medicare eligible
15570203	Laparoscopic gastric bypass is superior to laparoscopic gastric banding for treatment of morbid obesity	Ann Surg	Weber, M.	mean age <55; not medicare eligible
14631219	Laparoscopic Roux-en-Y gastric bypass, but not rebanding, should be proposed as rescue procedure for patients with failed laparoscopic gastric banding	Ann Surg	Weber, M.	mean age <55; not medicare eligible
0	Emotional eating, marital status and history of physical abuse predict 2-year weight loss in weight loss surgery patients	Eating Behaviors	Wedin, S.	mean age <55; not medicare eligible
0	Outcome after laparoscopic adjustable gastric banding - 8 Years experience	Obesity Surgery	Weiner, R.	mean age <55; not medicare eligible
11178766	A prospective randomized trial of different laparoscopic gastric banding techniques for morbid obesity	Surg Endosc	Weiner, R. and Bockhorn, H. and Rosenthal, R. and Wagner, D.	mean age <55; not medicare eligible
0	Antidiabetic efficacy of obesity surgery in Germany: A quality assurance nationwide survey	Surgery for Obesity and Related Diseases	Weiner, R. and El-Sayes, I. and Manger, T. and Weiner, S. and Lippert, H. and Stroh, C.	mean age <55; not medicare eligible
26164113	Quality and safety in obesity surgery-15 years of Roux-en-Y gastric bypass outcomes from a	Surg Obes Relat Dis	Weiss, A. C. and Parina, R. and Horgan, S. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	longitudinal database		Talamini, M. and Chang, D. C. and Sandler, B.	
0	Physical activity predicts weight loss following gastric bypass surgery: Findings from a support group survey	Obesity Surgery	Welch, G.	mean age <55; not medicare eligible
20087678	Evaluation of clinical outcomes for gastric bypass surgery: results from a comprehensive follow-up study	Obes Surg	Welch, G. and Wesolowski, C. and Zagarins, S. and Kuhn, J. and Romanelli, J. and Garb, J. and Allen, N.	mean age <55; not medicare eligible
18580201	Comparing outcomes of laparoscopic versus open bariatric surgery	Ann Surg	Weller, W. E.	mean age <55; not medicare eligible
0	Preservation of fat-free mass after bariatric surgery: A comparison of malabsorptive and restrictive procedures	American Surgeon	Wells, J.	mean age <55; not medicare eligible
24731535	Multidisciplinary diabetes care with and without bariatric surgery in overweight people: a randomised controlled trial	Lancet Diabetes Endocrinol	Wentworth, J. M. and Playfair, J. and Laurie, C. and Ritchie, M. E. and Brown, W. A. and Burton, P. and Shaw, J. E. and O'Brien, P. E.	mean age <55; not medicare eligible
23180572	Long-term results of a randomized clinical trial comparing Roux-en-Y gastric bypass with vertical banded gastroplasty	Br J Surg	Werling, M.	mean age <55; not medicare eligible
11433902	Laparoscopic vs open Roux-en-Y gastric bypass: a prospective, randomized trial	Obes Surg	Westling, A.	mean age <55; not medicare eligible
26541244	Systematic review of psychological and social outcomes of adolescents undergoing bariatric surgery, and predictors of success	Clin Obes	White, B.	mean age <55; not medicare eligible
25720515	Prognostic Significance of Depressive Symptoms on Weight Loss and Psychosocial Outcomes Following Gastric Bypass Surgery: A Prospective 24-Month Follow-Up Study	Obes Surg	White, M. A.	mean age <55; not medicare eligible
26048516	The effects of weight loss surgery on blood rheology in severely obese patients	Surg Obes Relat Dis	Wiewiora, M. and Piecuch, J. and Gluck, M. and Slowinska-Lozynska, L. and Sosada, K.	mean age <55; not medicare eligible
24662112	Effect of bariatric surgery on hypertension: a meta-analysis	Ann Pharmacother	Wilhelm, S. M.	No primary data
24992422	The safety and efficacy of bariatric surgery for obese, wheelchair bound patients	Annals of the Royal College of Surgeons of England		

ID	Title	Journal	Authors	Reason for Exclusion
25148886	Changes in BMI and psychosocial functioning in partners of women who undergo gastric bypass surgery for obesity	Obes Surg	Willmer, M., Berglind, D., Thorell, A., Sundbom, M., Udden, J., Raoof, M., Hedberg, J., Tynelius, P., Ghaderi, A., Naslund, E., Rasmussen, F.	mean age <55; not medicare eligible
0	Venous thromboembolism after bariatric surgery performed by Bariatric Surgery Center of Excellence Participants: Analysis of the Bariatric Outcomes Longitudinal Database	Surgery for Obesity and Related Diseases	Winegar, D. A.	mean age <55; not medicare eligible
0	Prediction of excess weight loss after laparoscopic Roux-en-Y gastric bypass: data from an artificial neural network	Surgical Endoscopy and Other Interventional Techniques	Wise, E. S.	mean age <55; not medicare eligible
21429816	Effects of postbariatric surgery weight loss on adipokines and metabolic parameters: comparison of laparoscopic Roux-en-Y gastric bypass and laparoscopic sleeve gastrectomy--a prospective randomized trial	Surg Obes Relat Dis	Woelnerhanssen, B.	mean age <55; not medicare eligible
11466603	Results of bariatric surgery	Int J Obes Relat Metab Disord	Wolf, A. M. and Kortner, B. and Kuhlmann, H. W.	mean age <55; not medicare eligible
0	C1q/TNF-related protein-9 (CTRP9) levels are associated with obesity and decrease following weight loss surgery	Journal of Clinical Endocrinology and Metabolism	Wolf, R. M., Steele, K. E., Peterson, L. A., Zeng, X., Jaffe, A. E., Schweitzer, M. A., Magnuson, T. H., Wong, G. W.	mean age <55; not medicare eligible
0	Treating diabetes with surgery	JAMA: Journal of the American Medical Association	Wolfe, Bruce M. and Purnell, Jonathan Q. and Belle, Steven H.	No primary data
18586562	Predictors of outcome in treatment of morbid obesity by laparoscopic adjustable gastric banding: results of a prospective study of 380 patients	Surg Obes Relat Dis	Wolnerhanssen, B. K.	mean age <55; not medicare eligible
27272667	Influence of Liver Disease on Perioperative Outcome After Bariatric Surgery in a Northern German Cohort	Obes Surg	Wolter, S. and Dupree, A. and Coelius, C. and El Gammal, A. and Kluwe, J. and Sauer, N. and Mann, O.	mean age <55; not medicare eligible
19342735	Laparoscopic bariatric surgery: a five-year review	Hong Kong Med J	Wong, S. K. and Kong, A. P. and Mui, W. L. and So, W. Y. and Tsung, B. Y. and Yau, P. Y. and	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
			Chow, F. C. and Ng, E. K.	
0	Development of bariatric surgery: The effectiveness of a multi-disciplinary weight management programme in Hong Kong	Annals of the Academy of Medicine Singapore	Wong, S. K. H.	mean age <55; not medicare eligible
22050632	Use of laparoscopic sleeve gastrectomy and adjustable gastric banding for suboptimally controlled diabetes in Hong Kong	Diabetes Obes Metab	Wong, S. K. H.	mean age <55; not medicare eligible
20186576	One year improvements in cardiovascular risk factors: a comparative trial of laparoscopic Roux-en-Y gastric bypass vs. adjustable gastric banding	Obes Surg	Woodard, G. A.	mean age <55; not medicare eligible
0	Laparoscopic Adjustable Gastric Banding In Patients with Unexpected Cirrhosis: Safety and Outcomes	Obesity Surgery	Woodford, R. M., Burton, P. R., Oâ€™Brien, P. E., Laurie, C., Brown, W. A.	mean age <55; not medicare eligible
DARE-12013066881	Bariatric surgery versus conventional medical therapy for obese patients with type 2 diabetes: a meta-analysis (Provisional abstract)	Chinese Journal of Evidence-Based Medicine	Xie, Xf and Zhang, Wl and Li, Q and Li, N and Wang, C	No primary data
0	Impact of weight-loss surgery and diabetes status on serum ALT levels	Obesity Surgery	Xourafas, D. and Ardestani, A. and Ashley, S. W. and Tavakkoli, A.	mean age <55; not medicare eligible
DARE-12013065475	Bariatric surgery for non-obese type 2 diabetes mellitus in Mainland China: a meta-analysis (Provisional abstract)	Chinese Journal of Tissue Engineering Research	Xu, Jh and Pan, W and Gong, J and Lu, Sx and Guan, Sh and Wang, Dx and Piao, Z and Li, N and Li, Js	No primary data
26054489	Effectiveness of laparoscopic Roux-en-Y gastric bypass on obese class I type 2 diabetes mellitus patients	Surg Obes Relat Dis	Xu, L., Yin, J., Mikami, D. J., Portenier, D. D., Zhou, X., Mao, Z.	mean age <55; not medicare eligible
0	Laparoscopic Roux-en-Y gastric bypass and sleeve gastrectomy achieve comparable weight loss at 1 year	American Surgeon	Yaghoubian, A.	mean age <55; not medicare eligible
HTA-32012000812	Bariatric treatments for adult obesity (Structured abstract)	Health Technology Assessment Database	Yan, C and Guo, B and Chuck, A and Harstall, C	No primary data
23594442	Defining and predicting complete remission of type 2 diabetes: a short-term efficacy study of open gastric bypass	Obes Facts	Yan, H.	mean age <55; not medicare eligible
27124041	Roux-en-Y Gastric Bypass Versus Medical Treatment for Type 2 Diabetes Mellitus in Obese Patients: A Systematic Review and Meta-Analysis of Randomized Controlled	Medicine (Baltimore)	Yan, Y.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	Trials			
0	Bariatric Surgery and Liver Cancer in a Consortium of Academic Medical Centers	Obesity Surgery	Yang, B. and Yang, H. P. and Ward, K. K. and Sahasrabudde, V. V. and McGlynn, K. A.	Not about bariatric surgery
16756734	The influence of Helicobacter pylori infection on the development of gastric ulcer in symptomatic patients after bariatric surgery	Obes Surg	Yang, C. S. and Lee, W. J. and Wang, H. H. and Huang, S. P. and Lin, J. T. and Wu, M. S.	mean age <55; not medicare eligible
26198306	Long-term effects of laparoscopic sleeve gastrectomy versus roux-en-Y gastric bypass for the treatment of Chinese type 2 diabetes mellitus patients with body mass index 28-35 kg/m(2)	BMC Surg	Yang, J.	mean age <55; not medicare eligible
0	Diabetes Associated Markers After Bariatric Surgery: Fetuin-A, but Not Matrix Metalloproteinase-7, Is Reduced	Obesity Surgery	Yang, P. J.	mean age <55; not medicare eligible
24713521	Bariatric surgery decreased the serum level of an endotoxin-associated marker: lipopolysaccharide-binding protein	Surg Obes Relat Dis	Yang, P. J. and Lee, W. J. and Tseng, P. H. and Lee, P. H. and Lin, M. T. and Yang, W. S.	mean age <55; not medicare eligible
DARE-12013022114	A meta-analysis: to compare the clinical results between gastric bypass and sleeve gastrectomy for the obese patients (Provisional abstract)	Obesity Surgery	Yang, X and Yang, G and Wang, W and Chen, G and Yang, H	mean age <55; not medicare eligible
0	Impact of sleeve gastrectomy with ileal interposition duodenojejunal bypass operation on lipid metabolism in non-obese type 2 diabetes mellitus patients	Zhonghua wei chang wai ke za zhi = Chinese journal of gastrointestinal surgery	Yang, Y., Yan, J., Wu, Y., Lin, Y., Yue, X.	mean age <55; not medicare eligible
26335074	Single-stage revision from gastric band to gastric bypass or sleeve gastrectomy: 6- and 12-month outcomes	Surg Endosc	Yeung, L.	mean age <55; not medicare eligible
25843397	Comparison of the effects of Roux-en-Y gastrojejunostomy and LRYGB with small stomach pouch on type 2 diabetes mellitus in patients with BMI<35 kg/m(2)	Surg Obes Relat Dis	Yi, B.	mean age <55; not medicare eligible
2016-55801-010	Efficacy of laparoscopic sleeve gastrectomy for the treatment of obesity in a non-Western society	Eating and Weight Disorders	Yildiz, Baris, Katar, Kagan, Hamamci, Okan	mean age <55; not medicare eligible
23955521	Gastric bypass and sleeve gastrectomy for type 2 diabetes: a systematic review and meta-analysis of outcomes	Obes Surg	Yip, S.	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
26983631	Laparoscopic Sleeve Gastrectomy and Gastric Bypass for The Aging Population	Obes Surg	Yoon, J.	single arm study n<50
0	Use and outcomes of laparoscopic sleeve gastrectomy vs laparoscopic gastric bypass: Analysis of the American college of Surgeons nsqip	Journal of the American College of Surgeons	Young, M. T.	mean age <55; not medicare eligible
26198617	Impact of Botulinum Neurotoxin Pyloric Injection During Laparoscopic Sleeve Gastrectomy on Postoperative Gastric Leak: a Clinical Randomized Study	Obes Surg	Youssef, T., Abdalla, E., El-Alfy, K., Dawoud, I., Morshed, M., Farid, M.	mean age <55; not medicare eligible
23996294	Differential effects of laparoscopic sleeve gastrectomy and laparoscopic gastric bypass on appetite, circulating acyl-ghrelin, peptide YY3-36 and active GLP-1 levels in non-diabetic humans	Obes Surg	Yousseif, A.	mean age <55; not medicare eligible
0	Remission of type 2 diabetes mellitus in patients after different types of bariatric surgery: A population-based cohort study in the United Kingdom	JAMA Surgery	Yska, J. P.	mean age <55; not medicare eligible
25646793	Two-year changes in bone density after Roux-en-Y gastric bypass surgery	Journal of Clinical Endocrinology and Metabolism	Yu E, and Boussein, M. L. and Putman, M. S. and Monis, E. L. and Roy, A. E. and Pratt, J. S. A. and Butsch, W. S. and Finkelstein, J. S.	mean age <55; not medicare eligible
0	Two-year changes in bone density after Roux-en-Y gastric bypass surgery	Transl. Endocrinol. Metab.	Yu, E. W. and Boussein, M. L. and Putman, M. S. and Monis, E. L. and Roy, A. E. and Pratt, J. S. A. and Butsch, W. S. and Finkelstein, J. S.	mean age <55; not medicare eligible
26600045	Effects of Gastric Bypass and Gastric Banding on Bone Remodeling in Obese Patients With Type 2 Diabetes	J Clin Endocrinol Metab	Yu, E. W., Wewalka, M., Ding, S. A., Simonson, D. C., Foster, K., Holst, J. J., Vernon, A., Goldfine, A. B., Halperin, F.	mean age <55; not medicare eligible
0	Metabolic Syndrome After Roux-en-Y Gastric Bypass Surgery in Chinese Obese Patients with Type 2 Diabetes	Obesity Surgery	Yu, H., Zhang, L., Bao, Y., Zhang, P., Tu, Y., Di, J., Han, X., Han, J., Jia, W.	mean age <55; not medicare eligible
25355456	The long-term effects of bariatric surgery for	Obes Surg	Yu, J.	No primary data

ID	Title	Journal	Authors	Reason for Exclusion
	type 2 diabetes: systematic review and meta-analysis of randomized and non-randomized evidence			
26318429	Laparoscopic Roux-en-Y gastric bypass patients have an increased lifetime risk of repeat operations when compared to laparoscopic sleeve gastrectomy patients	Surg Endosc	Zak, Y.	mean age <55; not medicare eligible
0	Effects of gastric banding on glucose tolerance, cardiovascular and renal function, and diabetic complications: A 13-year study of the morbidly obese	Surgery for Obesity and Related Diseases	Zakaria, A. S. and Rossetti, L. and Cristina, M. and Veronelli, A. and Lombardi, F. and Saibene, A. and Micheletto, G. and Pontiroli, A. E.	mean age <55; not medicare eligible
27450209	The effects of optimal perioperative glucose control on morbidly obese patients undergoing bariatric surgery	Surg Endosc	Zaman, J. A. and Shah, N. and Leverson, G. E. and Greenberg, J. A. and Funk, L. M.	mean age <55; not medicare eligible
23260801	Long-term results of a randomized trial comparing banded versus standard laparoscopic Roux-en-Y gastric bypass	Surg Obes Relat Dis	Zarate, X.	mean age <55; not medicare eligible
DARE-12014071794	Is laparoscopic sleeve gastrectomy a lower risk bariatric procedure compared with laparoscopic Roux-en-Y gastric bypass? A meta-analysis (Provisional abstract)	Database of Abstracts of Reviews of Effects	Zellmer, Jd and Mathiason, Ma and Kallies, Kj and Kothari, Sn	mean age <55; not medicare eligible
0	The Effectiveness of Bariatric Surgery for Chinese Obesity in 2Â Years: A Meta-Analysis and Systematic Review	Journal of Investigative Surgery	Zeng, T. and Cai, Y. and Chen, L.	mean age <55; not medicare eligible
25813367	Clinical factors that predict remission of diabetes after different bariatric surgical procedures: interdisciplinary group of bariatric surgery of Verona (G.I.C.O.V.)	Acta Diabetol	Zenti, M. G.	mean age <55; not medicare eligible
27220850	Revisional Surgery Following Laparoscopic Gastric Plication	Obes Surg	Zerrweck, C.	mean age <55; not medicare eligible
0	Laparoscopic gastric bypass vs. sleeve gastrectomy in the super obese patient: Early outcomes of an observational study	Obesity Surgery	Zerrweck, C.	mean age <55; not medicare eligible
111866228. Language:	Outcomes of Prolonged Laparoscopic Bariatric Operations Compared With Shorter Open Procedures	Surgical Laparoscopy, Endoscopy & Percutaneous Techniques	Zettervall, Sara L.	mean age <55; not medicare eligible
24913240	A meta-analysis of 2-year effect after surgery: laparoscopic Roux-en-Y gastric bypass versus	Obes Surg	Zhang, C.	mean age <55; not medicare eligible

ID	Title	Journal	Authors	Reason for Exclusion
	laparoscopic sleeve gastrectomy for morbid obesity and diabetes mellitus			
0	Perioperative risk and complications of revisional bariatric surgery compared to primary Roux-en-Y gastric bypass	Surgical Endoscopy and Other Interventional Techniques	Zhang, L.	mean age <55; not medicare eligible
23239292	Reduction in obesity-related comorbidities: is gastric bypass better than sleeve gastrectomy?	Surg Endosc	Zhang, N.	mean age <55; not medicare eligible
26087171	Comparison of Short- and Mid-term Efficacy and the Mechanisms of Gastric Bypass Surgeries on Managing Obese and Nonobese Type 2 Diabetes Mellitus: A Prospective Study	Arch Med Res	Zhang, X., Cheng, Z., Xiao, Z., Du, X., Du, J., Li, Y., Long, Y., Yu, H., Zhang, X., Tian, H.	mean age <55; not medicare eligible
24827405	A randomized clinical trial of laparoscopic Roux-en-Y gastric bypass and sleeve gastrectomy for the treatment of morbid obesity in China: a 5-year outcome	Obes Surg	Zhang, Y.	mean age <55; not medicare eligible
25092167	Laparoscopic sleeve gastrectomy versus laparoscopic Roux-en-Y gastric bypass for morbid obesity and related comorbidities: a meta-analysis of 21 studies	Obes Surg	Zhang, Y. and Wang, J. and Sun, X. and Cao, Z. and Xu, X. and Liu, D. and Xin, X. and Qin, M.	No primary data
0	The long-term course of quality of life and the prediction of weight outcome after laparoscopic adjustable gastric banding: A prospective study	Bariatric Surgical Patient Care	Zijlstra, H.	mean age <55; not medicare eligible
0	Long-term virologic outcomes following bariatric surgery in patients with HIV	Obesity Research and Clinical Practice	Zivich, S. and Cauterucci, M. and Allen, S. and Vetter, M. and Vinnard, C.	N < 10 per arm
21937419	Billroth I vs. Billroth II vs. Roux-en-Y following distal gastrectomy: a meta-analysis based on 15 studies	Hepatogastroenterology	Zong, L. and Chen, P.	No primary data
25392079	Effect of Laparoscopic Roux-en-Y Gastric Bypass Surgery on Obstructive Sleep Apnea in a Chinese Population with Obesity and T2DM	Obes Surg	Zou, J., Zhang, P., Yu, H., Di, J., Han, X., Yin, S., Yi, H.	mean age <55; not medicare eligible
0	Complications and outcome after laparoscopic bariatric surgery: LAGB versus LRYGB	Langenbeck's Archives of Surgery	Zuegel, N. P.	mean age <55; not medicare eligible
19450339	Obesity in adults	BMJ Clin Evid	Arterburn, D.	could not be retrieved
CN-01108636	[Chosen anthropometric parameters and concentrations of leptin and adiponectin in extreme obese patients treated with	Polski merkuriusz lekarski : organ Polskiego Towarzystwa Lekarskiego	Blus, E and Kowalczyk, Z and Wojciechowska-Kulik, A and Baj, Z and	could not be retrieved

ID	Title	Journal	Authors	Reason for Exclusion
	implantation of a gastric balloon]		Majewska, E	
27149810	[THE CHANGE IN THE CONCENTRATION OF VITAMINS AFTER BARIATRIC SURGERY]	Klin Med (Mosk)	Bodunova, N. A., Sabelnikova, E. A., Parfenov, A. I., Askerhanov, R. G., Tkachenko, E. V., Varvanina, G. G., Feydorov, I. U., Khatkov, I. E., Mosin, S. V.	could not be retrieved
0	Prevalence of obesity and the first experience of laparoscopic adjustable gastric banding in Lithuania	Chirurgische Gastroenterologie Interdisziplinär	Brimas, G. and Barzda, A. and Lipnickas, V. and Valiukenas, V. and Brimiene, V. and Strupas, K.	could not be retrieved
0	Surgical correction of dislipodemia in patients with obesity	Vestnik khirurgii imeni I. I. Grekova	Fishman, M. B., Mirchuk, K. K., Chie, M., Muzhikov, S. P.	could not be retrieved
26591854	[RANDOMIZED CONTROLLED COMPARATIVE INVESTIGATION OF EFFICACY OF LAPAROSCOPIC PLICATION OF BIG GASTRIC CURVATURE AND LAPAROSCOPIC SLEEVE GASTRECTOMY]	Klin Khir	Grubnik, V. V. and Parfentyev, R. S. and Medvedev, O. V. and Kresyun, M. S.	could not be retrieved
108257987. Language:	Comparison of complication rates between laparoscopic Roux-en-Y gastric bypass and laparoscopic adjustable gastric banding	UPNAAI Nursing Journal	Hardie, Thomas and Crowley, Jaclyn and Wheeler, Erlinda C.	could not be retrieved
HTA-32008000022	Laparoscopic bariatric surgery: Roux-en-Y gastric bypass, vertical banded gastroplasty and adjustable gastric banding (Structured abstract)	Health Technology Assessment Database	Hayes	could not be retrieved
0	Metabolic Changes After Roux-N-Y Bariatric Surgery In Hispanics	Boletín de la Asociación Médica de Puerto Rico	Hernández-Gil de Lamadrid, J., Nieves-Rivera, J. J., Mora, L., Corretjer, L., Altieri, P. I., Suárez, A., Banchs, H. L., Muñoz, J., Soto, M. I., Escobales, N., Crespo, M.	could not be retrieved
0	Gastric restrictive procedures to treat obesity: reasons for failure and long-term evaluation of the results of operative revision	International journal of surgical investigation	Kaminski, D. L.	could not be retrieved
0	Gastrointestinal quality of life following bariatric surgery in Asian patients	Hepato-Gastroenterology	Lee, Y. C.	could not be retrieved

ID	Title	Journal	Authors	Reason for Exclusion
24901132	Comparative study on laparoscopic sleeve gastrectomy and laparoscopic gastric bypass for treatment of morbid obesity patients	Hepatogastroenterology	Li, J. F.	could not be retrieved
22944342	Laparoscopic Roux-en-Y gastric bypass vs. laparoscopic sleeve gastrectomy for morbid obesity and diabetes mellitus: a meta-analysis of sixteen recent studies	Hepatogastroenterology	Li, P.	could not be retrieved
15195014	Radiological contrast studies after vertical banded gastroplasty (VBG) and Roux-en-Y gastric bypass (RYGBP) in patients with morbid obesity. Study of the complications	Radiol Med	Mondeturo, F. and Cappello, I. and Mazzoni, G. and Barozzi, L. and Ghetti, A. and Nottola, D. and Cariani, S. and Amenta, E.	could not be retrieved
CN-01160226	A comparative effectiveness trial of laparoscopic gastric banding versus CPAP for obstructive sleep apnea	Sleep	Patel, Sr	could not be retrieved
26680388	A New Bariatric Procedure: The Stomach Sparing Gastric Sleeve	Surg Technol Int	Rodriguez, G., Martinez, A., Viramontes-So, M., Sanmiguel, L., Jimenez, J. A., Limon, J., Chavez, L., Gradillo, L., Lagardere, A. O.	could not be retrieved
22829557	Modified Roux-en-Y gastric bypass for type 2 diabetes mellitus in China	Hepatogastroenterology	Sun, Z. C.	could not be retrieved
0	Determinants of the resolution of type 2 diabetes after bariatric surgery	Vascular Disease Prevention	Zalesin, K. C. and Krause, K. R. and Chengelis, D. L. and McCullough, P. A.	could not be retrieved

Appendix C. Design Details

Study	Number of centers	Country	Funding	Inclusion criteria	Exclusion criteria	Medicare eligibility criteria
Abbas 2015 26001882	Single Center	U.S.	No industry support	patients older than 60 years of age who underwent laparoscopic Roux-en-Y gastric bypass (LRYGB) or laparoscopic sleeve gastrectomy (LSG)	.	Age
Altieri 2016 26201412	Regional registry (New York Statewide Planning and Research Cooperative System (SPARCS) administrative database)	U.S.	Not reported	patients who underwent band removal (ICD-9 code 44.97, CPT 43772), band revision (ICD-9 code 44.96, 44.98, CPT code 43771), band replacement (ICD-9 code 44.97 with 44.95 CPT 43659, 43773, 43774), or conversion to Roux-en-Y gastric bypass (ICD-9 code 44.38) or sleeve gastrectomy (ICD-9 Code 43.82 and 43.89)	Patients under 18 years of age, those with in hospital mortality (n = 1), and procedures less than 30 days from initial surgery	Age
Andalib 2016 26416373	Regional registry (American College of Surgeons National Surgical Quality Improvement Program (ACS NSQIP) database)	U.S.	Not reported	adult morbidly obese patients, underwent adjustable gastric banding (AGB), sleeve gastrectomy (SG), Roux-en-Y gastric bypass (RYGB), and biliopancreatic diversion–duodenal switch (BPD–DS)	revisional bariatric procedure along with a procedure coded as emergent, had a surgery in the 30 days prior to the index surgery, preoperative sepsis, disseminated cancer, and American Society of Anesthesiology (ASA) class 5 (moribund),	ESRD
Ardestani 2015 25573879	Regional registry (the Bariatric Outcomes Longitudinal Database (BOLD))	U.S.	Not reported	RYGB or LAGB, ≥ 18 years, insulin treated diabetes, BMI ≥ 35 kg/m ² , 12 months post-op data	hand-or robotic-assisted procedures	Age
Boules 2015 26243345	Single Center	unclear	Not reported	patients who had concomitant HH repair during bariatric surgery between 2010 and 2014.	Patients presenting with severe or obstructive symptoms from HHs were treated primarily as HHs	Age
Busetto 2008 18239641	Multicenter	Italy	No industry support	.	.	Age
Clough 2011 20490708	Regional registry (LapBase®)	Australia	Not reported	over 60 years of age at the time of LGB surgery and had at least 3 months follow-up since the time of operation	nd	Age

Study	Number of centers	Country	Funding	Inclusion criteria	Exclusion criteria	Medicare eligibility criteria
	(Accessmed, Melbourne) bariatric database)					
Davidson 2016 26864395	Unclear	U.S.	Not reported	patients undergoing gastric bypass surgery	.	Age
Dorman 2012 22038414	Regional registry (2005-2009 ACS NSQIP Participant Use File)	U.S.	No industry support	>18 years, underwent bariatric surgery	BMI < 35 kg/m2	Age
Dunkle-Blatter 2007 17331804	Single Center	U.S.	Not reported	patients undergoing Roux-en-Y gastric bypass (RYGB) were selected for this study	.	Age
Flum 2005 16234496	Regional registry (Medicare Part B database)	U.S.	No industry support	Patients with a claim for a gastric restrictive procedure without gastric bypass; vertical-banded gastroplasty; gastric restrictive procedure without gastric bypass for morbid obesity; gastric restrictive procedure with gastric bypass; Roux-en-Y gastroenterostomy (RYGB); gastric restrictive procedure with gastric bypass with small intestine reconstruction to limit absorption; revision of gastric restrictive procedure	.	MedicareAge/ Disabled
Flum 2011 21975317	Multicenter	U.S.	Not reported	CMS enrollees (2004-2008), morbid obesity, with info on bariatric surgery	nd	Medicare/Age/ ESRD/Disabled
Freeman 2015 25708829	Multicenter	U.S.	Not reported	Required to meet NIH guidelines to undergo surgical weight loss (BMI greater than 40 kg/m2 or BMI between 35 and 40 kg/m2 with a comorbid medical condition along with a documented inability to achieve weight loss with a medical regimen over a 6-month period)	.	Disabled
Gebhart 2015 25130515	Regional registry (University Health System (UHC) database)	U.S.	Not reported	.	.	Age
Giordano 2014 24318411	Single Center	Finland	No industry support	no previous bariatric procedures; minimum 24 mo FU	revisional LYRGB; <24 mo FU	Age
Hallowell 2007 17576885	Unclear	U.S.	Not reported	gastric bypass from March 24, 1998, through May 31, 2006	revision surgery	Medicare/Age/ Disabled

Study	Number of centers	Country	Funding	Inclusion criteria	Exclusion criteria	Medicare eligibility criteria
Hazzan 2006 17138231	Single Center	U.S.	Not reported	> 60 years, received laparoscopic bariatric procedures performed at Mount Sinai Medical Center from February 1999 to September 2005	.	Age
Huang 2015 25859266	Single Center	Taiwan	Not reported	.	.	Age
Irwin 2013 23744816	Multicenter	U.S.	No industry support	Patients who had bariatric surgery were matched by date of surgery (2 years), age (5 years), and target international normalized ratio (INR) range with up to five patients who had either a cholecystectomy or endoscopic retrograde cholangiopancreatography (ERCP)	pregnant, incarcerated, 18 years of age or younger at the time of surgery, had cancer-related abdominal surgery, or died within 14 days of surgery from a nonsurgical complication	Age
Johnson 2012 22643265	Regional registry (SCORS 1996-2008)	U.S.	Not reported	ages 40-79; diagnosis of morbid obesity and received a primary surgical procedure of interest, with a presurgical diagnosis of MI, angina, stroke.	.	Age
Lee 2016 27220823	Single Center	U.S.	Not reported	>=18, bariatric surgery at VA hospital 08/01/2006-02/01/2014	bariatric surgery outside VA hospital	Age
Lemaître 2016 27063637	Single Center	South Pacific	Industry funded	all LSG cases between January 2008 and February 2013. All were Medicare beneficiaries	.	Medicare/Age/Disabled
Leonetti 2012 22508671	Single Center	Italy	Not reported	National Institutes of Health criteria for bariatric surgery indications.	Contradictions to National Institutes of Health criteria for bariatric surgery indications.	Age
Loy 2014 24582414	Unclear	U.S.	Not reported	National Institutes of Health criteria for bariatric surgery, >=70 years of age	.	Age
Luppi 2015 25088486	Single Center	Spain	Not reported	.	.	Age
Maraka 2015 25611727	Regional registry (Mayo Clinic Rochester bariatric surgery database)	U.S.	Not reported	Patients with insulin-requiring diabetes mellitus that underwent bariatric surgery from May 2008 to April 2013	Patients with DM2 treated with oral agents or diet alone	Age
Martin 2015 26530652	Regional registry (Mayo Clinic Joint Registry)	U.S.	No industry support	bariatric surgery before total knee arthroplasty (TKA)	.	Age
McGlone 2015 26112136	Single Center	UK	No industry support	all elderly patients (defined as 60 years and over) undergoing bariatric surgery in our service between January 2011 and October 2012	.	Age
Michaud 2016 26130180	Single Center	Canada	No industry support	All patients aged 60 years and above who underwent a primary open BPD-DS with standard intestinal measures (250-cm alimentary limb and 100-cm common channel) from November 1992 to	.	Age

Study	Number of centers	Country	Funding	Inclusion criteria	Exclusion criteria	Medicare eligibility criteria
September 2011						
Miranda 2013 23604694	Single Center	U.S.	Not reported	.	.	Age
Mittermair 2008 18830777	Single Center	Austria	No industry support Not reported	1996-2006 >= 50 years who received a laparoscopically placed SAGB (Obtech, Ethicon Endo-Surgery). Patients with a body mass index (BMI) greater than 40 or a BMI between 35 and 40 with additional obesity-related comorbidities were considered for the SAGB operation	.	Age
Mizrahi 2014 24442420	Single Center	U.S.	Not reported	BMI higher than 40 kg/m2 or higher than 35 kg/m2 with obesity-related comorbidities	18>age, pregnancy, alcohol or substance abuse, current malignancy, hypothyroidism, or those not able to read and sign an informed consent form.	Age
Moon 2016 26220238	Multicenter	U.S./Brazil	Not reported	>= 60 y/o, got LAGB, LSG, or RYGB	nd	Age
Mozer 2015 25832986	Regional registry (ACS NSQIP 2006-2011)	U.S.	No industry support	Patients undergoing laparoscopic gastric bypass (RYGB), sleeve gastrectomy (LSG), and adjustable gastric band placement (LAGB) with dialysis dependent renal failure	.	Dialysis dependent renal failure
Nagao 2014 24519024	Single Center	France	Not reported	Primary LSG between 2005 and 2010; body mass index (BMI) >=40 kg/m2 or a BMI between 35 and 40 kg/m2 with obesity-related comorbidities, such as diabetes mellitus, hypertension, and sleep apnea syndrome, as well as the patient's preference for such a bariatric procedure if not contraindicated	inability to give informed consent, a clinically significant psychiatric disorder, the presence of gastroesophageal reflux disease, and/or presence of a Barrett esophagus	Age
Nickel 2016 27179771	Regional registry (Medicare)	U.S.	Not reported	patients who underwent TKA for osteoarthritis	TKA after December 31, 2010	Medicare
O'Keefe 2010 20532834	Unclear	U.S.	Not reported	.	.	Age
Ochner 2013 23700235	Single Center	U.S.	No industry support	underwent either laparoscopic Roux-en-Y gastric bypass (RYGB) or laparoscopic gastric banding between May 1, 2001 and May 1, 2011	Men and patients between 45 and 55 years of age were not included in categorical analyses	Age
Omalu 2007 17938303	Regional registry (Pennsylvania Health Care Cost and Containment Council)	U.S.	Not reported	All state-resident patients who underwent bariatric surgery; all in-patient discharges with International Classification of Diseases, Ninth Revision, Clinical Modification, diagnosis codes of 278.00 (obesity, unspecified) or 278.01 (morbid obesity); and all in-patient discharges with major diagnostic group code 10 and diagnostic related group code 288 (operating procedures for obesity)	.	Age

Study	Number of centers	Country	Funding	Inclusion criteria	Exclusion criteria	Medicare eligibility criteria
Papasavas 2004 15479593	Multicenter	U.S.	Not reported	>= 55 years old	nd	Age
Peraglie 2016 25814071	Single Center	U.S.	Not reported	>= 60	nd	Age
Perry 2008 18156918	Regional registry (Medicare fee-for-service patients)	U.S.	Not reported	Morbidly obese Fee-for-Service Medicare patients	Medicare HMO beneficiaries	Medicare/Age
Praveenraj 2016 27279392	Unclear	India	No industry support	All obese elderly patients over the age of 50 years who underwent LSG or LYRGB between February 2012 and July 2013 and with at least 1 year of followup	nd	Age
Qin 2015 25373923	Multicenter	U.S.	No industry support	laparoscopic gastric bypass, laparoscopic sleeve gastrectomy, >= 19 years	<19 years, BMI < 35 kg/m2	Age/Disabled
Quebbeman n 2005 16925254	Single Center	U.S.	Not reported	patients over ?65 years at surgery	.	Age
Quirante 2017 28039650	Single Center	U.S.	No industry support	>= 65 yo, underwent a bariatric procedure during the 11-year period between 2005 and 2015 at Cleveland Clinic Florida Bariatric and Metabolic Institute	nd	Age
Ramirez 2012 22551574	Single Center	U.S.	Not reported	.	.	Age
Ritz 2014 24708912	Regional registry (SOFFCO)	France	Not reported	Must have had a RYGB, an adjustable gastric banding (LAGB), or a sleeve gastrectomy (SG)	Patients without any weight data during the first year of follow-up	Age
Saleh 2015 25868831	Regional registry (ACS NSQIP 2005-2011)	U.S.	No industry support	>=18 years old with a BMI >=30 kg/m2 who underwent a bariatric procedure	Open bariatric procedures and revisional surgeries, high-risk (ASA 5, emergency case, a history of ascites, or a worsening cardiac condition), major concurrent procedure was performed at the time of their procedure	ESRD
Scott 2013 22014480	Single Center	U.S.	Not reported	inpatients aged 40 –79 years who were discharged between January 1, 1996 and December 31, 2008, and who had a diagnosis of morbid obesity and a primary surgical procedure of interest	documented history of MI or cerebrovascular accident, had a primary outcome within 30 days of the index procedure, or had missing or implausible data	Age
Serrot 2011 22000180	Single Center	U.S.	Not reported	patients that had bariatric surgery 2001-2009, BMI <35 kg/m2, T2DM	nd	Age

Study	Number of centers	Country	Funding	Inclusion criteria	Exclusion criteria	Medicare eligibility criteria
Sosa 2004 15603658	Single Center	U.S.	Not reported	laparoscopic Roux-en-Y gastric bypass (LRYGBP) performed March 2001 to October , >= 60 years of age	nd	Age
Soto 2013 23733390	Single Center	U.S.	Not reported	patients age 60 and greater who underwent LSG as a final approach for morbid obesity at the Bariatric and Metabolic Institute at Cleveland Clinic Florida between November 2004 and December 2010	high risk, contraindications for gastric bypass (i.e., inflammatory bowel disease, severe small bowel adhesions); low BMI (≥ 35 kg/m ²) without comorbidities, heavy smokers, and/or patients on anticoagulants [4], and as a step to allow other non-bariatric operations (i.e., joint replacement) to be performed.	Age
Spaniolas 2014 24913586	Regional regisrty (NSQIP 2010-2011)	U.S.	Not reported	Compares SG and RYGBP, Age >= 65	.	Age
Sugerman 2004 15273547	Single Center	U.S.	Not reported	Patients receiving a bariatric procedure between 1981 and 2003: horizontal gastroplasty in 1981, vertical-banded gastroplasty (VBG) from 1982 to 1985, proximal gastric bypass (P-GBP) after 1985, long-limb gastric bypass (LL-GBP) with a 150-cm Roux (alimentary limb) for patients with a BMI ≥ 50 kg/m ² after 1991, hand-assisted laparoscopic GBP (HAL-GBP) in 1998 and totally laparoscopic GBP (L-GBP) after 1999; malabsorptive distal gastric bypass (D-GBP).	.	Age
Sun 2016 26264895	Regional registry (Pennsylvania Health Care Cost Containment Council (PHC4))	U.S.	Not reported	Patients over age 18 who underwent elective gastric bypass for severe obesity in 2011 were included. Gastric bypass was identified using the International Classification of Disease, 9th Revision, Clinical Modification (ICD-9)	.	Age
Tiwari 2011 21459686	Unclear	U.S.	No industry support	>18 yro	.	Age
Trieu 2007 17400516	Single Center	U.S.	Not reported	> 60 years of age who had undergone LRYGB at the Bariatric Institute, Cleveland Clinic Florida, from September 2001 to September 2004	.	Age
Valderas 2009 19517199	Single Center	Chile	Industry funded	BMI > 35 kg/m ² , EWL > 50%, >1 of amenorrhea, live in Santiago, Chile or 200 km roundabout	Any bone-affecting conditions, any medications affecting mineral metabolism in the past 12 months	Age
van Rutte 2013 23344504	Single Center	Netherland	Not reported	>=55 yo, body mass index (BMI) higher than 40 kg/m ² or higher than 35 kg/m ² with severe comorbidities, e.g., type 2 diabetes (T2DM),	Severe eating disorders, severe psychiatric disorders, and alcoholism	Age

Study	Number of centers	Country	Funding	Inclusion criteria	Exclusion criteria	Medicare eligibility criteria
				hypertension (HT), obstructive sleep apnea syndrome (OSAS) or affected joints, high motivation, and serious attempts at losing weight in the past		
Varela 2006 17058723	Regional registry (UHC 1999-2005)	U.S.	Not reported	all patients >60 undergoing elective bariatric surgery for obesity or morbid obesity	patients undergoing emergent or urgent procedures	Age
Wagner 2007 17938305	Single Center	U.S.	No industry support	All medically disabled patients who were recipients of Medicaid at the time of initial evaluation for RYGB; BMI of 40 or greater or BMI of 35 or greater with significant comorbid conditions	patients 65 years or older	Disabled
Werner 2015 26071250	Regional registry (PearlDiver Patient Records Database)	U.S.	Not reported	Underwent TKA from 2005 to 2011, CPT code (27447), ICD-9 codes for morbid obesity (278.01) or BMI N40 (V85.4, V85.41–V85.45), bariatric surgery for weight loss	nd	Age
Wiklund 2017	Single Center	Sweden	No industry support	LRYGB, performed at a university hospital in Sweden	.	Disabled
Willkomm 2010 20870182	Single Center	U.S.	Not reported	underwent Roux-en-Y gastric bypass (RYGB) at Baylor University Medical Center from January 2005 to December 2008, >65 yo (in subgroup analysis)	nd	Age
Wise 2016 26091994	Single Center	U.S.	No industry support	All patients between 2005 and 2014 who underwent LAGB at age 50 or greater	patients who required operative removal, replacement or adjustment procedures or conversion to open bypass due to complications, within the first year; did not have record of an immediately preoperative weight, follow-up weight or BMI value at either 180 or 365 days postoperatively, or a height measurement for calculation of ideal body weight	Age
Wittgrove 2009 19705206	Unclear	U.S.	Industry funded	60+ years of age, surgery performed 1/2002-1/2007, at least 12 months postoperative	nd	Age
Wool 2009 18855082	Single Center	U.S.	Not reported	male, >= 60 yo, had a body mass index (BMI) >40 kg/m2 or BMI>35 kg/m2 in association with comorbid conditions that included diabetes, hypertension, obstructive sleep apnea, degenerative joint disease, or osteoarthritis.	.	Age
Yuan 2009 18996764	Single Center	U.S.	No industry support	patients who underwent primary bariatric surgery from 1981 to 2006	.	Medicare

Study	Number of centers	Country	Funding	Inclusion criteria	Exclusion criteria	Medicare eligibility criteria
Zaveri 2016 27795883	Single Center	U.S.	Not reported	elderly patients (defined as 70 years and over) undergoing bariatric surgery	Patients with revision surgeries	Age

Appendix D. Arm Details

Study	Arm	Type of surgery	Surgery method	Pre- and/or post-surgical surgical work-ups (e.g., psychiatric evaluations, behavioral and nutritional counseling)	Surgery or endoscopy
Abbas 2015 26001882	Roux-en-Y or gastrectomy	Sleeve gastrectomy/Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Abbas 2015 26001882	Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Abbas 2015 26001882	gastrectomy	Sleeve gastrectomy	Laparoscopic		Surgery
Altieri 2016 26201412	Laparoscopic Adjustable Gastric Banding (LAGB) Surgery	Gastric banding	Laparoscopic		Surgery
Andalib 2016 26416373	Adjustable gastric banding	Gastric banding	Not specified		Not specified
Andalib 2016 26416373	Sleeve gastrectomy	Sleeve gastrectomy	Not specified		Not specified
Andalib 2016 26416373	Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Not specified		Not specified
Andalib 2016 26416373	Biliopancreatic diversion–duodenal switch	Biliopancreatic diversion with duodenal switch	Not specified		Not specified
Ardestani 2015 25573879	Roux-en-Y gastric bypass surgery	Roux-en-Y Gastric Bypass	Not specified	disease severity level assessment using the following 6-point Likert scale to facilitate tracking comorbidity changes after the surgery	Surgery
Ardestani 2015 25573879	laparoscopic adjustable gastric banding	Gastric banding	Laparoscopic	disease severity level assessment using the following 6-point Likert scale to facilitate tracking comorbidity changes after the surgery	Surgery
Boules 2015 26243345	Bariatric surgery + hernia repair	Sleeve gastrectomy/Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Boules 2015 26243345	Bariatric surgery + Laparoscopic sleeve gastrectomy	Sleeve gastrectomy	Laparoscopic		Surgery
Boules 2015 26243345	Bariatric surgery + Laparoscopic Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Boules 2015 26243345	Bariatric surgery alone	Sleeve gastrectomy/Roux-en-Y Gastric Bypass	Laparoscopic		Endoscopy
Busetto 2008 18239641	bariatric surgery	Unspecified	Not specified		Not specified
Clough 2011 20490708	Laparoscopic Gastric Banding	Gastric banding	Laparoscopic		Surgery
Davidson 2016 26864395	Gastric Bypass Surgery	Roux-en-Y Gastric Bypass	Not specified		Surgery
Dorman 2012 22038414	Bariatric Surgery	Gastric banding/Roux-en-Y Gastric Bypass/Duodenal	Laparoscopic		Surgery

Study	Arm	Type of surgery	Surgery method	Pre- and/or post-surgical surgical work-ups (e.g., psychiatric evaluations, behavioral and nutritional counseling)	Surgery or endocopy
		switch			
Dunkle-Blatter 2007 17331804	Roux-en-Y Gastric Bypass (RYGB)	Roux-en-Y Gastric Bypass	Open		Surgery
Flum 2005 16234496	Bariatric surgery	Gastric banding/Sleeve gastrectomy/Biliopancreatic diversion/Roux-en-Y Gastric Bypass	Not specified		Surgery
Flum 2011 21975317	Open Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Open		Surgery
Flum 2011 21975317	Laparoscopic Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Flum 2011 21975317	Laparoscopic adjustable gastric band	Gastric banding	Laparoscopic		Surgery
Flum 2011 21975317	Other	Unspecified	Not specified		Not specified
Freeman 2015 25708829	Laparoscopic Sleeve Gastrectomy (LSG) Surgery	Sleeve gastrectomy	Laparoscopic	Patients were required to undergo multidisciplinary medical weight loss management for a 6-month period prior to LSG with documented inability to achieve substantive weight loss; Collected data included: demographic data, medical comorbidities (diabetes mellitus, obstructive sleep apnea, stroke, and coronary artery disease), medications, etiology of ESRD and pre-operative dialysis dependence.	Surgery
Gebhart 2015 25130515	Laparoscopic Adjustable Gastric Banding (LAGB)	Gastric banding	Laparoscopic		Surgery
Gebhart 2015 25130515	Laparoscopic Sleeve Gastrectomy (LSG)	Sleeve gastrectomy	Laparoscopic		Surgery
Gebhart 2015 25130515	Laparoscopic or Open Gastric Bypass	Roux-en-Y Gastric Bypass	Not specified		Surgery
Gebhart 2015 25130515	Bariatric surgery	Gastric banding/Sleeve gastrectomy/Roux-en-Y Gastric Bypass	Not specified		Surgery
Giordano 2014 24318411	Laparoscopic Roux-en-Y gastric bypass (LRYGB)	Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Hallowell 2007 17576885	Gastric Bypass (60+)	Roux-en-Y Gastric Bypass	Not specified	Supervised nonsurgical weight loss attempts, BMI ≥ 40 or ≥ 35 with at least 1 significant obesity-related comorbidity, Evaluation by a pulmonologist, polysomnogram	Surgery
Hallowell 2007 17576885	Medicare Patients	Roux-en-Y Gastric Bypass	Not specified	Supervised nonsurgical weight loss attempts, BMI ≥ 40 or ≥ 35 with at least 1 significant obesity-related comorbidity, Evaluation by a pulmonologist,	Surgery

Study	Arm	Type of surgery	Surgery method	Pre- and/or post-surgical surgical work-ups (e.g., psychiatric evaluations, behavioral and nutritional counseling)	Surgery or endocopy
				polysomnogram	
Hazzan 2006 17138231	Laparoscopic Roux-en-Y gastric bypass (LRYGB)	Roux-en-Y Gastric Bypass	Laparoscopic	Upper endoscopy was performed on all patients including biopsy to check for Helicobacter pylori; Patients who had not undergone a colonoscopic evaluation within 5 years, or with recent changes in bowel habits, also underwent colonoscopy; Full preoperative blood work was performed, including nutritional parameters (albumin, iron panel, folate, B12 vitamin, 1,25-vitamin D, and intact parathyroid hormone level); psychological evaluation; patients possessing a gallbladder underwent right upper quadrant abdominal ultrasonography; patients with a history suggestive of sleep apnea underwent sleep; basic cardiopulmonary evaluation with extended testing testing.	Surgery
Hazzan 2006 17138231	Laparoscopic adjustable gastric banding (LAGB)	Gastric banding	Laparoscopic	Upper endoscopy was performed on all patients including biopsy to check for Helicobacter pylori; Patients who had not undergone a colonoscopic evaluation within 5 years, or with recent changes in bowel habits, also underwent colonoscopy; Full preoperative blood work was performed, including nutritional parameters (albumin, iron panel, folate, B12 vitamin, 1,25-vitamin D, and intact parathyroid hormone level); psychological evaluation; patients possessing a gallbladder underwent right upper quadrant abdominal ultrasonography; patients with a history suggestive of sleep apnea underwent sleep; basic cardiopulmonary evaluation with extended testing testing.	Surgery
Hazzan 2006 17138231	Laparoscopic biliopancreatic diversion with duodenal switch (LDS)	Biliopancreatic diversion	Laparoscopic	Upper endoscopy was performed on all patients including biopsy to check for Helicobacter pylori; Patients who had not undergone a colonoscopic evaluation within 5 years, or with recent changes in bowel habits, also underwent colonoscopy; Full preoperative blood work was performed, including nutritional parameters (albumin, iron panel, folate, B12 vitamin, 1,25-vitamin D, and intact parathyroid hormone level); psychological evaluation; patients possessing a gallbladder underwent right upper quadrant abdominal ultrasonography; patients with a history suggestive of sleep apnea underwent sleep; basic cardiopulmonary evaluation with extended testing testing.	Surgery
Hazzan 2006 17138231	Laparoscopic Sleeve Gastrectomy (LSG)	Sleeve gastrectomy	Laparoscopic	Upper endoscopy was performed on all patients including biopsy to check for Helicobacter pylori; Patients who had not undergone a colonoscopic	Surgery

Study	Arm	Type of surgery	Surgery method	Pre- and/or post-surgical surgical work-ups (e.g., psychiatric evaluations, behavioral and nutritional counseling)	Surgery or endoscopy
				evaluation within 5 years, or with recent changes in bowel habits, also underwent colonoscopy; Full preoperative blood work was performed, including nutritional parameters (albumin, iron panel, folate, B12 vitamin, 1,25-vitamin D, and intact parathyroid hormone level); psychological evaluation; patients possessing a gallbladder underwent right upper quadrant abdominal ultrasonography; patients with a history suggestive of sleep apnea underwent sleep; basic cardiopulmonary evaluation with extended testing testing.	
Hazzan 2006 17138231	Laparoscopic Revisional Surgery (LRS)	Unspecified	Laparoscopic	Upper endoscopy was performed on all patients including biopsy to check for Helicobacter pylori; Patients who had not undergone a colonoscopic evaluation within 5 years, or with recent changes in bowel habits, also underwent colonoscopy; Full preoperative blood work was performed, including nutritional parameters (albumin, iron panel, folate, B12 vitamin, 1,25-vitamin D, and intact parathyroid hormone level); psychological evaluation; patients possessing a gallbladder underwent right upper quadrant abdominal ultrasonography; patients with a history suggestive of sleep apnea underwent sleep; basic cardiopulmonary evaluation with extended testing testing.	Surgery
Huang 2015 25859266	Laparoscopic Roux-en-Y gastric bypass (LRYGB)	Roux-en-Y Gastric Bypass	Laparoscopic	Vitamin and mineral supplementation prescribed	Surgery
Huang 2015 25859266	Laparoscopic Sleeve Gastrectomy (LSG)	Sleeve gastrectomy	Laparoscopic	Vitamin and mineral supplementation prescribed	Surgery
Irwin 2013 23744816	Bariatric surgery total	Gastric banding/Roux-en-Y Gastric Bypass	Not specified		Surgery
Irwin 2013 23744816	Gastric banding	Gastric banding	Not specified		Surgery
Irwin 2013 23744816	Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Not specified		Surgery
Irwin 2013 23744816	Matched control	No surgery	Not specified		Surgery
Johnson 2012 22643265	gastric bypass or adjustable gastric banding	Gastric banding/Roux-en-Y Gastric Bypass	Not specified		Surgery
Johnson 2012 22643265	Surgical control	No surgery	Not specified		Surgery
Lee 2016 27220823	Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Lee 2016	laparoscopic	Gastric banding	Laparoscopic		Surgery

Study	Arm	Type of surgery	Surgery method	Pre- and/or post-surgical surgical work-ups (e.g., psychiatric evaluations, behavioral and nutritional counseling)	Surgery or endocopy
27220823	adjustable gastric band				
Lee 2016 27220823	sleeve gastrectomy	Sleeve gastrectomy	Laparoscopic		Surgery
Lemaître 2016 27063637	laparoscopic sleeve gastrectomy	Sleeve gastrectomy	Laparoscopic	the preoperative evaluation of all patient candidates (between 6 and 12 months beforehand) for the LSG included the following: (i) screening for comorbidities (cardiovascular, metabolic, respiratory), (ii) screening for eating disorders (TCA), as well as the assessment of nutritional and vitamin status and (iii) physical activity training, and (iv) psychological and psychiatric evaluation. Regular postsurgical dietary/nutritional evaluation (at 1, 3, 6 and 12 month) and daily supplementation with vitamins and minerals were recommended for all patients, with good compliance obtained (78% followed the center's nutritional supplementation recommendations).	Surgery
Leonetti 2012 22508671	Laparoscopic Sleeve Gastrectomy (LSG)	Sleeve gastrectomy	Laparoscopic	Patients followed up and assessed for diabetic state with routine laboratory tests and anthropometric measurements every 3 months.	Surgery
Leonetti 2012 22508671	Intensive conventional medical therapy.	No surgery	Not specified	Patients followed up and assessed for diabetic state with routine laboratory tests and anthropometric measurements every 3 months.	Not specified
Loy 2014 24582414	laparoscopic adjustable gastric banding	Gastric banding	Laparoscopic	Full blood analysis, electrocardiogram, chest x-ray, upper GI barium contrast study, and upper gastrointestinal endoscopy (if indicated), assessment by a cardiologist and pulmonologist, psychological evaluation, nutritionist prescribed 14-day protein shake diet	Surgery
Luppi 2015 25088486	Laparoscopic sleeve gastrectomy	Sleeve gastrectomy	Laparoscopic	All patients were assessed preoperatively by a multidisciplinary team and the criteria used for LSG were based on the Interdisciplinary European Guidelines on Metabolic and Bariatric Surgery	Surgery
Maraka 2015 25611727	Bariatric Surgery	Gastric banding/Sleeve gastrectomy/Biliopancreatic diversion with duodenal switch	Not specified		Surgery
Martin 2015 26530652	Bariatric Surgery	Roux-en-Y Gastric Bypass	Not specified		Surgery
Martin 2015 26530652	No surgery/High BMI	No surgery	Not specified		Not specified
Martin 2015 26530652	No surgery/Low BMI	No surgery	Not specified		Not specified
McGlone 2015 26112136	Bariatric surgery	Gastric banding/Sleeve gastrectomy/Roux-en-Y Gastric Bypass	Laparoscopic		Surgery

Study	Arm	Type of surgery	Surgery method	Pre- and/or post-surgical surgical work-ups (e.g., psychiatric evaluations, behavioral and nutritional counseling)	Surgery or endocopy
Michaud 2016 26130180	Biliopancreatic diversion with duodenal switch	Biliopancreatic diversion with duodenal switch	Open	Regular subcutaneous heparin was given for the first postoperative day and then switched to low-molecular-weight heparin. Patients were discharged with the same regimen for 3 weeks when they were tolerating a soft diet. Vitamin and mineral supplementations (ferrous sulfate 300 mg, vitamin D 50,000 IU, vitamin A 20,000 IU, calcium carbonate 500–1000 mg, and a multivitamin complex) were started within the first month after surgery, and these supplements were adjusted during follow-up according to plasma nutritional markers. Nutritional deficiencies were immediately corrected using standardized protocols. Patients also received recommendations to consume a high-protein diet.	Surgery
Miranda 2013 23604694	Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Not specified		Not specified
Miranda 2013 23604694	No surgery	No surgery	Not specified	Patients were "co-managed by endocrinologists, cardiologists and nutritionists" but no specific interventions were reported.	Not specified
Mittermair 2008 18830777	Swedish adjustable gastric band	Gastric banding	Laparoscopic	After a period of a further 4 weeks on pureed food, solid food was permitted. The postoperative follow-up program included appointments once a month for the first 6 months and then every third month during the first year. Thereafter, patients were seen once every 6 months for the first 2 years, and after 2 years, a control visit is planned annually. After 1 month, the balloon is filled the first time with 2 ml of iopamidol (Iopamiro 200, Astra AB, Sweden) and then, according to the weight loss, every month with an additional 1 ml depending on the patient's comfort and weight loss objectives.	Surgery
Mizrahi 2014 24442420	Laparoscopic Sleeve Gastrectomy (LSG)	Sleeve gastrectomy	Laparoscopic	Patients were assessed preoperatively by our multidisciplinary team which includes a bariatric surgeon, dietician, and a health psychologist, and they all met the minimal criteria for bariatric surgery as proposed by the NIH Consensus Development Panel report of 1991: BMI higher than 40 kg/m ² or higher than 35 kg/m ² with obesity-related comorbidities	Surgery
Moon 2016 26220238	Laparoscopic adjustable gastric banding	Gastric banding	Laparoscopic		Surgery
Moon 2016 26220238	Laparoscopic sleeve gastrectomy	Sleeve gastrectomy	Laparoscopic		Surgery
Moon 2016	Roux-en-Y gastric	Roux-en-Y Gastric Bypass	165 laparoscopic, 45 open		Surgery

Study	Arm	Type of surgery	Surgery method	Pre- and/or post-surgical surgical work-ups (e.g., psychiatric evaluations, behavioral and nutritional counseling)	Surgery or endocopy
26220238	bypass				
Mozer 2015 25832986	laparoscopic adjustable gastric band	Gastric banding	Laparoscopic		Surgery
Mozer 2015 25832986	Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Mozer 2015 25832986	Laparoscopic Sleeve Gastrectomy	Sleeve gastrectomy	Laparoscopic		Surgery
Nagao 2014 24519024	Laparoscopic sleeve gastrectomy	Sleeve gastrectomy	Laparoscopic		Surgery
Nickel 2016 27179771	bariatric surgery	Unspecified	Not specified		Not specified
O'Keefe 2010 20532834	Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Laparoscopic	Various presurgical tests (cardiac, pulmonary function, EGD, colonoscopy, DVT tests, heparin, smoking cessation) conducted as needed. Dietary restriction and psychological/behavioral profile for all patients.	Surgery
O'Keefe 2010 20532834	Laparoscopic Adjustable Gastric Banding.	Gastric banding	Laparoscopic	Various presurgical tests (cardiac, pulmonary function, EGD, colonoscopy, DVT tests, heparin, smoking cessation) conducted as needed. Dietary restriction and psychological/behavioral profile for all patients.	Surgery
O'Keefe 2010 20532834	Vertical Sleeve Gastrectomy.	Sleeve gastrectomy	Laparoscopic	Various presurgical tests (cardiac, pulmonary function, EGD, colonoscopy, DVT tests, heparin, smoking cessation) conducted as needed. Dietary restriction and psychological/behavioral profile for all patients.	Surgery
Ochner 2013 23700235	Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Ochner 2013 23700235	gastric banding	Gastric banding	Laparoscopic		Surgery
Omalu 2007 17938303	bariatric surgery	Unspecified	not specified		surgery
Papasavas 2004 15479593	Laparoscopic Roux-en-Y gastric bypass (LRYGB)	Roux-en-Y Gastric Bypass	Laparoscopic	A combination of sequential compression device and low molecular weight heparin was employed as prophylaxis against deep venous thrombosis. A prophylactic dose of antibiotics was administered in the preoperative area.	Surgery
Peraglie 2016 25814071	laparoscopic mini-gastric bypass	Mini-gastric bypass	Laparoscopic	All patients were required to undergo a multi-step program that included extensive education on the procedure as well as potential risks and complications. Patients were also required to have medical and psychological clearance, laboratory evaluation including H. pylori testing, complete blood count (CBC), comprehensive metabolic panel (CMP) and vitamin D levels. In the event of H. pylori positivity or low vitamin D, treatment for eradication or vitamin D supplementation was given prior to surgery. All	Surgery

Study	Arm	Type of surgery	Surgery method	Pre- and/or post-surgical surgical work-ups (e.g., psychiatric evaluations, behavioral and nutritional counseling)	Surgery or endocopy
				patients were seen one-on-one by the surgeon (CP), and all attended an extensive group clinic before surgery.	
Perry 2008 18156918	Bariatric Surgery	Gastric banding/Roux-en-Y Gastric Bypass/Unspecified	Laparoscopic	Analyzed prevalence of major weight-related comorbidities (diabetes, sleep apnea, hypertension, hyperlip- idemia, and coronary artery disease) 180 to 360 days prior to surgery.	Surgery
Perry 2008 18156918	No Surgery	No surgery	not specified	Analyzed prevalence of major weight-related comorbidities (diabetes, sleep apnea, hypertension, hyperlip- idemia, and coronary artery disease) 180 to 360 days prior to surgery.	not specified
Praveenraj 2016 27279392	Laparoscopic sleeve gastrectomy	Sleeve gastrectomy	Laparoscopic		Surgery
Praveenraj 2016 27279392	Laparoscopic Roux- en-Y gastric bypass	Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Qin 2015 25373923	laparoscopic sleeve gastrectomy	Sleeve gastrectomy	Laparoscopic	Clinical and surgical characteristics, and comorbidities were examined.	Surgery
Qin 2015 25373923	laparoscopic gastric bypass	Roux-en-Y Gastric Bypass	Laparoscopic	Clinical and surgical characteristics, and comorbidities were examined.	Surgery
Quebbemann 2005 16925254	Gastric bypass	Roux-en-Y Gastric Bypass	Laparoscopic	2-week, preoperative 800 Kcal diet. Postoperative evaluations were scheduled at 3-month intervals for the first year, 6-month intervals for 1 year, and then yearly: measurement of B vitamins, folate, selenium, parathyroid hormone, zinc, as well as complete electrolyte, hepatic, lipid, and hematology profiles. Vitamin supplementation was recommended for all patients.	Surgery
Quebbemann 2005 16925254	gastric band	Gastric banding	Laparoscopic	2-week, preoperative 800 Kcal diet. monthly visits for all LAGB patients, at which surgeons performed all adjustments, and counseling was provided on optimal eating habits. Vitamin supplementation was recommended for all patients.	Surgery
Quirante 2017 28039650	Bariatric surgery	Gastric banding/Sleeve gastrectomy/Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Ramirez 2012 22551574	Laparoscopic Gastric Banding	Gastric banding	Laparoscopic	Meeting to discuss benefits of surgery type. Medical screening - cardiac workup, drugs ceased, vena cava filters for patients with DVT postoperative liquid diet	Surgery
Ramirez 2012 22551574	Laparoscopic Roux- en-Y gastric bypass (LRYGB)	Roux-en-Y Gastric Bypass	Laparoscopic	Meeting to discuss benefits of surgery type. Medical screening - cardiac workup, drugs ceased, vena cava filters for patients with DVT postoperative liquid diet	Surgery
Ramirez 2012 22551574	Laparoscopic Sleeve Gastrectomy (LSG)	Sleeve gastrectomy	Laparoscopic	Meeting to discuss benefits of surgery type. Medical screening - cardiac workup, drugs ceased, vena cava filters for patients with DVT postoperative liquid diet	Surgery

Study	Arm	Type of surgery	Surgery method	Pre- and/or post-surgical surgical work-ups (e.g., psychiatric evaluations, behavioral and nutritional counseling)	Surgery or endocopy
Ritz 2014 24708912	Adjustable Gastric Banding (LAGB)	Gastric banding	Laparoscopic	The weight of patients was measured before surgery	Surgery
Ritz 2014 24708912	Gastric Bypass (RYGB)	Gastric banding	Not specified	The weight of patients was measured before surgery	Surgery
Ritz 2014 24708912	Sleeve Gastrectomy	Sleeve gastrectomy	Not specified	The weight of patients was measured before surgery	Surgery
Saleh 2015 25868831	Laparoscopic Roux-en-Y	Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Saleh 2015 25868831	Laparoscopic adjustable band	Gastric banding	Laparoscopic		Surgery
Saleh 2015 25868831	Laparoscopic Sleeve Gastrectomy	Sleeve gastrectomy	Laparoscopic		Surgery
Scott 2013 22014480	Bariatric Surgery	Unspecified	Not specified		Surgery
Scott 2013 22014480	Gastrointestinal Surgery	No surgery	Not specified		Surgery
Scott 2013 22014480	Orthopedic Surgery	No surgery	not specified		Not specified
Serrot 2011 22000180	Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Laparoscopic	All patients met NIH criteria for bariatric surgery at their initial evaluation.	Surgery
Serrot 2011 22000180	Non-surgical controls	No surgery	Not specified		Not specified
Sosa 2004 15603658	Laparoscopic Roux-en-Y gastric bypass (LRYGB)	Roux-en-Y Gastric Bypass	Laparoscopic	laparoscopic Roux-en-Y gastric bypass	Surgery
Soto 2013 23733390	Laparoscopic Sleeve Gastrectomy (LSG) Surgery	Sleeve gastrectomy	Laparoscopic	All patients received bowel preparation with a mild laxative preoperatively	Surgery
Spaniolas 2014 24913586	Sleeve Gastrectomy	Sleeve gastrectomy	Laparoscopic	No	Surgery
Spaniolas 2014 24913586	Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Laparoscopic	No	Surgery
Sugerman 2004 15273547	Bariatric surgery	Gastric banding/Gastroplasty/Roux-en-Y Gastric Bypass	Not specified	All GBP patients were asked to take lifetime supplemental vitamin B12 (500 mcg/d po or 1 mg/mo IM), and calcium (500 mg/d). Menstruating women were told to take ferrous sulfate (325 mg bid). Laboratory data obtained at the annual follow-up visit included standard hemoglobin and complete metabolic profiles, vitamin B12, serum magnesium, and iron levels. Patients were contacted by letter if deficiencies were noted for additional supplementation.	Surgery
Sun 2016 26264895	Gastric bypass	Roux-en-Y Gastric Bypass	not specified		Surgery

Study	Arm	Type of surgery	Surgery method	Pre- and/or post-surgical surgical work-ups (e.g., psychiatric evaluations, behavioral and nutritional counseling)	Surgery or endocopy
Tiwari 2011 21459686	laproscopic gastric bypass, patients aged ≥ 65 yro	Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Tiwari 2011 21459686	laproscopic gastric bypass, patients aged 51-64 yro	Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Trieu 2007 17400516	Laparoscopic Roux-en-Y Gastric Bypass (LRYGB) Surgery	Roux-en-Y Gastric Bypass	Laparoscopic	the postoperative care followed a standardized order set. A Gastrografin upper gastrointestinal swallow radiologic study was performed on postoperative day 1. The patients were started on a liquid diet if they were stable and no leak had been detected. The patients were discharged after tolerating a liquid diet and passing flatus. The drains were generally removed before discharge. The patients were then followed up in the clinic at 2 weeks and 2, 6, and 12 months, and yearly thereafter.	Surgery
Valderas 2009 19517199	Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Not specified	A morning-fasted venous blood sample was drawn to measure serum total calcium (Ca), phosphorus, total alkaline phosphatases (ALP), gamma glutamyl transferase (GGT), alanine transaminase, total bilirubin, albumin, creatinine, thyroid-stimulating hormone (TSH) and serum carboxy telopeptide (CTx).	Surgery
Valderas 2009 19517199	No surgery	No surgery	Not specified	A morning-fasted venous blood sample was drawn to measure serum total calcium (Ca), phosphorus, total alkaline phosphatases (ALP), gamma glutamyl transferase (GGT), alanine transaminase, total bilirubin, albumin, creatinine, thyroid-stimulating hormone (TSH) and serum carboxy telopeptide (CTx).	Not specified
van Rutte 2013 23344504	Sleeve gastrectomy	Sleeve gastrectomy	Laparoscopic		Surgery
Varela 2006 17058723	all surgery	Gastric banding/Gastroplasty/Roux-en-Y Gastric Bypass/Unspecified	Not specified		Surgery
Varela 2006 17058723	lap band	Gastric banding	Laparoscopic		Surgery
Varela 2006 17058723	gastroplasty	Gastroplasty	Laparoscopic		Surgery
Varela 2006 17058723	gastric bypass	Roux-en-Y Gastric Bypass	Not specified		Surgery
Wagner 2007 17938305	open Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Open	Counseling from a dietician before and after surgery	Surgery
Werner 2015 26071250	No surgery/not obese	No surgery	Not specified	Comorbidities were assessed.	Not specified
Werner 2015	No surgery/Morbidly	No surgery	Not specified	Comorbidities were assessed.	Not specified

Study	Arm	Type of surgery	Surgery method	Pre- and/or post-surgical surgical work-ups (e.g., psychiatric evaluations, behavioral and nutritional counseling)	Surgery or endocopy
26071250	Obese				
Werner 2015 26071250	Bariatric Surgery	Gastric banding/Roux-en-Y Gastric Bypass	Laparoscopic	Comorbidities were assessed.	Surgery
Wiklund 2017	laparoscopic Roux-en-Y Gastric Bypass surgery	Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Willkomm 2010 20870182	Roux-en-Y gastric bypass	Roux-en-Y Gastric Bypass	Laparoscopic	cardiac clearance, assessment for sleep apnea, colonoscopy, and upper endoscopy	Surgery
Wise 2016 26091994	laparoscopic adjustable gastric banding	Gastric banding	Laparoscopic	standard postoperative care consisted of a clinic visit at one week, followed by assessments at every 4–6 weeks for the first postoperative year to make minor adjustments to band tightness via accession of the port	Surgery
Wittgrove 2009 19705206	Laparoscopic Roux-en-Y gastric bypass (LRYGB)	Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Wool 2009 18855082	Gastric bypass or sleeve gastrectomy	Roux-en-Y Gastric Bypass	Not specified		Surgery
Yuan 2009 18996764	total group	Gastroplasty/Roux-en-Y Gastric Bypass	Not specified		Surgery
Yuan 2009 18996764	open gastric bypass	Gastroplasty/Roux-en-Y Gastric Bypass	Open		Surgery
Yuan 2009 18996764	laparoscopic gastric bypass	Roux-en-Y Gastric Bypass	Laparoscopic		Surgery
Zaveri 2016 27795883	Laparoscopic Roux-en-Y Gastric Bypass (LRYGB)	Roux-en-Y Gastric Bypass	Laparoscopic	Patients were followed up at intervals for a minimum of 18 months. During these visits, patient's weight and late complication of surgery were recorded. All the patients were given vitamin recommendations by our registered dietician depending on the type of surgery they get.	Surgery
Zaveri 2016 27795883	Laparoscopic Adjustable Gastric Banding (LAGB)	Gastric banding	Laparoscopic	Patients were followed up at intervals for a minimum of 18 months. During these visits, patient's weight and late complication of surgery were recorded. All the patients were given vitamin recommendations by our registered dietician depending on the type of surgery they get.	Surgery
Zaveri 2016 27795883	Single Anastomosis Duodenal Switch (SADS)	Single Anastomosis Duodenal Switch (SADS)	Not specified	Patients were followed up at intervals for a minimum of 18 months. During these visits, patient's weight and late complication of surgery were recorded. All the patients were given vitamin recommendations by our registered dietician depending on the type of surgery they get; preoperative educational experience on SADS	Surgery

Appendix E. Baseline Patient Characteristics and Comorbidities

Study	N	Mean Age y (SD) [range]	Mean BMI kg/m2 (SD) [range]	Mean weight kg (SD) [range]	BP mmHg mean (SD)	% female	% white	% black	% Hispanic	% Asian
Abbas 2015 26001882	83	63.4 (3.1)	47 (7.9)	122.4 (25.5)		80				
Altieri 2016 26201412	8990	[>= 45]								
Andalib 2016 26416373	234	47.26 (10.38)	47.04 (8.2)	134.84 (27.08)		56.84	45.73	38.46	7.69	
Ardestani 2015 25573879	5225	53.8 (10.2)	47.1 (8)			66.7	81.7			
Boules 2015 26243345	166	56.7 (8.6)	44.6 (8)	119.2 (24.2)		81.3				
Busetto 2008 18239641	216	64.1 (4)	44.2 (7.6)	116.4 (21.1)		85.2				
Clough 2011 20490708	113	63.6 [60, 73]	42.2	116.9		56.5				
Davidson 2016 26864395	1210	59 (3.4)	46 (7)			76.2				
Dorman 2012 22038414	18058	[50, 70]				76.8	80.8	10.5	3.1	0.7
Dunkle-Blatter 2007 17331804	61	62 [60-72]	49.3 (7.5) [38.0, 78.3]			67.2				
Flum 2005 16234496	1519									
Flum 2011 21975317	47030	52.9 (11.6)				75.48	81.01	14.73	2.05	
Freeman 2015 25708829	52	50 (10) [18- 67]				54				
Gebhart 2015 25130515	6125	[>60]				68.65	84.22			
Giordano 2014 24318411	132	59.43 (3.81)	46.21 (7.47)	132.27 (28.97)		57.6				
Hallowell 2007 17576885	77	56 (9.5) [31, 66]	52.7 (6.5)			89.6				
Hazzan 2006 17138231	55	61.5 [60-70]	46.2 [38-61]			65.4				
Huang 2015 25859266	68	58.9 (4.3) [55, 79]	39.5 (6.8) [32, 60.4]	102.1 (19.4)		64.7				
Irwin 2013 23744816	27	56.9 (9.2)	50.2 (7.5)			81.5				
Johnson 2012 22643265	349	55.1				65	86			
Lee 2016 27220823	162	55.2 (9.3)	42.9 (5.3)	131.4 (21.3)	125 (14.8)/74.78 (12.5)		59.3			
Lemaître 2016 27063637	494	45.5 [18, 75]	47.8 (7.8) [35.0, 82.3]	133.5 [84, 255]		74				
Leonetti 2012 22508671	60	54.5 (8.3)	40.2 (5.9)			68				
Loy 2014 24582414	55	72.4 (2.5)	45 (6.2)	123 (22)		60	94.5	5.5		

		[70, 82]					
Luppi 2015 25088486	28	63.2 [60, 68]	43.3	113.2		64.3	
Maraka 2015 25611727	128	55	46.3 (9.0)			64.8	
Martin 2015 26530652	364	58.2 (7.3)	40.7 (9.7)			81	
McGlone 2015 26112136	50	[>60]	49.5 (6.1)			74	
Michaud 2016 26130180	102	62.3 (2)	50.9 (6.8)	133 (24)		61	
Miranda 2013 23604694	19	Median 65 [49, 78]	Median 50.9 [22, 64]	141.6 [98, 210]	134.6	47	
Mittermair 2008 18830777	134	55.6 (4.6) [50, 69]	43.9 (5.7) [35.3, 62.7]			76.1	
Mizrahi 2014 24442420	52	62.9 (0.3) [60, 70]	42.6 (0.7)	117.3 (2.8)		56	
Moon 2016 26220238	353	62.9 (2.5) [60-71]	44.5 (6.6) [32.9, 74.5]			71.4	
Mozer 2015 25832986	138	Median 48 (10.6)	Median 46	Median 294		51.4	
Nagao 2014 24519024	52	55.1 (3.7)	46.4 (6)	127.4 (24.1)		82	
Nickel 2016 27179771	5918					83	
O'Keefe 2010 20532834	197	67.3 (2.3) [65-78]	48.1 (6.9) [35.6, 73]	72.9 (17.8) [38.7, 127.1]		72.1	
Ochner 2013 23700235	157					100	
Omalu 2007 17938303	2022	[>55]					
Papasavas 2004 15479593	71	59 [55, 67]	50.2 [37, 65]			76.1	
Peraglie 2016 25814071	88	64 [60, 74]	43 [33, 61]	118 [78, 171]		62	
Perry 2008 18156918	11903	[65, 75]				77.6	
Praveenraj 2016 27279392	86	57.5 (6.1) [50, 75]	43.2 (8.7) [29, 87]	108.2 (23.1) [65, 200]		53.5	
Qin 2015 25373923	3616	56.7 (5.1)	45.2 (7.6)			74.8	76.1 14.9 0.8
Quebbemann 2005 16925254	27	68 [65.8, 72.6] [65.8, 72.6]	47.4 (7.4)			63	
Quirante 2017 28039650	393		41.6			58	83 5 11
Ramirez 2012 22551574	42	73.5 [71, 80]	44 [34-81]	124.5 [80.1-219.1]		52.4	
Ritz 2014 24708912	154	[>60]					
Saleh 2015 25868831	667	50.7 (11.7)	47 (7.4)			65.5	25.8
Scott 2013 22014480	2432	[50, 79]					

Serrot 2011 22000180	34	Median 59	34.3	Median 225.5	Median SBP 126 IQR 30	55.9									
Sosa 2004 15603658	22	64.4 [60, 75]	48.5 [40, 62]												
Soto 2013 23733390	35	66.3 [60-79]	46.3 [33.7, 77.6]			68.6									
Spaniolas 2014 24913586	1005		44 (7)			69.2									
Sugerman 2004 15273547	65	63 (3) [60.1, 74.5]	49 (7)	133 (22)		78	85	14	1						
Sun 2016 26264895	367	[>60]													
Tiwari 2011 21459686	905														
Trieu 2007 17400516	92	62.2 [60-74]	48.45 [35-68]	136.63 [86.4, 215.9]		63									
Valderas 2009 19517199	52	57.8 (4.3)	36.4 (8.7)			100							100		
van Rutte 2013 23344504	135	[55, 70]	43.8 [29.8, 65.1]			69.6									
Varela 2006 17058723	1339	[>60]				73	82.2								
Wagner 2007 17938305	54	48.9 [27, 63]	56.8 [34, 113]			75.9									
Werner 2015 26071250	79	[65, 84]	[>40]			78.1									
Wiklund 2017	70	47 (12)	44.7 (5.8)	133.7 (24.5)		58.6									
Willkomm 2010 20870182	100	68 [65, 77]	45 [33, 61]												
Wise 2016 26091994	117	59.3 (5.7)	43.6 (6.2)			77.8					6.8				
Wittgrove 2009 19705206	120	62 [60, 74]	43 [34, 70]			48									
Wool 2009 18855082	60	56.7	49 [37, 71]			0									
Yuan 2009 18996764	282	48.5 (11.78)	52.4 (10)			74.47									
Zaveri 2016 27795883	53	72.7 (2.5)	43.3 (5.8)	264.6 (40.7)		66									
		[70, 81.4]													

Comorbidities

Study	Diabetes %	Hypertension %	Renal disease %	Pulmonary %	Liver disease %	Cardiovascular disease %	Congestive heart failure (CHF) %	Psychiatric %	Drug/alcohol abuse %	Smoking %	Lipid disorders %	Sleep apnea %	GERD %	Bone-related diseases %	Neurological %
Saleh 2015 2586883	54.3	85.8				10.1 CAD				8.2					

Study	Diabetes %	Hypertension %	Renal disease %	Pulmonary %	Liver disease %	Cardiovascular disease %	Congestive heart failure (CHF) %	Psychiatric %	Drug/alcohol abuse %	Smoking %	Lipid disorders %	Sleep apnea %	GERD %	Bone-related diseases %	Neurological %
1															
Ardestani 2015 25573879	100														
Martin 2015 26530652	26.4													92	
Lee 2016 27220823															
Yuan 2009 18996764	39.72	71.99		9.93 obesity hypoven- tillation syndrom- e		7.8 venous stasis ulcers						46.45			
Mozer 2015 25832986	50					10.9/91.3 cardiac comorbidities/vascular comorbidities				9.4					7.2
Irwin 2013 23744816	55.6	77.8		14.8 hx of pulmona- ry embolis- m		7.4 stroke or VTE	11.1								
Flum 2011 21975317															
Perry 2008 18156918	44.9	59.1				9.8 Coronary Artery Disease					38.1	31			
Qin 2015 25373923	35.2	73		18 Dyspnea		2.6 Previous cardiac			0.2	6.7					1.2 stroke

Study	Diabetes %	Hypertension %	Renal disease %	Pulmonary %	Liver disease %	Cardiovascular disease %	Congestive heart failure (CHF) %	Psychiatric %	Drug/alcohol abuse %	Smoking %	Lipid disorders %	Sleep apnea %	GERD %	Bone-related diseases %	Neurological %
surgery															
Ochner 2013 23700235															
Spaniolas 2014 24913586	53.7		0.2			10.6/86.7 Cardiac/vascular				3					
Wagner 2007 17938305	50	46.3		33.3 asthma				44.4				57.4	64.8	66.7	
Quebbemann 2005 16925254															
Leonetti 2012 22508671	100	83.3									90				
Moon 2016 26220238	48.7	72.5										40.8			
Davidson 2016 26864395															
Varela 2006 17058723	53.6	77.3	0.5	21.5 chronic pulmonary disease	2.6 chronic liver disease	20.2 CHF or CAD									
Serrot 2011 22000180	67.6	79.4									67.6				
O'Keefe 2010 20532834	51	85.9	.5/1/3.5	6.1/11.6 Asthma/COPD		14.1 Coronary Artery Disease	9.6	37.9/16.2 depression/anxiety			64.1	48.5	42.4	49.5/30.3	

Study	Diabetes %	Hypertension %	Renal disease %	Pulmonary %	Liver disease %	Cardiovascular disease %	Congestive heart failure (CHF) %	Psychiatric %	Drug/alcohol abuse %	Smoking %	Lipid disorders %	Sleep apnea %	GERD %	Bone-related diseases %	Neurological %
Nickel 2016 2717977 1	58.41	83.25	8.58	40.35 chronic pulmonary disease	9.75	12.45 valvular disease	15.85	62.22 psychoses or depression	3.9/6.94	25.77			1.35		16.09
Abbas 2015 2600188 2	64	90		30 asthma		51 hyperlipidemia						35			
Valderas 2009 1951719 9															
Johnson 2012 2264326 5	66	92				68/44 angina/MI				36	74	44			3.7
Andalib 2016 2641637 3	47.86	85.47	100	2.99 COPD		5.13 a binary variable representing the occurrence of any history of angina within 1 month before index surgery, history of myocardial infarction within 6 months before surgery, any previous	0.43			7.69					2.56

Study	Diabetes %	Hypertension %	Renal disease %	Pulmonary %	Liver disease %	Cardiovascular disease %	Congestive heart failure (CHF) %	Psychiatric %	Drug/alcohol abuse %	Smoking %	Lipid disorders %	Sleep apnea %	GERD %	Bone-related diseases %	Neurological %
						percutaneous cardiac intervention, or any previous cardiac surgery									
Miranda 2013 23604694	63	95				37 Coronary Artery Disease	100	42 depression		32	84				
Praveenraj 2016 27279392	61.6														
Werner 2015 26071250	79.5	97.7	16.4	44.3 COPD	28.8 chronic liver disease	50.7/16.9 CHD/PVD	32.4			25.1	95	62.1			
Ritz 2014 24708912	35.7	49.7				9.1 Coronary Heart Disease					22.7	29.7			
Hazzan 2006 17138231	34	50									43	32	14	12	
Zaveri 2016 27795883	47.2	79.2										58.5	37.7		
Gebhart 2015 25130515	49.53	83.9	6.31	22.34 Chronic Pulmonary Disease	15.18		4.86								
Flum 2005 16234496															

Study	Diabetes %	Hypertension %	Renal disease %	Pulmonary %	Liver disease %	Cardiovascular disease %	Congestive heart failure (CHF) %	Psychiatric %	Drug/alcohol abuse %	Smoking %	Lipid disorders %	Sleep apnea %	GERD %	Bone-related diseases %	Neurological %
Lemaitre 2016 27063637															
Willkomm 2010 20870182	65	81										45%			
Dorman 2012 22038414	42.2	76.5		34.8		7.6/0.5 Cardiac/vascular				7.6					
Huang 2015 25859266	75	58.8			61.8 Fatty Liver Hepatitis						35.3				
Wise 2016 26091994	47	89.7						29.9/14.5 depression/anxiety							
Boules 2015 26243345	25.9											23.5			
Quirante 2017 28039650	59	56						15 depression			44	56	42		
Wittgrove 2009 19705206	57	72									88/50	40			
Wiklund 2017															
Ramirez 2012 22551574	38	66				9.5/19/19 cardiac failure/arrhythmia/coronary artery disease					57	26		30	
Peraglie	45	76				11 CAD					41				

Study	Diabetes %	Hypertension %	Renal disease %	Pulmonary %	Liver disease %	Cardiovascular disease %	Congestive heart failure (CHF) %	Psychiatric %	Drug/alcohol abuse %	Smoking %	Lipid disorders %	Sleep apnea %	GERD %	Bone-related diseases %	Neurological %
2016 25814071						coronary artery disease									
Altieri 2016 26201412															
van Rutte 2013 23344504	54.1	75.5									41.5	34.1	21.5		
Clough 2011 20490708	33.7	73.1						19.2			48.1	14.4	47.1	61.5/66.3	
Scott 2013 22014480						Coronary Artery Disease									
McGlone 2015 26112136	56	86									42	18	16	32	
Sosa 2004 15603658	17.4	47.8									21.7	13			
Nagao 2014 24519024	46	61										20			
Papasavas 2004 15479593	45	80.3		12 Asthma				28			24	10	19	36	
Sugerman 2004 15273547	49	80	51	9 obesity hypovenilation syndrom		16 chronic venous stasis disease						37	51	89	

Study	Diabetes %	Hypertension %	Renal disease %	Pulmonary %	Liver disease %	Cardiovascular disease %	Congestive heart failure (CHF) %	Psychiatric %	Drug/alcohol abuse %	Smoking %	Lipid disorders %	Sleep apnea %	GERD %	Bone-related diseases %	Neurological %
				e											
Mizrahi 2014 24442420	60	69		2 Asthma		17/7 Ischemic heart disease/arrhythmia					77	19		23	
Maraka 2015 25611727	92 (8 type 1)														
Michaud 2016 26130180	57	81				32					42	71			
Loy 2014 24582414	49.1	89		24 Exertional dyspnea		29 Ischemic heart disease		25/25			73	56		29/53	
Trieu 2007 17400516															
Hallowell 2007 17576885	50.6	71.4									28.6	66.2	55.8	81.8	
Dunkle-Blatter 2007 17331804	70.5	83.6								62.3					
Mittermair 2008 18830777															
Freeman 2015 25708829	53.4	92.3	9.6			9.6 MI						61			13.5
Tiwari 2011 2145968															

Study	Diabetes %	Hypertension %	Renal disease %	Pulmonary %	Liver disease %	Cardiovascular disease %	Congestive heart failure (CHF) %	Psychiatric %	Drug/alcohol abuse %	Smoking %	Lipid disorders %	Sleep apnea %	GERD %	Bone-related diseases %	Neurological %
6															
Sun 2016 2626489 5															
Busetto 2008 1823964 1	21.1	35.2									11.9	15.6		38.8	
Giordano 2014 2431841 1	62.88	74.24													
Luppi 2015 2508848 6	42.9	75									71.4	67.9			
Wool 2009 1885508 2	66.7														
Soto 2013 2373339 0															

Appendix F. Prediction Studies

First Author	Setting	Sample size	Men (N, %)	Age			Bariatric Intervention
				Mean/Median	SD	Range	
Aguñera 2015 26377595	Spain	139	31 (22.3%)	40.6	10.3	18-62	Gastric bypass; Duodenal switch; Vertical sleeve; Laparoscopic gastric plication
Arterburn 2013 24304479	USA	370	274 (74)	51.6	NR	NR	Gastric bypass surgery
Benoit 2014 24570089	USA	40,352	8713 (21.6)	45.8	11.28	NR	Roux-en-Y gastric bypass
Brandao 2015 26122195	Portugal	150	137 (91.3)	NR	NR	21-64	Roux-en-Y gastric bypass, Laparoscopic adjustable gastric banding
Brown 2013 23636997	Australia	127	25 (19.80)	43.6	12.4	15-71.4	Laparoscopic adjustable gastric banding
Courcoulas 2015 25824474	USA	1738	NR	46	NR	NR	Roux-en-Y gastric bypass
Dallal 2009 19277799	USA	1168	218 (18.7)	45.2	12	NR	Gastric bypass
de Raaff 2016 26220241	The Netherlands	816	162 (19.9)	44.4	10.6	NR	Laparoscopic Roux-en-Y gastric bypass; Laparoscopic sleeve gastrectomy
Fried 2012 22648797	USA, Czech Republic	105	17 (31.5)	47.5	10.3	NR	Laparoscopic greater curvature plication
Galtier 2006 16477271	France	73	0 (-)	39.1	10.4	18.4-64.8	Laparoscopic adjustable gastric banding
Gouillat 2012 21870049	France	262	29 (11)	36.4	9.7	18.0-61.0	Laparoscopic adjustable gastric banding
Gras-Miralles 2014 24927691	Spain	14	0	44	IQR 41-55	NR	Laparoscopic Roux-en-Y gastric bypass; Laparoscopic sleeve gastrectomy
Lee 2007 18074500	Taiwan	249	72 (28.9)	33	9	NR	Laparoscopic mini-gastric bypass and laparoscopic adjustable gastric banding
Lee 2009	Taiwan	74	22 (29.7)	31.7	9.1	NR	Laparoscopic adjustable gastric banding

Lee 2009 20214230	Taiwan	251	68 (27.1)	33	NR	NR	Laparoscopic mini-gastric bypass and laparoscopic adjustable gastric banding
Manning 2015 25239175	UK, Italy	538	145 (27)	46.5	11.1	NR	Sleeve gastrectomy
Martin 2015 25929176	Australia	292	87 (29.8)	41.5	11.1	NR	Laparoscopic sleeve gastrectomy
Melton 2008 18071836	USA	495	91 (18)	42	NR	19-66	Roux-en-Y gastric bypass
Obeidat 2016 26428251	Jordan	146		34	10.8	NR	Sleeve gastrectomy
Ortega 2012 22234587	Spain	407	98 (24)	44	NR	18-65	Roux-en-Y gastric bypass; Sleeve gastrectomy
Robinson 2014 24913590	Online survey	274	11 (4)	51.14	8.39	NR	Gastric bypass; Lap band; Gastric sleeve; Other
Valera-Mora 2005 15941878	Italy	107	22 (20.6)	37	10	NR	Biliopancreatic diversion (BPD)
van Hout 2009 18317854	The Netherlands	112	14 (12.5)	38.8	8.3	NR	Vertical band gastroplasty
Yanos 2015 25519772	USA	97		56.11	11.26	NR	Roux-en-Y gastric bypass

Appendix G. Prediction Studies Model Definitions

Model #	Study	Outcome	Bariatric Intervention	Predictors	Modeling method
1	Agüera 2015 26377595	%EWL >50% (good outcome/successful weight loss) at 1 year	Gastric bypass Duodenal switch Vertical sleeve laparoscopic gastric plication (ref)	Bariatric surgery type; Married; Age; TCI-R: cooperativeness; SCL-90: depression; SCL-90: anxiety	Stepwise logistic regression estimated the best predictive model for a good %EWL outcome
2	Arterburn 2013 24304479	significant (30%) weight loss at 1 year	gastric bypass surgery	Age ≤65years Female; Married; Never married; Unknown/missing race; Caucasian; ASA class 3 ASA class 4; Taking oral hypoglycemic agents (OHAs); Taking insulin or insulin and OHAs; Super obese; Diagnostic Cost Group (DCG); score 1-1.99; DCG score > 2; Current smoker Laparoscopic surgery	multivariable logistic regression
3		significant (25%) weight loss at 1 year	gastric bypass surgery	Age ≤65years Female; Married; Never married; Unknown/missing race; Caucasian; ASA class 3 ASA class 4; Taking oral hypoglycemic agents (OHAs); Taking insulin or insulin and OHAs; Super obese; Diagnostic Cost Group (DCG); score 1-1.99; DCG score > 2; Current smoker Laparoscopic surgery	multivariable logistic regression
4		significant (35%) weight loss at 1 year	gastric bypass surgery	Age ≤65years Female; Married; Never married; Unknown/missing race; Caucasian; ASA class 3 ASA class 4; Taking oral hypoglycemic agents (OHAs); Taking insulin or insulin and OHAs; Super obese; Diagnostic Cost Group (DCG); score 1-1.99; DCG score > 2; Current smoker Laparoscopic surgery	multivariable logistic regression
5	Benoit 2014 24570089	absolute weight loss at 12 months	RYGB	baseline weight; age at surgery; day within time period; African American status; Caucasian status; height; diabetes status at baseline; BMI at baseline; gender; number of medications at baseline; personality disorder status at baseline	stepwise selection
6			AGB	baseline weight; age at surgery; day within time period; African American status; Caucasian status; height; diabetes status at baseline; BMI at baseline; gender; number of medications at baseline; personality disorder status at baseline	stepwise selection

Model #	Study	Outcome	Bariatric Intervention	Predictors	Modeling method
7			SG	baseline weight; age at surgery; day within time period; African American status; Caucasian status; height; diabetes status at baseline; BMI at baseline; gender; number of medications at baseline; personality disorder status at baseline	stepwise selection
8	Brandao 2015 26122195	%EWL at 24 months	RYGB, LAGB	PEWL; EDE-Q; BDI-II; BIS-11; OQ-45.2; HDL-C TGs; HbA1c	Pearson's correlations to identify significant predictors; Multiple linear regression for significant predictors
9	Brown 2013 23636997	%EWL at 2 years (poor outcome: EWL <25 %, or lack of weight information, at 2 years)	Laparoscopic Adjustable Gastric Banding	Gender; Age at date of surgery	hierarchical regression
10			Laparoscopic Adjustable Gastric Banding	Gender; Age at date of surgery; Baseline BMI, %EWL at date of surgery, %EWL 3 months	hierarchical regression
11	Courcoulas 2015 25824474	3-year weight change	RYGB	Age; race; BMI per 5 kg/m ² ; Neck circumference, per 1 cm; Abnormal kidney function; Diabetes; AST, per 10 IU/L; Leptin, per 5 ng/mL; Counseling for psychiatric or emotional problems; Current or recent smoker; Eat breakfast regularly; Eat when feel full, more than once a wk; Number of times eat per d; Eaten or drank meal replacements; Self-weigh at least weekly; Acceptable percent weight loss, per 5%	Multivariable linear regression models by applying the Least Absolute Shrinkage and Selection Operator (LASSO)
12			LAGB	In the linear model for those undergoing LAGB there were no predictors that were consistently important in every completed data set, and the only predictor always identified in the dichotomous model was band size. Participants with a large band had 90% greater odds of losing less than 10% of their initial weight.	Multivariable linear regression models by applying the Least Absolute Shrinkage and Selection Operator (LASSO)
13	Dallal 2009 19277799	Weight at 1st post-op visit (typically at 1 week)	Gastric bypass	Gender (men vs. women); Initial weight; Age; Surgeon (BQ vs. RD); Race (White vs. Black); Location (Philadelphia vs. California); Height (m)	Mixed-model regression

Model #	Study	Outcome	Bariatric Intervention	Predictors	Modeling method
14	de Raaff 2016 26220241	Insufficient Weight Loss (EWL≤50 %) 1 year after bariatric surgery	LRYGB; LSG	Gender; F/M; Age; BMI; AHI; Type of surgery; Type II diabetes	Multivariable logistic regression analysis with backward selection
15	Fried 2012 22648797	suboptimal weight loss (i.e., residual BMI >35.9) at 6 months	laparoscopic greater curvature plication	preoperative body mass index	Multivariable logistic regression
16	Galtier 2006 16477271	% of excess weight lost (EWL) 1 year after surgery	laparoscopic adjustable gastric banding	difference in RMR/body weight; difference in energy sparing; baseline BMI; postsurgery time	Multiple linear regression with stepwise selection
17	Gouillat 2012 21870049	weight loss after bariatric surgery at 3 years	Laparoscopic Adjustable Gastric Banding	Time (linear term); Time ² (quadratic term); Time ³ (cubic term); Comorbidities; Upper GI symptoms; Filling volume for band (ml); Age; Height; Number of follow-up visits × time ² ; Number of follow-up visits × time ³ ; Upper GI symptoms × time; Filling volume × time; Filling volume × time ² ; Filling volume × time ³ ; Age × time; Height × time; Height × time ² ; Height × time ³ ; Clustering effects	multilevel model
18	Gras-Miralles 2014 24927691	positive outcome was pre-defined following current standards as an excess weight loss of ≥50 % and a BMI ≤30 kg/m ² after surgery	LRYGB (n=7) or LSG (n=7)	proportional weight loss; included pre-surgery BMI, surgery type, and pre-surgery caloric intake capacity	Backward, forward, and mixed stepwise
19	Lee 2007 18074500	Weight reduction success is defined as the percentage of excess weight loss (%EWL) >50% at the point of 2 years after operation	laparoscopic mini-gastric bypass (LMGB) and laparoscopic adjustable gastric banding (LAGB)	Type of intervention	Logistic regression
20			laparoscopic mini-gastric bypass (LMGB) and laparoscopic adjustable gastric banding (LAGB)	Type of intervention; HbA1c; serum TG levels	Artificial Neural Network Model

Model #	Study	Outcome	Bariatric Intervention	Predictors	Modeling method
21	Lee 2009	Weight reduction success is defined as the percentage of excess weight loss (%EWL) >50% at the point of 2 years after operation	laparoscopic adjustable gastric banding (LAGB)	None	Multivariate logistic regression
22			laparoscopic adjustable gastric banding (LAGB)	Gender; insulin; rs4684846 on PPARgamma; rs660339 on UCP2; albumin	Artificial Neural Network Model
23	Lee 2009 20214230	Weight reduction success is defined as the percentage of excess weight loss (%EWL) >50% at the point of 2 years after operation	laparoscopic mini-gastric bypass (LMGB) and laparoscopic adjustable gastric banding (LAGB)	type of operation; ALT; WBC; HbA1c; Insulin	Logistic regression
24			laparoscopic mini-gastric bypass (LMGB) and laparoscopic adjustable gastric banding (LAGB)	type of operation; ALT; WBC; HbA1c	Discriminant analysis model
25			laparoscopic mini-gastric bypass (LMGB) and laparoscopic adjustable gastric banding (LAGB)	type of operation; AST	Classification and regression tree (CART)
26	Manning 2015 25239175	maximal %WL (%WL of 20 % or more)	sleeve gastrectomy	3-6 months WLW, baseline BMI, age; bariatric center; ethnicity	multiple regression analyses, after backward selection
27		maximal %WL (%WL of 20 % or more)	Roux-en-Y gastric bypass	3-6 months WLW, baseline BMI, age; T2D; gender	multiple regression analyses, after backward selection
28	Martin 2015 25929176	%EWL 2 years after LSG	laparoscopic sleeve gastrectomy (LSG)	Baseline BMI; Total clinic visits over 2 years; Presence of hypertension	Stepwise backward selection; mixed modeling to determine whether there was a significant change in %EWL over 2 years

Model #	Study	Outcome	Bariatric Intervention	Predictors	Modeling method
29		% weight loss at 2 years	laparoscopic sleeve gastrectomy (LSG)	age, baseline BMI, and number of clinic visits remained significant and accounted for 21% of the variability in percentage of weight loss ($r^2 = 0.21$) (data not shown).	Stepwise backward selection; mixed modeling to determine whether there was a significant change in %EWL over 2 years
30	Melton 2008 18071836	poor or suboptimal weight loss (SWL): SWL was defined as a failure to lose at least 40% of EBW by 1 year postoperatively.	RYGBP	Male sex; BMI; Diabetes	Multiple logistic regression
31	Obeidat 2016 26428251	%EWL at 1 year	sleeve gastrectomy	age, preoperative BMI, 1-month %EWL. Sex and the presence of diabetes were not significant predictors of poor weight loss.	Multivariate analysis
32		%EWL at 2 years	sleeve gastrectomy	age, preoperative BMI, 1-month %EWL. Sex and the presence of diabetes were not significant predictors of poor weight loss.	Multivariate analysis
33	Ortega 2012 22234587	excess body weight loss (EWL)	RYGB, SG	Age (years); Gender (M vs. F); ST (RYGB vs. SG); DM (no vs. yes); BMI (kg/m ²); Waist circumference (cm)	Stepwise regression analysis.
34		excess body weight loss (EWL)	RYGB, SG	Age (years); BMI (kg/m ²); Waist circumference (cm); HbA1c (%); Triglycerides (mg/dl) -- Gender (M vs. F); ST (RYGB vs. SG); DM (no vs. yes) were not significant	Stepwise regression analysis.
35		success of surgery: excess body weight loss EWL>60% at 1 year	RYGB, SG	Age (years); BMI (kg/m ²); Waist circumference (cm); HbA1c (%); Triglycerides (mg/dl) -- Male gender and RYGB were not significant	Stepwise regression analysis.
36	Robinson 2014 24913590	successful weight loss (least 50% EWL) at ≥1 year	gastric bypass; lap band; gastric sleeve; other	Adherence to dietary recommendations; Grazing frequency; Highest lifetime presurgical BMI; Attendance at support groups	Signal Detection Analysis (SDA)

Model #	Study	Outcome	Bariatric Intervention	Predictors	Modeling method
37	Valera-Mora 2005 15941878	WL 2 y after biliopancreatic diversion (BPD)	biliopancreatic diversion (BPD)	Age, diabetes, and insulin sensitivity were independent, negative predictors of weight loss in a multivariate model that included sex, age, presence of diabetes, insulin sensitivity, and initial body weight, whereas initial body weight was a strong positive predictor. By replacing initial weight with initial fat-free mass and initial fat mass, insulin sensitivity was no longer a significant predictor, and both initial fat mass and fatfree mass were independent positive predictors of weight loss. The use of attained weight instead of weight loss did not change the pattern of associations.	Simple and multiple linear regression analyses were used to identify predictors of weight loss
38	van Hout 2009 18317854	EWL or EBL 2 years after VBG.	VBG	Controlling for gender and preoperative EW and BMI, respectively, age made the only significant unique contribution to additional variances in 2-years EWL (beta=-0.20; p=0.046) and EBL (beta=-0.21; p=0.036).	Hierarchical multiple regression analyses (
39	Yanos 2015 25519772	nadir weight loss as the percentage of total weight lost at the patient's lowest self-reported post- operative weight (%TWL)	RYGB	post-WLS medical comorbidities	Stepwise linear and logistic regression analyses
40		weight regain (WR): regain of $\geq 20\%$ initial weight loss vs. $< 20\%$ initial weight loss	RYGB	postoperative depression and avoiding sweets	Stepwise linear and logistic regression analyses

Appendix H. Results

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Miranda 2013 23604694	Addiction	Smoking	Patients who are currently smokers.	All Participants	0 years	RYGB	13	4/13 (30.8)		
Miranda 2013 23604694	Addiction	Smoking	Patients who are currently smokers.	All Participants	0 years	No surgery/Controls	6	2/6 (33.3)		
Miranda 2013 23604694	Addiction	Smoking	Patients who are currently smokers.	All Participants	0 Follow Up	RYGB	13	1/13 (7.7)		
Miranda 2013 23604694	Addiction	Smoking	Patients who are currently smokers.	All Participants	0 Follow Up	No surgery/Controls	6	0/6 (0)		
Saleh 2015 25868831	Adverse Events/Post-operative Complications	AE: all complications	prolonged length of stay (>30d), re-operation within 30 d, mortality, urinary tract infections, superficial/deep wound infections, sepsis, bleeding, thromboembolic, cardiorespiratory, and renal complications.	All Participants	30 days	AGB	199	8/199 (4)		
Saleh 2015 25868831	Adverse Events/Post-operative Complications	AE: all complications	prolonged length of stay (>30d), re-operation within 30 d, mortality, urinary tract infections, superficial/deep wound infections, sepsis, bleeding, thromboembolic	All Participants	30 days	SG	64	5/64 (7.8)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Saleh 2015 25868831	Adverse Events/Post-operative Complications	AE: all complications	c, cardiorespiratory, and renal complications. prolonged length of stay (>30d), re-operation within 30 d, mortality, urinary tract infections, superficial/deep wound infections, sepsis, bleeding, thromboembolic, cardiorespiratory, and renal complications.	All Participants	30 days	RYGB	404	35/404 (8.7)		
Saleh 2015 25868831	Adverse Events/Post-operative Complications	AE: major complications	prolonged length of stay (>30d), re-operation within 30 d, mortality, sepsis, bleeding, thromboembolic, cardiorespiratory, and renal complications.	All Participants	30 days	AGB	199	4/199 (2)		
Saleh 2015 25868831	Adverse Events/Post-operative Complications	AE: major complications	prolonged length of stay (>30d), re-operation within 30 d, mortality, sepsis, bleeding, thromboembolic, cardiorespiratory, and renal complications.	All Participants	30 days	SG	64	4/64 (6.3)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Saleh 2015 25868831	Adverse Events/Post-operative Complications	AE: major complications	prolonged length of stay (>30d), re-operation within 30 d, mortality, sepsis, bleeding, thromboembolic, cardiorespiratory, and renal complications.	All Participants	30 days	RYGB	404	29/404 (7.2)		
Saleh 2015 25868831	Adverse Events/Post-operative Complications	mortality	.	All Participants	30 days	AGB	199	0/199 (0)		
Saleh 2015 25868831	Adverse Events/Post-operative Complications	mortality	.	All Participants	30 days	SG	64	0/64 (0)		
Saleh 2015 25868831	Adverse Events/Post-operative Complications	mortality	.	All Participants	30 days	RYGB	404	1/404 (0.2)		
Yuan 2009 18996764	Adverse Events/Post-operative Complications	mortality	.	males	30 days	Multiple surgeries	72	4/72 (5.6)		
Yuan 2009 18996764	Adverse Events/Post-operative Complications	mortality	.	males	90 days	Multiple surgeries	72	4/72 (5.6)		
Yuan 2009 18996764	Adverse Events/Post-operative Complications	mortality	.	All Participants	30 days	Multiple surgeries	282	7/282 (2.5)		
Yuan 2009 18996764	Adverse Events/Post-operative Complications	mortality	.	All Participants	30 days	RYGB	175	5/175 (2.9)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Yuan 2009 18996764	Adverse Events/Post-operative Complications	mortality	.	All Participants	30 days	RYGB	99	2/99 (2)		
Yuan 2009 18996764	Adverse Events/Post-operative Complications	mortality	.	All Participants	90 days	Multiple surgeries	282	9/282 (3.2)		
Yuan 2009 18996764	Adverse Events/Post-operative Complications	AE: wound infection	.	All Participants	postoperative	Multiple surgeries	282	14/282 (5)		
Yuan 2009 18996764	Adverse Events/Post-operative Complications	AE: small bowel obstruction	.	All Participants	postoperative	Multiple surgeries	282	12/282 (4.3)		
Yuan 2009 18996764	Adverse Events/Post-operative Complications	AE: anastomosis leak	.	All Participants	postoperative	Multiple surgeries	282	16/282 (5.7)		
Yuan 2009 18996764	Adverse Events/Post-operative Complications	AE: incisional hernia	.	All Participants	postoperative	Multiple surgeries	282	70/282 (24.8)		
Yuan 2009 18996764	Adverse Events/Post-operative Complications	AE: internal hernia	.	All Participants	postoperative	Multiple surgeries	282	1/282 (0.4)		
Yuan 2009 18996764	Adverse Events/Post-operative Complications	AE: pulmonary embolism	.	All Participants	postoperative	Multiple surgeries	282	1/282 (0.4)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	Mortality	.	All Participants	30 days	SG	23	1/23 (4.2)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	Mortality	.	All Participants	30 days	RYGB	68	0/68 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Mozer 2015 25832986	Adverse Events/Post-operative Complications	Mortality	.	All Participants	30 days	AGB	47	0/47 (0)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: surgical site infection	.	All Participants	30 days	SG	23	0/23 (0)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: surgical site infection	.	All Participants	30 days	RYGB	68	1/68 (1.5)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: surgical site infection	.	All Participants	30 days	AGB	47	0/47 (0)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: pulmonary embolism	.	All Participants	30 days	SG	23	1/23 (4.2)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: pulmonary embolism	.	All Participants	30 days	RYGB	68	1/68 (1.5)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: pulmonary embolism	.	All Participants	30 days	AGB	47	0/47 (0)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: pulmonary complications	.	All Participants	30 days	SG	23	1/23 (4.2)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: pulmonary complications	.	All Participants	30 days	RYGB	68	1/68 (1.5)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: pulmonary complications	.	All Participants	30 days	AGB	47	0/47 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: overall morbidity	.	All Participants	30 days	SG	23	2/23 (8.3)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: overall morbidity	.	All Participants	30 days	RYGB	68	5/68 (7.4)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: overall morbidity	.	All Participants	30 days	AGB	47	1/47 (2.1)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: organ space infection (leak)	.	All Participants	30 days	SG	23	0/23 (0)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: organ space infection (leak)	.	All Participants	30 days	RYGB	68	0/68 (0)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: organ space infection (leak)	.	All Participants	30 days	AGB	47	0/47 (0)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: cardiovascular complications	.	All Participants	30 days	SG	23	1/23 (4.2)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: cardiovascular complications	.	All Participants	30 days	RYGB	68	3/68 (4.4)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: cardiovascular complications	.	All Participants	30 days	AGB	47	1/47 (2.1)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: bleeding	.	All Participants	30 days	SG	23	0/23 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: bleeding	.	All Participants	30 days	RYGB	68	1/68 (1.5)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: bleeding	.	All Participants	30 days	AGB	47	1/47 (2.1)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: Reoperations	.	All Participants	30 days	SG	23	1/23 (4.2)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: Reoperations	.	All Participants	30 days	RYGB	68	4/68 (5.9)		
Mozer 2015 25832986	Adverse Events/Post-operative Complications	AE: Reoperations	.	All Participants	30 days	AGB	47	1/47 (2.1)		
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	>=20% decrease from preoperative dose at any time during followup	All Participants	180 days days	No surgery/Contr ols	59	19/59 (32.2)		
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	>=20% decrease from preoperative dose at any time during followup	All Participants	180 days days	Multiple surgeries	27	20/27 (74.1)		
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Mortality	warfarin attributed	All Participants	180 days	No surgery/Contr ols	59	0/59 (0)		
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Mortality	warfarin attributed	All Participants	180 days	Multiple surgeries	27	0/27 (0)		
Irwin 2013 23744816	Adverse Events/Post-	AE thrombosis	.	All Participants	180 days	No surgery/Contr	59	0/59 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications					ols				
Irwin 2013 23744816	Adverse Events/Post-operative Complications	AE thrombosis	.	All Participants	180 days	Multiple surgeries	27	0/27 (0)		
Irwin 2013 23744816	Adverse Events/Post-operative Complications	AE bleeding	.	All Participants	180 days	No surgery/Contr ols	59	7/59 (11.9)		
Irwin 2013 23744816	Adverse Events/Post-operative Complications	AE bleeding	.	All Participants	180 days	Multiple surgeries	27	2/27 (7.4)		
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	28 days	RYGB	22			difference -15.8 (-38, -2)
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	28 days	No surgery/Contr ols	59			difference 0.0 (-3, 0)
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	28 days	AGB	5			difference 0 (-18, 8)
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	28 days	Multiple surgeries	27			difference -15.8 (-35, 0)
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	56 days	RYGB	22			difference -32.3 (-43, -8)
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	56 days	No surgery/Contr ols	59			difference 0 (-4, 5)
Irwin 2013 23744816	Adverse Events/Post-	Warfarin dose	.	All Participants	56 days	AGB	5			difference 0 (-9, 8)

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	56 days	Multiple surgeries	27			difference -30.0 (-40.0, 0)
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	90 days	RYGB	22			difference -20 (-34, 0)
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	90 days	No surgery/Controls	59			difference 0 (0, 9)
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	90 days	AGB	5			difference 0 (-9, 8)
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	90 days	Multiple surgeries	27			difference -14.0 (-30, 0)
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	180 days	RYGB	22			difference 2.4 (-20, 19)
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	180 days	No surgery/Controls	59			difference 0 (0, 13)
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	180 days	AGB	5			difference 0 (-10, 25)
Irwin 2013 23744816	Adverse Events/Post-operative Complications	Warfarin dose	.	All Participants	180 days	Multiple surgeries	27			difference 0 (-18, 22)
Flum 2011 21975317	Adverse Events/Post-	Reoperative complications	.	All Participants	90 days	RYGB	18978	520/18978 (2.7)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Flum 2011 21975317	Adverse Events/Post-operative Complications	Reoperative complications	.	All Participants	90 days	RYGB	13130	537/13130 (4.1)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Reoperative complications	.	All Participants	90 days	Multiple surgeries	1714	24/1714 (1.4)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Reoperative complications	.	All Participants	90 days	AGB	9643	27/9643 (0.3)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Reoperative complications	.	Pre-NCD	90 days	RYGB	6087	196/6087 (3.2)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Reoperative complications	.	Pre-NCD	90 days	RYGB	9575	338/9575 (3.5)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Reoperative complications	.	Pre-NCD	90 days	Multiple surgeries	1221	16/1221 (1.3)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Reoperative complications	.	Pre-NCD	90 days	AGB	244	2/244 (0.8)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Reoperative complications	.	Post-NCD	90 days	RYGB	12857	324/12857 (2.5)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Reoperative complications	.	Post-NCD	90 days	RYGB	3554	199/3554 (5.6)		
Flum 2011 21975317	Adverse Events/Post-	Reoperative complications	.	Post-NCD	90 days	Multiple surgeries	497	8/497 (1.6)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Flum 2011 21975317	Adverse Events/Post-operative Complications	Reoperative complications	.	Post-NCD	90 days	AGB	9615	25/9615 (0.3)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Readmission	.	All Participants	90 days	RYGB	18949	3316/18949 (17.5)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Readmission	.	All Participants	90 days	RYGB	13141	2954/13141 (22.5)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Readmission	.	All Participants	90 days	Multiple surgeries	1716	279/1716 (16.3)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Readmission	.	All Participants	90 days	AGB	9678	903/9678 (9.3)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Readmission	.	Pre-NCD	90 days	RYGB	6082	1096/6082 (18)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Readmission	.	Pre-NCD	90 days	RYGB	9583	2114/9583 (22.1)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Readmission	.	Pre-NCD	90 days	Multiple surgeries	1219	167/1219 (13.7)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Readmission	.	Pre-NCD	90 days	AGB	244	28/244 (11.5)		
Flum 2011 21975317	Adverse Events/Post-	Readmission	.	Post-NCD	90 days	RYGB	12862	2220/12862 (17.3)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Flum 2011 21975317	Adverse Events/Post-operative Complications	Readmission	.	Post-NCD	90 days	RYGB	3555	840/3555 (23.6)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Readmission	.	Post-NCD	90 days	Multiple surgeries	497	112/497 (22.5)		
Flum 2011 21975317	Adverse Events/Post-operative Complications	Readmission	.	Post-NCD	90 days	AGB	9439	875/9439 (9.3)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Surgical complicatons	Complications resulting from bariatric surgery.	50-65	Post-surgery	SG	3313	46/3313 (1.4)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Surgical complicatons	Complications resulting from bariatric surgery.	50-65	Post-surgery	AGB	18275	530/18275 (2.9)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Surgical complicatons	Complications resulting from bariatric surgery.	65+	Post-surgery	SG	303	4/303 (1.3)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Surgical complicatons	Complications resulting from bariatric surgery.	65+	Post-surgery	AGB	2196	57/2196 (2.6)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Death	Death as a result of bariatric surgery.	65+	Post-surgery	SG	303	2/303 (0.7)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Death	Death as a result of bariatric surgery.	65+	Post-surgery	AGB	2196	11/2196 (0.5)		
Qin 2015 25373923	Adverse Events/Post-	Death	Death as a result of	50-65	Post-surgery	SG	3313	3/3313 (0.1)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications		bariatric surgery.							
Qin 2015 25373923	Adverse Events/Post-operative Complications	Death	Death as a result of bariatric surgery.	50-65	Post-surgery	AGB	18275	37/18275 (0.2)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Return to OR	Return to operating room after bariatric surgery.	65+	Post-surgery	SG	303	8/303 (2.6)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Return to OR	Return to operating room after bariatric surgery.	65+	Post-surgery	AGB	2196	70/2196 (3.2)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Return to OR	Return to operating room after bariatric surgery.	50-65	Post-surgery	SG	3313	60/3313 (1.8)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Return to OR	Return to operating room after bariatric surgery.	50-65	Post-surgery	AGB	18275	512/18275 (2.8)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Overall complications	Overall complications as a result of bariatric surgery.	65+	Post-surgery	SG	303	22/303 (7.3)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Overall complications	Overall complications as a result of bariatric surgery.	65+	Post-surgery	AGB	2196	171/2196 (7.8)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Overall complications	Overall complications as a result of bariatric surgery.	50-65	Post-surgery	SG	3313	133/3313 (4)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Overall complications	Overall complications as a result of bariatric surgery.	50-65	Post-surgery	AGB	18275	1188/18275 (6.5)		
Qin 2015	Adverse	Medical	Medical	65+	Post-surgery	SG	303	20/303 (6.6)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
25373923	Events/Post-operative Complications	complications	complications as a result of bariatric surgery.							
Qin 2015 25373923	Adverse Events/Post-operative Complications	Medical complications	Medical complications as a result of bariatric surgery.	65+	Post-surgery	AGB	2196	138/2196 (6.3)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Medical complications	Medical complications as a result of bariatric surgery.	50-65	Post-surgery	SG	3313	103/3313 (3.1)		
Qin 2015 25373923	Adverse Events/Post-operative Complications	Medical complications	Medical complications as a result of bariatric surgery.	50-65	Post-surgery	AGB	18257	785/18257 (4.3)		
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	Mortality	Patient Mortality 30 days after surgery.	All Participants	30 days	SG	1791	5/1791 (0.3)		
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	Mortality	Patient Mortality 30 days after surgery.	All Participants	30 days	RYGB	155	1/155 (0.6)		
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	Serious Morbidity	Patients with serious morbidities 30 days after surgery.	All Participants	30 days	SG	1791	48/1791 (2.7)		
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	Serious Morbidity	Patients with serious morbidities 30 days after surgery.	All Participants	30 days	RYGB	155	8/155 (5.2)		
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	Septic Occurrences	Occurrences of sepsis post surgery 30 days after surgery.	All Participants	30 days	SG	1791	15/1791 (0.8)		
Spaniolas 2014 24913586	Adverse Events/Post-operative	Septic Occurrences	Occurrences of sepsis post surgery 30 days after	All Participants	30 days	RYGB	155	2/155 (1.3)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	Complications		surgery.							
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	Reoperation	Patients needing reoperation in the first 30 days after surgery.	All Participants	30 days	SG	1791	33/1791 (1.8)		
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	Reoperation	Patients needing reoperation in the first 30 days after surgery.	All Participants	30 days	RYGB	155	5/155 (3.2)		
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	Pulmonary Embolism	Patients with a pulmonary embolism 30 days after surgery.	All Participants	30 days	SG	1791	6/1791 (0.3)		
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	Pulmonary Embolism	Patients with a pulmonary embolism 30 days after surgery.	All Participants	30 days	RYGB	155	2/155 (1.3)		
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	Postoperative Bleeding	Patients with postoperative bleeding 30 days after surgery.	All Participants	30 days	SG	1791	19/1791 (1.1)		
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	Postoperative Bleeding	Patients with postoperative bleeding 30 days after surgery.	All Participants	30 days	RYGB	155	4/155 (2.6)		
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	Overall Morbidity	Overall morbidity in study population 30 days after surgery.	All Participants	30 days	SG	1791	77/1791 (4.3)		
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	Overall Morbidity	Overall morbidity in study population 30 days after surgery.	All Participants	30 days	RYGB	155	14/155 (9)		
Spaniolas 2014	Adverse	Organ Space Infection	Patients with an organ	All Participants	30 days	SG	1791	8/1791 (0.4)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
24913586	Events/Post-operative Complications		space infection after surgery 30 days after surgery.							
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	Organ Space Infection	Patients with an organ space infection after surgery 30 days after surgery.	All Participants	30 days	RYGB	155	0/155 (0)		
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	SSI	Surgical site infections post surgery 30 days after surgery.	All Participants	30 days	SG	1791	24/1791 (1.3)		
Spaniolas 2014 24913586	Adverse Events/Post-operative Complications	SSI	Surgical site infections post surgery 30 days after surgery.	All Participants	30 days	RYGB	155	2/155 (1.3)		
Quebbemann 2005 16925254	Adverse Events/Post-operative Complications	AE major	.	All Participants	30 days	AGB	14	0/14 (0)		
Quebbemann 2005 16925254	Adverse Events/Post-operative Complications	AE major	.	All Participants	30 days	RYGB	13	0/13 (0)		
Quebbemann 2005 16925254	Adverse Events/Post-operative Complications	AE minor	.	All Participants	30 days	AGB	14	1/14 (7.1)		
Quebbemann 2005 16925254	Adverse Events/Post-operative Complications	AE minor	.	All Participants	30 days	RYGB	13	1/13 (7.7)		
Moon 2016 26220238	Adverse Events/Post-operative Complications	Readmission	<60 days post-operation	All Participants	60 days	AGB	68	0/68 (0)		
Moon 2016 26220238	Adverse Events/Post-operative	Readmission	<60 days post-operation	All Participants	60 days	RYGB	210	9.03/210 (4.3)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	Complications									
Moon 2016 26220238	Adverse Events/Post-operative Complications	Readmission	<60 days post-operation	All Participants	60 days	SG	73	1.971/73 (2.7)		
Moon 2016 26220238	Adverse Events/Post-operative Complications	Readmission	>60 days post-operation	All Participants	nd days	AGB	68	7.004/68 (10.3)		
Moon 2016 26220238	Adverse Events/Post-operative Complications	Readmission	>60 days post-operation	All Participants	nd days	RYGB	210	19.95/210 (9.5)		
Moon 2016 26220238	Adverse Events/Post-operative Complications	Readmission	>60 days post-operation	All Participants	nd days	SG	73	1.022/73 (1.4)		
Moon 2016 26220238	Adverse Events/Post-operative Complications	Reoperation	overall re-operation rate	All Participants	nd days	AGB	68	7.004/68 (10.3)		
Moon 2016 26220238	Adverse Events/Post-operative Complications	Reoperation	overall re-operation rate	All Participants	nd days	RYGB	210	19.95/210 (9.5)		
Moon 2016 26220238	Adverse Events/Post-operative Complications	Reoperation	overall re-operation rate	All Participants	nd days	SG	73	1.022/73 (1.4)		
Moon 2016 26220238	Adverse Events/Post-operative Complications	Mortality	procedure-related mortality only	All Participants	nd days	RYGB	210	2.94/210 (1.4)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	mortality	in hospital	diabetes with end organ damage	before hospital discharge	Multiple surgeries	54	0/54 (0)		
Varela 2006 17058723	Adverse Events/Post-	mortality	in hospital	renal failure	before hospital discharge	Multiple surgeries	6	1/6 (16.7)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Varela 2006 17058723	Adverse Events/Post-operative Complications	mortality	in hospital	congestive heart failure or coronary artery disease	before hospital discharge	Multiple surgeries	236	11/236 (4.7)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	mortality	in hospital	chronic liver disease	before hospital discharge	Multiple surgeries	30	1/30 (2.6)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	mortality	in hospital	All Participants	before hospital discharge	AGB	96	0/96 (0)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	mortality	in hospital	All Participants	before hospital discharge	RYGB	300	0/300 (0)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	mortality	in hospital	All Participants	before hospital discharge	VBG	32	0/32 (0)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	mortality	in hospital	All Participants	before hospital discharge	Multiple surgeries	1339	9/1339 (0.7)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	mortality	in hospital	hypertension	before hospital discharge	Multiple surgeries	904	5/904 (0.5)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	mortality	in hospital	diabetes	before hospital discharge	Multiple surgeries	627	4/627 (0.6)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	mortality	in hospital	chronic pulmonary disease	before hospital discharge	Multiple surgeries	252	1/252 (0.4)		
Varela 2006 17058723	Adverse Events/Post-	morbidity	.	All Participants	before hospital discharge	AGB	96	4/96 (4.2)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Varela 2006 17058723	Adverse Events/Post-operative Complications	morbidity	.	All Participants	before hospital discharge	RYGB	300	35/300 (11.7)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	morbidity	.	All Participants	before hospital discharge	VBG	32	1/32 (3.1)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	morbidity	.	hypertension	before hospital discharge	Multiple surgeries	904	132/904 (14.6)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	morbidity	.	diabetes	before hospital discharge	Multiple surgeries	627	100/627 (15.9)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	morbidity	.	chronic pulmonary disease	before hospital discharge	Multiple surgeries	252	54/252 (21.4)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	morbidity	.	chronic liver disease	before hospital discharge	Multiple surgeries	30	8/30 (26.7)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	morbidity	.	congestive heart failure or coronary artery disease	before hospital discharge	Multiple surgeries	236	49/236 (20.7)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	morbidity	.	diabetes with end organ damage	before hospital discharge	Multiple surgeries	54	7/54 (12.9)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	morbidity	.	renal failure	before hospital discharge	Multiple surgeries	6	2/6 (33.3)		
Varela 2006 17058723	Adverse Events/Post-	AE bleeding	.	All Participants	30 days	Multiple surgeries	1339	33/1339 (2.5)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Varela 2006 17058723	Adverse Events/Post-operative Complications	AE overall	.	All Participants	30 days	Multiple surgeries	1339	253/1339 (18.9)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	AE pulmonary	including pneumonia	All Participants	30 days	Multiple surgeries	1339	58/1339 (4.3)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	AE wound infection	.	All Participants	30 days	Multiple surgeries	1339	23/1339 (1.7)		
Varela 2006 17058723	Adverse Events/Post-operative Complications	readmission	.	All Participants	30 days	Multiple surgeries	1339	9/1339 (0.7)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Wound Infection	Presence of a wound infection post operation.	All Participants	30 days	SG	6	0/6 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Wound Infection	Presence of a wound infection post operation.	All Participants	30 days	RYGB	157	6/157 (3.8)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Wound Infection	Presence of a wound infection post operation.	All Participants	30 days	AGB	34	1/34 (2.9)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Intra-Abdominal Hematoma	Presence of an intra-abdominal hematoma post surgery.	All Participants	30 days	SG	6	0/6 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Intra-Abdominal Hematoma	Presence of an intra-abdominal hematoma post surgery.	All Participants	30 days	RYGB	157	1/157 (0.6)		
O'Keefe 2010 20532834	Adverse	AE: Intra-Abdominal	Presence of an intra-	All Participants	30 days	AGB	34	0/34 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	Events/Post-operative Complications	Hematoma	abdominal hematoma post surgery.							
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Incisional Hernia	Presence of an incisional hernia post operation.	All Participants	30 days	SG	6	1/6 (16.7)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Incisional Hernia	Presence of an incisional hernia post operation.	All Participants	30 days	RYGB	157	5/157 (3.2)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Incisional Hernia	Presence of an incisional hernia post operation.	All Participants	30 days	AGB	34	0/34 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Hip Fracture	Hip fracture post surgery	All Participants	30 days	SG	6	0/6 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Hip Fracture	Hip fracture post surgery	All Participants	30 days	RYGB	157	0/157 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Hip Fracture	Hip fracture post surgery	All Participants	30 days	AGB	34	1/34 (2.9)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Hiatal Hernia Recurrence	Presence of a hiatal hernia recurrence post surgery.	All Participants	30 days	SG	6	1/6 (16.7)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Hiatal Hernia Recurrence	Presence of a hiatal hernia recurrence post surgery.	All Participants	30 days	RYGB	157	0/157 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Hiatal Hernia Recurrence	Presence of a hiatal hernia recurrence post surgery.	All Participants	30 days	AGB	34	0/34 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Gastrointestinal bleed	Presence of gastrointestinal bleeding	All Participants	30 days	SG	6	0/6 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Gastrointestinal bleed	Presence of gastrointestinal bleeding	All Participants	30 days	RYGB	157	4/157 (2.5)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Gastrointestinal bleed	Presence of gastrointestinal bleeding	All Participants	30 days	AGB	34	0/34 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Foreign Body Obstruction	Presence of a foreign body obstruction post operation.	All Participants	30 days	SG	6	0/6 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Foreign Body Obstruction	Presence of a foreign body obstruction post operation.	All Participants	30 days	RYGB	157	2/157 (1.3)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Foreign Body Obstruction	Presence of a foreign body obstruction post operation.	All Participants	30 days	AGB	34	1/34 (2.9)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: DVT	Presence of Deep Vein Thrombosis post operation.	All Participants	30 days	SG	6	1/6 (16.7)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: DVT	Presence of Deep Vein Thrombosis post operation.	All Participants	30 days	RYGB	157	0/157 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: DVT	Presence of Deep Vein Thrombosis post operation.	All Participants	30 days	AGB	34	0/34 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Anastomotic Leak	Presence of an anastomotic leak	All Participants	30 days	SG	6	0/6 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Anastomotic Leak	Presence of an anastomotic leak	All Participants	30 days	RYGB	157	0/157 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Lap Band Leak	Presence of a lap band leak post surgery. Applicable for Lap band cohort only.	All Participants	30 days	AGB	34	1/34 (2.9)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Marginal Ulcer	Presence of a Marginal Ulcer post operation.	All Participants	30 days	SG	6	1/6 (16.7)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Marginal Ulcer	Presence of a Marginal Ulcer post operation.	All Participants	30 days	RYGB	157	16/157 (10.2)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Marginal Ulcer	Presence of a Marginal Ulcer post operation.	All Participants	30 days	AGB	34	0/34 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Wound Dehiscence	Presence of wound dehiscence post surgery.	All Participants	30 days	SG	6	0/6 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Wound Dehiscence	Presence of wound dehiscence post surgery.	All Participants	30 days	RYGB	157	1/157 (0.6)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Wound Dehiscence	Presence of wound dehiscence post surgery.	All Participants	30 days	AGB	34	0/34 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Stenosis/Stricture	Presence of stenosis or a stricture post operation.	All Participants	30 days	SG	6	1/6 (16.7)		
O'Keefe 2010 20532834	Adverse Events/Post-operative	AE: Stenosis/Stricture	Presence of stenosis or a stricture post	All Participants	30 days	RYGB	157	14/157 (8.9)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	Complications		operation.							
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Stenosis/Stricture	Presence of stenosis or a stricture post operation.	All Participants	30 days	AGB	34	0/34 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Roux Syndrome	Presence of roux syndrome post surgery. Only applicable to Roux-en-Y cohort.	All Participants	30 days	RYGB	157	1/157 (0.6)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Respiratory Failure	Postoperative respiratory failure	All Participants	30 days	SG	6	0/6 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Respiratory Failure	Postoperative respiratory failure	All Participants	30 days	RYGB	157	1/157 (0.6)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Respiratory Failure	Postoperative respiratory failure	All Participants	30 days	AGB	34	0/34 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Pneumonia	Patients who contracted pneumonia postoperatively .	All Participants	30 days	SG	6	1/6 (16.7)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Pneumonia	Patients who contracted pneumonia postoperatively .	All Participants	30 days	RYGB	157	1/157 (0.6)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Pneumonia	Patients who contracted pneumonia postoperatively .	All Participants	30 days	AGB	34	0/34 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Oral Candidiasis	Presence of oral candidiasis post operation.	All Participants	30 days	SG	6	0/6 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Oral Candidiasis	Presence of oral candidiasis post operation.	All Participants	30 days	RYGB	157	2/157 (1.3)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Oral Candidiasis	Presence of oral candidiasis post operation.	All Participants	30 days	AGB	34	0/34 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Obstruction	Presence of an obstruction post surgery.	All Participants	30 days	SG	6	1/6 (16.7)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Obstruction	Presence of an obstruction post surgery.	All Participants	30 days	RYGB	157	1/157 (0.6)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Obstruction	Presence of an obstruction post surgery.	All Participants	30 days	AGB	34	2/34 (5.9)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Myocardial Infarction	Patients who had a postoperative myocardial infarction.	All Participants	30 days	SG	6	0/6 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Myocardial Infarction	Patients who had a postoperative myocardial infarction.	All Participants	30 days	RYGB	157	2/157 (1.3)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Myocardial Infarction	Patients who had a postoperative myocardial infarction.	All Participants	30 days	AGB	34	0/34 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Acute Cholecystitis	Patient had acute cholecystitis post operation.	All Participants	30 days	SG	6	0/6 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative	AE: Acute Cholecystitis	Patient had acute cholecystitis post operation.	All Participants	30 days	RYGB	157	3/157 (1.9)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	Complications									
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Acute Cholecystitis	Patient had acute cholecystitis post operation.	All Participants	30 days	AGB	34	0/34 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	Mortality	Mortality	All Participants	30 days	SG	6	0/6 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	Mortality	Mortality	All Participants	30 days	RYGB	157	0/157 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	Mortality	Mortality	All Participants	30 days	AGB	34	0/34 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Abdominal Wall Hematoma	Presence of an abdominal wall hematoma post surgery.	All Participants	0 N/A	SG	6	0/6 (0)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Abdominal Wall Hematoma	Presence of an abdominal wall hematoma post surgery.	All Participants	0 N/A	RYGB	157	1/157 (0.6)		
O'Keefe 2010 20532834	Adverse Events/Post-operative Complications	AE: Abdominal Wall Hematoma	Presence of an abdominal wall hematoma post surgery.	All Participants	0 N/A	AGB	34	0/34 (0)		
Abbas 2015 26001882	Adverse Events/Post-operative Complications	AE: any	.	All Participants	1 years	Multiple surgeries	83	8/83 (9.6)		
Abbas 2015 26001882	Adverse Events/Post-operative Complications	AE: Thrombotic event	.	All Participants	1 years	Multiple surgeries	83	1/83 (1.2)		
Abbas 2015 26001882	Adverse Events/Post-	AE: Wound infection	.	All Participants	1 years	Multiple surgeries	83	2/83 (2.4)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Abbas 2015 26001882	Adverse Events/Post-operative Complications	AE: diagnostic laparoscopy	.	All Participants	1 years	Multiple surgeries	83	1/83 (1.2)		
Abbas 2015 26001882	Adverse Events/Post-operative Complications	AE: Cardiac event	.	All Participants	1 years	Multiple surgeries	83	1/83 (1.2)		
Abbas 2015 26001882	Adverse Events/Post-operative Complications	AE: intestinal obstruction	.	All Participants	1 years	Multiple surgeries	83	3/83 (3.6)		
Andalib 2016 26416373	Adverse Events/Post-operative Complications	Mortality	30-day postoperative mortality	All Participants	30 days	BPD-DS	2	0/2 (0)		
Andalib 2016 26416373	Adverse Events/Post-operative Complications	Mortality	30-day postoperative mortality	All Participants	30 days	RYGB	101	1/101 (1)		
Andalib 2016 26416373	Adverse Events/Post-operative Complications	Mortality	30-day postoperative mortality	All Participants	30 days	AGB	46	0/46 (0)		
Andalib 2016 26416373	Adverse Events/Post-operative Complications	Mortality	30-day postoperative mortality	All Participants	30 days	SG	85	0/85 (0)		
Andalib 2016 26416373	Adverse Events/Post-operative Complications	Morbidity (major)	defined as the presence of any of 14 major adverse events including deep surgical site infection, organ/space surgical site infection, sepsis, septic	All Participants	30 days	BPD-DS	2	0/2 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			shock, pneumonia, unplanned reintubation, failure to wean from mechanical ventilation beyond 48 h from index operation, myocardial infarction, cardiac arrest, stroke, deep vein thrombosis, pulmonary embolism, need for transfusion, and wound disruption.							
Andalib 2016 26416373	Adverse Events/Post-operative Complications	Morbidity (major)	defined as the presence of any of 14 major adverse events including deep surgical site infection, organ/space surgical site infection, sepsis, septic shock, pneumonia, unplanned reintubation, failure to wean from mechanical ventilation beyond 48 h from index operation, myocardial infarction,	All Participants	30 days	RYGB	101	7/101 (6.9)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			cardiac arrest, stroke, deep vein thrombosis, pulmonary embolism, need for transfusion, and wound disruption.							
Andalib 2016 26416373	Adverse Events/Post-operative Complications	Morbidity (major)	defined as the presence of any of 14 major adverse events including deep surgical site infection, organ/space surgical site infection, sepsis, septic shock, pneumonia, unplanned reintubation, failure to wean from mechanical ventilation beyond 48 h from index operation, myocardial infarction, cardiac arrest, stroke, deep vein thrombosis, pulmonary embolism, need for transfusion, and wound disruption.	All Participants	30 days	AGB	46	1/46 (2.2)		
Andalib 2016 26416373	Adverse Events/Post-	Morbidity (major)	defined as the presence of any of 14	All Participants	30 days	SG	85	6/85 (7.1)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications		major adverse events including deep surgical site infection, organ/space surgical site infection, sepsis, septic shock, pneumonia, unplanned reintubation, failure to wean from mechanical ventilation beyond 48 h from index operation, myocardial infarction, cardiac arrest, stroke, deep vein thrombosis, pulmonary embolism, need for transfusion, and wound disruption.							
Andalib 2016 26416373	Adverse Events/Post-operative Complications	Return to OR	.	All Participants	30 days	BPD-DS	2	0/2 (0)		
Andalib 2016 26416373	Adverse Events/Post-operative Complications	Return to OR	.	All Participants	30 days	RYGB	101	3/101 (3)		
Andalib 2016 26416373	Adverse Events/Post-operative Complications	Return to OR	.	All Participants	30 days	AGB	46	0/46 (0)		
Andalib 2016	Adverse	Return to OR	.	All Participants	30 days	SG	85	5/85 (5.9)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
26416373	Events/Post-operative Complications									
Andalib 2016 26416373	Adverse Events/Post-operative Complications	Unplanned readmission	.	All Participants	30 days	BPD-DS	2	0/2 (0)		
Andalib 2016 26416373	Adverse Events/Post-operative Complications	Unplanned readmission	.	All Participants	30 days	RYGB	101	9/101 (15.8)		
Andalib 2016 26416373	Adverse Events/Post-operative Complications	Unplanned readmission	.	All Participants	30 days	AGB	46	1/46 (7.1)		
Andalib 2016 26416373	Adverse Events/Post-operative Complications	Unplanned readmission	.	All Participants	30 days	SG	85	6/85 (8)		
Praveenraj 2016 27279392	Adverse Events/Post-operative Complications	Short term major or minor complication	Major complications were defined as those directly related to the operation, such as anastomotic or staple line leak, haemorrhage, intestinal obstruction, inadvertent injury to other organs, postoperative venous thromboembolism or pulmonary complications. Minor complications	All Participants	nd months	RYGB	32	0/32 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			were defined as non–lifethreatening events that include superficial skin or softtissue infection, incisional haematoma, urinary tract infection or musculoskeletal problems							
Praveenraj 2016 27279392	Adverse Events/Post-operative Complications	Short term major or minor complication	Major complications were defined as those directly related to the operation, such as anastomotic or staple line leak, haemorrhage, intestinal obstruction, inadvertent injury to other organs, postoperative venous thromboembolism or pulmonary complications. Minor complications were defined as non–lifethreatening events that include superficial skin or softtissue infection, incisional	All Participants	nd months	SG	54	1/54 (1.9)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			haematoma, urinary tract infection or musculoskeletal problems							
Werner 2015 26071250	Adverse Events/Post-operative Complications	90-day major complication rate	Major complications: PE, DVT, postoperative infection, postoperative I&D, MI, respiratory failure, CVA.	All Participants	90 days	TKA alone	66523	4037/66523 (6.1)		
Werner 2015 26071250	Adverse Events/Post-operative Complications	90-day major complication rate	Major complications: PE, DVT, postoperative infection, postoperative I&D, MI, respiratory failure, CVA.	All Participants	90 days	Bariatric and TKA	219	21/219 (9.6)		
Werner 2015 26071250	Adverse Events/Post-operative Complications	90-day major complication rate	Major complications: PE, DVT, postoperative infection, postoperative I&D, MI, respiratory failure, CVA.	All Participants	90 days	TKA alone	11294	2147/11294 (19)		
Werner 2015 26071250	Adverse Events/Post-operative Complications	90-day minor complication rate	Minor complications: stiffness, MUA, UTI, pneumonia, ARF, acute cholecystitis, blood transfusion.	All Participants	90 days	TKA alone	66523	5553/66523 (8.3)		
Werner 2015 26071250	Adverse Events/Post-operative Complications	90-day minor complication rate	Minor complications: stiffness, MUA, UTI, pneumonia, ARF, acute cholecystitis,	All Participants	90 days	Bariatric and TKA	219	33/219 (15.1)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Werner 2015 26071250	Adverse Events/Post-operative Complications	90-day minor complication rate	blood transfusion. Minor complications: stiffness, MUA, UTI, pneumonia, ARF, acute cholecystitis, blood transfusion.	All Participants	90 days	TKA alone	11294	2556/11294 (22.6)		
Werner 2015 26071250	Adverse Events/Post-operative Complications	VTE (DVT and/or PE)	Venous thromboembolism, Deep vein thrombosis and/or Pulmonary embolism	All Participants	90 days	TKA alone	66523	1465/66523 (2.2)		
Werner 2015 26071250	Adverse Events/Post-operative Complications	VTE (DVT and/or PE)	Venous thromboembolism, Deep vein thrombosis and/or Pulmonary embolism	All Participants	90 days	Bariatric and TKA	219	14/219 (6.4)		
Werner 2015 26071250	Adverse Events/Post-operative Complications	VTE (DVT and/or PE)	Venous thromboembolism, Deep vein thrombosis and/or Pulmonary embolism	All Participants	90 days	TKA alone	11294	675/11294 (6)		
Werner 2015 26071250	Adverse Events/Post-operative Complications	Medical	Medical complications: MI, respiratory failure, CVA, UTI, PNA, ARF, cholecystitis.	All Participants	90 days	TKA alone	66523	5941/66523 (8.9)		
Werner 2015 26071250	Adverse Events/Post-operative Complications	Medical	Medical complications: MI, respiratory failure, CVA, UTI, PNA, ARF, cholecystitis.	All Participants	90 days	Bariatric and TKA	219	31/219 (14.2)		
Werner 2015 26071250	Adverse	Medical	Medical complications:	All Participants	90 days	TKA alone	11294	2981/11294 (26.4)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	Events/Post-operative Complications		MI, respiratory failure, CVA, UTI, PNA, ARF, cholecystitis.							
Werner 2015 26071250	Adverse Events/Post-operative Complications	Transfusion	Blood transfusion	All Participants	90 days	TKA alone	66523	106/66523 (0.2)		
Werner 2015 26071250	Adverse Events/Post-operative Complications	Transfusion	Blood transfusion	All Participants	90 days	Bariatric and TKA	219	1/219 (0.5)		
Werner 2015 26071250	Adverse Events/Post-operative Complications	Transfusion	Blood transfusion	All Participants	90 days	TKA alone	11294	56/11294 (0.5)		
Ritz 2014 24708912	Adverse Events/Post-operative Complications	Surgical Complication	.	All Participants	30 days	RYGB	57	7/57 (12.3)		
Ritz 2014 24708912	Adverse Events/Post-operative Complications	Surgical Complication	.	All Participants	30 days	AGB	50	1/50 (2)		
Ritz 2014 24708912	Adverse Events/Post-operative Complications	Surgical Complication	.	All Participants	30 days	SG	47	2/47 (4.3)		
Ritz 2014 24708912	Adverse Events/Post-operative Complications	Medical Complication	.	All Participants	30 days	RYGB	57	4/57 (7)		
Ritz 2014 24708912	Adverse Events/Post-operative Complications	Medical Complication	.	All Participants	30 days	AGB	50	1/50 (2)		
Ritz 2014 24708912	Adverse Events/Post-operative	Medical Complication	.	All Participants	30 days	SG	47	0/47 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	Complications									
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: Anastomotic Bleed	.	All Participants	After surgery	RYGB	33	1/33 (3)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: Anastomotic Bleed	.	All Participants	After surgery	AGB	9	0/9 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: Anastomotic Bleed	.	All Participants	After surgery	Revisional surgery	3	0/3 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: Anastomotic Bleed	.	All Participants	After surgery	SG	3	0/3 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: Anastomotic Bleed	.	All Participants	After surgery	BPD-DS	7	0/7 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: left Empyema	.	All Participants	After surgery	RYGB	33	1/33 (3)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: left Empyema	.	All Participants	After surgery	AGB	9	0/9 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: left Empyema	.	All Participants	After surgery	Revisional surgery	3	0/3 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: left Empyema	.	All Participants	After surgery	SG	3	0/3 (0)		
Hazzan 2006 17138231	Adverse Events/Post-	Adverse Outcome: left Empyema	.	All Participants	After surgery	BPD-DS	7	0/7 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: Urinary Tract Infection	.	All Participants	After surgery	RYGB	33	0/33 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: Urinary Tract Infection	.	All Participants	After surgery	AGB	9	0/9 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: Urinary Tract Infection	.	All Participants	After surgery	Revisional surgery	3	0/3 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: Urinary Tract Infection	.	All Participants	After surgery	SG	3	0/3 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: Urinary Tract Infection	.	All Participants	After surgery	BPD-DS	7	1/7 (14.3)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: Wound Infection	.	All Participants	After surgery	RYGB	33	0/33 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: Wound Infection	.	All Participants	After surgery	AGB	9	0/9 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: Wound Infection	.	All Participants	After surgery	Revisional surgery	3	1/3 (33.3)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Adverse Outcome: Wound Infection	.	All Participants	After surgery	SG	3	0/3 (0)		
Hazzan 2006 17138231	Adverse Events/Post-	Adverse Outcome:	.	All Participants	After surgery	BPD-DS	7	0/7 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications	Wound Infection								
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Mortality	.	All Participants	30 days	RYGB	33	0/33 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Mortality	.	All Participants	30 days	AGB	9	0/9 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Mortality	.	All Participants	30 days	Revisional surgery	3	0/3 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Mortality	.	All Participants	30 days	SG	3	0/3 (0)		
Hazzan 2006 17138231	Adverse Events/Post-operative Complications	Mortality	.	All Participants	30 days	BPD-DS	7	0/7 (0)		
Zaveri 2016 27795883	Adverse Events/Post-operative Complications	Complication rate	.	All Participants	30 days	SADS	15	3/15 (20)		
Zaveri 2016 27795883	Adverse Events/Post-operative Complications	Complication rate	.	All Participants	30 days	AGB	24	1.992/24 (8.3)		
Zaveri 2016 27795883	Adverse Events/Post-operative Complications	Complication rate	.	All Participants	30 days	RYGB	14	3.99/14 (28.5)		
Zaveri 2016 27795883	Adverse Events/Post-operative Complications	Complication rate	.	All Participants	1 years	SADS	15	3/15 (20)		
Zaveri 2016 27795883	Adverse Events/Post-	Complication rate	.	All Participants	1 years	AGB	24	15/24 (62.5)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Zaveri 2016 27795883	Adverse Events/Post-operative Complications	Complication rate	.	All Participants	1 years	RYGB	14	3.99/14 (28.5)		
Gebhart 2015 25130515	Adverse Events/Post-operative Complications	In-Hospital Mortality	In-hospital mortality.	All Participants	0 years	Multiple surgeries	6105	7/6105 (0.1)		
Gebhart 2015 25130515	Adverse Events/Post-operative Complications	In-Hospital Mortality	In-hospital mortality.	All Participants	0 years	RYGB	4213	6/4213 (0.1)		
Gebhart 2015 25130515	Adverse Events/Post-operative Complications	In-Hospital Mortality	In-hospital mortality.	All Participants	0 years	SG	850	1/850 (0.1)		
Gebhart 2015 25130515	Adverse Events/Post-operative Complications	In-Hospital Mortality	In-hospital mortality.	All Participants	0 years	AGB	1062	0/1062 (0)		
Gebhart 2015 25130515	Adverse Events/Post-operative Complications	Observed-To-Expected Mortality Ratio	Observed to expected mortality ratio.	All Participants	0 years	Multiple surgeries	6105	52.503/6105 (0.9)		
Gebhart 2015 25130515	Adverse Events/Post-operative Complications	Serious Morbidity	Serious morbidities in patients.	All Participants	0 years	Multiple surgeries	6105	81/6105 (1.3)		
Gebhart 2015 25130515	Adverse Events/Post-operative Complications	Serious Morbidity	Serious morbidities in patients.	All Participants	0 years	RYGB	4213	65/4213 (1.5)		
Gebhart 2015 25130515	Adverse Events/Post-operative Complications	Serious Morbidity	Serious morbidities in patients.	All Participants	0 years	SG	850	11/850 (1.3)		
Gebhart 2015 25130515	Adverse Events/Post-	Serious Morbidity	Serious morbidities in	All Participants	0 years	AGB	1062	7/1062 (0.7)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications		patients.							
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	Charlston Comorbidity Score = 3	90 days	Multiple surgeries	16	4/16 (24.7)		
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	Charlston Comorbidity Score = 2	90 days	Multiple surgeries	85	16/85 (18.8)		
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	Charlston Comorbidity Score = 1	90 days	Multiple surgeries	934	33/934 (3.5)		
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	Charlston Comorbidity Score = 0	90 days	Multiple surgeries	15120	393/15120 (2.6)		
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	revision surgery	30 days	Multiple surgeries	1225	18/1225 (1.5)		
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	revision surgery	90 days	Multiple surgeries	1225	27/1225 (2.2)		
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	primary surgery	30 days	Multiple surgeries	14930	299/14930 (2)		
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	primary surgery	90 days	Multiple surgeries	14930	418/14930 (2.8)		
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	<65	30 days	Multiple surgeries	14638	249/14638 (1.7)		
Flum 2005 16234496	Adverse Events/Post-	Mortality	.	<65	90 days	Multiple surgeries	14638	337/14638 (2.3)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	>= 65	30 days	Multiple surgeries	1517	73/1517 (4.8)		
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	>= 65	90 days	Multiple surgeries	1517	105/1517 (6.9)		
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	Men	30 days	Multiple surgeries	3912	145/3912 (3.7)		
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	Men	90 days	Multiple surgeries	3912	188/3912 (4.8)		
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	Women	30 days	Multiple surgeries	12243	184/12243 (1.5)		
Flum 2005 16234496	Adverse Events/Post-operative Complications	Mortality	.	Women	90 days	Multiple surgeries	12243	257/12243 (2.1)		
Lemaître 2016 27063637	Adverse Events/Post-operative Complications	AE: hemorrhages	.	All Participants	post-surgery	SG	494	12/494 (2.4)		
Lemaître 2016 27063637	Adverse Events/Post-operative Complications	AE: gastric fistula	.	All Participants	post-surgery	SG	494	15/494 (3)		
Lemaître 2016 27063637	Adverse Events/Post-operative Complications	mortality	.	All Participants	post-surgery	SG	494	1/494 (0.2)		
Willkomm 2010 20870182	Adverse Events/Post-	Postoperative complication-	.	All Participants	nd days	RYGB	100	1/100 (1)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications	Bleeding	.							
Willkomm 2010 20870182	Adverse Events/Post-operative Complications	Postoperative complication-Cardiac	.	All Participants	nd days	RYGB	100	2/100 (2)		
Willkomm 2010 20870182	Adverse Events/Post-operative Complications	Postoperative complication-Pulmonary	.	All Participants	nd days	RYGB	100	3/100 (3)		
Willkomm 2010 20870182	Adverse Events/Post-operative Complications	Postoperative complication-Wound	.	All Participants	nd days	RYGB	100	1/100 (1)		
Willkomm 2010 20870182	Adverse Events/Post-operative Complications	Postoperative mortality	.	All Participants	nd days	RYGB	100	0/100 (0)		
Willkomm 2010 20870182	Adverse Events/Post-operative Complications	Readmission	.	All Participants	30 days	RYGB	100	6/100 (6)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	30-day Mortality	Overall 30-day mortality	>= 70 years	30 days	Multiple surgeries	356	2/356 (0.6)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	30-day Mortality	Overall 30-day mortality	65-69 years	30 days	Multiple surgeries	1638	6/1638 (0.4)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	30-day Mortality	Overall 30-day mortality	50-64 years	30 days	Multiple surgeries	16064	33/16064 (0.2)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Sepsis	.	65-69 years	30 days	Multiple surgeries	1638	17/1638 (0.1)		
Dorman 2012 22038414	Adverse Events/Post-	AE: Sepsis	.	50-64 years	30 days	Multiple surgeries	16064	118/16064 (0.7)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Sepsis	.	>= 70 years	30 days	Multiple surgeries	356	3/356 (0.8)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Cardiovascular	Required CPR	>= 70 years	30 days	Multiple surgeries	356	0/356 (0)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Cardiovascular	Required CPR	65-69 years	30 days	Multiple surgeries	1638	17/1638 (1)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Cardiovascular	Required CPR	50-64 years	30 days	Multiple surgeries	16064	28/16064 (0.2)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Cardiovascular	Myocardial infarction	>= 70 years	30 days	Multiple surgeries	356	1/356 (0.3)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Cardiovascular	Myocardial infarction	65-69 years	30 days	Multiple surgeries	1638	0/1638 (0)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Cardiovascular	Myocardial infarction	50-64 years	30 days	Multiple surgeries	16064	7/16064 (0)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Renal	Acute failure	>= 70 years	30 days	Multiple surgeries	356	1/356 (0.3)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Renal	Acute failure	65-69 years	30 days	Multiple surgeries	1638	6/1638 (0.4)		
Dorman 2012 22038414	Adverse Events/Post-	AE: Renal	Acute failure	50-64 years	30 days	Multiple surgeries	16064	36/16064 (0.2)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Renal	Progressive insufficiency	>= 70 years	30 days	Multiple surgeries	356	1/356 (0.3)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Renal	Progressive insufficiency	65-69 years	30 days	Multiple surgeries	1638	5/1638 (0.3)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Renal	Progressive insufficiency	50-64 years	30 days	Multiple surgeries	16064	44/16064 (0.3)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Septic Shock	.	50-64 years	30 days	Multiple surgeries	16064	74/16064 (0.5)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Septic Shock	.	>= 70 years	30 days	Multiple surgeries	356	0/356 (0)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Septic Shock	.	65-69 years	30 days	Multiple surgeries	1638	7/1638 (0.4)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	PLOS	Prolonged length of stay	>= 70 years	30 days	Multiple surgeries	34	17/34 (50)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	PLOS	Prolonged length of stay	>= 70 years	30 days	Multiple surgeries	325	65/325 (20)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	PLOS	Prolonged length of stay	65-69 years	30 days	Multiple surgeries	169	49/169 (29)		
Dorman 2012 22038414	Adverse Events/Post-	PLOS	Prolonged length of stay	65-69 years	30 days	Multiple surgeries	1470	338/1470 (23)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Dorman 2012 22038414	Adverse Events/Post-operative Complications	PLOS	Prolonged length of stay	50-64 years	30 days	Multiple surgeries	1814	381/1814 (21)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	PLOS	Prolonged length of stay	50-64 years	30 days	Multiple surgeries	14217	3270/14217 (23)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	Return to OR	Return to operating room	>= 70 years	30 days	Multiple surgeries	356	7/356 (2)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	Return to OR	Return to operating room	65-69 years	30 days	Multiple surgeries	1638	35/1638 (2.1)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	Return to OR	Return to operating room	50-64 years	30 days	Multiple surgeries	16064	416/16064 (2.6)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Respiratory	Pneumonia	50-64 years	30 days	Multiple surgeries	16064	108/16064 (0.7)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Respiratory	Pneumonia	>= 70 years	30 days	Multiple surgeries	356	2/356 (0.6)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Respiratory	Pneumonia	65-69 years	30 days	Multiple surgeries	1638	12/1638 (0.7)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Infection	dehiscence	>= 70 years	30 days	Multiple surgeries	356	1/356 (0.3)		
Dorman 2012 22038414	Adverse Events/Post-	AE: Infection	dehiscence	65-69 years	30 days	Multiple surgeries	1638	2/1638 (0.1)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Infection	dehiscence	50-64 years	30 days	Multiple surgeries	16064	45/16064 (0.3)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Infection	Organ space infection	>= 70 years	30 days	Multiple surgeries	356	1/356 (0.3)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Infection	Organ space infection	65-69 years	30 days	Multiple surgeries	1638	11/1638 (0.7)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Infection	Organ space infection	50-64 years	30 days	Multiple surgeries	16064	104/16064 (0.6)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Infection	Deep incisional infection	>= 70 years	30 days	Multiple surgeries	356	0/356 (0)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Infection	Deep incisional infection	65-69 years	30 days	Multiple surgeries	1638	3/1638 (0.2)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Infection	Deep incisional infection	50-64 years	30 days	Multiple surgeries	16064	65/16064 (0.4)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Respiratory	Reintubation	50-64 years	30 days	Multiple surgeries	16064	107/16064 (0.7)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Respiratory	Reintubation	>= 70 years	30 days	Multiple surgeries	356	1/356 (0.3)		
Dorman 2012 22038414	Adverse Events/Post-	AE: Respiratory	Reintubation	65-69 years	30 days	Multiple surgeries	1638	12/1638 (0.7)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Respiratory	Intubated >48 hours	50-64 years	30 days	Multiple surgeries	16064	82/16064 (0.5)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Respiratory	Intubated >48 hours	>= 70 years	30 days	Multiple surgeries	356	0/356 (0)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Respiratory	Intubated >48 hours	65-69 years	30 days	Multiple surgeries	1638	12/1638 (0.7)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Respiratory	Pulmonary embolism	>= 70 years	30 days	Multiple surgeries	356	0/356 (0)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Respiratory	Pulmonary embolism	65-69 years	30 days	Multiple surgeries	1638	8/1638 (0.5)		
Dorman 2012 22038414	Adverse Events/Post-operative Complications	AE: Respiratory	Pulmonary embolism	50-64 years	30 days	Multiple surgeries	16064	41/16064 (0.3)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: GJ Ulcer With Stricture	Number of patients with Gastrojejunal ulcer with stricture > 30 days.	All Participants	30 days	RYGB	44	2/44 (4.6)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: GJ Ulcer With Stricture	Number of patients with Gastrojejunal ulcer with stricture > 30 days.	All Participants	30 days	SG	24	0/24 (0)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Intestinal Obstruction	.	All Participants	30 days	RYGB	44	2/44 (4.6)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Intestinal Obstruction	.	All Participants	30 days	SG	24	0/24 (0)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: JJ Stricture	jejunojejunostomy stricture, < 30 days.	All Participants	30 days	RYGB	44	1/44 (2.3)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: JJ Stricture	jejunojejunostomy stricture, < 30 days.	All Participants	30 days	SG	24	0/24 (0)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Marginal Ulcer	Number of patients with a marginal ulcer > 30 days	All Participants	30 days	RYGB	44	1/44 (2.3)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Marginal Ulcer	Number of patients with a marginal ulcer > 30 days	All Participants	30 days	SG	24	0/24 (0)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Mortality	Patients who died.	All Participants	1 years	RYGB	44	1/44 (2.3)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Mortality	Patients who died.	All Participants	1 years	SG	24	0/24 (0)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Reoperation	Patients who needed a reoperation.	All Participants	1 years	RYGB	44	7/44 (15.9)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Reoperation	Patients who needed a reoperation.	All Participants	1 years	SG	24	1/24 (4.2)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Stomach Mid-Body Stricture	Number of patients with stomach mid-body stricture	All Participants	30 days	RYGB	44	0/44 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			> 30 days.							
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Stomach Mid-Body Stricture	Number of patients with stomach mid-body stricture > 30 days.	All Participants	30 days	SG	24	1/24 (4.2)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Total early complications	Total number of early complications < 30 days.	All Participants	30 days	RYGB	44	6/44 (13.6)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Total early complications	Total number of early complications < 30 days.	All Participants	30 days	SG	24	0/24 (0)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Total Late complications	total number of late complications > 30 days.	All Participants	30 days	RYGB	44	3/44 (6.8)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Total Late complications	total number of late complications > 30 days.	All Participants	30 days	SG	24	1/24 (4.2)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Total Morbidity	total morbidity	All Participants	1 years	RYGB	44	9/44 (20.5)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: Total Morbidity	total morbidity	All Participants	1 years	SG	24	1/24 (4.2)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: GJ Leak	Gastro jejunostrictomic leak, <30 days	All Participants	30 days	RYGB	44	3/44 (6.8)		
Huang 2015 25859266	Adverse Events/Post-operative Complications	AE: GJ Leak	Gastro jejunostrictomic leak, <30 days	All Participants	30 days	SG	24	0/24 (0)		
Boules 2015 26243345	Adverse Events/Post-	Mortality	.	All Participants	30 days	Bariatric surgery and	83	0/83 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications					hernia repair				
Boules 2015 26243345	Adverse Events/Post-operative Complications	Mortality	.	All Participants	30 days	Multiple surgeries	83	0/83 (0)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE early postoperative symptoms	.	All Participants	30 days	RYGB	61	14/61 (23)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE early postoperative symptoms	.	All Participants	30 days	SG	22	14/22 (64)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE readmission	.	All Participants	30 days	Bariatric surgery and hernia repair	83	5/83 (6)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE stenosis	.	All Participants	30 days	Bariatric surgery and hernia repair	83	1/83 (1.2)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE stenosis	.	All Participants	30 days	Multiple surgeries	83	2/83 (2.4)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE reflux	.	All Participants	30 days	Bariatric surgery and hernia repair	83	1/83 (1.2)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE reflux	.	All Participants	30 days	Multiple surgeries	83	1/83 (1.2)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE nausea	.	All Participants	30 days	Bariatric surgery and hernia repair	83	9/83 (10.8)		
Boules 2015 26243345	Adverse Events/Post-	AE nausea	.	All Participants	30 days	Multiple surgeries	83	7/83 (8.4)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE marginal ulcer	.	All Participants	30 days	Bariatric surgery and hernia repair	83	1/83 (1.2)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE marginal ulcer	.	All Participants	30 days	Multiple surgeries	83	4/83 (4.8)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE late postoperative complications	.	All Participants	30 days	Bariatric surgery and hernia repair	83	3/83 (3.6)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE late postoperative complications	.	All Participants	30 days	Multiple surgeries	83	6/83 (7.2)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE dysphagia	.	All Participants	30 days	Bariatric surgery and hernia repair	83	7/83 (8.4)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE dysphagia	.	All Participants	30 days	Multiple surgeries	83	1/83 (1.2)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE dehydration	.	All Participants	30 days	Bariatric surgery and hernia repair	83	1/83 (1.2)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE dehydration	.	All Participants	30 days	Multiple surgeries	83	3/83 (3.6)		
Boules 2015 26243345	Adverse Events/Post-operative Complications	AE abdominal pain	.	All Participants	30 days	Bariatric surgery and hernia repair	83	6/83 (7.2)		
Boules 2015 26243345	Adverse Events/Post-	AE abdominal pain	.	All Participants	30 days	Multiple surgeries	83	3/83 (3.6)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Abscess	.	All Participants	nd	Multiple surgeries	350	7/350 (2)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Jejunal ulcer	.	All Participants	nd	Multiple surgeries	450	9/450 (2)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Leak	.	All Participants	nd	Multiple surgeries	100	1/100 (1)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Nausea	.	All Participants	nd	Multiple surgeries	391	43/391 (11)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Obstruction	.	All Participants	nd	Multiple surgeries	333	10/333 (3)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Pneumonia	.	All Participants	nd	Multiple surgeries	300	6/300 (2)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Pulmonary embolism	.	All Participants	nd	Multiple surgeries	200	2/200 (1)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Stricture	.	All Participants	nd	Multiple surgeries	400	4/400 (1)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Vomiting	.	All Participants	nd	Multiple surgeries	400	36/400 (9)		
Quirante 2017 28039650	Adverse Events/Post-	AE- Incisional hernia	.	All Participants	nd	Multiple surgeries	300	6/300 (2)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications	w/obstruction								
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Incisional hernia w/o obstruction	.	All Participants	nd	Multiple surgeries	350	7/350 (2)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Fistula	.	All Participants	nd	Multiple surgeries	350	7/350 (2)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Bleed	.	All Participants	nd	Multiple surgeries	500	5/500 (1)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- De novo GERD	.	All Participants	nd	Multiple surgeries	413	33/413 (8)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Deep venous thrombosis	.	All Participants	nd	Multiple surgeries	400	4/400 (1)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Dehydration	.	All Participants	nd	Multiple surgeries	400	16/400 (4)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Diaphragmatic hernia	.	All Participants	nd	Multiple surgeries	400	4/400 (1)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Diarrhea	.	All Participants	nd	Multiple surgeries	420	21/420 (5)		
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE- Early obstruction	.	All Participants	30	Multiple surgeries	200	2/200 (1)		
Quirante 2017 28039650	Adverse Events/Post-	AE- Early wound	.	All Participants	30	Multiple surgeries	300	3/300 (1)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications	infection								
Quirante 2017 28039650	Adverse Events/Post-operative Complications	AE: Wound infection	.	All Participants	nd	Multiple surgeries	450	9/450 (2)		
Wittgrove 2009 19705206	Adverse Events/Post-operative Complications	AE: Atrial fibrillation	A-fib; new onset	All Participants	90 days	RYGB	120	2/120 (1.7)		
Wittgrove 2009 19705206	Adverse Events/Post-operative Complications	AE: Leak	.	All Participants	90 days	RYGB	120	0/120 (0)		
Wittgrove 2009 19705206	Adverse Events/Post-operative Complications	AE: Wound Infection	.	All Participants	90 days	RYGB	120	2/120 (1.7)		
Wittgrove 2009 19705206	Adverse Events/Post-operative Complications	AE: Bleeding requiring transfusion	(no reoperations required)	All Participants	90 days	RYGB	120	3/120 (2.5)		
Wittgrove 2009 19705206	Adverse Events/Post-operative Complications	AE: Abscess	.	All Participants	90 days	RYGB	120	1/120 (0.8)		
Wittgrove 2009 19705206	Adverse Events/Post-operative Complications	AE: Strictures	.	All Participants	90 days	RYGB	120	13/120 (10.8)		
Wittgrove 2009 19705206	Adverse Events/Post-operative Complications	AE: Pulmonary embolus	.	All Participants	90 days	RYGB	120	0/120 (0)		
Wittgrove 2009 19705206	Adverse Events/Post-operative Complications	AE: Death	.	All Participants	90 days	RYGB	120	0/120 (0)		
Wittgrove 2009 19705206	Adverse Events/Post-	AE: Re-exploration	Internal Hernia (1), Abdominal	All Participants	90 days	RYGB	120	2/120 (1.7)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications		wall hernia (1)							
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Wound Infection	presence of a wound infection	All Participants	1 years	SG	12	0/12 (0)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Wound Infection	presence of a wound infection	All Participants	1 years	AGB	22	3/22 (13.6)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Wound Infection	presence of a wound infection	All Participants	1 years	Multiple surgeries	42	4/42 (9.5)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Wound Infection	presence of a wound infection	All Participants	1 years	RYGB	8	1/8 (12.5)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Accidental Colotomy	Presence of Accidental Colotomy	All Participants	1 years	SG	12	2/12 (16.7)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Accidental Colotomy	Presence of Accidental Colotomy	All Participants	1 years	AGB	22	0/22 (0)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Accidental Colotomy	Presence of Accidental Colotomy	All Participants	1 years	Multiple surgeries	42	2/42 (4.8)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Accidental Colotomy	Presence of Accidental Colotomy	All Participants	1 years	RYGB	8	0/8 (0)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Acute Gastroesophageal Junction Obstruction	Presence of Acute Gastroesophageal Junction Obstruction	All Participants	1 years	SG	12	0/12 (0)		
Ramirez 2012 22551574	Adverse	AE: Acute Gastroesophageal	Presence of Acute	All Participants	1 years	AGB	22	1/22 (4.5)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	Events/Post-operative Complications	geal Junction Obstruction	Gastroesopha geal Junction Obstruction							
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Acute Gastroesopha geal Junction Obstruction	Presence of Acute Gastroesopha geal Junction Obstruction	All Participants	1 years	Multiple surgeries	42	1/42 (2.4)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Acute Gastroesopha geal Junction Obstruction	Presence of Acute Gastroesopha geal Junction Obstruction	All Participants	1 years	RYGB	8	0/8 (0)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Band Slippage	Presence of a band slip post surgery	All Participants	1 years	SG	12	0/12 (0)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Band Slippage	Presence of a band slip post surgery	All Participants	1 years	AGB	22	1/22 (4.5)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Band Slippage	Presence of a band slip post surgery	All Participants	1 years	Multiple surgeries	42	1/42 (2.4)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Band Slippage	Presence of a band slip post surgery	All Participants	1 years	RYGB	8	0/8 (0)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Cardiac Arrhythmia	Presence of Cardiac Arrhythmia	All Participants	1 years	SG	12	1/12 (8.3)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Cardiac Arrhythmia	Presence of Cardiac Arrhythmia	All Participants	1 years	AGB	22	1/22 (4.5)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Cardiac Arrhythmia	Presence of Cardiac Arrhythmia	All Participants	1 years	Multiple surgeries	42	2/42 (4.8)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Cardiac Arrhythmia	Presence of Cardiac Arrhythmia	All Participants	1 years	RYGB	8	0/8 (0)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Esophageal Perforation	Presence of an Esophageal Perforation	All Participants	1 years	SG	12	0/12 (0)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Esophageal Perforation	Presence of an Esophageal Perforation	All Participants	1 years	AGB	22	1/22 (4.5)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Esophageal Perforation	Presence of an Esophageal Perforation	All Participants	1 years	Multiple surgeries	42	1/42 (2.4)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Esophageal Perforation	Presence of an Esophageal Perforation	All Participants	1 years	RYGB	8	0/8 (0)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Leak	Presence of a postoperative leak	All Participants	1 years	SG	12	1/12 (8.3)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Leak	Presence of a postoperative leak	All Participants	1 years	AGB	22	0/22 (0)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Leak	Presence of a postoperative leak	All Participants	1 years	Multiple surgeries	42	1/42 (2.4)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Leak	Presence of a postoperative leak	All Participants	1 years	RYGB	8	0/8 (0)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Megaesophagus	Presence of Megaesophagus	All Participants	1 years	SG	12	0/12 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Megaesophagus	Presence of Megaesophagus	All Participants	1 years	AGB	22	1/22 (4.5)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Megaesophagus	Presence of Megaesophagus	All Participants	1 years	Multiple surgeries	42	1/42 (2.4)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Megaesophagus	Presence of Megaesophagus	All Participants	1 years	RYGB	8	0/8 (0)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Pneumonia	Presence of Pneumonia	All Participants	1 years	SG	12	0/12 (0)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Pneumonia	Presence of Pneumonia	All Participants	1 years	AGB	22	2/22 (9.1)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Pneumonia	Presence of Pneumonia	All Participants	1 years	Multiple surgeries	42	0/42 (0)		
Ramirez 2012 22551574	Adverse Events/Post-operative Complications	AE: Pneumonia	Presence of Pneumonia	All Participants	1 years	RYGB	8	0/8 (0)		
Peraglie 2016 25814071	Adverse Events/Post-operative Complications	AE: Transfusion	.	All Participants	90 days	MGB	88	0/88 (0)		
Peraglie 2016 25814071	Adverse Events/Post-operative Complications	AE: DVT/PE	.	All Participants	90 days	MGB	88	0/88 (0)		
Peraglie 2016 25814071	Adverse Events/Post-operative Complications	AE: Leak	.	All Participants	90 days	MGB	88	0/88 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Peraglie 2016 25814071	Adverse Events/Post-operative Complications	AE: Mortality 90 days	.	All Participants	90 days	MGB	88	0/88 (0)		
Peraglie 2016 25814071	Adverse Events/Post-operative Complications	AE: Mortality - 30 days	.	All Participants	90 days	MGB	88	0/88 (0)		
Peraglie 2016 25814071	Adverse Events/Post-operative Complications	AE: Mortality in Hospital	.	All Participants	90 days	MGB	88	0/88 (0)		
Peraglie 2016 25814071	Adverse Events/Post-operative Complications	AE: Oral Thrush	.	All Participants	90 days	MGB	88	1/88 (1)		
Peraglie 2016 25814071	Adverse Events/Post-operative Complications	AE: Readmission	.	All Participants	90 days	MGB	88	1/88 (1)		
Peraglie 2016 25814071	Adverse Events/Post-operative Complications	AE: Reintubation	.	All Participants	90 days	MGB	88	1/88 (1)		
Peraglie 2016 25814071	Adverse Events/Post-operative Complications	AE: Bleeding Port-site	.	All Participants	90 days	MGB	88	2/88 (2)		
Peraglie 2016 25814071	Adverse Events/Post-operative Complications	AE: Reoperation	.	All Participants	90 days	MGB	88	0/88 (0)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Revisions	.	All Participants	During the procedure	AGB	8990	1293/8990 (14.4)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Digestive	.	All Participants	During the procedure	AGB	16044	19/16044 (0.1)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Enteritis	.	All Participants	During the procedure	AGB	16059	4/16059 (0)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Hemorrhage	.	All Participants	During the procedure	AGB	16061	2/16061 (0)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Hypertension	.	All Participants	Baseline	AGB	8502	7561/8502 (47.1)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Hypertension	.	All Participants	During the procedure	AGB	16062	1/16062 (0)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Internal complication	.	All Participants	During the procedure	AGB	16042	21/16042 (0.1)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Liver complication	.	All Participants	During the procedure	AGB	16062	1/16062 (0)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Nervous	.	All Participants	During the procedure	AGB	16061	2/16061 (0)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Phlebitis	.	All Participants	During the procedure	AGB	16014	49/16014 (0.3)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Surgical error	.	All Participants	During the procedure	AGB	15976	87/15976 (0.5)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Infection	.	All Participants	During the procedure	AGB	16047	16/16047 (0.1)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Ventilation	.	All Participants	During the procedure	AGB	16060	3/16060 (0)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Abscess	.	All Participants	During the procedure	AGB	16058	5/16058 (0)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Anastomotic	.	All Participants	During the procedure	AGB	16058	5/16058 (0)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Atelectasis	.	All Participants	During the procedure	AGB	16007	56/16007 (0.4)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Pneumonia	.	All Participants	During the procedure	AGB	16036	27/16036 (0.2)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Pulmonary edema	.	All Participants	During the procedure	AGB	16060	3/16060 (0)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Pulmonary embolus	.	All Participants	During the procedure	AGB	16061	2/16061 (0)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Renal failure	.	All Participants	During the procedure	AGB	16053	10/16053 (0.1)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Respiratory failure	.	All Participants	During the procedure	AGB	16040	23/16040 (0.1)		
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Tracheostomy	.	All Participants	During the procedure	AGB	16062	1/16062 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Altieri 2016 26201412	Adverse Events/Post-operative Complications	Adverse Event: Vascular	.	All Participants	During the procedure	AGB	16061	2/16061 (0)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Bleeding	.	All Participants	30 days	SG	135	5/135 (3.7)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Bleeding	.	55-59 yo	30 days	SG	73	3/73 (4.1)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Bleeding	.	60-64 yo	30 days	SG	50	1/50 (2)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Bleeding	.	>= 65 yo	30 days	SG	12	1/12 (8.3)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Leakage	.	All Participants	30 days	SG	135	1/135 (0.7)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Leakage	.	55-59 yo	30 days	SG	73	1/73 (1.4)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Leakage	.	60-64 yo	30 days	SG	50	0/50 (0)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Leakage	.	>= 65 yo	30 days	SG	12	0/12 (0)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Dehydration	.	All Participants	30 days	SG	135	2/135 (1.5)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Dehydration	.	55-59 yo	30 days	SG	73	1/73 (1.4)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Dehydration	.	60-64 yo	30 days	SG	50	0/50 (0)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Dehydration	.	>= 65 yo	30 days	SG	12	1/12 (8.3)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Dysphagia	.	All Participants	30 days	SG	135	2/135 (1.5)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Dysphagia	.	55-59 yo	30 days	SG	73	0/73 (0)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Dysphagia	.	60-64 yo	30 days	SG	50	2/50 (4)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Dysphagia	.	>= 65 yo	30 days	SG	12	0/12 (0)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Cardiac	.	All Participants	30 days	SG	135	3/135 (2.2)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Cardiac	.	55-59 yo	30 days	SG	73	1/73 (1.4)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Cardiac	.	60-64 yo	30 days	SG	50	2/50 (4)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Cardiac	.	>= 65 yo	30 days	SG	12	0/12 (0)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Pulmonary	.	All Participants	30 days	SG	135	1/135 (0.7)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Pulmonary	.	55-59 yo	30 days	SG	73	0/73 (0)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Pulmonary	.	60-64 yo	30 days	SG	50	1/50 (2)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Pulmonary	.	>= 65 yo	30 days	SG	12	0/12 (0)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Sepsis	.	All Participants	30 days	SG	135	1/135 (0.7)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Sepsis	.	55-59 yo	30 days	SG	73	0/73 (0)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Sepsis	.	60-64 yo	30 days	SG	50	0/50 (0)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Sepsis	.	>= 65 yo	30 days	SG	12	1/12 (8.3)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Total	.	All Participants	30 days	SG	135	15/135 (11.1)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Total	.	55-59 yo	30 days	SG	73	6/73 (8.2)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Total	.	60-64 yo	30 days	SG	50	6/50 (12)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Early complication: Total	.	>= 65 yo	30 days	SG	12	3/12 (25)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Late complication: Dehydration	.	All Participants	>30 days	SG	135	2/135 (1.5)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Late complication: Dehydration	.	55-59 yo	>30 days	SG	73	1/73 (1.4)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Late complication: Dehydration	.	60-64 yo	>30 days	SG	50	1/50 (2)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Late complication: Dehydration	.	>= 65 yo	>30 days	SG	12	0/12 (0)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Late complication: Dysphagia	.	All Participants	>30 days	SG	135	3/135 (2.2)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Late complication: Dysphagia	.	55-59 yo	>30 days	SG	73	0/73 (0)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Late complication: Dysphagia	.	60-64 yo	>30 days	SG	50	2/50 (4)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Late complication: Dysphagia	.	>= 65 yo	>30 days	SG	12	1/12 (8.3)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Late complication: Incisional hernia	.	All Participants	>30 days	SG	135	1/135 (0.7)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Late complication: Incisional hernia	.	55-59 yo	>30 days	SG	73	1/73 (1.4)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Late complication: Incisional hernia	.	60-64 yo	>30 days	SG	50	0/50 (0)		
van Rutte 2013 23344504	Adverse Events/Post-operative Complications	Late complication: Incisional hernia	.	>= 65 yo	>30 days	SG	12	0/12 (0)		
Clough 2011 20490708	Adverse Events/Post-operative Complications	Any complication	.	All Participants	median: 22.5 months	AGB	113	21/113 (18.6)		
Clough 2011 20490708	Adverse Events/Post-operative Complications	All infectious complications	.	All Participants	median: 22.5 months	AGB	113	7/113 (6.2)		
Clough 2011 20490708	Adverse Events/Post-operative Complications	All port-related complications	.	All Participants	median: 22.5 months	AGB	113	8/113 (7.1)		
Clough 2011 20490708	Adverse Events/Post-operative Complications	Port infections	.	All Participants	median: 22.5 months	AGB	113	5/113 (4.4)		
Clough 2011 20490708	Adverse Events/Post-operative Complications	Minor complications	.	All Participants	median: 22.5 months	AGB	113	17/113 (15)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Clough 2011 20490708	Adverse Events/Post-operative Complications	Medical complications	Arrhythmia, Aspiration pneumonia, Pulmonary embolus, Unstable diabetes	All Participants	median: 22.5 months	AGB	113	5/113 (4.4)		
Clough 2011 20490708	Adverse Events/Post-operative Complications	Major complications	included Slipped band—re-operation, Gastric obstruction—re-operation, Duodenal fistula, Colonic fistula, Acute gastric dilatation, Cardiac arrhythmia—ablation procedure, Recurrent aspiration pneumonia, Pulmonary embolus	All Participants	median: 22.5 months	AGB	113	8/113 (7.1)		
McGlone 2015 26112136	Adverse Events/Post-operative Complications	readmission	.	Morbidly obese (BMI<50)	30 days	Multiple surgeries	24	2/24 (8.3)		
McGlone 2015 26112136	Adverse Events/Post-operative Complications	readmission	.	Super-obese (BMI≥50)	30 days	Multiple surgeries	26	3/26 (11.5)		
McGlone 2015 26112136	Adverse Events/Post-operative Complications	readmission	.	All Participants	30 days	Multiple surgeries	50	5/50 (10)		
McGlone 2015 26112136	Adverse Events/Post-operative Complications	mortality	.	Morbidly obese (BMI<50)	30 days	Multiple surgeries	24	0/24 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
McGlone 2015 26112136	Adverse Events/Post-operative Complications	mortality	.	Super-obese (BMI≥50)	30 days	Multiple surgeries	26	1/26 (3.8)		
McGlone 2015 26112136	Adverse Events/Post-operative Complications	mortality	.	All Participants	30 days	Multiple surgeries	50	1/50 (2)		
McGlone 2015 26112136	Adverse Events/Post-operative Complications	AE: any related to surgery	.	Morbidly obese (BMI<50)	30 days	Multiple surgeries	24	2/24 (8.3)		
McGlone 2015 26112136	Adverse Events/Post-operative Complications	AE: any related to surgery	.	Super-obese (BMI≥50)	30 days	Multiple surgeries	26	3/26 (11.5)		
McGlone 2015 26112136	Adverse Events/Post-operative Complications	AE: any related to surgery	.	All Participants	30 days	Multiple surgeries	50	5/50 (10)		
Sosa 2004 15603658	Adverse Events/Post-operative Complications	AE: postoperative complication	.	All Participants	1 years	RYGB	23	1/23 (4.3)		
Sosa 2004 15603658	Adverse Events/Post-operative Complications	AE: Death	.	All Participants	1 years	RYGB	23	1/23 (4.3)		
Papasavas 2004 15479593	Adverse Events/Post-operative Complications	AE: small bowel obstruction	.	All Participants	12 months	RYGB	71	5/71 (7)		
Papasavas 2004 15479593	Adverse Events/Post-operative Complications	AE: Empyema	.	All Participants	12 months	RYGB	71	1/71 (1.4)		
Papasavas 2004 15479593	Adverse Events/Post-operative Complications	AE: Exacerbation of chronic obstructive	.	All Participants	12 months	RYGB	71	1/71 (1.4)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
		pulmonary disease								
Papasavas 2004 15479593	Adverse Events/Post-operative Complications	AE: Anastomotic ulcer	.	All Participants	12 months	RYGB	71	4/71 (5.6)		
Papasavas 2004 15479593	Adverse Events/Post-operative Complications	AE: Anastomotic bleeding	.	All Participants	12 months	RYGB	71	3/71 (4.2)		
Papasavas 2004 15479593	Adverse Events/Post-operative Complications	AE: Deep venous thrombosis	.	All Participants	12 months	RYGB	71	2/71 (2.8)		
Papasavas 2004 15479593	Adverse Events/Post-operative Complications	AE: Anastomotic leak	.	All Participants	12 months	RYGB	71	1/71 (1.4)		
Papasavas 2004 15479593	Adverse Events/Post-operative Complications	AE: Diabetic ketoacidosis	.	All Participants	12 months	RYGB	71	1/71 (1.4)		
Papasavas 2004 15479593	Adverse Events/Post-operative Complications	AE: Anastomotic stricture	.	All Participants	12 months	RYGB	71	1/71 (1.4)		
Papasavas 2004 15479593	Adverse Events/Post-operative Complications	AE: Wound infection	.	All Participants	12 months	RYGB	71	1/71 (1.4)		
Papasavas 2004 15479593	Adverse Events/Post-operative Complications	AE: Urinary tract infection	.	All Participants	12 months	RYGB	71	1/71 (1.4)		
Sugerman 2004 15273547	Adverse Events/Post-operative Complications	AE: incisional hernia	.	All Participants	up to 10 years	Multiple surgeries	80	26/80 (32.5)		
Sugerman 2004	Adverse Events/Post-	AE: pulmonary embolus	.	All Participants	30 days	Multiple surgeries	80	1/80 (1.3)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
15273547	operative Complications									
Sugerman 2004 15273547	Adverse Events/Post-operative Complications	AE: stomal stenoses	.	All Participants	up to 10 years	Multiple surgeries	80	5/80 (6.3)		
Sugerman 2004 15273547	Adverse Events/Post-operative Complications	AE: symptomatic marginal ulcers	.	All Participants	up to 10 years	Multiple surgeries	80	10/80 (12.5)		
Sugerman 2004 15273547	Adverse Events/Post-operative Complications	AE: wound infections	.	All Participants	30 days	Multiple surgeries	80	4/80 (5)		
Sugerman 2004 15273547	Adverse Events/Post-operative Complications	AE: bowel obstructions	.	All Participants	up to 10 years	Multiple surgeries	80	3/80 (3.8)		
Sugerman 2004 15273547	Adverse Events/Post-operative Complications	AE: anastomotic leaks	.	All Participants	30 days	Multiple surgeries	80	2/80 (2.5)		
Sugerman 2004 15273547	Adverse Events/Post-operative Complications	mortality	.	All Participants	30 days	Multiple surgeries	80	0/80 (0)		
Mizrahi 2014 24442420	Adverse Events/Post-operative Complications	AE: Arrhythmia	.	All Participants	> 30 days	SG	52	1/52 (2)		
Mizrahi 2014 24442420	Adverse Events/Post-operative Complications	AE: Colitis	.	All Participants	> 30 days	SG	52	1/52 (2)		
Mizrahi 2014 24442420	Adverse Events/Post-operative Complications	AE: Trocar site hernia	.	All Participants	> 30 days	SG	52	2/52 (4)		
Mizrahi 2014 24442420	Adverse Events/Post-	AE: Nutritional deficiency	.	All Participants	> 30 days	SG	52	1/52 (2)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Mizrahi 2014 24442420	Adverse Events/Post-operative Complications	AE: Esophagitis	.	All Participants	> 30 days	SG	52	0/52 (0)		
Mizrahi 2014 24442420	Adverse Events/Post-operative Complications	AE: Bowel Obstruction	.	All Participants	> 30 days	SG	52	1/52 (2)		
Mizrahi 2014 24442420	Adverse Events/Post-operative Complications	AE: Arrhythmia	.	All Participants	< 30 days	SG	52	4/52 (7)		
Mizrahi 2014 24442420	Adverse Events/Post-operative Complications	AE: UTI	.	All Participants	< 30 days	SG	52	4/52 (7)		
Mizrahi 2014 24442420	Adverse Events/Post-operative Complications	Malignancy	.	All Participants	Postoperative	SG	52	2/52 (3.8)		
Mizrahi 2014 24442420	Adverse Events/Post-operative Complications	Gallstones	.	All Participants	Postoperative	SG	52	4/52 (7.8)		
Mizrahi 2014 24442420	Adverse Events/Post-operative Complications	AE: Bleeding	.	All Participants	< 30 days	SG	52	1/52 (2)		
Mizrahi 2014 24442420	Adverse Events/Post-operative Complications	AE: PE	pulmonary embolism	All Participants	< 30 days	SG	52	0/52 (0)		
Mizrahi 2014 24442420	Adverse Events/Post-operative Complications	AE: SSI	Surgical site infection	All Participants	< 30 days	SG	52	1/52 (2)		
Mizrahi 2014 24442420	Adverse Events/Post-	AE: Dysphagia	.	All Participants	< 30 days	SG	52	1/52 (2)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: hospitalization due to abdominal pain	.	All Participants	7.1 years	BPD-DS	102	3/102 (2.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: hospitalization due to diarrhea	.	All Participants	7.1 years	BPD-DS	102	0/102 (0)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: hospitalization due to intestinal obstruction	.	All Participants	7.1 years	BPD-DS	102	3/102 (2.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: hospitalization due to gastrointestinal bleeding	.	All Participants	7.1 years	BPD-DS	102	1/102 (0.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: hospitalization due to incisional hernia	.	All Participants	7.1 years	BPD-DS	102	3/102 (2.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: hospitalization due to delayed fistula	.	All Participants	7.1 years	BPD-DS	102	4/102 (3.8)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: hospitalization due to malnutrition	.	All Participants	7.1 years	BPD-DS	102	12/102 (11.4)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Total minor	.	All Participants	30 days	BPD-DS	105	14/105 (13.3)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Dyspepsia	.	All Participants	30 days	BPD-DS	105	0/105 (0)		
Michaud 2016	Adverse	AE:	At 7.1 years,	All Participants	30 days	BPD-DS	105	2/105 (1.9)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
26130180	Events/Post-operative Complications	Pancreatitis	hospitalization due to							
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Pancreatitis	At 7.1 years, hospitalization due to	All Participants	7.1 years	BPD-DS	102	0/102 (0)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Intra-abdominal abscess	At 7.1 years, hospitalization due to	All Participants	30 days	BPD-DS	105	3/105 (2.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Intra-abdominal abscess	At 7.1 years, hospitalization due to	All Participants	7.1 years	BPD-DS	102	2/102 (1.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Ileoileal anastomosis leak	.	All Participants	30 days	BPD-DS	105	1/105 (0.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: gastric leak	.	All Participants	30 days	BPD-DS	105	1/105 (0.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Duodenal leak	.	All Participants	30 days	BPD-DS	105	3/105 (2.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Biliary leak	.	All Participants	30 days	BPD-DS	105	0/105 (0)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Abdominal hemorrhage	.	All Participants	30 days	BPD-DS	105	0/105 (0)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	mortality	.	All Participants	30 days	BPD-DS	105	1/105 (0.9)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: reoperation	.	All Participants	10 days	BPD-DS	105	5/105 (4.8)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	blood loss	.	All Participants	30 days	BPD-DS	105		593 (484)	
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Pneumonia	.	All Participants	30 days	BPD-DS	105	1/105 (0.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Pulmonary embolism	At 7.1 years, hospitalization due to	All Participants	30 days	BPD-DS	105	1/105 (0.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Pulmonary embolism	At 7.1 years, hospitalization due to	All Participants	7.1 years	BPD-DS	102	1/102 (0.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Respiratory insufficiency	.	All Participants	30 days	BPD-DS	105	2/105 (1.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Urinary complications	.	All Participants	30 days	BPD-DS	105	2/105 (1.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Food intolerance	At 7.1 years, hospitalization due to	All Participants	30 days	BPD-DS	105	5/105 (4.8)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Food intolerance	At 7.1 years, hospitalization due to	All Participants	7.1 years	BPD-DS	102	1/102 (0.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Digestive hemorrhage	.	All Participants	30 days	BPD-DS	105	0/105 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Renal colic	.	All Participants	30 days	BPD-DS	105	0/105 (0)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Wound infection	.	All Participants	30 days	BPD-DS	105	3/105 (2.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: total major	.	All Participants	30 days	BPD-DS	105	17/105 (16.2)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: stenosis	At 7.1 years, hospitalization due to	All Participants	30 days	BPD-DS	105	1/105 (0.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: stenosis	At 7.1 years, hospitalization due to	All Participants	7.1 years	BPD-DS	102	1/102 (0.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Small bowel obstruction	.	All Participants	30 days	BPD-DS	105	2/105 (1.9)		
Michaud 2016 26130180	Adverse Events/Post-operative Complications	AE: Atelectasia	.	All Participants	30 days	BPD-DS	105	2/105 (1.9)		
Loy 2014 24582414	Adverse Events/Post-operative Complications	Readmission	.	All Participants	30 days	AGB	55	0/55 (0)		
Trieu 2007 17400516	Adverse Events/Post-operative Complications	Adverse Event: postoperative intraluminal hemorrhage with spontaneous resolution	.	All Participants	<6 months	RYGB	92	1/92 (1.1)		
Trieu 2007 17400516	Adverse Events/Post-	Adverse Event: pneumonia	.	All Participants	<6 months	RYGB	92	1/92 (1.1)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Trieu 2007 17400516	Adverse Events/Post-operative Complications	Adverse Event: nonfatal pulmonary embolus	.	All Participants	<6 months	RYGB	92	1/92 (1.1)		
Trieu 2007 17400516	Adverse Events/Post-operative Complications	Adverse Event: anastomotic leaks	.	All Participants	<6 months	RYGB	92	2/92 (2.2)		
Trieu 2007 17400516	Adverse Events/Post-operative Complications	Adverse Event: rapid atrial fibrillation	.	All Participants	<6 months	RYGB	92	1/92 (1.1)		
Hallowell 2007 17576885	Adverse Events/Post-operative Complications	AE: Bleeding	.	All Participants	30 days	RYGB	31	0/31 (0)		
Hallowell 2007 17576885	Adverse Events/Post-operative Complications	AE: Bleeding	.	All Participants	30 days	RYGB	46	0/46 (0)		
Hallowell 2007 17576885	Adverse Events/Post-operative Complications	AE: Bowel obstruction	.	All Participants	30 days	RYGB	31	0/31 (0)		
Hallowell 2007 17576885	Adverse Events/Post-operative Complications	AE: Bowel obstruction	.	All Participants	30 days	RYGB	46	1/46 (2.2)		
Hallowell 2007 17576885	Adverse Events/Post-operative Complications	AE: Death	.	All Participants	30 days	RYGB	31	0/31 (0)		
Hallowell 2007 17576885	Adverse Events/Post-operative Complications	AE: Death	.	All Participants	30 days	RYGB	46	0/46 (0)		
Hallowell 2007 17576885	Adverse Events/Post-	AE: Fistula	.	All Participants	30 days	RYGB	31	0/31 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Hallowell 2007 17576885	Adverse Events/Post-operative Complications	AE: Fistula	.	All Participants	30 days	RYGB	46	1/46 (2.2)		
Hallowell 2007 17576885	Adverse Events/Post-operative Complications	AE: Leak	.	All Participants	30 days	RYGB	31	2/31 (6.4)		
Hallowell 2007 17576885	Adverse Events/Post-operative Complications	AE: Leak	.	All Participants	30 days	RYGB	46	1/46 (2.2)		
Hallowell 2007 17576885	Adverse Events/Post-operative Complications	AE: Pneumonia	.	All Participants	30 days	RYGB	31	1/31 (3.2)		
Hallowell 2007 17576885	Adverse Events/Post-operative Complications	AE: Pneumonia	.	All Participants	30 days	RYGB	46	1/46 (2.2)		
Hallowell 2007 17576885	Adverse Events/Post-operative Complications	AE: Pulmonary embolism	.	All Participants	30 days	RYGB	31	0/31 (0)		
Hallowell 2007 17576885	Adverse Events/Post-operative Complications	AE: Pulmonary embolism	.	All Participants	30 days	RYGB	46	2/46 (4.3)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Marginal ulcer	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Marginal ulcer	.	All Participants	90 days	RYGB	61	1/61 (1.6)		
Dunkle-Blatter 2007	Adverse Events/Post-	Adverse Event: Clostridium	.	All Participants	30 days	RYGB	61	0/61 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
17331804	operative Complications	difficile colitis								
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Clostridium difficile colitis	.	All Participants	31-90 days	RYGB	61	2/61 (3.3)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Nutritional/TPN /electrolyte abnormalities	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Nutritional/TPN /electrolyte abnormalities	.	All Participants	31-90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Alopecia	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Alopecia	.	All Participants	31-90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Anemia	.	All Participants	30 days	RYGB	61	1/61 (1.6)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Anemia	.	All Participants	31-90 days	RYGB	61	1/61 (1.6)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Diarrhea	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Diarrhea	.	All Participants	31-90 days	RYGB	61	1/61 (1.6)		
Dunkle-Blatter 2007	Adverse Events/Post-	Adverse Event: Cardiac	.	All Participants	30 days	RYGB	61	1/61 (1.6)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
17331804	operative Complications									
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Cardiac	.	All Participants	31-90 days	RYGB	61	1/61 (1.6)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Renal	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Renal	.	All Participants	31-90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Stricture	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Stricture	.	All Participants	31-90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Stricture	.	All Participants	90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Pancreatic/gall bladder	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Pancreatic/gall bladder	.	All Participants	31-90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: GERD	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007	Adverse Events/Post-	Adverse Event: GERD	.	All Participants	31-90 days	RYGB	61	1/61 (1.6)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
17331804	operative Complications									
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Nausea/vomiting	.	All Participants	30 days	RYGB	61	1/61 (1.6)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Nausea/vomiting	.	All Participants	31-90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Constipation	.	All Participants	30 days	RYGB	61	2/61 (3.3)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Constipation	.	All Participants	31-90 days	RYGB	61	1/61 (1.6)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Respiratory (other)	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Respiratory (other)	.	All Participants	31-90 days	RYGB	61	1/61 (1.6)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Acute pancreatitis/cholecystectomy	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Acute pancreatitis/cholecystectomy	.	All Participants	90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Renal failure	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007	Adverse Events/Post-	Adverse Event: Renal failure	.	All Participants	90 days	RYGB	61	1/61 (1.6)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
17331804	operative Complications									
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Fistula	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Fistula	.	All Participants	90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Postoperative ventral hernia	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Postoperative ventral hernia	.	All Participants	90 days	RYGB	61	2/61 (3.3)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Pneumonia	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Pneumonia	.	All Participants	90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Pulmonary embolus	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Pulmonary embolus	.	All Participants	90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Deep venous thrombosis	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007	Adverse Events/Post-	Adverse Event: Deep venous	.	All Participants	90 days	RYGB	61	0/61 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
17331804	operative Complications	thrombosis								
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Gastrointestinal hemorrhage	.	All Participants	30 days	RYGB	61	2/61 (3.3)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Gastrointestinal hemorrhage	.	All Participants	90 days	RYGB	61	1/61 (1.6)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Intestinal obstruction	.	All Participants	30 days	RYGB	61	1/61 (1.6)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Intestinal obstruction	.	All Participants	90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Internal hernia	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Internal hernia	.	All Participants	90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: All leaks or abscess	.	All Participants	30 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: All leaks or abscess	.	All Participants	90 days	RYGB	61	2/61 (3.8)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Respiratory	.	All Participants	30 days	RYGB	61	2/61 (3.3)		
Dunkle-Blatter 2007	Adverse Events/Post-	Adverse Event: Respiratory	.	All Participants	31-90 days	RYGB	61	0/61 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
17331804	operative Complications									
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Wound Infection	.	All Participants	30 days	RYGB	61	16/61 (26.3)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Wound Infection	.	All Participants	31-90 days	RYGB	61	9/61 (14.8)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Minor complications	.	All Participants	30 days	RYGB	61	16/61 (26.2)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Minor complications	.	All Participants	31-90 days	RYGB	61	9/61 (14.8)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Minor complications	.	All Participants	>90 days	RYGB	61	5/61 (8.2)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Major complications	.	All Participants	30 days	RYGB	61	3/61 (4.9)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Major complications	.	All Participants	31-90 days	RYGB	61	7/61 (11.5)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Major complications	.	All Participants	>90 days	RYGB	61	10/61 (16.4)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Mortality	.	All Participants	30 days	RYGB	61	1/61 (1.6)		
Dunkle-Blatter 2007	Adverse Events/Post-	Mortality	.	All Participants	90 days	RYGB	61	1/61 (1.6)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
17331804	operative Complications									
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Wound seroma/hematoma	.	All Participants	30 days	RYGB	61	3/61 (4.9)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Wound seroma/hematoma	.	All Participants	31-90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Urinary tract infection	.	All Participants	30 days	RYGB	61	2/61 (3.3)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Urinary tract infection	.	All Participants	31-90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Urinary retention	.	All Participants	30 days	RYGB	61	3/61 (4.9)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Urinary retention	.	All Participants	31-90 days	RYGB	61	0/61 (0)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Peripheral neurologic	.	All Participants	30 days	RYGB	61	1/61 (1.6)		
Dunkle-Blatter 2007 17331804	Adverse Events/Post-operative Complications	Adverse Event: Peripheral neurologic	.	All Participants	31-90 days	RYGB	61	0/61 (0)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Wound infection	.	60-69	30 days	AGB	27	0/27 (0)		
Mittermair 2008	Adverse Events/Post-	AE: Wound infection	.	50-59	30 days	AGB	107	1/107 (0.9)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
18830777	operative Complications									
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Band migration	.	60-69	30 days	AGB	27	1/27 (3.7)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Band migration	.	50-59	30 days	AGB	107	8/107 (7.5)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Band leakage	.	60-69	30 days	AGB	27	2/27 (7.4)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Band leakage	.	50-59	30 days	AGB	107	10/107 (9.3)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Band infection	.	60-69	30 days	AGB	27	0/27 (0)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Band infection	.	50-59	30 days	AGB	107	2/107 (1.9)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: any	.	60-69	30 days	AGB	27	10/27 (37)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: any	.	50-59	30 days	AGB	107	55/107 (51.4)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: any	.	All Participants	30 days	AGB	134	65/134 (48.5)		
Mittermair 2008	Adverse Events/Post-	reoperation	.	60-69	30 days	AGB	27	8/27 (29.6)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
18830777	operative Complications									
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	reoperation	.	50-59	30 days	AGB	107	38/107 (35.5)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	reoperation	.	All Participants	30 days	AGB	134	46/134 (34.3)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Esophageal dilation	.	50-59	30 days	AGB	107	17/107 (15.9)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Esophageal dilation	.	60-69	30 days	AGB	27	5/27 (18.5)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Pouch dilation	.	60-69	30 days	AGB	27	2/27 (7.4)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Pouch dilation	.	50-59	30 days	AGB	107	13/107 (12.1)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Port problems	.	60-69	30 days	AGB	27	4/27 (14.8)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Port problems	.	50-59	30 days	AGB	107	11/107 (10.3)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Incisional hernia	.	60-69	30 days	AGB	27	0/27 (0)		
Mittermair 2008	Adverse Events/Post-	AE: Incisional hernia	.	50-59	30 days	AGB	107	7/107 (6.5)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
18830777	operative Complications									
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Gastric perforation–Pouch necrosis	.	60-69	30 days	AGB	27	0/27 (0)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Gastric perforation–Pouch necrosis	.	50-59	30 days	AGB	107	1/107 (0.9)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Gastric bleeding	.	60-69	30 days	AGB	27	0/27 (0)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Gastric bleeding	.	50-59	30 days	AGB	107	1/107 (0.9)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Esophagitis	.	60-69	30 days	AGB	27	8/27 (29.6)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	AE: Esophagitis	.	50-59	30 days	AGB	107	28/107 (26.2)		
Mittermair 2008 18830777	Adverse Events/Post-operative Complications	mortality	.	All Participants	30 days	AGB	134	0/134 (0)		
Freeman 2015 25708829	Adverse Events/Post-operative Complications	Blood loss	.	All Participants	After Surgery	SG	52		29.3 (29.7)	
Freeman 2015 25708829	Adverse Events/Post-operative Complications	Adverse Event: Supraventricular tachycardia	.	All Participants	After Surgery	SG	52	1/52 (1.9)		
Tiwari 2011 21459686	Adverse Events/Post-	Mortality	.	All Participants	30 days	RYGB	905	2/905 (0.2)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Tiwari 2011 21459686	Adverse Events/Post-operative Complications	Mortality	.	All Participants	30 days	RYGB	10930	15/10930 (0.1)		
Tiwari 2011 21459686	Adverse Events/Post-operative Complications	readmission	.	All Participants	30 days	RYGB	905	29/905 (3.2)		
Tiwari 2011 21459686	Adverse Events/Post-operative Complications	readmission	.	All Participants	30 days	RYGB	10930	235/10930 (2.2)		
Tiwari 2011 21459686	Adverse Events/Post-operative Complications	Morbidity	.	All Participants	30 days	RYGB	905	116/905 (12.8)		
Tiwari 2011 21459686	Adverse Events/Post-operative Complications	Morbidity	.	All Participants	30 days	RYGB	10930	933/10930 (8.5)		
Busetto 2008 18239641	Adverse Events/Post-operative Complications	further surgery	simulataneous cholecystectomy or hiatal hernia repair in patients with cholelithiasis or large hiatal hernia	All Participants	30 days	AGB	202	17/202 (7.8)		
Busetto 2008 18239641	Adverse Events/Post-operative Complications	revision surgery	total	60-69 yro	5 years	AGB	120	8/120 (4.6)		
Busetto 2008 18239641	Adverse Events/Post-operative Complications	revision surgery	total	70-79 yro	5 years	AGB	28	0/28 (0)		
Busetto 2008 18239641	Adverse Events/Post-operative	revision surgery	total	All Participants	5 years	AGB	150	8/150 (3.7)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	Complications									
Busetto 2008 18239641	Adverse Events/Post-operative Complications	intraoperative complication	.	All Participants	30 days	AGB	216	2/216 (1)		
Busetto 2008 18239641	Adverse Events/Post-operative Complications	laparotomic conversion	.	All Participants	30 days	AGB	216	1/216 (0.5)		
Busetto 2008 18239641	Adverse Events/Post-operative Complications	peri-operative mortality	.	All Participants	30 days	AGB	216	1/216 (0.5)		
Giordano 2014 24318411	Adverse Events/Post-operative Complications	post operative complications total	.	All Participants	30 days	RYGB	132	28/132 (21.2)		
Giordano 2014 24318411	Adverse Events/Post-operative Complications	anastomotic leak	.	All Participants	30 days	RYGB	132	1/132 (0.8)		
Giordano 2014 24318411	Adverse Events/Post-operative Complications	anastomosis stricture	.	All Participants	30 days	RYGB	132	3/132 (2.3)		
Giordano 2014 24318411	Adverse Events/Post-operative Complications	ulcus marginalis	.	All Participants	30 days	RYGB	132	5/132 (3.8)		
Giordano 2014 24318411	Adverse Events/Post-operative Complications	internal hernia	.	All Participants	30 days	RYGB	132	0/132 (0)		
Giordano 2014 24318411	Adverse Events/Post-operative Complications	mortality	.	All Participants	30 days	RYGB	132	0/132 (0)		
Giordano 2014 24318411	Adverse Events/Post-	subdural hematoma	.	All Participants	30 days	RYGB	132	1/132 (0.8)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Giordano 2014 24318411	Adverse Events/Post-operative Complications	embolia	.	All Participants	30 days	RYGB	132	2/132 (1.5)		
Giordano 2014 24318411	Adverse Events/Post-operative Complications	pneumonia	.	All Participants	30 days	RYGB	132	1/132 (0.8)		
Giordano 2014 24318411	Adverse Events/Post-operative Complications	intraoperative complication	.	All Participants	0 months	RYGB	132	19/132 (14.4)		
Giordano 2014 24318411	Adverse Events/Post-operative Complications	wound infection	.	All Participants	30 days	RYGB	132	13/132 (9.8)		
Giordano 2014 24318411	Adverse Events/Post-operative Complications	Conversion to open	.	All Participants	0 months	RYGB	132	3/132 (2.3)		
Giordano 2014 24318411	Adverse Events/Post-operative Complications	wound breakdown	.	All Participants	30 days	RYGB	132	1/132 (0.8)		
Giordano 2014 24318411	Adverse Events/Post-operative Complications	hypotension	.	All Participants	30 days	RYGB	132	1/132 (0.8)		
Giordano 2014 24318411	Adverse Events/Post-operative Complications	anuria	.	All Participants	30 days	RYGB	132	1/132 (0.8)		
Giordano 2014 24318411	Adverse Events/Post-operative Complications	tachycardia	.	All Participants	30 days	RYGB	132	0/132 (0)		
Giordano 2014 24318411	Adverse Events/Post-	urinary infection	.	All Participants	30 days	RYGB	132	0/132 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Giordano 2014 24318411	Adverse Events/Post-operative Complications	haemorrhage	.	All Participants	30 days	RYGB	132	5/132 (3.8)		
Luppi 2015 25088486	Adverse Events/Post-operative Complications	AE: Grade IIIb (Clavien-Dindo)	.	All Participants	postoperative	SG	28	1/28 (3.6)		
Luppi 2015 25088486	Adverse Events/Post-operative Complications	AE: Grade IV (Clavien-Dindo)	.	All Participants	postoperative	SG	28	0/28 (0)		
Luppi 2015 25088486	Adverse Events/Post-operative Complications	AE: Grade V (Clavien-Dindo)	.	All Participants	postoperative	SG	28	0/28 (0)		
Luppi 2015 25088486	Adverse Events/Post-operative Complications	AE: Grade IIIa (Clavien-Dindo)	.	All Participants	postoperative	SG	28	1/28 (3.6)		
Luppi 2015 25088486	Adverse Events/Post-operative Complications	AE: Grade II (Clavien-Dindo)	.	All Participants	postoperative	SG	28	1/28 (3.6)		
Luppi 2015 25088486	Adverse Events/Post-operative Complications	AE: Grade I (Clavien-Dindo)	.	All Participants	postoperative	SG	28	2/28 (7.1)		
Luppi 2015 25088486	Adverse Events/Post-operative Complications	AE: Complications Total (Clavien-Dindo)	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1360123/	All Participants	postoperative	SG	28	18/28 (5)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Urinary tract infection	.	All Participants	nd years	Multiple surgeries	60	1/60 (1.7)		
Wool 2009 18855082	Adverse Events/Post-	Complication: Urinary tract	.	50-59 yo	nd years	Multiple surgeries	47	0/47 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications	infection								
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Urinary tract infection	.	60-66 yo	nd years	Multiple surgeries	13	1/13 (7.7)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Wound infection	.	All Participants	nd years	Multiple surgeries	60	1/60 (1.7)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Wound infection	.	50-59 yo	nd years	Multiple surgeries	47	1/47 (2.1)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Wound infection	.	60-66 yo	nd years	Multiple surgeries	13	0/13 (0)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Morbidity	.	All Participants	30 days	Multiple surgeries	60	8/60 (13.3)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Morbidity	.	50-59 yo	30 days	Multiple surgeries	47	4/47 (8.5)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Morbidity	.	60-66 yo	30 days	Multiple surgeries	13	4/13 (30.8)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Mortality	.	All Participants	30 days	Multiple surgeries	60	0/60 (0)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Mortality	.	50-59 yo	30 days	Multiple surgeries	47	0/47 (0)		
Wool 2009 18855082	Adverse Events/Post-	Mortality	.	60-66 yo	30 days	Multiple surgeries	13	0/13 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Total	.	50-59 yo	nd	Multiple surgeries	47	4/47 (8.5)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Total	.	60-66 yo	nd	Multiple surgeries	13	4/13 (30.8)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Total	.	All Participants	nd	Multiple surgeries	60	26/60 (43.3)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Atrial fibrillation	.	All Participants	nd	Multiple surgeries	60	2/60 (3.3)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Atrial fibrillation	.	50-59 yo	nd	Multiple surgeries	47	0/47 (0)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Atrial fibrillation	.	60-66 yo	nd	Multiple surgeries	13	2/13 (15.4)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Early bowel obstruction	.	All Participants	nd	Multiple surgeries	60	3/60 (5)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Early bowel obstruction	.	50-59 yo	nd	Multiple surgeries	47	2/47 (4.3)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Early bowel obstruction	.	60-66 yo	nd	Multiple surgeries	13	1/13 (7.7)		
Wool 2009 18855082	Adverse Events/Post-	Complication: Gout flare	.	All Participants	nd	Multiple surgeries	60	1/60 (1.7)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	operative Complications									
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Gout flare	.	50-59 yo	nd	Multiple surgeries	47	1/47 (2.1)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Gout flare	.	60-66 yo	nd	Multiple surgeries	13	0/13 (0)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Laryngeal edema	.	All Participants	nd	Multiple surgeries	60	1/60 (1.7)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Laryngeal edema	.	50-59 yo	nd	Multiple surgeries	47	0/47 (0)		
Wool 2009 18855082	Adverse Events/Post-operative Complications	Complication: Laryngeal edema	.	60-66 yo	nd	Multiple surgeries	13	1/13 (7.7)		
Lee 2016 27220823	Cardiovascular	SBP (mm/Hg)	Systolic blood pressure	All Participants	0 months	SG	48		122.4 (13.3)	
Lee 2016 27220823	Cardiovascular	SBP (mm/Hg)	Systolic blood pressure	All Participants	0 months	RYGB	84		124.6 (13.9)	
Lee 2016 27220823	Cardiovascular	SBP (mm/Hg)	Systolic blood pressure	All Participants	0 months	AGB	30		130.5 (18.1)	
Lee 2016 27220823	Cardiovascular	SBP (mm/Hg)	Systolic blood pressure	All Participants	6 months	SG	48		129.1 (45.7)	
Lee 2016 27220823	Cardiovascular	SBP (mm/Hg)	Systolic blood pressure	All Participants	6 months	RYGB	84		125.4 (26.1)	
Lee 2016 27220823	Cardiovascular	SBP (mm/Hg)	Systolic blood pressure	All Participants	6 months	AGB	30		124.3 (34.1)	
Lee 2016 27220823	Cardiovascular	SBP (mm/Hg)	Systolic blood pressure	All Participants	12 months	SG	48		130 (41.3)	
Lee 2016 27220823	Cardiovascular	SBP (mm/Hg)	Systolic blood pressure	All Participants	12 months	RYGB	84		122.8 (25.6)	
Lee 2016 27220823	Cardiovascular	SBP (mm/Hg)	Systolic blood pressure	All Participants	12 months	AGB	30		134.3 (42.6)	
Lee 2016 27220823	Cardiovascular	DBP (mm/Hg)	Diastolic blood pressure	All Participants	0 months	SG	48		76.1 (10.3)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Lee 2016 27220823	Cardiovascular	DBP (mm/Hg)	Diastolic blood pressure	All Participants	0 months	RYGB	84		74.8 (97)	
Lee 2016 27220823	Cardiovascular	DBP (mm/Hg)	Diastolic blood pressure	All Participants	0 months	AGB	30		72.2 (19.9)	
Lee 2016 27220823	Cardiovascular	DBP (mm/Hg)	Diastolic blood pressure	All Participants	6 months	SG	48		77.1 (23)	
Lee 2016 27220823	Cardiovascular	DBP (mm/Hg)	Diastolic blood pressure	All Participants	6 months	RYGB	84		75.6 (17.5)	
Lee 2016 27220823	Cardiovascular	DBP (mm/Hg)	Diastolic blood pressure	All Participants	6 months	AGB	30		76.5 (21.8)	
Lee 2016 27220823	Cardiovascular	DBP (mm/Hg)	Diastolic blood pressure	All Participants	12 months	SG	48		78.4 (20.9)	
Lee 2016 27220823	Cardiovascular	DBP (mm/Hg)	Diastolic blood pressure	All Participants	12 months	RYGB	84		74.5 (18.2)	
Lee 2016 27220823	Cardiovascular	DBP (mm/Hg)	Diastolic blood pressure	All Participants	12 months	AGB	30		76.5 (22)	
Yuan 2009 18996764	Cardiovascular	hypertension resolution	.	males	1 years	Multiple surgeries	72	41/72 (56.8)		
Yuan 2009 18996764	Cardiovascular	hypertension resolution	.	All Participants	1 years	Multiple surgeries	282	137/282 (48.7)		
Perry 2008 18156918	Cardiovascular	Hypertension	.	Over 65	.5 years	Multiple surgeries	1024	798.72/1024 (78)		
Perry 2008 18156918	Cardiovascular	Hypertension	.	Over 65	.5 years	No surgery/Contr ols	1054.1	794.7914/1054 (75.4)		
Perry 2008 18156918	Cardiovascular	Hypertension	.	Over 65	1.0 years	Multiple surgeries	720	488.88/720 (67.9)		
Perry 2008 18156918	Cardiovascular	Hypertension	.	Over 65	1.0 years	No surgery/Contr ols	737.8	559.9902/738 (75.9)		
Perry 2008 18156918	Cardiovascular	Hypertension	.	Over 65	1.5 years	Multiple surgeries	476	316.064/476 (66.4)		
Perry 2008 18156918	Cardiovascular	Hypertension	.	Over 65	1.5 years	No surgery/Contr ols	489.9	375.7533/490 (76.7)		
Perry 2008 18156918	Cardiovascular	Hypertension	.	All Participants	.5 years	Multiple surgeries	9354	5799.48/9354 (62)		
Perry 2008 18156918	Cardiovascular	Hypertension	.	All Participants	.5 years	No surgery/Contr ols	9705.5	6007.7045/9706 (61.9)		
Perry 2008 18156918	Cardiovascular	Hypertension	.	All Participants	1.0 years	Multiple surgeries	6690	3559.08/6690 (53.2)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Perry 2008 18156918	Cardiovascular	Hypertension	.	All Participants	1.0 years	No surgery/Contr ols	6984.1	4358.0784/6984 (62.4)		
Perry 2008 18156918	Cardiovascular	Hypertension	.	All Participants	1.5 years	Multiple surgeries	4621	2310.5/4621 (50)		
Perry 2008 18156918	Cardiovascular	Hypertension	.	All Participants	1.5 years	No surgery/Contr ols	4743.9	3007.6326/4744 (63.4)		
Perry 2008 18156918	Cardiovascular	Coronary Artery Disease	.	All Participants	.5 years	Multiple surgeries	9354	897.984/9354 (9.6)		
Perry 2008 18156918	Cardiovascular	Coronary Artery Disease	.	All Participants	.5 years	No surgery/Contr ols	9705.5	1319.948/9706 (13.6)		
Perry 2008 18156918	Cardiovascular	Coronary Artery Disease	.	All Participants	1.0 years	Multiple surgeries	6690	602.1/6690 (9)		
Perry 2008 18156918	Cardiovascular	Coronary Artery Disease	.	All Participants	1.0 years	No surgery/Contr ols	6984.1	956.8217/6984 (13.7)		
Perry 2008 18156918	Cardiovascular	Coronary Artery Disease	.	All Participants	1.5 years	Multiple surgeries	4621	448.237/4621 (9.7)		
Perry 2008 18156918	Cardiovascular	Coronary Artery Disease	.	All Participants	1.5 years	No surgery/Contr ols	4743.9	673.6338/4744 (14.2)		
Perry 2008 18156918	Cardiovascular	Coronary Artery Disease	.	Over 65	.5 years	Multiple surgeries	1024	195.584/1024 (19.1)		
Perry 2008 18156918	Cardiovascular	Coronary Artery Disease	.	Over 65	.5 years	No surgery/Contr ols	1054.1	250.8758/1054 (23.8)		
Perry 2008 18156918	Cardiovascular	Coronary Artery Disease	.	Over 65	1.0 years	Multiple surgeries	720	125.28/720 (17.4)		
Perry 2008 18156918	Cardiovascular	Coronary Artery Disease	.	Over 65	1.0 years	No surgery/Contr ols	737.8	182.2366/738 (24.7)		
Perry 2008 18156918	Cardiovascular	Coronary Artery Disease	.	Over 65	1.5 years	Multiple surgeries	476	92.82/476 (19.5)		
Perry 2008 18156918	Cardiovascular	Coronary Artery Disease	.	Over 65	1.5 years	No surgery/Contr ols	489.9	124.9245/490 (25.5)		
Wagner 2007 17938305	Cardiovascular	HTN	.	All Participants	baseline	RYGB	38	19/38 (50)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Wagner 2007 17938305	Cardiovascular	HTN	.	All Participants	baseline	No surgery/Contr ols	16	6/16 (37.5)		
Wagner 2007 17938305	Cardiovascular	HTN	.	All Participants	44 months	RYGB	38	16/38 (42.1)		
Wagner 2007 17938305	Cardiovascular	HTN	.	All Participants	44 months	No surgery/Contr ols	16	9/16 (56.3)		
Quebbemann 2005 16925254	Cardiovascular	hypertension	.	All Participants	0 years	Multiple surgeries	27	22/27 (81.5)		
Quebbemann 2005 16925254	Cardiovascular	hypertension	.	All Participants	1 years	Multiple surgeries	27	12/27 (44.4)		
Quebbemann 2005 16925254	Cardiovascular	hypertension improvement	n improved but not resolved	All Participants	last day of followup (1-2 years) years	Multiple surgeries	22	8/22 (36.4)		
Moon 2016 26220238	Cardiovascular	Remission of HTN	.	All Participants	nd	AGB	45	8/45 (18)		
Moon 2016 26220238	Cardiovascular	Remission of HTN	.	All Participants	nd	RYGB	158	32/158 (20)		
Moon 2016 26220238	Cardiovascular	Remission of HTN	.	All Participants	nd	SG	53	9/53 (17)		
Moon 2016 26220238	Cardiovascular	Improvement of HTN	.	All Participants	nd	AGB	45	21/45 (46)		
Moon 2016 26220238	Cardiovascular	Improvement of HTN	.	All Participants	nd	RYGB	158	44/158 (28)		
Moon 2016 26220238	Cardiovascular	Improvement of HTN	.	All Participants	nd	SG	53	19/53 (36)		
Serrot 2011 22000180	Cardiovascular	Hypertensive Medications	Percentage of patients taking fewer hypertensive medications.	All Participants	0 years	No surgery/Contr ols	17	12/17 (70.6)		
Serrot 2011 22000180	Cardiovascular	Hypertensive Medications	Percentage of patients taking fewer hypertensive medications.	All Participants	0 years	RYGB	17	15/17 (88.2)		
Serrot 2011 22000180	Cardiovascular	Hypertensive Medications	Percentage of patients taking fewer hypertensive medications.	All Participants	1 years	No surgery/Contr ols	17	1/17 (6)		
Serrot 2011 22000180	Cardiovascular	Hypertensive Medications	Percentage of patients taking	All Participants	1 years	RYGB	17	7/17 (41)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			fewer hypertensive medications.							
Serrot 2011 22000180	Cardiovascular	SBP (mm Hg)	Systolic blood pressure	All Participants	0 years	No surgery/Contr ols	17		126 (30)	
Serrot 2011 22000180	Cardiovascular	SBP (mm Hg)	Systolic blood pressure	All Participants	0 years	RYGB	17		126 (28)	
Serrot 2011 22000180	Cardiovascular	SBP (mm Hg)	Systolic blood pressure	All Participants	1 years	No surgery/Contr ols	17		124 (26)	
Serrot 2011 22000180	Cardiovascular	SBP (mm Hg)	Systolic blood pressure	All Participants	1 years	RYGB	17		132 (27)	
Abbas 2015 26001882	Cardiovascular	Hypertension	.	All Participants	0 years	Multiple surgeries	83	75/83 (90.4)		
Abbas 2015 26001882	Cardiovascular	Hypertension	.	All Participants	1 years	Multiple surgeries	83	10/83 (12)		
Abbas 2015 26001882	Cardiovascular	HTN improvement	.	All Participants	1 years	Multiple surgeries	75	10/75 (13.3)		
Miranda 2013 23604694	Cardiovascular	Ejection Fraction %	Median ejection fraction percentage	All Participants	0 years	RYGB	13			57
Miranda 2013 23604694	Cardiovascular	Ejection Fraction %	Median ejection fraction percentage	All Participants	0 years	No surgery/Contr ols	6			57.5
Miranda 2013 23604694	Cardiovascular	Ejection Fraction %	Median ejection fraction percentage	All Participants	0 Follow Up	RYGB	13			59
Miranda 2013 23604694	Cardiovascular	Ejection Fraction %	Median ejection fraction percentage	All Participants	0 Follow Up	No surgery/Contr ols	6			62.5
Miranda 2013 23604694	Cardiovascular	Diuretics	Patients taking diuretics.	All Participants	0 years	RYGB	13	4/13 (30.8)		.
Miranda 2013 23604694	Cardiovascular	Diuretics	Patients taking diuretics.	All Participants	0 years	No surgery/Contr ols	6	4/6 (66.7)		.
Miranda 2013 23604694	Cardiovascular	Diuretics	Patients taking diuretics.	All Participants	0 Follow Up	RYGB	13	2/13 (15.4)		.
Miranda 2013 23604694	Cardiovascular	Diuretics	Patients taking diuretics.	All Participants	0 Follow Up	No surgery/Contr	6	2/6 (33.3)		.

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
						ols				
Miranda 2013 23604694	Cardiovascular	Hypertension	Patients with Hypertension	All Participants	0 years	RYGB	13	12/13 (92.3)		
Miranda 2013 23604694	Cardiovascular	Hypertension	Patients with Hypertension	All Participants	0 years	No surgery/Contr ols	6	6/6 (100)		
Miranda 2013 23604694	Cardiovascular	Hypertension	Patients with Hypertension	All Participants	0 Follow Up	RYGB	13	13/13 (100)		
Miranda 2013 23604694	Cardiovascular	Hypertension	Patients with Hypertension	All Participants	0 Follow Up	No surgery/Contr ols	6	6/6 (100)		
Miranda 2013 23604694	Cardiovascular	Leg Edema	Symptom Score: Median leg edema score measured on a 5 point Likert scale.	All Participants	0 years	RYGB	13			4
Miranda 2013 23604694	Cardiovascular	Leg Edema	Symptom Score: Median leg edema score measured on a 5 point Likert scale.	All Participants	0 years	No surgery/Contr ols	6			3
Miranda 2013 23604694	Cardiovascular	Leg Edema	Symptom Score: Median leg edema score measured on a 5 point Likert scale.	All Participants	0 Follow Up	RYGB	13			3
Miranda 2013 23604694	Cardiovascular	Leg Edema	Symptom Score: Median leg edema score measured on a 5 point Likert scale.	All Participants	0 Follow Up	No surgery/Contr ols	6			3.5
Miranda 2013 23604694	Cardiovascular	Coronary Artery Disease	Patients with Coronary Artery Disease	All Participants	0 years	RYGB	13	4/13 (30.8)		
Miranda 2013 23604694	Cardiovascular	Coronary Artery Disease	Patients with Coronary Artery Disease	All Participants	0 years	No surgery/Contr ols	6	3/6 (50)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Miranda 2013 23604694	Cardiovascular	Coronary Artery Disease	Patients with Coronary Artery Disease	All Participants	0 Follow Up	RYGB	13	4/13 (30.8)		
Miranda 2013 23604694	Cardiovascular	Coronary Artery Disease	Patients with Coronary Artery Disease	All Participants	0 Follow Up	No surgery/Contr ols	6	4/6 (66.7)		
Miranda 2013 23604694	Cardiovascular	Beta-Blockers	Patients taking beta-blockers.	All Participants	0 years	RYGB	13	6/13 (46.2)		
Miranda 2013 23604694	Cardiovascular	Beta-Blockers	Patients taking beta-blockers.	All Participants	0 years	No surgery/Contr ols	6	5/6 (83.3)		
Miranda 2013 23604694	Cardiovascular	Beta-Blockers	Patients taking beta-blockers.	All Participants	0 Follow Up	RYGB	13	7/13 (53.8)		
Miranda 2013 23604694	Cardiovascular	Beta-Blockers	Patients taking beta-blockers.	All Participants	0 Follow Up	No surgery/Contr ols	6	4/6 (66.7)		
Miranda 2013 23604694	Cardiovascular	ACEi:ARB	Patients taking ACEi angiotensin-converting enzyme inhibitor, ARB angioten-sin-receptor II blocker.	All Participants	0 years	RYGB	13	7/13 (53.8)		
Miranda 2013 23604694	Cardiovascular	ACEi:ARB	Patients taking ACEi angiotensin-converting enzyme inhibitor, ARB angioten-sin-receptor II blocker.	All Participants	0 years	No surgery/Contr ols	6	3/6 (50)		
Miranda 2013 23604694	Cardiovascular	ACEi:ARB	Patients taking ACEi angiotensin-converting enzyme inhibitor, ARB angioten-sin-receptor II blocker.	All Participants	0 Follow Up	RYGB	13	9/13 (69.2)		
Miranda 2013 23604694	Cardiovascular	ACEi:ARB	Patients taking ACEi angiotensin-	All Participants	0 Follow Up	No surgery/Contr	6	5/6 (83.3)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			converting enzyme inhibitor, ARB angioten-sin-receptor II blocker.			ols				
Zaveri 2016 27795883	Cardiovascular	Hypertension	.	All Participants	0 months	SADS	15	11/15 (73.3)		
Zaveri 2016 27795883	Cardiovascular	Hypertension	.	All Participants	0 months	AGB	24	19/24 (79.2)		
Zaveri 2016 27795883	Cardiovascular	Hypertension	.	All Participants	0 months	RYGB	14	12/14 (85.7)		
Zaveri 2016 27795883	Cardiovascular	Hypertension	.	All Participants	18 months	SADS	15	1/15 (6.7)		
Zaveri 2016 27795883	Cardiovascular	Hypertension	.	All Participants	18 months	AGB	24	4/24 (16.7)		
Zaveri 2016 27795883	Cardiovascular	Hypertension	.	All Participants	18 months	RYGB	14	6/14 (42.9)		
Lemaître 2016 27063637	Cardiovascular	Hypertension	.	All Participants	0 years	SG	494	354/494 (71.7)		
Lemaître 2016 27063637	Cardiovascular	Hypertension	.	All Participants	2 years	SG	494	183/494 (37)		
Huang 2015 25859266	Cardiovascular	Hypertension	Patients with hypertension	All Participants	0 years	RYGB	44	25/44 (56.8)		
Huang 2015 25859266	Cardiovascular	Hypertension	Patients with hypertension	All Participants	0 years	SG	24	15/24 (62.5)		
Huang 2015 25859266	Cardiovascular	Hypertension	Patients with hypertension	All Participants	1 years	RYGB	44	11/44 (25.6)		
Huang 2015 25859266	Cardiovascular	Hypertension	Patients with hypertension	All Participants	1 years	SG	24	6/24 (25)		
Wittgrove 2009 19705206	Cardiovascular	Resolution of Comorbidity	Hypertension	All Participants	0 days	RYGB	120	86/120 (72)		
Wittgrove 2009 19705206	Cardiovascular	Resolution of Comorbidity	Hypertension	All Participants	90 days	RYGB	120	10/120 (8.3)		
Ramirez 2012 22551574	Cardiovascular	Hypertension Medication	Change in number of hypertension meds taken	All Participants	1 years	Multiple surgeries	42	18/42 (44)		
van Rutte 2013 23344504	Cardiovascular	HTN: Remission	.	55-59 yo	nd	SG	49	24/49 (49)		
van Rutte 2013 23344504	Cardiovascular	HTN: Remission	.	60-64 yo	nd	SG	41	22/41 (53.7)		
van Rutte 2013 23344504	Cardiovascular	HTN: Remission	.	>= 65 yo	nd	SG	12	4/12 (33.3)		
van Rutte 2013 23344504	Cardiovascular	HTN: Improvement	.	55-59 yo	nd	SG	49	18/49 (37.2)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
van Rutte 2013 23344504	Cardiovascular	HTN: Improvement	.	60-64 yo	nd	SG	41	25/41 (62.1)		
van Rutte 2013 23344504	Cardiovascular	HTN: Improvement	.	>= 65 yo	nd	SG	12	10/12 (80)		
Clough 2011 20490708	Cardiovascular	Hypertension: mean number of meds	.	All Participants	median 22.5 months	AGB	76		1.05	
Clough 2011 20490708	Cardiovascular	Hypertension: mean number of meds	.	All Participants	0 months	AGB	76		1.15	
Clough 2011 20490708	Cardiovascular	Hypertension more meds	.	All Participants	median 22.5 months	AGB	76	11/76 (14.5)		
Clough 2011 20490708	Cardiovascular	Hypertension less meds	.	All Participants	median 22.5 months	AGB	76	10/76 (13.2)		
Clough 2011 20490708	Cardiovascular	Hypertension deteriorated	.	All Participants	median 22.5 months	AGB	76	4/76 (5.4)		
Clough 2011 20490708	Cardiovascular	Hypertension improved	.	All Participants	median 22.5 months	AGB	76	43/76 (57.1)		
McGlone 2015 26112136	Cardiovascular	hypertension	.	Super-obese (BMI≥50)	0 months	Multiple surgeries	26	22/26 (84.6)		
McGlone 2015 26112136	Cardiovascular	hypertension	.	Super-obese (BMI≥50)	33 months	Multiple surgeries	17	10/17 (58.8)		
McGlone 2015 26112136	Cardiovascular	hypertension	.	Morbidly obese (BMI<50)	0 months	Multiple surgeries	24	21/24 (87.5)		
McGlone 2015 26112136	Cardiovascular	hypertension	.	Morbidly obese (BMI<50)	33 months	Multiple surgeries	19	10/19 (52.6)		
McGlone 2015 26112136	Cardiovascular	hypertension	.	All Participants	0 months	Multiple surgeries	50	43/50 (86)		
McGlone 2015 26112136	Cardiovascular	hypertension	.	All Participants	33 months	Multiple surgeries	36	20/36 (55.6)		
Sosa 2004 15603658	Cardiovascular	hypertension	.	All Participants	1 years	RYGB	23	11/23 (47.8)		
Sosa 2004 15603658	Cardiovascular	hypertension	.	All Participants	0 years	RYGB	23	1/23 (4.3)		
Papasavas 2004 15479593	Cardiovascular	Hypertension	.	All Participants	0 months	RYGB	71	57/71 (85)		
Papasavas 2004 15479593	Cardiovascular	Hypertension	.	All Participants	12 months	RYGB	71	32/71 (48)		
Sugerman 2004 15273547	Cardiovascular	hypertension	.	All Participants	0 years	Multiple surgeries	80	64/80 (80)		
Sugerman 2004	Cardiovascular	hypertension	.	All Participants	1 years	Multiple	65	34/65 (52)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
15273547						surgeries				
Sugerman 2004 15273547	Cardiovascular	hypertension	.	All Participants	5 years	Multiple surgeries	15	8/15 (50)		
Mizrahi 2014 24442420	Cardiovascular	Hypertension	.	All Participants	0 months	SG	52	36/52 (69)		
Mizrahi 2014 24442420	Cardiovascular	Hypertension	.	All Participants	24 months	SG	52	14/52 (26.9)		
Maraka 2015 25611727	Cardiovascular	DBP	.	Insulin-requiring type 2 diabetes mellitus	0 years	Multiple surgeries	118		76 (13)	
Maraka 2015 25611727	Cardiovascular	DBP	.	Insulin-requiring type 2 diabetes mellitus	1 years	Multiple surgeries	102		74 (12)	
Maraka 2015 25611727	Cardiovascular	DBP	.	Insulin-requiring type 2 diabetes mellitus	2 years	Multiple surgeries	63		75 (11)	
Maraka 2015 25611727	Cardiovascular	DBP	.	Type 1 Diabetes	0 years	Multiple surgeries	10		76 (12)	
Maraka 2015 25611727	Cardiovascular	DBP	.	Type 1 Diabetes	1 years	Multiple surgeries	9		66 (12)	
Maraka 2015 25611727	Cardiovascular	DBP	.	Type 1 Diabetes	2 years	Multiple surgeries	9		72 (13)	
Maraka 2015 25611727	Cardiovascular	Number of anti-hypertensive medications	.	Insulin-requiring type 2 diabetes mellitus	0 years	Multiple surgeries	118		2.2 (1.3)	
Maraka 2015 25611727	Cardiovascular	Number of anti-hypertensive medications	.	Insulin-requiring type 2 diabetes mellitus	1 years	Multiple surgeries	102		1.3 (1.2)	
Maraka 2015 25611727	Cardiovascular	Number of anti-hypertensive medications	.	Insulin-requiring type 2 diabetes mellitus	2 years	Multiple surgeries	63		1.3 (1.2)	
Maraka 2015 25611727	Cardiovascular	Number of anti-hypertensive medications	.	Type 1 Diabetes	0 years	Multiple surgeries	10		2.1 (1.4)	
Maraka 2015 25611727	Cardiovascular	Number of anti-hypertensive	.	Type 1 Diabetes	1 years	Multiple surgeries	9		2.2 (1.6)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
		medications								
Maraka 2015 25611727	Cardiovascular	Number of anti-hypertensive medications	.	Type 1 Diabetes	2 years	Multiple surgeries	9		2.3 (1.5)	
Maraka 2015 25611727	Cardiovascular	SBP	.	Type 1 Diabetes	0 years	Multiple surgeries	10		136 (10)	
Maraka 2015 25611727	Cardiovascular	SBP	.	Type 1 Diabetes	1 years	Multiple surgeries	9		127 (9)	
Maraka 2015 25611727	Cardiovascular	SBP	.	Type 1 Diabetes	2 years	Multiple surgeries	9		126 (15)	
Maraka 2015 25611727	Cardiovascular	SBP	.	Insulin-requiring type 2 diabetes mellitus	0 years	Multiple surgeries	118		132 (20)	
Maraka 2015 25611727	Cardiovascular	SBP	.	Insulin-requiring type 2 diabetes mellitus	1 years	Multiple surgeries	102		129 (21)	
Maraka 2015 25611727	Cardiovascular	SBP	.	Insulin-requiring type 2 diabetes mellitus	2 years	Multiple surgeries	63		133 (21)	
Michaud 2016 26130180	Cardiovascular	Hypertension unchanged	.	All Participants	7.1 years	BPD-DS	85	6/85 (7.1)		
Michaud 2016 26130180	Cardiovascular	Hypertension resolved	.	All Participants	7.1 years	BPD-DS	85	35/85 (41.1)		
Michaud 2016 26130180	Cardiovascular	Hypertension improved	.	All Participants	7.1 years	BPD-DS	85	35/85 (41.1)		
Loy 2014 24582414	Cardiovascular	Hypertension	.	All Participants	0 years	AGB	55	49/55 (89)		
Loy 2014 24582414	Cardiovascular	Hypertension	.	All Participants	8 years	AGB	55	36/55 (65.5)		
Dunkle-Blatter 2007 17331804	Cardiovascular	Hypertension	.	All Participants	After surgery	RYGB	61	43/61 (70)		
Dunkle-Blatter 2007 17331804	Cardiovascular	Improvement in Hypertension	.	All Participants	After surgery	RYGB	61	46/61 (76)		
Freeman 2015 25708829	Cardiovascular	Hypertension	.	All Participants	Before Surgery	SG	52	48/52 (92.3)		
Freeman 2015 25708829	Cardiovascular	Hypertension	.	All Participants	After Surgery	SG	52	29/52 (55.8)		
Freeman 2015 25708829	Cardiovascular	Number of antihypertensiv	.	All Participants	Before Surgery	SG	52		2.3	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
		e medications								
Freeman 2015 25708829	Cardiovascular	Number of antihypertensive medications	.	All Participants	After Surgery	SG	52		1.4	
Busetto 2008 18239641	Cardiovascular	Hypertension	bp >= 140 mm/Hg or use of antihypertensive drugs. improvement = normalization of BP or reduction in medication	All Participants	0 years	AGB	216	76/216 (35.2)		
Busetto 2008 18239641	Cardiovascular	Hypertension	bp >= 140 mm/Hg or use of antihypertensive drugs. improvement = normalization of BP or reduction in medication	All Participants	1 years	AGB	202	25/202 (11.6)		
Giordano 2014 24318411	Cardiovascular	Hypertension	BP persistently at or above 140/90 mm/Hg	All Participants	0 months	RYGB	132	98/132 (74.2)		
Giordano 2014 24318411	Cardiovascular	Hypertension	BP persistently at or above 140/90 mm/Hg	All Participants	24 months	RYGB	132	95/132 (72)		
Luppi 2015 25088486	Cardiovascular	Hypertension	.	All Participants	0 years	SG	28	21/28 (75)		
Luppi 2015 25088486	Cardiovascular	Hypertension	.	All Participants	1 years	SG	28	14/28 (50)		
Luppi 2015 25088486	Cardiovascular	Hypertension	.	All Participants	2 years	SG	28	10/28 (35.7)		
Luppi 2015 25088486	Cardiovascular	Daily Hypertension Medications	.	All Participants	0 years	SG	28		2.4	
Luppi 2015 25088486	Cardiovascular	Daily Hypertension Medications	.	All Participants	1 years	SG	28		1.5	
Luppi 2015 25088486	Cardiovascular	Daily Hypertension Medications	.	All Participants	2 years	SG	28		1.6	
Soto 2013 23733390	Cardiovascular	Resolution of Hypertension	.	All Participants	Preoperative	SG	35	15/35 (42.9)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Soto 2013 23733390	Cardiovascular	Resolution of Hypertension	.	All Participants	Postoperative	SG	35	4/35 (11.4)		
Wagner 2007 17938305	Comorbidities	number of comorbid conditions	.	All Participants	baseline	RYGB	38		4.0	
Wagner 2007 17938305	Comorbidities	number of comorbid conditions	.	All Participants	baseline	No surgery/Controls	16		3.1	
Wagner 2007 17938305	Comorbidities	number of comorbid conditions	.	All Participants	44 months	RYGB	38		2.7	
Wagner 2007 17938305	Comorbidities	number of comorbid conditions	.	All Participants	44 months	No surgery/Controls	16		4.7	
Quebbemann 2005 16925254	Comorbidities	number of comorbidities	.	All Participants	0 years	AGB	14		5.9	
Quebbemann 2005 16925254	Comorbidities	number of comorbidities	.	All Participants	0 years	RYGB	13		4.1	
Quebbemann 2005 16925254	Comorbidities	number of comorbidities	.	All Participants	1 years	AGB	14		2.8	
Quebbemann 2005 16925254	Comorbidities	number of comorbidities	.	All Participants	1 years	RYGB	13		2.2	
Loy 2014 24582414	Comorbidities	Improvement in comorbidities	n=235 recorded individual comorbidities	All Participants	8 years	AGB	235	49/235 (21)		
Loy 2014 24582414	Comorbidities	Complete resolution of comorbidities	n=235 recorded individual comorbidities	All Participants	8 years	AGB	235	73/235 (31)		
Loy 2014 24582414	Comorbidities	Aggravation of comorbidities	n=235 recorded individual comorbidities	All Participants	8 years	AGB	235	4/235 (1.4)		
Luppi 2015 25088486	Comorbidities	Comorbidity	Patient having at least one comorbidity	All Participants	0 years	SG	28	28/28 (100)		
Luppi 2015 25088486	Comorbidities	Comorbidity	Patient having at least one comorbidity	All Participants	1 years	SG	28	23/28 (82.1)		
Luppi 2015 25088486	Comorbidities	Comorbidity	Patient having at least one	All Participants	2 years	SG	28	15/28 (53.6)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			comorbidity							
Miranda 2013 23604694	Fatigue	Fatigue	Symptom Score: Median fatigue score measured on a 5 point Likert scale.	All Participants	0 years	RYGB	13			5
Miranda 2013 23604694	Fatigue	Fatigue	Symptom Score: Median fatigue score measured on a 5 point Likert scale.	All Participants	0 years	No surgery/Contr ols	6			2.5
Miranda 2013 23604694	Fatigue	Fatigue	Symptom Score: Median fatigue score measured on a 5 point Likert scale.	All Participants	0 Follow Up	RYGB	13			3
Miranda 2013 23604694	Fatigue	Fatigue	Symptom Score: Median fatigue score measured on a 5 point Likert scale.	All Participants	0 Follow Up	No surgery/Contr ols	6			3
Wagner 2007 17938305	Gastrointestinal	GERD	.	All Participants	baseline	RYGB	38	25/38 (65.8)		
Wagner 2007 17938305	Gastrointestinal	GERD	.	All Participants	baseline	No surgery/Contr ols	16	10/16 (62.5)		
Wagner 2007 17938305	Gastrointestinal	GERD	.	All Participants	44 months	RYGB	38	14/38 (36.8)		
Wagner 2007 17938305	Gastrointestinal	GERD	.	All Participants	44 months	No surgery/Contr ols	16	10/16 (62.5)		
Zaveri 2016 27795883	Gastrointestinal	GERD	.	All Participants	0 months	SADS	15	7/15 (46.7)		
Zaveri 2016 27795883	Gastrointestinal	GERD	.	All Participants	0 months	AGB	24	6/24 (25)		
Zaveri 2016 27795883	Gastrointestinal	GERD	.	All Participants	0 months	RYGB	14	6/14 (42.9)		
Zaveri 2016 27795883	Gastrointestinal	GERD	.	All Participants	18 months	SADS	15	3/15 (20)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Zaveri 2016 27795883	Gastrointestinal	GERD	.	All Participants	18 months	AGB	24	3/24 (12.5)		
Zaveri 2016 27795883	Gastrointestinal	GERD	.	All Participants	18 months	RYGB	14	3/14 (21.4)		
Lemaître 2016 27063637	Gastrointestinal	GERD	.	All Participants	post-surgery	SG	494	46/494 (9.4)		
Boules 2015 26243345	Gastrointestinal	Reflux	decrease in use of anti-reflux medication	All Participants	1 years	RYGB	50	33/50 (66)		
Boules 2015 26243345	Gastrointestinal	Reflux	decrease in use of anti-reflux medication	All Participants	1 years	SG	20	10/20 (50)		
van Rutte 2013 23344504	Gastrointestinal	GERD: Remission	.	55-59 yo	nd	SG	19	12/19 (63.2)		
van Rutte 2013 23344504	Gastrointestinal	GERD: Remission	.	60-64 yo	nd	SG	9	6/9 (66.7)		
van Rutte 2013 23344504	Gastrointestinal	GERD: Remission	.	>= 65 yo	nd	SG	1	0/1 (0)		
van Rutte 2013 23344504	Gastrointestinal	GERD: Improvement	.	55-59 yo	nd	SG	19	0/19 (0)		
van Rutte 2013 23344504	Gastrointestinal	GERD: Improvement	.	60-64 yo	nd	SG	9	0/9 (0)		
van Rutte 2013 23344504	Gastrointestinal	GERD: Improvement	.	>= 65 yo	nd	SG	1	0/1 (0)		
Clough 2011 20490708	Gastrointestinal	Reflux: mean number of meds	.	All Participants	median 22.5 months	AGB	49		0.10	
Clough 2011 20490708	Gastrointestinal	Reflux: mean number of meds	.	All Participants	0 months	AGB	49		0.25	
Clough 2011 20490708	Gastrointestinal	Reflux more meds	.	All Participants	median 22.5 months	AGB	49	12/49 (25)		
Clough 2011 20490708	Gastrointestinal	Reflux less meds	.	All Participants	median 22.5 months	AGB	49	12/49 (25)		
Clough 2011 20490708	Gastrointestinal	Reflux deteriorated	.	All Participants	median 22.5 months	AGB	49	8/49 (15.4)		
Clough 2011 20490708	Gastrointestinal	Reflux improved	.	All Participants	median 22.5 months	AGB	49	18/49 (35.9)		
Papasavas 2004	Gastrointestinal	GERD	gastroesophageal reflux	All Participants	0 months	RYGB	71	13/71 (19)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
15479593			disease							
Papasavas 2004 15479593	Gastrointestinal	GERD	gastroesophageal reflux disease	All Participants	12 months	RYGB	71	7/71 (10)		
Sugerman 2004 15273547	Gastrointestinal	GERD	.	All Participants	0 years	Multiple surgeries	80	41/80 (51)		
Sugerman 2004 15273547	Gastrointestinal	GERD	.	All Participants	1 years	Multiple surgeries	65	3/65 (5)		
Sugerman 2004 15273547	Gastrointestinal	GERD	.	All Participants	5 years	Multiple surgeries	15	0/15 (0)		
Loy 2014 24582414	Gastrointestinal	AE: port site hernia	.	All Participants	8 years	AGB	55	1/55 (1.8)		
Loy 2014 24582414	Gastrointestinal	AE: gallstones	.	All Participants	8 years	AGB	55	2/55 (3.6)		
Busetto 2008 18239641	Gastrointestinal	malabsorption	.	60-69 yro	5 years	AGB	120	0/120 (0)		
Busetto 2008 18239641	Gastrointestinal	malabsorption	.	70-79 yro	5 years	AGB	28	0/28 (0)		
Busetto 2008 18239641	Gastrointestinal	malabsorption	.	All Participants	5 years	AGB	150	0/150 (0)		
Soto 2013 23733390	Gastrointestinal	Resolution of GERD	.	All Participants	Preoperative	SG	35	8/35 (22.9)		
Soto 2013 23733390	Gastrointestinal	Resolution of GERD	.	All Participants	Postoperative	SG	35	1/35 (2.9)		
Sugerman 2004 15273547	Genitourinary	urinary incontinence	.	All Participants	0 years	Multiple surgeries	80	41/80 (51)		
Sugerman 2004 15273547	Genitourinary	urinary incontinence	.	All Participants	1 years	Multiple surgeries	65	3/65 (5)		
Sugerman 2004 15273547	Genitourinary	urinary incontinence	.	All Participants	5 years	Multiple surgeries	15	2/15 (13)		
Zaveri 2016 27795883	Healthcare utilization/Rehospitalization	Hospital Stay	.	All Participants	After Surgery	SADS	15		2.1 (1.6)	
Zaveri 2016 27795883	Healthcare utilization/Rehospitalization	Hospital Stay	.	All Participants	After Surgery	AGB	24		1.4 (0.9)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Zaveri 2016 27795883	Healthcare utilization/Rehospitalization	Hospital Stay	.	All Participants	After Surgery	RYGB	14		3.1 (2.1)	
Boules 2015 26243345	Healthcare utilization/Rehospitalization	Hospital stay	.	All Participants	30 days	Bariatric surgery and hernia repair	83		3.5 (1.7)	
Boules 2015 26243345	Healthcare utilization/Rehospitalization	Hospital stay	.	All Participants	30 days	Multiple surgeries	83		3.4 (2.5)	
Michaud 2016 26130180	Healthcare utilization/Rehospitalization	hospital stay	.	All Participants	30 days	BPD-DS	105		10.2 (8.3)	
Mittermair 2008 18830777	Healthcare utilization/Rehospitalization	hospital stay	.	All Participants	30 days	AGB	134		4.1	
Irwin 2013 23744816	Hematologic	Time in therapeutic INR range	.	All Participants	6 preoperative months	No surgery/Controls	59		55.7 (22.7)	
Irwin 2013 23744816	Hematologic	Time in therapeutic INR range	.	All Participants	6 preoperative months	Multiple surgeries	27		61.6 (19.5)	
Irwin 2013 23744816	Hematologic	Time in therapeutic INR range	.	All Participants	6 postoperative months	No surgery/Controls	59		53.8 (25.9)	
Irwin 2013 23744816	Hematologic	Time in therapeutic INR range	.	All Participants	6 postoperative months	Multiple surgeries	27		43.4 (24.1)	
Irwin 2013 23744816	Hematologic	Warfarin dose	.	All Participants	baseline	RYGB	22			46.3 (35, 70)
Irwin 2013 23744816	Hematologic	Warfarin dose	.	All Participants	baseline	No surgery/Controls	59			37.5 (28, 49)
Irwin 2013 23744816	Hematologic	Warfarin dose	.	All Participants	baseline	AGB	5			27.5 (28, 40)
Irwin 2013 23744816	Hematologic	Warfarin dose	.	All Participants	baseline	Multiple surgeries	27			40 (30, 66)
Sugerman 2004 15273547	Hematologic	chronic venous stasis disease	.	All Participants	0 years	Multiple surgeries	80	13/80 (16)		
Sugerman 2004 15273547	Hematologic	chronic venous stasis disease	.	All Participants	1 years	Multiple surgeries	65	2/65 (3)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Sugerman 2004 15273547	Hematologic	chronic venous stasis disease	.	All Participants	5 years	Multiple surgeries	15	0/15 (0)		
Michaud 2016 26130180	Hematologic	Low hemoglobin	<100 g/L	All Participants	0 years	BPD-DS	105	0/105 (0)		
Michaud 2016 26130180	Hematologic	Low hemoglobin	<100 g/L	All Participants	5 years	BPD-DS	105	1/105 (0.9)		
Wagner 2007 17938305	HRQoL - Mental	QOL	HRQOL: social functioning	All Participants	baseline	RYGB	17			
Wagner 2007 17938305	HRQoL - Mental	QOL	HRQOL: social functioning	All Participants	44 months	RYGB	17			
Wagner 2007 17938305	HRQoL - Mental	QOL	HRQOL: mental health	All Participants	baseline	RYGB	17		28.1	
Wagner 2007 17938305	HRQoL - Mental	QOL	HRQOL: mental health	All Participants	44 months	RYGB	17		33.8	
Wagner 2007 17938305	HRQoL - Mental	QOL	HRQOL: role-emotional	All Participants	baseline	RYGB	17		8.3	
Wagner 2007 17938305	HRQoL - Mental	QOL	HRQOL: role-emotional	All Participants	44 months	RYGB	17		16.2	
Quebbemann 2005 16925254	HRQoL - Mental	QOL	Bariatric Surgery Impact Scale: emotional function/depression (5-25; higher = better)	All Participants	baseline	AGB	14		9.8	
Quebbemann 2005 16925254	HRQoL - Mental	QOL	Bariatric Surgery Impact Scale: emotional function/depression (5-25; higher = better)	All Participants	baseline	RYGB	13		13.9	
Quebbemann 2005 16925254	HRQoL - Mental	QOL	Bariatric Surgery Impact Scale: emotional function/depression (5-25; higher = better)	All Participants	last day of followup (1-2 years)	AGB	14		17.1	
Quebbemann 2005 16925254	HRQoL - Mental	QOL	Bariatric Surgery Impact Scale: emotional function/depression	All Participants	last day of followup (1-2 years)	RYGB	13		20.7	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			ssion (5-25; higher = better)							
Quebbemann 2005 16925254	HRQoL - Mental	QOL	Impact of Weight on Quality of Life Questionnaire-Lite Scale: Self esteem (1-100; higher = better)	All Participants	baseline	AGB	14		39.3	
Quebbemann 2005 16925254	HRQoL - Mental	QOL	Impact of Weight on Quality of Life Questionnaire-Lite Scale: Self esteem (1-100; higher = better)	All Participants	baseline	RYGB	13		28.6	
Quebbemann 2005 16925254	HRQoL - Mental	QOL	Impact of Weight on Quality of Life Questionnaire-Lite Scale: Self esteem (1-100; higher = better)	All Participants	last day of followup (1-2 years)	AGB	14		57.1	
Quebbemann 2005 16925254	HRQoL - Mental	QOL	Impact of Weight on Quality of Life Questionnaire-Lite Scale: Self esteem (1-100; higher = better)	All Participants	last day of followup (1-2 years)	RYGB	13		53.6	
Wiklund 2017 .	HRQoL - Mental	EQ-5D: Anxiety/depression	Moderate problems	All Participants	preoperative	RYGB	70	24/70 (34)		
Wiklund 2017 .	HRQoL - Mental	EQ-5D: Anxiety/depression	Moderate problems	All Participants	18 months	RYGB	70	18/70 (26)		
Wiklund 2017 .	HRQoL - Mental	EQ-5D: Anxiety/depression	No problems	All Participants	preoperative	RYGB	70	40/70 (57)		
Wiklund 2017 .	HRQoL - Mental	EQ-5D: Anxiety/depression	No problems	All Participants	18 months	RYGB	70	48/70 (68)		
Clough 2011 20490708	HRQoL - Mental	Improvement of Outlook on Life	rated as better or much better by patients	All Participants	median 22.5 months	AGB	113	72/113 (63.8)		
Clough 2011 20490708	HRQoL - Mental	Improvement of Self-Esteem	rated as better or much better	All Participants	median 22.5 months	AGB	113	57/113 (50)		

Study	Outcome Category 1	Outcome	Outcome Description by patients	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Clough 2011 20490708	HRQoL - Mental	Quality of life	Mental health	All Participants	median 22.5 months	AGB	113		78.5	
Clough 2011 20490708	HRQoL - Mental	Quality of life	Mental health	All Participants	0 months	AGB	113		68.9	
Clough 2011 20490708	HRQoL - Mental	Quality of life	Social functioning	All Participants	median 22.5 months	AGB	113		85.9	
Clough 2011 20490708	HRQoL - Mental	Quality of life	Social functioning	All Participants	0 months	AGB	113		70.4	
Clough 2011 20490708	HRQoL - Mental	Quality of life	Role-emotional	All Participants	median 22.5 months	AGB	113		89.9	
Clough 2011 20490708	HRQoL - Mental	Quality of life	Role-emotional	All Participants	0 months	AGB	113		58.5	
McGlone 2015 26112136	HRQoL - Mental	Moorehead-Ardelt Quality of Life Questionnaire: Satisfactory Social Contacts	-0.5 (worst) to 0.5 (best)	All Participants	33 months	Multiple surgeries	36		0.15	
McGlone 2015 26112136	HRQoL - Mental	Moorehead-Ardelt Quality of Life Questionnaire: Satisfactory Social Contacts	-0.5 (worst) to 0.5 (best)	Morbidly obese (BMI<50)	33 months	Multiple surgeries	19		0.2	
McGlone 2015 26112136	HRQoL - Mental	Moorehead-Ardelt Quality of Life Questionnaire: Satisfactory Social Contacts	-0.5 (worst) to 0.5 (best)	Super-obese (BMI≥50)	33 months	Multiple surgeries	19		0.1	
Quebbemann 2005 16925254	HRQoL - Other	QOL	Impact of Weight on Quality of Life Questionnaire-Lite Scale: Work (1-100; higher = better)	All Participants	baseline	AGB	14		43.8	
Quebbemann 2005 16925254	HRQoL - Other	QOL	Impact of Weight on Quality of Life	All Participants	baseline	RYGB	13		31.3	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			Questionnaire-Lite Scale: Work (1-100; higher = better)							
Quebbemann 2005 16925254	HRQoL - Other	QOL	Impact of Weight on Quality of Life Questionnaire-Lite Scale: Work (1-100; higher = better)	All Participants	last day of followup (1-2 years)	AGB	14		68.8	
Quebbemann 2005 16925254	HRQoL - Other	QOL	Impact of Weight on Quality of Life Questionnaire-Lite Scale: Work (1-100; higher = better)	All Participants	last day of followup (1-2 years)	RYGB	13		56.3	
McGlone 2015 26112136	HRQoL - Other	Moorehead-Ardelt Quality of Life Questionnaire: Approach to food	range -0.5 (worst) to 0.5 (best)	All Participants	33 months	Multiple surgeries	36		0.25	
McGlone 2015 26112136	HRQoL - Other	Moorehead-Ardelt Quality of Life Questionnaire: Approach to food	range -0.5 (worst) to 0.5 (best)	Morbidly obese (BMI<50)	33 months	Multiple surgeries	19		0.2	
McGlone 2015 26112136	HRQoL - Other	Moorehead-Ardelt Quality of Life Questionnaire: Approach to food	range -0.5 (worst) to 0.5 (best)	Super-obese (BMI≥50)	33 months	Multiple surgeries	17		0.3	
Quebbemann 2005 16925254	HRQoL - Overall	QOL	Combined (5-325; higher = better)	All Participants	baseline	AGB	14		130.6 (19.8)	
Quebbemann 2005 16925254	HRQoL - Overall	QOL	Combined (5-325; higher = better)	All Participants	baseline	RYGB	13		107.9 (17.6)	
Quebbemann 2005 16925254	HRQoL - Overall	QOL	Combined (5-325; higher = better)	All Participants	last day of followup (1-2 years)	AGB	14		213.2 (17.7)	
Quebbemann 2005	HRQoL - Overall	QOL	Combined (5-325; higher =	All Participants	last day of followup (1-2	RYGB	13		207.9 (15.9)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
16925254			better)		years)					
O'Keefe 2010 20532834	HRQoL - Overall	Quality of Life Percentage Score	Pearson Quality of Life Score	All Participants	0 months	SG	5		54.8 (39.3)	
O'Keefe 2010 20532834	HRQoL - Overall	Quality of Life Percentage Score	Pearson Quality of Life Score	All Participants	0 months	RYGB	93		51.4 (28.7)	
O'Keefe 2010 20532834	HRQoL - Overall	Quality of Life Percentage Score	Pearson Quality of Life Score	All Participants	0 months	AGB	29		50.2 (30)	
O'Keefe 2010 20532834	HRQoL - Overall	Quality of Life Percentage Score	Pearson Quality of Life Score	All Participants	6 months	SG	3		69 (35.4)	
O'Keefe 2010 20532834	HRQoL - Overall	Quality of Life Percentage Score	Pearson Quality of Life Score	All Participants	6 months	RYGB	77		72.3 (27.3)	
O'Keefe 2010 20532834	HRQoL - Overall	Quality of Life Percentage Score	Pearson Quality of Life Score	All Participants	6 months	AGB	17		75.3 (21.3)	
O'Keefe 2010 20532834	HRQoL - Overall	Quality of Life Percentage Score	Pearson Quality of Life Score	All Participants	1 years	SG	1		6	
O'Keefe 2010 20532834	HRQoL - Overall	Quality of Life Percentage Score	Pearson Quality of Life Score	All Participants	1 years	RYGB	15		74.9 (23.4)	
O'Keefe 2010 20532834	HRQoL - Overall	Quality of Life Percentage Score	Pearson Quality of Life Score	All Participants	1 years	AGB	6		72.8 (20.7)	
Miranda 2013 23604694	HRQoL - Overall	Quality of Life Score	Median quality of life as measured by the 10 point Likert Scale.	All Participants	0 years	RYGB	13			3
Miranda 2013 23604694	HRQoL - Overall	Quality of Life Score	Median quality of life as measured by the 10 point Likert Scale.	All Participants	0 years	No surgery/Contr ols	6			4.5
Miranda 2013 23604694	HRQoL - Overall	Quality of Life Score	Median quality of life as measured by the 10 point Likert Scale.	All Participants	0 Follow Up	RYGB	13			7
Miranda 2013 23604694	HRQoL - Overall	Quality of Life Score	Median quality of life as measured by the 10 point Likert Scale.	All Participants	0 Follow Up	No surgery/Contr ols	6			6

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			Likert Scale.							
Wiklund 2017 .	HRQoL - Overall	EQ-5D: Anxiety/depression	Severe problems	All Participants	preoperative	RYGB	70	6/70 (9)		
Wiklund 2017 .	HRQoL - Overall	EQ-5D: Anxiety/depression	Severe problems	All Participants	18 months	RYGB	70	4/70 (6)		
Wiklund 2017 .	HRQoL - Overall	EQ-5D overall	1 = full health; 0 = death	All Participants	preoperative	RYGB	70			0.87
Wiklund 2017 .	HRQoL - Overall	EQ-5D overall	1 = full health; 0 = death	All Participants	18 months	RYGB	70			0.93
Wiklund 2017 .	HRQoL - Overall	EQ-VAS: overall	.	All Participants	preoperative	RYGB	70			60
Wiklund 2017 .	HRQoL - Overall	EQ-VAS: overall	.	All Participants	18 months	RYGB	70			80
McGlone 2015 26112136	HRQoL - Overall	Moorehead-Ardelt Quality of Life Questionnaire: usually I feel	-0.5 (worst) to 0.5 (best)	Super-obese (BMI≥50)	33 months	Multiple surgeries	17		0.3	
McGlone 2015 26112136	HRQoL - Overall	Moorehead-Ardelt Quality of Life Questionnaire: usually I feel	-0.5 (worst) to 0.5 (best)	Morbidly obese (BMI<50)	33 months	Multiple surgeries	19		0.2	
McGlone 2015 26112136	HRQoL - Overall	Moorehead-Ardelt Quality of Life Questionnaire: usually I feel	-0.5 (worst) to 0.5 (best)	All Participants	33 months	Multiple surgeries	36		0.25	
Wagner 2007 17938305	HRQoL - Physical	QOL	HRQOL: physical functioning	All Participants	baseline	RYGB	17		28.8	
Wagner 2007 17938305	HRQoL - Physical	QOL	HRQOL: physical functioning	All Participants	44 months	RYGB	17		37.5	
Wagner 2007 17938305	HRQoL - Physical	QOL	HRQOL: role-physical	All Participants	baseline	RYGB	17		5.2	
Wagner 2007 17938305	HRQoL - Physical	QOL	HRQOL: role-physical	All Participants	44 months	RYGB	17		15.8	
Quebbemann 2005 16925254	HRQoL - Physical	QOL	Impact of Weight on Quality of Life Questionnaire-	All Participants	baseline	AGB	14		37.7	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			Lite Scale: Physical function (1-100; higher = better)							
Quebbemann 2005 16925254	HRQoL - Physical	QOL	Impact of Weight on Quality of Life Questionnaire-Lite Scale: Physical function (1-100; higher = better)	All Participants	baseline	RYGB	13		34.1	
Quebbemann 2005 16925254	HRQoL - Physical	QOL	Impact of Weight on Quality of Life Questionnaire-Lite Scale: Physical function (1-100; higher = better)	All Participants	last day of followup (1-2 years)	AGB	14		70.4	
Quebbemann 2005 16925254	HRQoL - Physical	QOL	Impact of Weight on Quality of Life Questionnaire-Lite Scale: Physical function (1-100; higher = better)	All Participants	last day of followup (1-2 years)	RYGB	13		77.3	
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Pain/discomfort	Moderate problems	All Participants	preoperative	RYGB	70	43/70 (62)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Pain/discomfort	Moderate problems	All Participants	18 months	RYGB	70	38/70 (54)		
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Tying shoes	All Participants	preoperative	RYGB	70			26
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Tying shoes	All Participants	18 months	RYGB	70			3
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Rise from a chair without arm support	All Participants	preoperative	RYGB	70			6

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Rise from a chair without arm support	All Participants	18 months	RYGB	70			3
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Participating in exercise/sports	All Participants	preoperative	RYGB	70			55
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Participating in exercise/sports	All Participants	18 months	RYGB	70			0
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Wipe butt after using toilet	All Participants	preoperative	RYGB	70			7
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Wipe butt after using toilet	All Participants	18 months	RYGB	70			3
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Lifting heavy objects	All Participants	preoperative	RYGB	70			42
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Lifting heavy objects	All Participants	18 months	RYGB	70			0
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Heavy work	All Participants	preoperative	RYGB	70			55
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Heavy work	All Participants	18 months	RYGB	70			14
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Self-care	No problems	All Participants	preoperative	RYGB	70	65/70 (93)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Self-care	No problems	All Participants	18 months	RYGB	70	68/70 (97)		
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Light work	All Participants	preoperative	RYGB	70			19
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Light work	All Participants	18 months	RYGB	70			3
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Bend over and pick something up off the floor	All Participants	preoperative	RYGB	70			29.1
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Bend over and pick something up off the floor	All Participants	18 months	RYGB	70			3.7
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Pain/discomfort	No problems	All Participants	preoperative	RYGB	70	16/70 (23)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Pain/discomfort	No problems	All Participants	18 months	RYGB	70	25/70 (35)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Mobility	No problems	All Participants	preoperative	RYGB	70	43/70 (62)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Mobility	No problems	All Participants	18 months	RYGB	70	60/70 (85)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Mobility	Moderate problems	All Participants	preoperative	RYGB	70	27/70 (38)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Mobility	Moderate problems	All Participants	18 months	RYGB	70	11/70 (15)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Mobility	Severe problems	All Participants	preoperative	RYGB	70	0/70 (0)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Mobility	Severe problems	All Participants	18 months	RYGB	70	0/70 (0)		
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	vacuum cleaning	All Participants	preoperative	RYGB	70			14
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	vacuum cleaning	All Participants	18 months	RYGB	70			4
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Self-care	Moderate problems	All Participants	preoperative	RYGB	70	5/70 (7)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Self-care	Moderate problems	All Participants	18 months	RYGB	70	1/70 (1.5)		
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Running	All Participants	preoperative	RYGB	70			74.4
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Running	All Participants	18 months	RYGB	70			40.7
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Usual activities	Moderate Problems	All Participants	preoperative	RYGB	70	18/70 (26)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Usual activities	Moderate Problems	All Participants	18 months	RYGB	70	6/70 (9)		
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Outdoor walks	All Participants	preoperative	RYGB	70			19
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Outdoor walks	All Participants	18 months	RYGB	70			2
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index	Carrying a bag	All Participants	preoperative	RYGB	70			11

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
		(DRI)								
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Carrying a bag	All Participants	18 months	RYGB	70			3
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Dressing without help	All Participants	preoperative	RYGB	70			4
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Dressing without help	All Participants	18 months	RYGB	70			2
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Total score. 0-100 0 = manage easily, 100 = cannot manage	All Participants	preoperative	RYGB	70		30.4	
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Total score. 0-100 0 = manage easily, 100 = cannot manage	All Participants	18 months	RYGB	70		14.2	
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Usual activities	Severe problems	All Participants	preoperative	RYGB	70	2/70 (3)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Usual activities	Severe problems	All Participants	18 months	RYGB	70	0/70 (0)		
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Climbing stairs	All Participants	preoperative	RYGB	70			24
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Climbing stairs	All Participants	18 months	RYGB	70			4
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Self-care	Severe problems	All Participants	preoperative	RYGB	70	0/70 (0)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Self-care	Severe problems	All Participants	18 months	RYGB	70	1/70 (1.5)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Pain/discomfort	Severe problems	All Participants	preoperative	RYGB	70	11/70 (15)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Pain/discomfort	Severe problems	All Participants	18 months	RYGB	70	8/70 (11)		
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	making a bed	All Participants	preoperative	RYGB	70			12
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index	making a bed	All Participants	18 months	RYGB	70			3

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
		(DRI)								
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Standing bent over a sink	All Participants	preoperative	RYGB	70			15
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Standing bent over a sink	All Participants	18 months	RYGB	70			4
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Usual activities	No problems	All Participants	preoperative	RYGB	70	50/70 (71)		
Wiklund 2017 .	HRQoL - Physical	EQ-5D: Usual activities	No problems	All Participants	18 months	RYGB	70	64/70 (91)		
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Sitting for a long time	All Participants	preoperative	RYGB	70			6
Wiklund 2017 .	HRQoL - Physical	QOL: Disability Rating Index (DRI)	Sitting for a long time	All Participants	18 months	RYGB	70			4
Clough 2011 20490708	HRQoL - Physical	Quality of life	Role-physical	All Participants	median 22.5 months	AGB	113		78.4	
Clough 2011 20490708	HRQoL - Physical	Quality of life	Role-physical	All Participants	0 months	AGB	113		43.8	
Clough 2011 20490708	HRQoL - Physical	Quality of life	physical functioning	All Participants	median 22.5 months	AGB	113		71.8	
Clough 2011 20490708	HRQoL - Physical	Quality of life	physical functioning	All Participants	0 months	AGB	113		46.2	
Clough 2011 20490708	HRQoL - Physical	Quality of life	Bodily pain	All Participants	median 22.5 months	AGB	113		71	
Clough 2011 20490708	HRQoL - Physical	Quality of life	Bodily pain	All Participants	0 months	AGB	113		51.3	
Clough 2011 20490708	HRQoL - Physical	Quality of life	Vitality	All Participants	median 22.5 months	AGB	113		60.2	
Clough 2011 20490708	HRQoL - Physical	Quality of life	Vitality	All Participants	0 months	AGB	113		44.8	
Clough 2011 20490708	HRQoL - Physical	Quality of life	General Health	All Participants	median 22.5 months	AGB	113		70.3	
Clough 2011 20490708	HRQoL - Physical	Quality of life	General Health	All Participants	0 months	AGB	113		45.6	
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and Reporting Outcome System	.	All Participants	33 months	Multiple surgeries	36	9/36 (25)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
		(BAROS): very good								
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and Reporting Outcome System (BAROS): very good	.	Morbidly obese (BMI<50)	33 months	Multiple surgeries	19	4/19 (21.1)		
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and Reporting Outcome System (BAROS): very good	.	Super-obese (BMI≥50)	33 months	Multiple surgeries	17	5/17 (29.4)		
McGlone 2015 26112136	HRQoL - Physical	Moorehead-Ardelt Quality of Life Questionnaire: Enjoy Physical Activity	-0.5 (worst) to 0.5 (best)	Morbidly obese (BMI<50)	33 months	Multiple surgeries	19		-0.1	
McGlone 2015 26112136	HRQoL - Physical	Moorehead-Ardelt Quality of Life Questionnaire: Enjoy Physical Activity	-0.5 (worst) to 0.5 (best)	Super-obese (BMI≥50)	33 months	Multiple surgeries	17		-0.1	
McGlone 2015 26112136	HRQoL - Physical	Moorehead-Ardelt Quality of Life Questionnaire: Enjoy Physical Activity	-0.5 (worst) to 0.5 (best)	All Participants	33 months	Multiple surgeries	36		-0.1	
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and Reporting Outcome System (BAROS): good	.	All Participants	33 months	Multiple surgeries	36	6/36 (16.7)		
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and Reporting Outcome System (BAROS): good	.	Morbidly obese (BMI<50)	33 months	Multiple surgeries	19	2/19 (10.5)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and Reporting Outcome System (BAROS): good	.	Super-obese (BMI≥50)	33 months	Multiple surgeries	17	4/17 (23.5)		
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and Reporting Outcome System (BAROS): fair	.	All Participants	33 months	Multiple surgeries	36	12/36 (33.3)		
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and Reporting Outcome System (BAROS): fair	.	Morbidly obese (BMI<50)	33 months	Multiple surgeries	19	5/19 (26.3)		
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and Reporting Outcome System (BAROS): fair	.	Super-obese (BMI≥50)	33 months	Multiple surgeries	17	7/17 (41.2)		
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and Reporting Outcome System (BAROS): failure	.	All Participants	33 months	Multiple surgeries	36	6/36 (16.7)		
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and Reporting Outcome System (BAROS): failure	.	Morbidly obese (BMI<50)	33 months	Multiple surgeries	19	5/19 (26.3)		
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and Reporting Outcome System (BAROS): failure	.	Super-obese (BMI≥50)	33 months	Multiple surgeries	17	1/17 (5.9)		
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and	.	All Participants	33 months	Multiple	36	3/36 (8.3)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	Physical	Reporting Outcome System (BAROS): excellent				surgeries				
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and Reporting Outcome System (BAROS): excellent	.	Morbidly obese (BMI<50)	33 months	Multiple surgeries	19	3/19 (15.8)		
McGlone 2015 26112136	HRQoL - Physical	Bariatric Analysis and Reporting Outcome System (BAROS): excellent	.	Super-obese (BMI≥50)	33 months	Multiple surgeries	17	0/17 (0)		
Sugerman 2004 15273547	Idiopathic intracranial hypertension	pseudotumor cerebri	.	All Participants	0 years	Multiple surgeries	80	1/80 (1)		
Sugerman 2004 15273547	Idiopathic intracranial hypertension	pseudotumor cerebri	.	All Participants	1 years	Multiple surgeries	65	0/65 (0)		
Sugerman 2004 15273547	Idiopathic intracranial hypertension	pseudotumor cerebri	.	All Participants	5 years	Multiple surgeries	15	0/15 (0)		
Mozer 2015 25832986	Length of stay	length of stay	.	All Participants	at time of procedure	SG	23		2 (3.2)	
Mozer 2015 25832986	Length of stay	length of stay	.	All Participants	at time of procedure	RYGB	68		3 (2.1)	
Mozer 2015 25832986	Length of stay	length of stay	.	All Participants	at time of procedure	AGB	47		1 (1.1)	
Varela 2006 17058723	Length of stay	length of stay	.	All Participants	30 days	Multiple surgeries	1339		4.9 (4)	
Andalib 2016 26416373	Length of stay	Length of stay	.	All Participants	30 days	BPD-DS	2			4
Andalib 2016 26416373	Length of stay	Length of stay	.	All Participants	30 days	RYGB	101			3
Andalib 2016 26416373	Length of stay	Length of stay	.	All Participants	30 days	AGB	46			1
Andalib 2016 26416373	Length of stay	Length of stay	.	All Participants	30 days	SG	85			2

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Gebhart 2015 25130515	Length of stay	Mean Length of Stay	Mean length of stay in hospital (days).	All Participants	0 years	Multiple surgeries	6105			
Gebhart 2015 25130515	Length of stay	Mean Length of Stay	Mean length of stay in hospital (days).	Elderly 1999-2005	0 years	Multiple surgeries	.			
Huang 2015 25859266	Length of stay	AE: Length of Stay	Mean length of stay	All Participants	0 years	RYGB	44		2.5 (1.4)	
Huang 2015 25859266	Length of stay	AE: Length of Stay	Mean length of stay	All Participants	0 years	SG	24		2.2 (1.4)	
McGlone 2015 26112136	Length of stay	length of stay	.	All Participants	33 months	Multiple surgeries	50			2
McGlone 2015 26112136	Length of stay	length of stay	.	Morbidly obese (BMI<50)	33 months	Multiple surgeries	24			2 (1.25, 2.75)
McGlone 2015 26112136	Length of stay	length of stay	.	Super-obese (BMI≥50)	33 months	Multiple surgeries	26			2 (1.75, 2.25)
Mizrahi 2014 24442420	Length of stay	LOS	Length of hospital stay	All Participants	Postoperative	SG	52		4.1 (0.1)	
Freeman 2015 25708829	Length of stay	Hospital length of stay	.	All Participants	After Surgery	SG	52		2.7 (1)	
Tiwari 2011 21459686	Length of stay	length of stay	.	All Participants	30 days	RYGB	905		3.5 (7.2)	
Tiwari 2011 21459686	Length of stay	length of stay	.	All Participants	30 days	RYGB	10930		2.8 (3.8)	
Sun 2016 26264895	Length of stay	Length of Stay	.	All Participants	After surgery	RYGB	367			
Giordano 2014 24318411	Length of stay	length of stay	.	All Participants	30 days	RYGB	132		2.6 (3.1)	
Luppi 2015 25088486	Length of stay	LOS	Length of Stay	All Participants	postoperative days	SG	28		2.8 (1.5)	2
Ardestani 2015 25573879	Metabolic	Clinical remission of Type 2 diabetes	remission of severity level 0 or 1	All Participants	1 months	RYGB	198	29/198 (14.4)		
Ardestani 2015 25573879	Metabolic	Clinical remission of Type 2 diabetes	remission of severity level 0 or 1	All Participants	1 months	AGB	198	14/198 (7)		
Ardestani 2015 25573879	Metabolic	Clinical remission of Type 2 diabetes	remission of severity level 0 or 1	All Participants	3 months	RYGB	198	55/198 (28)		
Ardestani 2015 25573879	Metabolic	Clinical remission of Type 2 diabetes	remission of severity level 0 or 1	All Participants	3 months	AGB	198	26/198 (12.9)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Ardestani 2015 25573879	Metabolic	Clinical remission of Type 2 diabetes	remission of severity level 0 or 1	All Participants	6 months	RYGB	198	61/198 (30.7)		
Ardestani 2015 25573879	Metabolic	Clinical remission of Type 2 diabetes	remission of severity level 0 or 1	All Participants	6 months	AGB	198	38/198 (19.4)		
Ardestani 2015 25573879	Metabolic	Clinical remission of Type 2 diabetes	remission of severity level 0 or 1	All Participants	12 months	RYGB	198	71/198 (35.7)		
Ardestani 2015 25573879	Metabolic	Clinical remission of Type 2 diabetes	remission of severity level 0 or 1	All Participants	12 months	AGB	198	5/198 (24)		
Ardestani 2015 25573879	Metabolic	Off insulin therapy	patients who ceased insulin use	All Participants	3 months	RYGB	198	73/198 (37.1)		
Ardestani 2015 25573879	Metabolic	Off insulin therapy	patients who ceased insulin use	All Participants	3 months	AGB	198	52/198 (26.3)		
Lee 2016 27220823	Metabolic	Glucose (mg/dL)	Glucose (mg/dL)	All Participants	0 months	SG	48		108.5 (57)	
Lee 2016 27220823	Metabolic	Glucose (mg/dL)	Glucose (mg/dL)	All Participants	0 months	RYGB	84		101.8 (28.7)	
Lee 2016 27220823	Metabolic	Glucose (mg/dL)	Glucose (mg/dL)	All Participants	0 months	AGB	30		123.7 (59.4)	
Lee 2016 27220823	Metabolic	Glucose (mg/dL)	Glucose (mg/dL)	All Participants	6 months	SG	48		99.2 (29.8)	
Lee 2016 27220823	Metabolic	Glucose (mg/dL)	Glucose (mg/dL)	All Participants	6 months	RYGB	84		100.3 (36.7)	
Lee 2016 27220823	Metabolic	Glucose (mg/dL)	Glucose (mg/dL)	All Participants	6 months	AGB	30		105.2 (57.3)	
Lee 2016 27220823	Metabolic	Glucose (mg/dL)	Glucose (mg/dL)	All Participants	12 months	SG	48		104.6 (40.8)	
Lee 2016 27220823	Metabolic	Glucose (mg/dL)	Glucose (mg/dL)	All Participants	12 months	RYGB	84		97.3 (17)	
Lee 2016 27220823	Metabolic	Glucose (mg/dL)	Glucose (mg/dL)	All Participants	12 months	AGB	30		105.6 (54.5)	
Lee 2016 27220823	Metabolic	HbA1C (%)	Hemoglobin A1c	All Participants	0 months	SG	48		5.9 (0.5)	
Lee 2016 27220823	Metabolic	HbA1C (%)	Hemoglobin A1c	All Participants	0 months	RYGB	84		5.6 (0.5)	
Lee 2016 27220823	Metabolic	HbA1C (%)	Hemoglobin A1c	All Participants	0 months	AGB	30		5.8 (0.7)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Lee 2016 27220823	Metabolic	HbA1C (%)	Hemoglobin A1c	All Participants	6 months	SG	48		5.9 (1.2)	
Lee 2016 27220823	Metabolic	HbA1C (%)	Hemoglobin A1c	All Participants	6 months	RYGB	84		5.8 (1.3)	
Lee 2016 27220823	Metabolic	HbA1C (%)	Hemoglobin A1c	All Participants	6 months	AGB	30		5.9 (1.2)	
Lee 2016 27220823	Metabolic	HbA1C (%)	Hemoglobin A1c	All Participants	12 months	SG	48		5.8 (1.2)	
Lee 2016 27220823	Metabolic	HbA1C (%)	Hemoglobin A1c	All Participants	12 months	RYGB	84		5.7 (0.9)	
Lee 2016 27220823	Metabolic	HbA1C (%)	Hemoglobin A1c	All Participants	12 months	AGB	30		5.9 (0.9)	
Lee 2016 27220823	Metabolic	Total Cholesterol (mg/dL)	Total Cholesterol (mg/dL)	All Participants	0 months	SG	48		182.5 (35.4)	
Lee 2016 27220823	Metabolic	Total Cholesterol (mg/dL)	Total Cholesterol (mg/dL)	All Participants	0 months	RYGB	84		167.5 (37.5)	
Lee 2016 27220823	Metabolic	Total Cholesterol (mg/dL)	Total Cholesterol (mg/dL)	All Participants	0 months	AGB	30		164.2 (31.4)	
Lee 2016 27220823	Metabolic	Total Cholesterol (mg/dL)	Total Cholesterol (mg/dL)	All Participants	6 months	SG	48		186.2 (62)	
Lee 2016 27220823	Metabolic	Total Cholesterol (mg/dL)	Total Cholesterol (mg/dL)	All Participants	6 months	RYGB	84		164.6 (45.9)	
Lee 2016 27220823	Metabolic	Total Cholesterol (mg/dL)	Total Cholesterol (mg/dL)	All Participants	6 months	AGB	30		165.3 (53.9)	
Lee 2016 27220823	Metabolic	Total Cholesterol (mg/dL)	Total Cholesterol (mg/dL)	All Participants	12 months	SG	48		188.8 (76.3)	
Lee 2016 27220823	Metabolic	Total Cholesterol (mg/dL)	Total Cholesterol (mg/dL)	All Participants	12 months	RYGB	84		161.7 (46.3)	
Lee 2016 27220823	Metabolic	Total Cholesterol (mg/dL)	Total Cholesterol (mg/dL)	All Participants	12 months	AGB	30		168.4 (50.7)	
Lee 2016 27220823	Metabolic	LDL cholesterol (mg/dL)	low-density lipoprotein cholesterol	All Participants	0 months	SG	48		117 (29.1)	
Lee 2016 27220823	Metabolic	LDL cholesterol (mg/dL)	low-density lipoprotein cholesterol	All Participants	0 months	RYGB	84		100.7 (33.6)	
Lee 2016 27220823	Metabolic	LDL cholesterol	low-density lipoprotein	All Participants	0 months	AGB	30		96.8 (24.5)	

Study	Outcome Category 1	Outcome (mg/dL)	Outcome Description cholesterol	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Lee 2016 27220823	Metabolic	LDL cholesterol (mg/dL)	low-density lipoprotein cholesterol	All Participants	6 months	SG	48		116.9 (57.9)	
Lee 2016 27220823	Metabolic	LDL cholesterol (mg/dL)	low-density lipoprotein cholesterol	All Participants	6 months	RYGB	84		102.2 (40.3)	
Lee 2016 27220823	Metabolic	LDL cholesterol (mg/dL)	low-density lipoprotein cholesterol	All Participants	6 months	AGB	30		101.9 (48.4)	
Lee 2016 27220823	Metabolic	LDL cholesterol (mg/dL)	low-density lipoprotein cholesterol	All Participants	12 months	SG	48		116.4 (70.9)	
Lee 2016 27220823	Metabolic	LDL cholesterol (mg/dL)	low-density lipoprotein cholesterol	All Participants	12 months	RYGB	84		90.3 (39.9)	
Lee 2016 27220823	Metabolic	LDL cholesterol (mg/dL)	low-density lipoprotein cholesterol	All Participants	12 months	AGB	30		99.6 (46.9)	
Lee 2016 27220823	Metabolic	HDL cholesterol (mg/dL)	High-density lipoprotein cholesterol	All Participants	0 months	SG	48		41 (7.9)	
Lee 2016 27220823	Metabolic	HDL cholesterol (mg/dL)	High-density lipoprotein cholesterol	All Participants	0 months	RYGB	84		44.9 (17.3)	
Lee 2016 27220823	Metabolic	HDL cholesterol (mg/dL)	High-density lipoprotein cholesterol	All Participants	0 months	AGB	30		43.1 (11.6)	
Lee 2016 27220823	Metabolic	HDL cholesterol (mg/dL)	High-density lipoprotein cholesterol	All Participants	6 months	SG	48		46.2 (18.4)	
Lee 2016 27220823	Metabolic	HDL cholesterol (mg/dL)	High-density lipoprotein cholesterol	All Participants	6 months	RYGB	84		41.1 (12.2)	
Lee 2016 27220823	Metabolic	HDL cholesterol (mg/dL)	High-density lipoprotein cholesterol	All Participants	6 months	AGB	30		42.2 (29.9)	
Lee 2016 27220823	Metabolic	HDL cholesterol (mg/dL)	High-density lipoprotein cholesterol	All Participants	12 months	SG	48		50.5 (31.4)	
Lee 2016 27220823	Metabolic	HDL cholesterol (mg/dL)	High-density lipoprotein cholesterol	All Participants	12 months	RYGB	84		48.2 (18)	
Lee 2016 27220823	Metabolic	HDL cholesterol (mg/dL)	High-density lipoprotein cholesterol	All Participants	12 months	AGB	30		46 (28.7)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Lee 2016 27220823	Metabolic	Triglycerides (mg/dL)	Triglycerides	All Participants	0 months	SG	48		126.6 (61.9)	
Lee 2016 27220823	Metabolic	Triglycerides (mg/dL)	Triglycerides	All Participants	0 months	RYGB	84		110.9 (62.8)	
Lee 2016 27220823	Metabolic	Triglycerides (mg/dL)	Triglycerides	All Participants	0 months	AGB	30		126.3 (74.2)	
Lee 2016 27220823	Metabolic	Triglycerides (mg/dL)	Triglycerides	All Participants	6 months	SG	48		115.3 (109.9)	
Lee 2016 27220823	Metabolic	Triglycerides (mg/dL)	Triglycerides	All Participants	6 months	RYGB	84		117 (81.2)	
Lee 2016 27220823	Metabolic	Triglycerides (mg/dL)	Triglycerides	All Participants	6 months	AGB	30		112 (100.7)	
Lee 2016 27220823	Metabolic	Triglycerides (mg/dL)	Triglycerides	All Participants	12 months	SG	48		107.8 (79.8)	
Lee 2016 27220823	Metabolic	Triglycerides (mg/dL)	Triglycerides	All Participants	12 months	RYGB	84		105 (98.5)	
Lee 2016 27220823	Metabolic	Triglycerides (mg/dL)	Triglycerides	All Participants	12 months	AGB	30		114.4 (140.1)	
Yuan 2009 18996764	Metabolic	diabetes resolution	.	All Participants	1 years	Multiple surgeries	282	183/282 (64.9)		
Yuan 2009 18996764	Metabolic	diabetes resolution	.	males	1 years	Multiple surgeries	72	23/72 (31.3)		
Perry 2008 18156918	Metabolic	Diabetes (unspecified)	.	All Participants	.5 years	Multiple surgeries	9354	4349.61/9354 (46.5)		
Perry 2008 18156918	Metabolic	Diabetes (unspecified)	.	All Participants	.5 years	No surgery/Contr ols	9705.5	4639.229/9706 (47.8)		
Perry 2008 18156918	Metabolic	Diabetes (unspecified)	.	All Participants	1.0 years	Multiple surgeries	6690	2836.56/6690 (42.4)		
Perry 2008 18156918	Metabolic	Diabetes (unspecified)	.	All Participants	1.0 years	No surgery/Contr ols	6984.1	3380.3044/6984 (48.4)		
Perry 2008 18156918	Metabolic	Diabetes (unspecified)	.	All Participants	1.5 years	Multiple surgeries	4621	1765.222/4621 (38.2)		
Perry 2008 18156918	Metabolic	Diabetes (unspecified)	.	All Participants	1.5 years	No surgery/Contr ols	4250.8	2078.6412/4251 (48.9)		
Perry 2008 18156918	Metabolic	Diabetes (unspecified)	.	Over 65	.5 years	Multiple surgeries	1024	553.984/1024 (54.1)		
Perry 2008 18156918	Metabolic	Diabetes (unspecified)	.	Over 65	.5 years	No surgery/Contr ols	1054.1	564.9976/1054 (53.6)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Perry 2008 18156918	Metabolic	Diabetes (unspecified)	.	Over 65	1.0 years	Multiple surgeries	720	364.32/720 (50.6)		
Perry 2008 18156918	Metabolic	Diabetes (unspecified)	.	Over 65	1.0 years	No surgery/Contr ols	737.8	396.9364/738 (53.8)		
Perry 2008 18156918	Metabolic	Diabetes (unspecified)	.	Over 65	1.5 years	Multiple surgeries	476	221.816/476 (46.6)		
Perry 2008 18156918	Metabolic	Diabetes (unspecified)	.	Over 65	1.5 years	No surgery/Contr ols	489.9	264.0561/490 (53.9)		
Perry 2008 18156918	Metabolic	Hyperlipidemia	.	All Participants	.5 years	Multiple surgeries	9354	3348.732/9354 (35.8)		
Perry 2008 18156918	Metabolic	Hyperlipidemia	.	All Participants	.5 years	No surgery/Contr ols	9705.5	3862.789/9706 (39.8)		
Perry 2008 18156918	Metabolic	Hyperlipidemia	.	All Participants	1.0 years	Multiple surgeries	6690	2201.01/6690 (32.9)		
Perry 2008 18156918	Metabolic	Hyperlipidemia	.	All Participants	1.0 years	No surgery/Contr ols	6984.1	2828.5605/6984 (40.5)		
Perry 2008 18156918	Metabolic	Hyperlipidemia	.	All Participants	1.5 years	Multiple surgeries	4621	1349.332/4621 (29.2)		
Perry 2008 18156918	Metabolic	Hyperlipidemia	.	All Participants	1.5 years	No surgery/Contr ols	4743.9	1968.7185/4744 (41.5)		
Perry 2008 18156918	Metabolic	Hyperlipidemia	.	Over 65	.5 years	Multiple surgeries	1024	540.672/1024 (52.8)		
Perry 2008 18156918	Metabolic	Hyperlipidemia	.	Over 65	.5 years	No surgery/Contr ols	1054.1	560.7812/1054 (53.2)		
Perry 2008 18156918	Metabolic	Hyperlipidemia	.	Over 65	1.0 years	Multiple surgeries	720	347.04/720 (48.2)		
Perry 2008 18156918	Metabolic	Hyperlipidemia	.	Over 65	1.0 years	No surgery/Contr ols	737.8	397.6742/738 (53.9)		
Perry 2008 18156918	Metabolic	Hyperlipidemia	.	Over 65	1.5 years	Multiple surgeries	476	217.056/476 (45.6)		
Perry 2008 18156918	Metabolic	Hyperlipidemia	.	Over 65	1.5 years	No surgery/Contr	489.9	266.9955/490 (54.5)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
						ols				
Wagner 2007 17938305	Metabolic	Diabetes	.	All Participants	baseline	RYGB	38	18/38 (47.4)		
Wagner 2007 17938305	Metabolic	Diabetes	.	All Participants	baseline	No surgery/Contr ols	16	9/16 (56.3)		
Wagner 2007 17938305	Metabolic	Diabetes	.	All Participants	44 months	RYGB	38	11/38 (28.9)		
Wagner 2007 17938305	Metabolic	Diabetes	.	All Participants	44 months	No surgery/Contr ols	16	12/16 (75)		
Quebbemann 2005 16925254	Metabolic	diabetes	.	All Participants	0 years	Multiple surgeries	27	9/27 (33.3)		
Quebbemann 2005 16925254	Metabolic	diabetes	.	All Participants	1 years	Multiple surgeries	27	3/27 (11.1)		
Leonetti 2012 22508671	Metabolic	Triglycerides (mg/dL)	Triglycerides	All Participants	0 months	No surgery/Contr ols	30		199 (130)	
Leonetti 2012 22508671	Metabolic	Triglycerides (mg/dL)	Triglycerides	All Participants	0 months	SG	30		169 (64)	
Leonetti 2012 22508671	Metabolic	Triglycerides (mg/dL)	Triglycerides	All Participants	18 months	No surgery/Contr ols	30		173 (103)	
Leonetti 2012 22508671	Metabolic	Triglycerides (mg/dL)	Triglycerides	All Participants	18 months	SG	30		97 (48)	
Leonetti 2012 22508671	Metabolic	HDL Cholesterol (mg/dL)	High-density lipoproteins	All Participants	0 months	No surgery/Contr ols	30		46.6 (9.8)	
Leonetti 2012 22508671	Metabolic	HDL Cholesterol (mg/dL)	High-density lipoproteins	All Participants	0 months	SG	30		48.3 (13.5)	
Leonetti 2012 22508671	Metabolic	HDL Cholesterol (mg/dL)	High-density lipoproteins	All Participants	18 months	No surgery/Contr ols	30		48 (10.9)	
Leonetti 2012 22508671	Metabolic	HDL Cholesterol (mg/dL)	High-density lipoproteins	All Participants	18 months	SG	30		61 (16.4)	
Moon 2016 26220238	Metabolic	Improvement of DM	.	All Participants	nd	AGB	29	14/29 (48)		
Moon 2016 26220238	Metabolic	Improvement of DM	.	All Participants	nd	RYGB	108	20/108 (19)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Moon 2016 26220238	Metabolic	Improvement of DM	.	All Participants	nd	SG	35	4/35 (11)		
Moon 2016 26220238	Metabolic	Remission of DM	.	All Participants	nd	AGB	29	3/29 (10)		
Moon 2016 26220238	Metabolic	Remission of DM	.	All Participants	nd	RYGB	108	21/108 (19)		
Moon 2016 26220238	Metabolic	Remission of DM	.	All Participants	nd	SG	35	12/35 (34)		
Serrot 2011 22000180	Metabolic	Hyperlipidemia Medications	Percentage of patients taking fewer hyperlipidemia medications.	All Participants	0 years	No surgery/Contr ols	17	11/17 (64.7)		
Serrot 2011 22000180	Metabolic	Hyperlipidemia Medications	Percentage of patients taking fewer hyperlipidemia medications.	All Participants	0 years	RYGB	17	12/17 (70.6)		
Serrot 2011 22000180	Metabolic	Hyperlipidemia Medications	Percentage of patients taking fewer hyperlipidemia medications.	All Participants	1 years	No surgery/Contr ols	17	11/17 (64.7)		
Serrot 2011 22000180	Metabolic	Hyperlipidemia Medications	Percentage of patients taking fewer hyperlipidemia medications.	All Participants	1 years	RYGB	17	6/17 (35)		
Serrot 2011 22000180	Metabolic	Diabetes Medication	Percentage of patients taking fewer diabetes medication.	All Participants	0 years	No surgery/Contr ols	17	9/17 (52.9)		
Serrot 2011 22000180	Metabolic	Diabetes Medication	Percentage of patients taking fewer diabetes medication.	All Participants	0 years	RYGB	17	14/17 (82.3)		
Serrot 2011 22000180	Metabolic	Diabetes Medication	Percentage of patients taking fewer diabetes medication.	All Participants	1 years	No surgery/Contr ols	17	1/17 (6)		
Serrot 2011 22000180	Metabolic	Diabetes Medication	Percentage of patients taking fewer diabetes medication.	All Participants	1 years	RYGB	17	12/17 (71)		
Serrot 2011 22000180	Metabolic	LDL Cholesterol (mg/dL)	Low-density lipoprotein	All Participants	0 years	No surgery/Contr ols	17		86 (47)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Serrot 2011 22000180	Metabolic	LDL Cholesterol (mg/dL)	Low-density lipoprotein	All Participants	0 years	RYGB	17		95 (44)	
Serrot 2011 22000180	Metabolic	LDL Cholesterol (mg/dL)	Low-density lipoprotein	All Participants	1 years	No surgery/Contr ols	17		100 (66)	
Serrot 2011 22000180	Metabolic	LDL Cholesterol (mg/dL)	Low-density lipoprotein	All Participants	1 years	RYGB	17		92 (62)	
O'Keefe 2010 20532834	Metabolic	Waist/Hip Ratio	Patient waist to hip ratio	All Participants	0 months	SG	6		0.9 (0.1)	
O'Keefe 2010 20532834	Metabolic	Waist/Hip Ratio	Patient waist to hip ratio	All Participants	0 months	RYGB	153		0.9 (0.1)	
O'Keefe 2010 20532834	Metabolic	Waist/Hip Ratio	Patient waist to hip ratio	All Participants	0 months	AGB	34		1 (0.1)	
O'Keefe 2010 20532834	Metabolic	Waist/Hip Ratio	Patient waist to hip ratio	All Participants	6 months	SG	4		0.8 (0.1)	
O'Keefe 2010 20532834	Metabolic	Waist/Hip Ratio	Patient waist to hip ratio	All Participants	6 months	RYGB	128		0.9 (0.1)	
O'Keefe 2010 20532834	Metabolic	Waist/Hip Ratio	Patient waist to hip ratio	All Participants	6 months	AGB	20		0.9 (0.1)	
O'Keefe 2010 20532834	Metabolic	Waist/Hip Ratio	Patient waist to hip ratio	All Participants	1 years	SG	3		0.9 (0.1)	
O'Keefe 2010 20532834	Metabolic	Waist/Hip Ratio	Patient waist to hip ratio	All Participants	1 years	RYGB	119		0.9 (0.1)	
O'Keefe 2010 20532834	Metabolic	Waist/Hip Ratio	Patient waist to hip ratio	All Participants	1 years	AGB	11		0.9 (0.1)	
Abbas 2015 26001882	Metabolic	Hyperlipidemia	.	All Participants	0 years	Multiple surgeries	83	42/83 (50.6)		
Abbas 2015 26001882	Metabolic	Hyperlipidemia	.	All Participants	1 years	Multiple surgeries	83	39/83 (47)		
Abbas 2015 26001882	Metabolic	Hyperlipidemia improvement	.	All Participants	1 years	Multiple surgeries	42	31/42 (73.8)		
Abbas 2015 26001882	Metabolic	HgbA1C	.	All Participants	0 years	RYGB	53		6.9	
Abbas 2015 26001882	Metabolic	HgbA1C	.	All Participants	0 years	SG	30		6.7	
Abbas 2015 26001882	Metabolic	HgbA1C	.	All Participants	1 years	RYGB	25		6.1	
Abbas 2015 26001882	Metabolic	HgbA1C	.	All Participants	1 years	SG	11		6.1	
Abbas 2015 26001882	Metabolic	Diabetes improvement	.	All Participants	1 years	Multiple surgeries	53	17/53 (32.1)		
Abbas 2015 26001882	Metabolic	Diabetes	.	All Participants	0 years	Multiple	83	53/83 (63.9)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
						surgeries				
Abbas 2015 26001882	Metabolic	Diabetes	.	All Participants	1 years	Multiple surgeries	83	20/83 (24.1)		
Miranda 2013 23604694	Metabolic	Diabetes Mellitus	Patients with Diabetes Mellitus	All Participants	0 years	RYGB	13	10/13 (76.9)		
Miranda 2013 23604694	Metabolic	Diabetes Mellitus	Patients with Diabetes Mellitus	All Participants	0 years	No surgery/Contr ols	6	2/6 (33.3)		
Miranda 2013 23604694	Metabolic	Diabetes Mellitus	Patients with Diabetes Mellitus	All Participants	0 Follow Up	RYGB	13	6/13 (46.2)		
Miranda 2013 23604694	Metabolic	Diabetes Mellitus	Patients with Diabetes Mellitus	All Participants	0 Follow Up	No surgery/Contr ols	6	3/6 (50)		
Miranda 2013 23604694	Metabolic	Dyslipidemia	Patients with Dyslipidemia	All Participants	0 years	RYGB	13	11/13 (84.6)		
Miranda 2013 23604694	Metabolic	Dyslipidemia	Patients with Dyslipidemia	All Participants	0 years	No surgery/Contr ols	6	5/6 (83.3)		
Miranda 2013 23604694	Metabolic	Dyslipidemia	Patients with Dyslipidemia	All Participants	0 Follow Up	RYGB	13	8/13 (61.5)		
Miranda 2013 23604694	Metabolic	Dyslipidemia	Patients with Dyslipidemia	All Participants	0 Follow Up	No surgery/Contr ols	6	6/6 (100)		
Praveenraj 2016 27279392	Metabolic	Diabetes remission	patients who had normal fasting blood glucose (FBG) (≤ 110 mg/dL), who had a normal HbA1c, and who required no diabetic medications after surgery	All Participants	12 months	RYGB	32	25/32 (78.1)		
Praveenraj 2016 27279392	Metabolic	Diabetes remission	patients who had normal fasting blood glucose (FBG) (≤ 110 mg/dL), who had a normal HbA1c,	All Participants	12 months	SG	54	28/54 (51.9)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			and who required no diabetic medications after surgery							
Praveenraj 2016 27279392	Metabolic	Diabetes improvement	if there was significant improvement in FBG (by >25 mg/dL) or if there was a significant reduction of HbA1c (by >1%), or if there was a significant reduction in diabetes medication or dose (by discontinuing one agent or 1/2 reduction in dose)	All Participants	12 months	RYGB	32	23/32 (71.9)		
Praveenraj 2016 27279392	Metabolic	Diabetes improvement	if there was significant improvement in FBG (by >25 mg/dL) or if there was a significant reduction of HbA1c (by >1%), or if there was a significant reduction in diabetes medication or dose (by discontinuing one agent or 1/2 reduction in dose)	All Participants	12 months	SG	54	26/54 (48.1)		
Praveenraj 2016 27279392	Metabolic	TGs	.	All Participants	12 months	RYGB	32		127.7 (31.4)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Praveenraj 2016 27279392	Metabolic	TGs	.	All Participants	12 months	SG	54		106 (50.8)	
Praveenraj 2016 27279392	Metabolic	TGs	.	All Participants	0 months	RYGB	32		120.6 (52.7)	
Praveenraj 2016 27279392	Metabolic	TGs	.	All Participants	0 months	SG	54		127.2 (64.8)	
Praveenraj 2016 27279392	Metabolic	LDL	.	All Participants	12 months	RYGB	32		100 (50.2)	
Praveenraj 2016 27279392	Metabolic	LDL	.	All Participants	12 months	SG	54		113.8 (61.2)	
Praveenraj 2016 27279392	Metabolic	LDL	.	All Participants	0 months	RYGB	32		90.6 (48.4)	
Praveenraj 2016 27279392	Metabolic	LDL	.	All Participants	0 months	SG	54		105.2 (41.7)	
Praveenraj 2016 27279392	Metabolic	HDL	.	All Participants	12 months	RYGB	32		48 (13.6)	
Praveenraj 2016 27279392	Metabolic	HDL	.	All Participants	12 months	SG	54		37.1 (17.1)	
Praveenraj 2016 27279392	Metabolic	HDL	.	All Participants	0 months	RYGB	32		43.8 (11.6)	
Praveenraj 2016 27279392	Metabolic	HDL	.	All Participants	0 months	SG	54		46.1 (13.8)	
Praveenraj 2016 27279392	Metabolic	HbA1c	.	All Participants	12 months	RYGB	32		6.7 (1.7)	
Praveenraj 2016 27279392	Metabolic	HbA1c	.	All Participants	12 months	SG	54		6.2 (0.7)	
Praveenraj 2016 27279392	Metabolic	HbA1c	.	All Participants	0 months	RYGB	32		8.6 (1.9)	
Praveenraj 2016 27279392	Metabolic	HbA1c	.	All Participants	0 months	SG	54		7.6 (2.4)	
Praveenraj 2016	Metabolic	Cholesterol	.	All Participants	12 months	RYGB	32		175.5 (50.2)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
27279392										
Praveenraj 2016 27279392	Metabolic	Cholesterol	.	All Participants	12 months	SG	54		168.3 (82.9)	
Praveenraj 2016 27279392	Metabolic	Cholesterol	.	All Participants	0 months	RYGB	32		160.4 (54.1)	
Praveenraj 2016 27279392	Metabolic	Cholesterol	.	All Participants	0 months	SG	54		176.2 (44.5)	
Zaveri 2016 27795883	Metabolic	Diabetes	.	All Participants	0 months	SADS	15	7/15 (46.7)		
Zaveri 2016 27795883	Metabolic	Diabetes	.	All Participants	0 months	AGB	24	12/24 (50)		
Zaveri 2016 27795883	Metabolic	Diabetes	.	All Participants	0 months	RYGB	14	6/14 (42.9)		
Zaveri 2016 27795883	Metabolic	Diabetes	.	All Participants	18 months	SADS	15	0/15 (0)		
Zaveri 2016 27795883	Metabolic	Diabetes	.	All Participants	18 months	AGB	24	4/24 (16.7)		
Zaveri 2016 27795883	Metabolic	Diabetes	.	All Participants	18 months	RYGB	14	1/14 (7.1)		
Lemaître 2016 27063637	Metabolic	Diabetes	.	All Participants	0 years	SG	494	352/494 (71.3)		
Lemaître 2016 27063637	Metabolic	Diabetes	.	All Participants	2 years	SG	494	97/494 (19.6)		
Lemaître 2016 27063637	Metabolic	Dyslipidemia	.	All Participants	0 years	SG	494	356/494 (72.1)		
Lemaître 2016 27063637	Metabolic	Dyslipidemia	.	All Participants	2 years	SG	494	139/494 (28.1)		
Willkomm 2010 20870182	Metabolic	Resolution of diabetes mellitus	.	All Participants	nd months	RYGB	65	45/65 (69)		
Huang 2015 25859266	Metabolic	Fatty Liver Hepatitis	Patients with fatty liver hepatitis	All Participants	0 years	RYGB	44	26/44 (59.1)		
Huang 2015 25859266	Metabolic	Fatty Liver Hepatitis	Patients with fatty liver hepatitis	All Participants	0 years	SG	24	16/24 (66.7)		
Huang 2015 25859266	Metabolic	Fatty Liver Hepatitis	Patients with fatty liver hepatitis	All Participants	1 years	RYGB	44	6/44 (13.9)		
Huang 2015 25859266	Metabolic	Fatty Liver Hepatitis	Patients with fatty liver hepatitis	All Participants	1 years	SG	24	6/24 (25)		
Huang 2015	Metabolic	Hyperlipidemia	Patients with	All Participants	0 years	RYGB	44	16/44 (36.4)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
25859266			Hyperlipidemia							
Huang 2015 25859266	Metabolic	Hyperlipidemia	Patients with Hyperlipidemia	All Participants	0 years	SG	24	8/24 (33.3)		
Huang 2015 25859266	Metabolic	Hyperlipidemia	Patients with Hyperlipidemia	All Participants	1 years	RYGB	44	3/44 (7)		
Huang 2015 25859266	Metabolic	Hyperlipidemia	Patients with Hyperlipidemia	All Participants	1 years	SG	24	2/24 (20.8)		
Huang 2015 25859266	Metabolic	Type 2 Diabetes	Number of patients with type II diabetes	All Participants	0 years	RYGB	44	39/44 (88.6)		
Huang 2015 25859266	Metabolic	Type 2 Diabetes	Number of patients with type II diabetes	All Participants	0 years	SG	24	12/24 (50)		
Huang 2015 25859266	Metabolic	Type 2 Diabetes	Number of patients with type II diabetes	All Participants	1 years	RYGB	44	12/44 (27.3)		
Huang 2015 25859266	Metabolic	Type 2 Diabetes	Number of patients with type II diabetes	All Participants	1 years	SG	24	8/24 (33.3)		
Huang 2015 25859266	Metabolic	Fasting Blood Sugar	Mean fasting blood sugar	All Participants	0 years	RYGB	44		149.5 (67.1)	
Huang 2015 25859266	Metabolic	Fasting Blood Sugar	Mean fasting blood sugar	All Participants	0 years	SG	24		132.3 (47.7)	
Huang 2015 25859266	Metabolic	Fasting Blood Sugar	Mean fasting blood sugar	All Participants	1 years	RYGB	44		98.6 (12.8)	
Huang 2015 25859266	Metabolic	Fasting Blood Sugar	Mean fasting blood sugar	All Participants	1 years	SG	24		107.3 (18.5)	
Huang 2015 25859266	Metabolic	HbA1c	MEan HbA1c	All Participants	0 years	RYGB	44		7.8 (1.5)	
Huang 2015 25859266	Metabolic	HbA1c	MEan HbA1c	All Participants	0 years	SG	24		7.9 (1.4)	
Huang 2015 25859266	Metabolic	HbA1c	MEan HbA1c	All Participants	1 years	RYGB	44		6 (0.8)	
Huang 2015 25859266	Metabolic	HbA1c	MEan HbA1c	All Participants	1 years	SG	24		6.8 (1)	
Wittgrove 2009 19705206	Metabolic	Resolution of Comorbidity	Type II Diabetes	All Participants	0 days	RYGB	120	68/120 (57)		
Wittgrove 2009 19705206	Metabolic	Resolution of Comorbidity	Type II Diabetes	All Participants	90 days	RYGB	120	17/120 (14)		
Wittgrove 2009 19705206	Metabolic	Resolution of Comorbidity	Hypertriglyceridemia	All Participants	0 days	RYGB	120	60/120 (50)		
Wittgrove 2009 19705206	Metabolic	Resolution of Comorbidity	Hypertriglyceridemia	All Participants	90 days	RYGB	120	5/120 (4.2)		
Wittgrove 2009 19705206	Metabolic	Resolution of Comorbidity	Hypercholesterolemia	All Participants	0 days	RYGB	120	106/120 (88)		
Wittgrove 2009	Metabolic	Resolution of	Hypercholester	All Participants	90 days	RYGB	120	18/120 (15)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
19705206		Comorbidity	olemia							
Ramirez 2012 22551574	Metabolic	Hyperlipidemia Medications	Change in number of medications taken for Hyperlipidemia	All Participants	1 years	Multiple surgeries	42	19/42 (46)		
Ramirez 2012 22551574	Metabolic	Diabetes Mellitus Medications	change in number of medications taken for Diabetes Mellitus	All Participants	1 years	Multiple surgeries	42	19/42 (45)		
van Rutte 2013 23344504	Metabolic	T2DM: Improvement	.	55-59 yo	nd	SG	39	9/39 (21.9)		
van Rutte 2013 23344504	Metabolic	T2DM: Improvement	.	60-64 yo	nd	SG	27	10/27 (36)		
van Rutte 2013 23344504	Metabolic	T2DM: Improvement	.	>= 65 yo	nd	SG	7	5/7 (66.7)		
van Rutte 2013 23344504	Metabolic	T2DM: Remission	.	55-59 yo	nd	SG	39	24/39 (62.3)		
van Rutte 2013 23344504	Metabolic	T2DM: Remission	.	60-64 yo	nd	SG	27	7/27 (25.9)		
van Rutte 2013 23344504	Metabolic	T2DM: Remission	.	>= 65 yo	nd	SG	7	3/7 (42.9)		
van Rutte 2013 23344504	Metabolic	Dyslipidemia: Remission	.	55-59 yo	nd	SG	28	10/28 (35.7)		
van Rutte 2013 23344504	Metabolic	Dyslipidemia: Remission	.	60-64 yo	nd	SG	21	10/21 (47.6)		
van Rutte 2013 23344504	Metabolic	Dyslipidemia: Remission	.	>= 65 yo	nd	SG	7	2/7 (28.6)		
van Rutte 2013 23344504	Metabolic	Dyslipidemia: Improvement	.	55-59 yo	nd	SG	28	9/28 (33.3)		
van Rutte 2013 23344504	Metabolic	Dyslipidemia: Improvement	.	60-64 yo	nd	SG	21	8/21 (40)		
van Rutte 2013 23344504	Metabolic	Dyslipidemia: Improvement	.	>= 65 yo	nd	SG	7	4/7 (57.1)		
Clough 2011 20490708	Metabolic	Diabetes: mean number of meds	.	All Participants	median 22.5 months	AGB	35		0.43	
Clough 2011 20490708	Metabolic	Diabetes: mean number of meds	.	All Participants	0 months	AGB	35		0.35	
Clough 2011 20490708	Metabolic	Diabetes more meds	.	All Participants	median 22.5 months	AGB	35	7/35 (18.8)		
Clough 2011 20490708	Metabolic	Diabetes less meds	.	All Participants	median 22.5 months	AGB	35	15/35 (43.8)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Clough 2011 20490708	Metabolic	Diabetes deteriorated	.	All Participants	median 22.5 months	AGB	35	5/35 (12.9)		
Clough 2011 20490708	Metabolic	Diabetes improved	.	All Participants	median 22.5 months	AGB	35	26/35 (74.2)		
Clough 2011 20490708	Metabolic	Hyperlipidaemia improved	.	All Participants	median 22.5 months	AGB	50	26/50 (51.1)		
Clough 2011 20490708	Metabolic	Hyperlipidaemia: mean number of meds	.	All Participants	median 22.5 months	AGB	50		0.41	
Clough 2011 20490708	Metabolic	Hyperlipidaemia: mean number of meds	.	All Participants	0 months	AGB	50		0.42	
Clough 2011 20490708	Metabolic	Hyperlipidaemia more meds	.	All Participants	median 22.5 months	AGB	50	9/50 (17.8)		
Clough 2011 20490708	Metabolic	Hyperlipidaemia less meds	.	All Participants	median 22.5 months	AGB	50	5/50 (10.7)		
Clough 2011 20490708	Metabolic	Hyperlipidaemia deteriorated	.	All Participants	median 22.5 months	AGB	50	2/50 (4.3)		
McGlone 2015 26112136	Metabolic	hypercholesterolaemia	.	Morbidly obese (BMI<50)	0 months	Multiple surgeries	24	11/24 (45.8)		
McGlone 2015 26112136	Metabolic	hypercholesterolaemia	.	Morbidly obese (BMI<50)	33 months	Multiple surgeries	19	6/19 (31.6)		
McGlone 2015 26112136	Metabolic	hypercholesterolaemia	.	Super-obese (BMI≥50)	0 months	Multiple surgeries	26	10/26 (38.5)		
McGlone 2015 26112136	Metabolic	hypercholesterolaemia	.	Super-obese (BMI≥50)	33 months	Multiple surgeries	17	4/17 (23.5)		
McGlone 2015 26112136	Metabolic	hypercholesterolaemia	.	All Participants	0 months	Multiple surgeries	50	21/50 (42)		
McGlone 2015 26112136	Metabolic	hypercholesterolaemia	.	All Participants	33 months	Multiple surgeries	36	10/36 (27.8)		
McGlone 2015 26112136	Metabolic	Diabetes	.	Morbidly obese (BMI<50)	0 months	Multiple surgeries	24	12/24 (50)		
McGlone 2015 26112136	Metabolic	Diabetes	.	Morbidly obese (BMI<50)	33 months	Multiple surgeries	19	6/19 (31.6)		
McGlone 2015 26112136	Metabolic	Diabetes	.	Super-obese (BMI≥50)	0 months	Multiple surgeries	26	16/26 (61.5)		
McGlone 2015 26112136	Metabolic	Diabetes	.	Super-obese (BMI≥50)	33 months	Multiple surgeries	17	9/17 (52.9)		
McGlone 2015 26112136	Metabolic	Diabetes	.	All Participants	0 months	Multiple surgeries	50	28/50 (56)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
McGlone 2015 26112136	Metabolic	Diabetes	.	All Participants	33 months	Multiple surgeries	36	15/36 (41.7)		
Sosa 2004 15603658	Metabolic	hypercholesterolemia	.	All Participants	0 years	RYGB	23	5/23 (21.7)		
Sosa 2004 15603658	Metabolic	hypercholesterolemia	.	All Participants	1 years	RYGB	23	2/23 (8.7)		
Sosa 2004 15603658	Metabolic	Diabetes	.	All Participants	0 years	RYGB	23	4/23 (17.4)		
Sosa 2004 15603658	Metabolic	Diabetes	.	All Participants	1 years	RYGB	23	1/23 (4.3)		
Nagao 2014 24519024	Metabolic	LDL cholesterol	.	All Participants	0 months	SG	61		1.2 (0.4)	
Nagao 2014 24519024	Metabolic	LDL cholesterol	.	All Participants	6 months	SG	61		1.4 (0.7)	
Nagao 2014 24519024	Metabolic	LDL cholesterol	.	All Participants	12 months	SG	52		1.3 (0.4)	
Nagao 2014 24519024	Metabolic	LDL cholesterol	.	All Participants	24 years	SG	42		1.2 (0.4)	
Nagao 2014 24519024	Metabolic	HbA1c	.	All Participants	0 months	SG	61		6.5 (1.6)	
Nagao 2014 24519024	Metabolic	HbA1c	.	All Participants	12 months	SG	52		5.9 (0.4)	
Nagao 2014 24519024	Metabolic	HbA1c	.	All Participants	24 months	SG	42		6 (0.7)	
Nagao 2014 24519024	Metabolic	Total cholesterol	.	All Participants	0 months	SG	61		2 (0.6)	
Nagao 2014 24519024	Metabolic	Total cholesterol	.	All Participants	6 months	SG	61		2.1 (0.5)	
Nagao 2014 24519024	Metabolic	Total cholesterol	.	All Participants	12 months	SG	52		2 (0.5)	
Nagao 2014 24519024	Metabolic	Total cholesterol	.	All Participants	24 years	SG	42		2.1 (0.6)	
Nagao 2014 24519024	Metabolic	Fasting serum glucose	.	All Participants	0 months	SG	61		1.2 (0.3)	
Nagao 2014 24519024	Metabolic	Fasting serum glucose	.	All Participants	6 months	SG	61		1 (0.1)	
Nagao 2014 24519024	Metabolic	Fasting serum glucose	.	All Participants	12 months	SG	52		1 (0.2)	
Nagao 2014 24519024	Metabolic	Fasting serum glucose	.	All Participants	24 months	SG	42		1 (0.2)	
Nagao 2014 24519024	Metabolic	diabetes resolution rate	.	All Participants	12 months	SG	52	23/52 (44.4)		
Nagao 2014 24519024	Metabolic	diabetes resolution rate	.	All Participants	24 months	SG	42	17/42 (40.9)		
Nagao 2014 24519024	Metabolic	Triglycerides	.	All Participants	0 months	SG	61		1.7 (0.9)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Nagao 2014 24519024	Metabolic	Triglycerides	.	All Participants	6 months	SG	61		1.3 (0.6)	
Nagao 2014 24519024	Metabolic	Triglycerides	.	All Participants	12 months	SG	52		1.1 (0.4)	
Nagao 2014 24519024	Metabolic	Triglycerides	.	All Participants	24 years	SG	42		1.2 (0.5)	
Papasavas 2004 15479593	Metabolic	Hyperlipidemia	.	All Participants	0 months	RYGB	71	16/71 (24)		
Papasavas 2004 15479593	Metabolic	Hyperlipidemia	.	All Participants	12 months	RYGB	71	5/71 (7)		
Papasavas 2004 15479593	Metabolic	DM Type 2	Patients using oral agents	All Participants	0 months	RYGB	71	23/71 (34)		
Papasavas 2004 15479593	Metabolic	DM Type 2	Patients using oral agents	All Participants	12 months	RYGB	71	5/71 (7)		
Papasavas 2004 15479593	Metabolic	DM Type 2	.	All Participants	0 months	RYGB	71	30/71 (45)		
Papasavas 2004 15479593	Metabolic	DM Type 2	.	All Participants	12 months	RYGB	71	13/71 (19)		
Papasavas 2004 15479593	Metabolic	DM Type 2	Patients using insulin	All Participants	0 months	RYGB	71	18/71 (27)		
Papasavas 2004 15479593	Metabolic	DM Type 2	Patients using insulin	All Participants	12 months	RYGB	71	9/71 (13)		
Sugerman 2004 15273547	Metabolic	Diabetes	.	All Participants	0 years	Multiple surgeries	80	39/80 (49)		
Sugerman 2004 15273547	Metabolic	Diabetes	.	All Participants	1 years	Multiple surgeries	65	11/65 (17)		
Sugerman 2004 15273547	Metabolic	Diabetes	.	All Participants	5 years	Multiple surgeries	15	3/15 (19)		
Mizrahi 2014 24442420	Metabolic	Diabetes Mellitus II	.	All Participants	0 months	SG	52	31/52 (60)		
Mizrahi 2014 24442420	Metabolic	Diabetes Mellitus II	.	All Participants	24 months	SG	52	5/52 (9.6)		
Mizrahi 2014 24442420	Metabolic	Hyperlipidemia	.	All Participants	0 months	SG	52	40/52 (77)		
Mizrahi 2014 24442420	Metabolic	Hyperlipidemia	.	All Participants	24 months	SG	52	21/52 (40.4)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Maraka 2015 25611727	Metabolic	Number of lipid medications	.	Type 1 Diabetes	0 years	Multiple surgeries	10		1 (0.5)	
Maraka 2015 25611727	Metabolic	Number of lipid medications	.	Type 1 Diabetes	1 years	Multiple surgeries	9		0.6 (0.7)	
Maraka 2015 25611727	Metabolic	Number of lipid medications	.	Type 1 Diabetes	2 years	Multiple surgeries	9		0.5 (0.8)	
Maraka 2015 25611727	Metabolic	Number of lipid medications	.	Insulin-requiring type 2 diabetes mellitus	0 years	Multiple surgeries	118		1.1 (0.8)	
Maraka 2015 25611727	Metabolic	Number of lipid medications	.	Insulin-requiring type 2 diabetes mellitus	1 years	Multiple surgeries	102		0.6 (0.7)	
Maraka 2015 25611727	Metabolic	Number of lipid medications	.	Insulin-requiring type 2 diabetes mellitus	2 years	Multiple surgeries	63		0.6 (0.6)	
Maraka 2015 25611727	Metabolic	LDL	.	Insulin-requiring type 2 diabetes mellitus	0 years	Multiple surgeries	118		89 (30)	
Maraka 2015 25611727	Metabolic	LDL	.	Insulin-requiring type 2 diabetes mellitus	1 years	Multiple surgeries	102		86 (32)	
Maraka 2015 25611727	Metabolic	LDL	.	Insulin-requiring type 2 diabetes mellitus	2 years	Multiple surgeries	63		84 (29)	
Maraka 2015 25611727	Metabolic	LDL	.	Type 1 Diabetes	0 years	Multiple surgeries	10		88 (24)	
Maraka 2015 25611727	Metabolic	LDL	.	Type 1 Diabetes	1 years	Multiple surgeries	9		72 (20)	
Maraka 2015 25611727	Metabolic	LDL	.	Type 1 Diabetes	2 years	Multiple surgeries	9		80 (20)	
Maraka 2015 25611727	Metabolic	Total cholesterol	.	Type 1 Diabetes	0 years	Multiple surgeries	10		163 (24)	
Maraka 2015 25611727	Metabolic	Total cholesterol	.	Type 1 Diabetes	1 years	Multiple surgeries	9		150 (25)	
Maraka 2015 25611727	Metabolic	Total cholesterol	.	Type 1 Diabetes	2 years	Multiple surgeries	9		170 (40)	
Maraka 2015 25611727	Metabolic	Total cholesterol	.	Insulin-requiring type	0 years	Multiple	118		174 (49)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
				2 diabetes mellitus		surgeries				
Maraka 2015 25611727	Metabolic	Total cholesterol	.	Insulin-requiring type 2 diabetes mellitus	1 years	Multiple surgeries	109		160 (38)	
Maraka 2015 25611727	Metabolic	Total cholesterol	.	Insulin-requiring type 2 diabetes mellitus	2 years	Multiple surgeries	63		163 (35)	
Maraka 2015 25611727	Metabolic	HDL	.	Insulin-requiring type 2 diabetes mellitus	0 years	Multiple surgeries	118		40 (11)	
Maraka 2015 25611727	Metabolic	HDL	.	Insulin-requiring type 2 diabetes mellitus	1 years	Multiple surgeries	102		48 (12)	
Maraka 2015 25611727	Metabolic	HDL	.	Insulin-requiring type 2 diabetes mellitus	2 years	Multiple surgeries	63		50 (11)	
Maraka 2015 25611727	Metabolic	HDL	.	Type 1 Diabetes	0 years	Multiple surgeries	10		51 (13)	
Maraka 2015 25611727	Metabolic	HDL	.	Type 1 Diabetes	1 years	Multiple surgeries	9		58 (10)	
Maraka 2015 25611727	Metabolic	HDL	.	Type 1 Diabetes	2 years	Multiple surgeries	9		66 (16)	
Maraka 2015 25611727	Metabolic	Triglycerides	.	Type 1 Diabetes	0 years	Multiple surgeries	10		119 (32)	
Maraka 2015 25611727	Metabolic	Triglycerides	.	Type 1 Diabetes	1 years	Multiple surgeries	9		97 (42)	
Maraka 2015 25611727	Metabolic	Triglycerides	.	Type 1 Diabetes	2 years	Multiple surgeries	9		116 (44)	
Maraka 2015 25611727	Metabolic	Triglycerides	.	Insulin-requiring type 2 diabetes mellitus	0 years	Multiple surgeries	118			(144, 245)
Maraka 2015 25611727	Metabolic	Triglycerides	.	Insulin-requiring type 2 diabetes mellitus	1 years	Multiple surgeries	102			(90, 157)
Maraka 2015 25611727	Metabolic	Triglycerides	.	Insulin-requiring type 2 diabetes	2 years	Multiple surgeries	63			(94, 185)

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
				mellitus						
Maraka 2015 25611727	Metabolic	HbA1c	.	Insulin-requiring type 2 diabetes mellitus	0 years	Multiple surgeries	118		7.8 (1.4)	
Maraka 2015 25611727	Metabolic	HbA1c	.	Insulin-requiring type 2 diabetes mellitus	1 years	Multiple surgeries	102		6.5 (1.3)	
Maraka 2015 25611727	Metabolic	HbA1c	.	Insulin-requiring type 2 diabetes mellitus	2 years	Multiple surgeries	63		6.8 (1.4)	
Maraka 2015 25611727	Metabolic	HbA1c	.	Type 1 Diabetes	0 years	Multiple surgeries	10		8.2 (1.6)	
Maraka 2015 25611727	Metabolic	HbA1c	.	Type 1 Diabetes	1 years	Multiple surgeries	9		8.3 (1.3)	
Maraka 2015 25611727	Metabolic	HbA1c	.	Type 1 Diabetes	2 years	Multiple surgeries	9		7.8 (0.9)	
Michaud 2016 26130180	Metabolic	HbA1c	.	All Participants	0 years	BPD-DS	105		6.8 (1.2)	
Michaud 2016 26130180	Metabolic	HbA1c	.	All Participants	7.1 years	BPD-DS	102		5.2 (0.7)	
Michaud 2016 26130180	Metabolic	Diabetes unchanged	.	All Participants	7.1 years	BPD-DS	60	1/60 (1.7)		
Michaud 2016 26130180	Metabolic	Diabetes improved	.	All Participants	7.1 years	BPD-DS	60	5/60 (8.3)		
Michaud 2016 26130180	Metabolic	Diabetes cured	.	All Participants	7.1 years	BPD-DS	60	50/60 (83.3)		
Loy 2014 24582414	Metabolic	Dyslipidemia	.	All Participants	0 years	AGB	55	40/55 (73)		
Loy 2014 24582414	Metabolic	Dyslipidemia	.	All Participants	8 years	AGB	55	29/55 (52.7)		
Loy 2014 24582414	Metabolic	Type 2 diabetes	Combined insulin-dependent and non-insulin-dependent patients.	All Participants	0 years	AGB	55	27/55 (49.1)		
Loy 2014 24582414	Metabolic	Type 2 diabetes	Combined insulin-dependent and non-insulin-dependent patients.	All Participants	8 years	AGB	55	19/55 (34.5)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Dunkle-Blatter 2007 17331804	Metabolic	Improvement in Diabetes	.	All Participants	After surgery	RYGB	61	60/61 (97.7)		
Dunkle-Blatter 2007 17331804	Metabolic	Diabetes	.	All Participants	After surgery	RYGB	61	28/61 (46.5)		
Freeman 2015 25708829	Metabolic	Hemoglobin A1c	.	All Participants	Before Surgery	SG	52		6.8 (1.6)	
Freeman 2015 25708829	Metabolic	Hemoglobin A1c	.	All Participants	After Surgery	SG	52		5.8 (1.6)	
Freeman 2015 25708829	Metabolic	Diabetes mellitus	.	All Participants	Before Surgery	SG	52	28/52 (53.8)		
Freeman 2015 25708829	Metabolic	Diabetes mellitus	.	All Participants	After Surgery	SG	52	15/52 (28.8)		
Busetto 2008 18239641	Metabolic	Dyslipidemia	total cholesterol > 5.2 mmol/L, HDL <0.9 mmol/L, triglycerides >2.2 mmol/L or use of hypolipidemic drugs. improvement = normalization of lipid levels or reduction of hypolipidemic medication.	All Participants	0 years	AGB	216	26/216 (11.9)		
Busetto 2008 18239641	Metabolic	Dyslipidemia	total cholesterol > 5.2 mmol/L, HDL <0.9 mmol/L, triglycerides >2.2 mmol/L or use of hypolipidemic drugs. improvement = normalization of lipid levels or reduction of hypolipidemic medication.	All Participants	1 years	AGB	202	16/202 (7.4)		
Busetto 2008 18239641	Metabolic	type II diabetes	fasting plasma glucose >=7.0	All Participants	0 years	AGB	216	46/216 (21.1)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			mmol/L or use of antidiabetic drug. improvement = normalization of blood glucose or reduction of medication.							
Busetto 2008 18239641	Metabolic	type II diabetes	fasting plasma glucose ≥ 7.0 mmol/L or use of antidiabetic drug. improvement = normalization of blood glucose or reduction of medication.	All Participants	1 years	AGB	202	0/202 (0)		
Giordano 2014 24318411	Metabolic	type II diabetes	Hb1Ac $>7\%$	All Participants	0 months	RYGB	132	83/132 (62.9)		
Giordano 2014 24318411	Metabolic	type II diabetes	Hb1Ac $>7\%$	All Participants	24 months	RYGB	132	61/132 (46.2)		
Luppi 2015 25088486	Metabolic	Daily Hyperlipidemia Medications	.	All Participants	0 years	SG	28		0.6	
Luppi 2015 25088486	Metabolic	Daily Hyperlipidemia Medications	.	All Participants	1 years	SG	28		0.5	
Luppi 2015 25088486	Metabolic	Daily Hyperlipidemia Medications	.	All Participants	2 years	SG	28		0.5	
Luppi 2015 25088486	Metabolic	Diabetes	.	All Participants	0 years	SG	28	12/28 (42.9)		
Luppi 2015 25088486	Metabolic	Diabetes	.	All Participants	1 years	SG	28	5/28 (17.9)		
Luppi 2015 25088486	Metabolic	Diabetes	.	All Participants	2 years	SG	28	3/28 (10.7)		
Luppi 2015 25088486	Metabolic	Hyperlipidemia	.	All Participants	0 years	SG	28	20/28 (71.4)		
Luppi 2015 25088486	Metabolic	Hyperlipidemia	.	All Participants	1 years	SG	28	12/28 (42.3)		
Luppi 2015 25088486	Metabolic	Hyperlipidemia	.	All Participants	2 years	SG	28	6/28 (21.4)		
Luppi 2015 25088486	Metabolic	Daily Diabetes Medications	.	All Participants	0 years	SG	28		0.6	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Luppi 2015 25088486	Metabolic	Daily Diabetes Medications	.	All Participants	1 years	SG	28		0.3	
Luppi 2015 25088486	Metabolic	Daily Diabetes Medications	.	All Participants	2 years	SG	28		0.2	
Wool 2009 18855082	Metabolic	Diabetes resolution or improvement	.	All Participants	1 years	Multiple surgeries	40	35/40 (87.5)		
Wool 2009 18855082	Metabolic	Diabetes resolution or improvement	.	50-59 yo	1 years	Multiple surgeries	30	26/30 (86.7)		
Wool 2009 18855082	Metabolic	Diabetes resolution or improvement	.	60-66 yo	1 years	Multiple surgeries	10	9/10 (90)		
Soto 2013 23733390	Metabolic	Resolution of Hyperlipidemia	.	All Participants	Preoperative	SG	35	9/35 (25.7)		
Soto 2013 23733390	Metabolic	Resolution of Hyperlipidemia	.	All Participants	Postoperative	SG	35	3/35 (8.6)		
Soto 2013 23733390	Metabolic	Resolution of Diabetes Mellitus	.	All Participants	Preoperative	SG	35	10/35 (28.6)		
Soto 2013 23733390	Metabolic	Resolution of Diabetes Mellitus	.	All Participants	Postoperative	SG	35	2/35 (5.7)		
Yuan 2009 18996764	Mortality	mortality	.	males	1 years	Multiple surgeries	72	4/72 (5.6)		
Yuan 2009 18996764	Mortality	mortality	.	All Participants	1 years	Multiple surgeries	282	11/282 (3.9)		
Perry 2008 18156918	Mortality	Mortality	.	Over 65	2 years	Multiple surgeries	1310	104.8/1310 (8)		
Perry 2008 18156918	Mortality	Mortality	.	Over 65	2 years	No surgery/Contr ols	1310.2	159.8444/1310 (12.2)		
O'Keefe 2010 20532834	Mortality	Mortality	Mortality	All Participants	1 years	SG	6	0/6 (0)		
O'Keefe 2010 20532834	Mortality	Mortality	Mortality	All Participants	1 years	RYGB	157	2/157 (1.3)		
O'Keefe 2010 20532834	Mortality	Mortality	Mortality	All Participants	1 years	AGB	34	0/34 (0)		
Johnson 2012 22643265	Mortality	Mortality	.	All Participants	28-35 months	Multiple surgeries	349	349/19 (5.4)		
Johnson 2012 22643265	Mortality	Mortality	.	All Participants	28-35 months	No surgery/Contr ols	903	903/150 (16.6)		
Johnson 2012	Mortality	non-	.	All Participants	1 years	Multiple	349		2 (1)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
22643265		cardiovascular mortality rate	.			surgeries				
Johnson 2012 22643265	Mortality	non-cardiovascular mortality rate	.	All Participants	1 years	No surgery/Contr ols	903		3 (1)	
Johnson 2012 22643265	Mortality	non-cardiovascular mortality rate	.	All Participants	3 years	Multiple surgeries	349		3 (1)	
Johnson 2012 22643265	Mortality	non-cardiovascular mortality rate	.	All Participants	3 years	No surgery/Contr ols	903		8 (1)	
Johnson 2012 22643265	Mortality	non-cardiovascular mortality rate	.	All Participants	5 years	Multiple surgeries	349		4 (1)	
Johnson 2012 22643265	Mortality	non-cardiovascular mortality rate	.	All Participants	5 years	No surgery/Contr ols	903		12 (1)	
Johnson 2012 22643265	Mortality	Mortality rate	.	All Participants	1 years	Multiple surgeries	349		3 (1)	
Johnson 2012 22643265	Mortality	Mortality rate	.	All Participants	1 years	No surgery/Contr ols	903		4 (1)	
Johnson 2012 22643265	Mortality	Mortality rate	.	All Participants	5 years	Multiple surgeries	349		7 (2)	
Johnson 2012 22643265	Mortality	Mortality rate	.	All Participants	5 years	No surgery/Contr ols	903		19 (2)	
Johnson 2012 22643265	Mortality	Mortality rate	.	All Participants	3 years	Multiple surgeries	349		5 (1)	
Johnson 2012 22643265	Mortality	Mortality rate	.	All Participants	3 years	No surgery/Contr ols	903		12 (1)	
Johnson 2012 22643265	Mortality	cardiovascular mortality rate	.	All Participants	1 years	Multiple surgeries	349		2 (1)	
Johnson 2012 22643265	Mortality	cardiovascular mortality rate	.	All Participants	1 years	No surgery/Contr ols	903		2 (0)	
Johnson 2012 22643265	Mortality	cardiovascular mortality rate	.	All Participants	3 years	Multiple surgeries	349		2 (1)	
Johnson 2012 22643265	Mortality	cardiovascular mortality rate	.	All Participants	3 years	No surgery/Contr	903		5 (1)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
						ols				
Johnson 2012 22643265	Mortality	cardiovascular mortality rate	.	All Participants	5 years	Multiple surgeries	349		3 (1)	
Johnson 2012 22643265	Mortality	cardiovascular mortality rate	.	All Participants	5 years	No surgery/Contr ols	903		7 (1)	
Johnson 2012 22643265	Mortality	Cardiovascular mortality	.	All Participants	28-35 months	Multiple surgeries	349	8/349 (2.3)		
Johnson 2012 22643265	Mortality	Cardiovascular mortality	.	All Participants	28-35 months	No surgery/Contr ols	903	60/903 (6.6)		
Flum 2005 16234496	Mortality	Mortality	.	revision surgery	1 years	Multiple surgeries	1225	53/1225 (4.3)		
Flum 2005 16234496	Mortality	Mortality	.	primary surgery	1 years	Multiple surgeries	14930	687/14930 (4.6)		
Flum 2005 16234496	Mortality	Mortality	.	<65	1 years	Multiple surgeries	14638	571/14638 (3.9)		
Flum 2005 16234496	Mortality	Mortality	.	>= 65	1 years	Multiple surgeries	1517	168/1517 (11.1)		
Flum 2005 16234496	Mortality	Mortality	.	Men	1 years	Multiple surgeries	3912	293/3912 (7.5)		
Flum 2005 16234496	Mortality	Mortality	.	Women	1 years	Multiple surgeries	12243	453/12243 (3.7)		
Sugerman 2004 15273547	Mortality	mortality	.	All Participants	1.5-10 years	Multiple surgeries	65	10/65 (15.4)		
Michaud 2016 26130180	Mortality	mortality	.	All Participants	7.1 years	BPD-DS	102	9/102 (8.6)		
Loy 2014 24582414	Mortality	Death	.	All Participants	8 years	AGB	55	1/55 (1.8)		
Mittermair 2008 18830777	Mortality	mortality	.	All Participants	7 years	AGB	134	0/134 (0)		
Valderas 2009 19517199	Musculoskeletal/Orthopedic	ALP (UI/L)	total alkaline phosphatases	All Participants	3.5 years	No surgery/Contr ols	26		94 (25)	
Valderas 2009 19517199	Musculoskeletal/Orthopedic	ALP (UI/L)	total alkaline phosphatases	All Participants	3.5 years	RYGB	26		101 (22)	
Valderas 2009 19517199	Musculoskeletal/Orthopedic	Femoral Neck BMD (g/cm2)	Femoral neck bone mineral density.	All Participants	3.5 years	No surgery/Contr ols	26		0.9 (0.1)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Valderas 2009 19517199	Musculoskeletal/Orthopedic	Femoral Neck BMD (g/cm2)	Femoral neck bone mineral density.	All Participants	3.5 years	RYGB	26		0.9 (0.1)	
Valderas 2009 19517199	Musculoskeletal/Orthopedic	Lumbar Spine BMD (g/cm2)	Lumbar spine bone mineral density	All Participants	3.5 years	No surgery/Controls	26		1.1 (0.2)	
Valderas 2009 19517199	Musculoskeletal/Orthopedic	Lumbar Spine BMD (g/cm2)	Lumbar spine bone mineral density	All Participants	3.5 years	RYGB	26		1.1 (0.1)	
Valderas 2009 19517199	Musculoskeletal/Orthopedic	PTH (pg/ml)	parathyroid hormone	All Participants	3.5 years	No surgery/Controls	26		49.4 (16)	
Valderas 2009 19517199	Musculoskeletal/Orthopedic	PTH (pg/ml)	parathyroid hormone	All Participants	3.5 years	RYGB	26		68.3 (35)	
Ramirez 2012 22551574	Musculoskeletal/Orthopedic	Degenerative Joint Disease Medications	Change in number of patients taking medications for Degenerative Joint Disease	All Participants	1 years	Multiple surgeries	42	14/42 (34)		
Papasavas 2004 15479593	Musculoskeletal/Orthopedic	DJD	degenerative joint disease	All Participants	0 months	RYGB	71	26/71 (39)		
Papasavas 2004 15479593	Musculoskeletal/Orthopedic	DJD	degenerative joint disease	All Participants	12 months	RYGB	71	13/71 (19)		
Sugerman 2004 15273547	Musculoskeletal/Orthopedic	degenerative joint and back disease	.	All Participants	0 years	Multiple surgeries	80	71/80 (89)		
Sugerman 2004 15273547	Musculoskeletal/Orthopedic	degenerative joint and back disease	.	All Participants	1 years	Multiple surgeries	65	29/65 (44)		
Sugerman 2004 15273547	Musculoskeletal/Orthopedic	degenerative joint and back disease	.	All Participants	5 years	Multiple surgeries	15	4/15 (25)		
Mizrahi 2014 24442420	Musculoskeletal/Orthopedic	Arthralgia	.	All Participants	0 months	SG	52	12/52 (23)		
Mizrahi 2014 24442420	Musculoskeletal/Orthopedic	Arthralgia	.	All Participants	24 months	SG	52	11/52 (21.2)		
Busetto 2008 18239641	Musculoskeletal/Orthopedic	Osteoarthritis	presence of chronic pain at weight bearing joints with or without use of medication.	All Participants	0 years	AGB	216	83/216 (38.8)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Busetto 2008 18239641	Musculoskeletal/Orthopedic	Osteoarthritis	improvement = significant reduction in pain or use of pain medication presence of chronic pain at weight bearing joints with or without use of medication. improvement = significant reduction in pain or use of pain medication	All Participants	1 years	AGB	202	54/202 (25)		
Mozer 2015 25832986	Operative characteristics	Procedure duration	.	All Participants	at time of procedure	SG	23		101 (48.3)	
Mozer 2015 25832986	Operative characteristics	Procedure duration	.	All Participants	at time of procedure	RYGB	68		124 (48.4)	
Mozer 2015 25832986	Operative characteristics	Procedure duration	.	All Participants	at time of procedure	AGB	47		77 (28.8)	
Michaud 2016 26130180	Operative characteristics	operative time	.	All Participants	30 days	BPD-DS	105		178.6 (46.7)	
Huang 2015 25859266	Operative parameters	AE: Operative Time	Mean Operative time	All Participants	0 years	RYGB	44		104 (62.8)	
Huang 2015 25859266	Operative parameters	AE: Operative Time	Mean Operative time	All Participants	0 years	SG	24		70 (28.8)	
Wagner 2007 17938305	Orthopedic/Musculoskeletal	Degenerative joint disease	.	All Participants	baseline	RYGB	38	26/38 (68.4)		
Wagner 2007 17938305	Orthopedic/Musculoskeletal	Degenerative joint disease	.	All Participants	baseline	No surgery/Controls	16	10/16 (62.5)		
Wagner 2007 17938305	Orthopedic/Musculoskeletal	Degenerative joint disease	.	All Participants	44 months	RYGB	38	21/38 (55.3)		
Wagner 2007 17938305	Orthopedic/Musculoskeletal	Degenerative joint disease	.	All Participants	44 months	No surgery/Controls	16	12/16 (75)		
Lee 2016 27220823	Overall medication	Reduction in number of medications	Reduction in number of medications	All Participants	6 months	SG	48		1.7 (2.9)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	use									
Lee 2016 27220823	Overall medication use	Reduction in number of medications	Reduction in number of medications	All Participants	6 months	RYGB	84		2.8 (3.4)	
Lee 2016 27220823	Overall medication use	Reduction in number of medications	Reduction in number of medications	All Participants	6 months	AGB	30		1.3 (2.9)	
Lee 2016 27220823	Overall medication use	Reduction in number of medications	Reduction in number of medications	All Participants	12 months	SG	48		1.8 (3.2)	
Lee 2016 27220823	Overall medication use	Reduction in number of medications	Reduction in number of medications	All Participants	12 months	RYGB	84		3.2 (3.3)	
Lee 2016 27220823	Overall medication use	Reduction in number of medications	Reduction in number of medications	All Participants	12 months	AGB	30		1.1 (2.8)	
Quebbemann 2005 16925254	Overall medication use	number of medications	.	All Participants	0 years	AGB	14		4.6	
Quebbemann 2005 16925254	Overall medication use	number of medications	.	All Participants	0 years	RYGB	13		5.5	
Quebbemann 2005 16925254	Overall medication use	number of medications	.	All Participants	1 years	AGB	14		4.1	
Quebbemann 2005 16925254	Overall medication use	number of medications	.	All Participants	1 years	RYGB	13		3.2	
O'Keefe 2010 20532834	Overall medication use	Number of Daily Medications	Number of daily medications taken by patients.	All Participants	0 months	SG	6		9.7 (2.8)	
O'Keefe 2010 20532834	Overall medication use	Number of Daily Medications	Number of daily medications taken by patients.	All Participants	0 months	RYGB	157		8 (3.7)	
O'Keefe 2010 20532834	Overall medication use	Number of Daily Medications	Number of daily medications	All Participants	0 months	AGB	34		8.2 (3.7)	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
O'Keefe 2010 20532834	Overall medication use	Number of Daily Medications	taken by patients. Number of daily medications taken by patients.	All Participants	6 months	SG	5		7.6 (2.3)	
O'Keefe 2010 20532834	Overall medication use	Number of Daily Medications	Number of daily medications taken by patients.	All Participants	6 months	RYGB	140		4.6 (2.8)	
O'Keefe 2010 20532834	Overall medication use	Number of Daily Medications	Number of daily medications taken by patients.	All Participants	6 months	AGB	32		6.4 (3.5)	
O'Keefe 2010 20532834	Overall medication use	Number of Daily Medications	Number of daily medications taken by patients.	All Participants	1 years	SG	4		8.3 (2.2)	
O'Keefe 2010 20532834	Overall medication use	Number of Daily Medications	Number of daily medications taken by patients.	All Participants	1 years	RYGB	125		4.4 (2.8)	
O'Keefe 2010 20532834	Overall medication use	Number of Daily Medications	Number of daily medications taken by patients.	All Participants	1 years	AGB	22		6.7 (4.5)	
Miranda 2013 23604694	Overall medication use	Number of Daily Medications	Number of medications taken daily by patients.	All Participants	0 years	RYGB	13	3/13 (23.1)		
Miranda 2013 23604694	Overall medication use	Number of Daily Medications	Number of medications taken daily by patients.	All Participants	0 years	No surgery/Contr ols	6	3/6 (50)		
Miranda 2013 23604694	Overall medication use	Number of Daily Medications	Number of medications taken daily by patients.	All Participants	0 Follow Up	RYGB	13	3/13 (23.1)		
Miranda 2013 23604694	Overall medication use	Number of Daily Medications	Number of medications taken daily by patients.	All Participants	0 Follow Up	No surgery/Contr ols	6	4/6 (66.7)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			patients.							
Dunkle-Blatter 2007 17331804	Overall medication use	Number of medications	.	All Participants	Baseline	RYGB	61	#VALUE!	10	
Dunkle-Blatter 2007 17331804	Overall medication use	Number of medications	.	All Participants	After Surgery	RYGB	61	#VALUE!	5	
Luppi 2015 25088486	Overall medication use	Total Daily Medications	.	All Participants	0 years	SG	28		4.3	
Luppi 2015 25088486	Overall medication use	Total Daily Medications	.	All Participants	1 years	SG	28		2.7	
Luppi 2015 25088486	Overall medication use	Total Daily Medications	.	All Participants	2 years	SG	28		2.9	
Wagner 2007 17938305	Psychiatric	psychiatric disorders	.	All Participants	baseline	RYGB	38	19/38 (50)		
Wagner 2007 17938305	Psychiatric	psychiatric disorders	.	All Participants	baseline	No surgery/Contr ols	16	5/16 (31.3)		
Wagner 2007 17938305	Psychiatric	psychiatric disorders	.	All Participants	44 months	RYGB	38	18/38 (47.4)		
Wagner 2007 17938305	Psychiatric	psychiatric disorders	.	All Participants	44 months	No surgery/Contr ols	16	9/16 (56.3)		
Miranda 2013 23604694	Psychiatric	Depression	Patients with depression	All Participants	0 years	RYGB	13	5/13 (38.5)		
Miranda 2013 23604694	Psychiatric	Depression	Patients with depression	All Participants	0 years	No surgery/Contr ols	6	3/6 (50)		
Miranda 2013 23604694	Psychiatric	Depression	Patients with depression	All Participants	0 Follow Up	RYGB	13	6/13 (46.2)		
Miranda 2013 23604694	Psychiatric	Depression	Patients with depression	All Participants	0 Follow Up	No surgery/Contr ols	6	5/6 (83.3)		
Clough 2011 20490708	Psychiatric	Percentage of patients on antidepressants	.	All Participants	median 22.5 months	AGB	113	18/113 (16.3)		
Clough 2011	Psychiatric	Percentage of	.	All Participants	0 months	AGB	113	24/113 (21)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
20490708		patients on antidepressants								
Clough 2011 20490708	Psychiatric	Improvement of Depression	rated as better or much better by patients	All Participants	median 22.5 months	AGB	113	41/113 (35.9)		
Papasavas 2004 15479593	Psychiatric	Psychiatric disease	.	All Participants	0 months	RYGB	71	19/71 (28)		
Papasavas 2004 15479593	Psychiatric	Psychiatric disease	.	All Participants	12 months	RYGB	71	12/71 (18)		
Loy 2014 24582414	Psychiatric	Depression	.	All Participants	0 years	AGB	55	14/55 (25)		
Loy 2014 24582414	Psychiatric	Depression	.	All Participants	8 years	AGB	55	10/55 (18.2)		
Loy 2014 24582414	Psychiatric	Anxiety	.	All Participants	0 years	AGB	55	14/55 (25)		
Loy 2014 24582414	Psychiatric	Anxiety	.	All Participants	8 years	AGB	55	10/55 (18.2)		
Clough 2011 20490708	Re-operation	Total re-operations related to banding	.	All Participants	median: 22.5 months	AGB	113	17/113 (15)		
Sugerman 2004 15273547	Re-operation	re-operation	due to lack of weight loss	All Participants	up to 10 years	Multiple surgeries	80	1/80 (1.3)		
Perry 2008 18156918	Respiratory	Sleep apnea	.	All Participants	.5 years	Multiple surgeries	9354	3395.502/9354 (36.3)		
Perry 2008 18156918	Respiratory	Sleep apnea	.	All Participants	.5 years	No surgery/Controls	9705.5	2746.6565/9706 (28.3)		
Perry 2008 18156918	Respiratory	Sleep apnea	.	All Participants	1.0 years	Multiple surgeries	6690	2000.31/6690 (29.9)		
Perry 2008 18156918	Respiratory	Sleep apnea	.	All Participants	1.0 years	No surgery/Controls	6984.1	2018.4049/6984 (28.9)		
Perry 2008 18156918	Respiratory	Sleep apnea	.	All Participants	1.5 years	Multiple surgeries	4621	1206.081/4621 (26.1)		
Perry 2008 18156918	Respiratory	Sleep apnea	.	All Participants	1.5 years	No surgery/Controls	4743.9	1375.731/4744 (29)		
Perry 2008 18156918	Respiratory	Sleep apnea	.	Over 65	.5 years	Multiple surgeries	1024	337.92/1024 (33)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Perry 2008 18156918	Respiratory	Sleep apnea	.	Over 65	.5 years	No surgery/Contr ols	1054.1	242.443/1054 (23)		
Perry 2008 18156918	Respiratory	Sleep apnea	.	Over 65	1.0 years	Multiple surgeries	720	185.04/720 (25.7)		
Perry 2008 18156918	Respiratory	Sleep apnea	.	Over 65	1.0 years	No surgery/Contr ols	737.8	168.9562/738 (22.9)		
Perry 2008 18156918	Respiratory	Sleep apnea	.	Over 65	1.5 years	Multiple surgeries	476	92.82/476 (19.5)		
Perry 2008 18156918	Respiratory	Sleep apnea	.	Over 65	1.5 years	No surgery/Contr ols	489.9	112.1871/490 (22.9)		
Wagner 2007 17938305	Respiratory	sleep apnea	.	All Participants	baseline	RYGB	38	24/38 (63.2)		
Wagner 2007 17938305	Respiratory	sleep apnea	.	All Participants	baseline	No surgery/Contr ols	16	7/16 (43.8)		
Wagner 2007 17938305	Respiratory	sleep apnea	.	All Participants	44 months	RYGB	38	13/38 (34.2)		
Wagner 2007 17938305	Respiratory	sleep apnea	.	All Participants	44 months	No surgery/Contr ols	16	8/16 (50)		
Wagner 2007 17938305	Respiratory	asthma	.	All Participants	baseline	RYGB	38	17/38 (44.7)		
Wagner 2007 17938305	Respiratory	asthma	.	All Participants	baseline	No surgery/Contr ols	16	1/16 (6.3)		
Wagner 2007 17938305	Respiratory	asthma	.	All Participants	44 months	RYGB	38	11/38 (28.9)		
Wagner 2007 17938305	Respiratory	asthma	.	All Participants	44 months	No surgery/Contr ols	16	4/16 (25)		
Moon 2016 26220238	Respiratory	Improvement of OSA	.	All Participants	nd	AGB	20	6/20 (30)		
Moon 2016 26220238	Respiratory	Improvement of OSA	.	All Participants	nd	RYGB	90	24/90 (27)		
Moon 2016 26220238	Respiratory	Improvement of OSA	.	All Participants	nd	SG	34	8/34 (24)		
Moon 2016 26220238	Respiratory	Remission of OSA	.	All Participants	nd	AGB	20	1/20 (5)		
Moon 2016	Respiratory	Remission of	.	All Participants	nd	RYGB	90	22/90 (24)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
26220238		OSA								
Moon 2016 26220238	Respiratory	Remission of OSA	.	All Participants	nd	SG	34	11/34 (32)		
Abbas 2015 26001882	Respiratory	Sleep apnea	.	All Participants	0 years	Multiple surgeries	83	29/83 (34.9)		
Abbas 2015 26001882	Respiratory	Sleep apnea	.	All Participants	1 years	Multiple surgeries	83	27/83 (32.5)		
Abbas 2015 26001882	Respiratory	Sleep apnea improvement	.	All Participants	1 years	Multiple surgeries	29	25/29 (86.2)		
Abbas 2015 26001882	Respiratory	Asthma	.	All Participants	0 years	Multiple surgeries	83	25/83 (30.1)		
Abbas 2015 26001882	Respiratory	Asthma	.	All Participants	1 years	Multiple surgeries	83	21/83 (25.3)		
Abbas 2015 26001882	Respiratory	Asthma improvement	.	All Participants	1 years	Multiple surgeries	25	14/25 (56)		
Miranda 2013 23604694	Respiratory	Exertional Dyspnea	Symptom Score: median Exertional dyspnea score measured on a 5 point Likert scale.	All Participants	0 years	RYGB	13			5
Miranda 2013 23604694	Respiratory	Exertional Dyspnea	Symptom Score: median Exertional dyspnea score measured on a 5 point Likert scale.	All Participants	0 years	No surgery/Controls	6			3
Miranda 2013 23604694	Respiratory	Exertional Dyspnea	Symptom Score: median Exertional dyspnea score measured on a 5 point Likert scale.	All Participants	0 Follow Up	RYGB	13			2
Miranda 2013 23604694	Respiratory	Exertional Dyspnea	Symptom Score: median Exertional dyspnea score measured on a 5 point Likert scale.	All Participants	0 Follow Up	No surgery/Controls	6			3
Miranda 2013	Respiratory	Orthopnea	Symptom:	All Participants	0 years	RYGB	13			3

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
23604694			Median Orthopnea symptom score measured on a 5 point Likert scale.							
Miranda 2013 23604694	Respiratory	Orthopnea	Symptom: Median Orthopnea symptom score measured on a 5 point Likert scale.	All Participants	0 years	No surgery/Contr ols	6			2.5
Miranda 2013 23604694	Respiratory	Orthopnea	Symptom: Median Orthopnea symptom score measured on a 5 point Likert scale.	All Participants	0 Follow Up	RYGB	13			1
Miranda 2013 23604694	Respiratory	Orthopnea	Symptom: Median Orthopnea symptom score measured on a 5 point Likert scale.	All Participants	0 Follow Up	No surgery/Contr ols	6			1
Miranda 2013 23604694	Respiratory	Paroxysmal Nocturnal Dyspnea	Symptoms. Median Paroxysmal nocturnal dyspnea symptom score. Measured on a 5 point Likert scale.	All Participants	0 years	RYGB	13			2
Miranda 2013 23604694	Respiratory	Paroxysmal Nocturnal Dyspnea	Symptoms. Median Paroxysmal nocturnal dyspnea symptom score. Measured on a 5 point Likert scale.	All Participants	0 years	No surgery/Contr ols	6			1

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Miranda 2013 23604694	Respiratory	Paroxysmal Nocturnal Dyspnea	Symptoms. Median Paroxysmal nocturnal dyspnea symptom score. Measured on a 5 point Likert scale.	All Participants	0 Follow Up	RYGB	13			1
Miranda 2013 23604694	Respiratory	Paroxysmal Nocturnal Dyspnea	Symptoms. Median Paroxysmal nocturnal dyspnea symptom score. Measured on a 5 point Likert scale.	All Participants	0 Follow Up	No surgery/Controls	6			1
Zaveri 2016 27795883	Respiratory	Sleep Apnea	.	All Participants	0 months	SADS	15	10/15 (66.7)		
Zaveri 2016 27795883	Respiratory	Sleep Apnea	.	All Participants	0 months	AGB	24	10/24 (41.7)		
Zaveri 2016 27795883	Respiratory	Sleep Apnea	.	All Participants	0 months	RYGB	14	10/14 (71.4)		
Zaveri 2016 27795883	Respiratory	Sleep Apnea	.	All Participants	18 months	SADS	15	5/15 (33.3)		
Zaveri 2016 27795883	Respiratory	Sleep Apnea	.	All Participants	18 months	AGB	24	5/24 (20.8)		
Zaveri 2016 27795883	Respiratory	Sleep Apnea	.	All Participants	18 months	RYGB	14	4/14 (28.6)		
Lemaître 2016 27063637	Respiratory	Obstructive sleep apnea	.	All Participants	0 years	SG	494	359/494 (72.7)		
Lemaître 2016 27063637	Respiratory	Obstructive sleep apnea	.	All Participants	2 years	SG	494	80/494 (16.2)		
Wittgrove 2009 19705206	Respiratory	Resolution of Comorbidity	Sleep Apnea	All Participants	0 days	RYGB	120	48/120 (40)		
Wittgrove 2009 19705206	Respiratory	Resolution of Comorbidity	Sleep Apnea	All Participants	90 days	RYGB	120	3/120 (2.5)		
van Rutte 2013 23344504	Respiratory	Sleep apnea: Remission	.	55-59 yo	nd	SG	22	13/22 (59.1)		
van Rutte 2013 23344504	Respiratory	Sleep apnea: Remission	.	60-64 yo	nd	SG	19	11/19 (59.1)		
van Rutte 2013 23344504	Respiratory	Sleep apnea: Remission	.	>= 65 yo	nd	SG	5	3/5 (60)		
van Rutte 2013	Respiratory	Sleep apnea:	.	55-59 yo	nd	SG	22	6/22 (25)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
23344504		Improvement								
van Rutte 2013 23344504	Respiratory	Sleep apnea: Improvement	.	60-64 yo	nd	SG	19	6/19 (31.3)		
van Rutte 2013 23344504	Respiratory	Sleep apnea: Improvement	.	>= 65 yo	nd	SG	5	1/5 (20)		
Clough 2011 20490708	Respiratory	Sleep apnoea improved	.	All Participants	median 22.5 months	AGB	15	7/15 (47.1)		
Clough 2011 20490708	Respiratory	Sleep apnoea deteriorated	.	All Participants	median 22.5 months	AGB	15	1/15 (3.9)		
Sosa 2004 15603658	Respiratory	Obstructive Sleep Apnea	.	All Participants	0 years	RYGB	23	3/23 (13)		
Sosa 2004 15603658	Respiratory	Obstructive Sleep Apnea	.	All Participants	1 years	RYGB	23	1/23 (4.3)		
Papasavas 2004 15479593	Respiratory	Asthma	.	All Participants	0 months	RYGB	71	8/71 (12)		
Papasavas 2004 15479593	Respiratory	Asthma	.	All Participants	12 months	RYGB	71	2/71 (3)		
Papasavas 2004 15479593	Respiratory	Sleep Apnea	Requiring continuous positive airway pressure.	All Participants	0 months	RYGB	71	7/71 (10)		
Papasavas 2004 15479593	Respiratory	Sleep Apnea	Requiring continuous positive airway pressure.	All Participants	12 months	RYGB	71	1/71 (1)		
Papasavas 2004 15479593	Respiratory	Home O2	Use of home oxygen	All Participants	0 months	RYGB	71	5/71 (7)		
Papasavas 2004 15479593	Respiratory	Home O2	Use of home oxygen	All Participants	12 months	RYGB	71	3/71 (4)		
Papasavas 2004 15479593	Respiratory	AE: Severe sleep apnea requiring postoperative tracheostomy	.	All Participants	12 months	RYGB	71	1/71 (1.4)		
Sugerman 2004 15273547	Respiratory	obesity hypoventilation syndrome	.	All Participants	0 years	Multiple surgeries	80	7/80 (9)		
Sugerman 2004 15273547	Respiratory	obesity hypoventilation syndrome	.	All Participants	1 years	Multiple surgeries	65	0/65 (0)		
Sugerman 2004	Respiratory	obesity hypoventilation	.	All Participants	5 years	Multiple surgeries	15	0/15 (0)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
15273547		syndrome								
Mizrahi 2014 24442420	Respiratory	Obstructive Sleep Apnea	.	All Participants	0 months	SG	52	10/52 (19)		
Mizrahi 2014 24442420	Respiratory	Obstructive Sleep Apnea	.	All Participants	24 months	SG	52	2/52 (3.8)		
Michaud 2016 26130180	Respiratory	Sleep apnea improved	.	All Participants	7.1 years	BPD-DS	75	9/75 (12)		
Michaud 2016 26130180	Respiratory	Sleep apnea resolved	.	All Participants	7.1 years	BPD-DS	75	58/75 (77.3)		
Loy 2014 24582414	Respiratory	Sleep apnea	.	All Participants	0 years	AGB	55	31/55 (56)		
Loy 2014 24582414	Respiratory	Sleep apnea	.	All Participants	8 years	AGB	55	20/55 (36.4)		
Loy 2014 24582414	Respiratory	Exertional dyspnea	.	All Participants	0 years	AGB	55	13/55 (24)		
Loy 2014 24582414	Respiratory	Exertional dyspnea	.	All Participants	8 years	AGB	55	5/55 (9.1)		
Busetto 2008 18239641	Respiratory	Sleep Apnea	presence of subjective dinurnal and/or nocturnal symptoms. improvement = significant improvement of subjective symptoms	All Participants	0 years	AGB	216	34/216 (15.6)		
Busetto 2008 18239641	Respiratory	Sleep Apnea	presence of subjective dinurnal and/or nocturnal symptoms. improvement = significant improvement of subjective symptoms	All Participants	1 years	AGB	202	0/202 (0)		
Luppi 2015 25088486	Respiratory	Sleep Apnea	.	All Participants	0 years	SG	28	19/28 (67.9)		
Luppi 2015 25088486	Respiratory	Sleep Apnea	.	All Participants	1 years	SG	28	12/28 (42.3)		
Luppi 2015 25088486	Respiratory	Sleep Apnea	.	All Participants	2 years	SG	28	9/28 (32.1)		
Luppi 2015 25088486	Respiratory	Daily Sleep Apnea Medications	.	All Participants	0 years	SG	28		0.7	

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Luppi 2015 25088486	Respiratory	Daily Sleep Apnea Medications	.	All Participants	1 years	SG	28		0.5	
Luppi 2015 25088486	Respiratory	Daily Sleep Apnea Medications	.	All Participants	2 years	SG	28		0.6	
Soto 2013 23733390	Respiratory	Resolution of OSA	.	All Participants	Preoperative	SG	35	11/35 (31.4)		
Soto 2013 23733390	Respiratory	Resolution of OSA	.	All Participants	Postoperative	SG	35	1/35 (2.9)		
Wagner 2007 17938305	Return to work	return to work	.	Less than mean excess BMI lost	baseline	RYGB	18	0/18 (0)		
Wagner 2007 17938305	Return to work	return to work	.	Less than mean excess BMI lost	44 months	RYGB	18	8/18 (44.4)		
Wagner 2007 17938305	Return to work	return to work	.	All Participants	baseline	RYGB	38	0/38 (0)		
Wagner 2007 17938305	Return to work	return to work	.	All Participants	baseline	No surgery/Contr ols	16	0/16 (0)		
Wagner 2007 17938305	Return to work	return to work	.	All Participants	44 months	RYGB	38	14/38 (36.8)		
Wagner 2007 17938305	Return to work	return to work	.	All Participants	44 months	No surgery/Contr ols	16	1/16 (6.3)		
Wagner 2007 17938305	Return to work	return to work	.	More than mean excess BMI lost	baseline	RYGB	20	0/20 (0)		
Wagner 2007 17938305	Return to work	return to work	.	More than mean excess BMI lost	44 months	RYGB	20	8/20 (40)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	insufficient weight loss or planned first-stage procedure as indication for revision	All Participants	nd	SG	135	4/135 (3)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	insufficient weight loss or planned first-stage procedure as indication for	55-59 yo	nd	SG	73	3/73 (4.1)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
			revision							
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	insufficient weight loss or planned first-stage procedure as indication for revision	60-64 yo	nd	SG	50	1/50 (2)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	insufficient weight loss or planned first-stage procedure as indication for revision	>= 65 yo	nd	SG	12	0/12 (0)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	GERD	All Participants	nd	SG	135	4/135 (3)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	GERD	55-59 yo	nd	SG	73	2/73 (2.7)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	GERD	60-64 yo	nd	SG	50	2/50 (4)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	GERD	>= 65 yo	nd	SG	12	0/12 (0)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	Dysphagia	All Participants	nd	SG	135	4/135 (3)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	Dysphagia	55-59 yo	nd	SG	73	2/73 (2.7)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	Dysphagia	60-64 yo	nd	SG	50	1/50 (2)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	Dysphagia	>= 65 yo	nd	SG	12	1/12 (8.3)		
van Rutte 2013 23344504	Revisional bariatric	Revision to RYGB by indication	complications of sleeve gastrectomy	All Participants	nd	SG	135	1/135 (0.7)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	surgery									
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	complications of sleeve gastrectomy	55-59 yo	nd	SG	73	1/73 (1.4)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	complications of sleeve gastrectomy	60-64 yo	nd	SG	50	0/50 (0)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB by indication	complications of sleeve gastrectomy	>= 65 yo	nd	SG	12	0/12 (0)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB: Total	.	All Participants	nd	SG	135	13/135 (9.6)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB: Total	.	55-59 yo	nd	SG	73	8/73 (11)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB: Total	.	60-64 yo	nd	SG	50	4/50 (8)		
van Rutte 2013 23344504	Revisional bariatric surgery	Revision to RYGB: Total	.	>= 65 yo	nd	SG	12	1/12 (8.3)		
Clough 2011 20490708	Revisional bariatric surgery	Band removal	.	All Participants	median 22.5 months	AGB	113	7/113 (6.2)		
Loy 2014 24582414	Revisional bariatric surgery	AE: band-slip	.	All Participants	8 years	AGB	55	1/55 (1.8)		
Loy 2014 24582414	Revisional bariatric surgery	AE: band removal	.	All Participants	8 years	AGB	55	1/55 (1.8)		
Busetto 2008 18239641	Revisional bariatric surgery	band removal	.	60-69 yro	5 years	AGB	120	2/120 (1.1)		
Busetto 2008 18239641	Revisional bariatric surgery	band removal	.	70-79 yro	5 years	AGB	28	0/28 (0)		
Busetto 2008 18239641	Revisional bariatric surgery	band removal	.	All Participants	5 years	AGB	150	2/150 (0.9)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
	surgery									
Busetto 2008 18239641	Revisional bariatric surgery	band repositioning	.	60-69 yro	5 years	AGB	120	6/120 (3.4)		
Busetto 2008 18239641	Revisional bariatric surgery	band repositioning	.	70-79 yro	5 years	AGB	28	0/28 (0)		
Busetto 2008 18239641	Revisional bariatric surgery	band repositioning	.	All Participants	5 years	AGB	150	6/150 (2.7)		
Quebbemann 2005 16925254	Revisional surgery	revisional surgery	due to lack of weight loss	All Participants	1 years	AGB	14	1/14 (7.1)		
Quebbemann 2005 16925254	Revisional surgery	revisional surgery	due to lack of weight loss	All Participants	1 years	RYGB	13	0/13 (0)		
Martin 2015 26530652	TKA-related outcomes	re-operation	.	All Participants	1 years	Multiple surgeries	182	167/182 (92)		
Martin 2015 26530652	TKA-related outcomes	re-operation	.	All Participants	1 years	Multiple surgeries	91	86/91 (95)		
Martin 2015 26530652	TKA-related outcomes	re-operation	.	All Participants	1 years	Multiple surgeries	91	78/91 (86)		
Martin 2015 26530652	TKA-related outcomes	re-operation	.	All Participants	5 years	Multiple surgeries	182	162/182 (89)		
Martin 2015 26530652	TKA-related outcomes	re-operation	.	All Participants	5 years	Multiple surgeries	91	83/91 (91)		
Martin 2015 26530652	TKA-related outcomes	re-operation	.	All Participants	5 years	Multiple surgeries	91	71/91 (78)		
Martin 2015 26530652	TKA-related outcomes	Complication	Overall complication rate	All Participants	1 years	Multiple surgeries	182	133/182 (73)		
Martin 2015 26530652	TKA-related outcomes	Complication	Overall complication rate	All Participants	1 years	Multiple surgeries	90	65/90 (72)		
Martin 2015 26530652	TKA-related outcomes	Complication	Overall complication rate	All Participants	1 years	Multiple surgeries	91	70/91 (77)		
Martin 2015 26530652	TKA-related outcomes	Complication	Overall complication rate	All Participants	5 years	Multiple surgeries	182	122/182 (67)		
Martin 2015 26530652	TKA-related outcomes	Complication	Overall complication	All Participants	5 years	Multiple surgeries	91	60/91 (66)		

Study	Outcome Category 1	Outcome	Outcome Description rate	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Martin 2015 26530652	TKA-related outcomes	Complication	Overall complication rate	All Participants	5 years	Multiple surgeries	90	65/90 (72)		
Martin 2015 26530652	TKA-related outcomes	Revision	Revision rate	All Participants	1 years	Multiple surgeries	182	180/182 (99)		
Martin 2015 26530652	TKA-related outcomes	Revision	Revision rate	All Participants	1 years	Multiple surgeries	91	88/91 (97)		
Martin 2015 26530652	TKA-related outcomes	Revision	Revision rate	All Participants	1 years	Multiple surgeries	91	89/91 (98)		
Martin 2015 26530652	TKA-related outcomes	Revision	Revision rate	All Participants	5 years	Multiple surgeries	182	177/182 (97)		
Martin 2015 26530652	TKA-related outcomes	Revision	Revision rate	All Participants	5 years	Multiple surgeries	91	86/91 (94)		
Martin 2015 26530652	TKA-related outcomes	Revision	Revision rate	All Participants	5 years	Multiple surgeries	91	84/91 (92)		
Martin 2015 26530652	TKA-related outcomes	PJI	Rate of prosthetic joint infection	All Participants	1 years	Multiple surgeries	182	180/182 (99)		
Martin 2015 26530652	TKA-related outcomes	PJI	Rate of prosthetic joint infection	All Participants	1 years	Multiple surgeries	91	89/91 (98)		
Martin 2015 26530652	TKA-related outcomes	PJI	Rate of prosthetic joint infection	All Participants	1 years	Multiple surgeries	91	89/91 (98)		
Martin 2015 26530652	TKA-related outcomes	PJI	Rate of prosthetic joint infection	All Participants	5 years	Multiple surgeries	182	180/182 (99)		
Martin 2015 26530652	TKA-related outcomes	PJI	Rate of prosthetic joint infection	All Participants	5 years	Multiple surgeries	91	89/91 (98)		
Martin 2015 26530652	TKA-related outcomes	PJI	Rate of prosthetic joint infection	All Participants	5 years	Multiple surgeries	92	87/92 (95)		
Nickel 2016 27179771	TKA-related outcomes	AE: Acute renal failure	.	All Participants	30 after TKA days	No surgery/Contr ols	6480	89/6480 (1.4)		
Nickel 2016 27179771	TKA-related outcomes	AE: Acute renal failure	.	All Participants	30 after TKA days	No surgery/Contr ols	26616	1626/26616 (6.1)		
Nickel 2016 27179771	TKA-related outcomes	AE: Acute renal failure	.	All Participants	30 after TKA days	Multiple surgeries	5918	302/5918 (5.1)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Nickel 2016 27179771	TKA-related outcomes	AE: vascular/neuro injury	.	All Participants	90 after TKA days	No surgery/Contr ols	6480	16/6480 (0.3)		
Nickel 2016 27179771	TKA-related outcomes	AE: vascular/neuro injury	.	All Participants	90 after TKA days	No surgery/Contr ols	26616	125/26616 (0.5)		
Nickel 2016 27179771	TKA-related outcomes	AE: vascular/neuro injury	.	All Participants	90 after TKA days	Multiple surgeries	5918	26/5918 (0.4)		
Nickel 2016 27179771	TKA-related outcomes	AE: vascular/neuro injury	.	All Participants	2 after TKA years	No surgery/Contr ols	6480	49/6480 (0.7)		
Nickel 2016 27179771	TKA-related outcomes	AE: vascular/neuro injury	.	All Participants	2 after TKA years	No surgery/Contr ols	26616	234/26616 (0.9)		
Nickel 2016 27179771	TKA-related outcomes	AE: vascular/neuro injury	.	All Participants	2 after TKA years	Multiple surgeries	5918	59/5918 (1)		
Nickel 2016 27179771	TKA-related outcomes	AE: Manipulation	.	All Participants	90 after TKA days	No surgery/Contr ols	6480	65/6480 (1)		
Nickel 2016 27179771	TKA-related outcomes	AE: Manipulation	.	All Participants	90 after TKA days	No surgery/Contr ols	26616	170/26616 (0.6)		
Nickel 2016 27179771	TKA-related outcomes	AE: Manipulation	.	All Participants	90 after TKA days	Multiple surgeries	5918	81/5918 (1.4)		
Nickel 2016 27179771	TKA-related outcomes	AE: Manipulation	.	All Participants	2 after TKA years	No surgery/Contr ols	6480	155/6480 (2.4)		
Nickel 2016 27179771	TKA-related outcomes	AE: Manipulation	.	All Participants	2 after TKA years	No surgery/Contr ols	26616	429/26616 (1.6)		
Nickel 2016 27179771	TKA-related outcomes	AE: Manipulation	.	All Participants	2 after TKA years	Multiple surgeries	5918	185/5918 (3.1)		
Nickel 2016 27179771	TKA-related outcomes	AE: Revision (of the joint surgery)	.	All Participants	90 after TKA days	No surgery/Contr ols	6480	19/6480 (0.3)		
Nickel 2016 27179771	TKA-related outcomes	AE: Revision (of the joint surgery)	.	All Participants	90 after TKA days	No surgery/Contr ols	26616	184/26616 (0.7)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Nickel 2016 27179771	TKA-related outcomes	AE: Revision (of the joint surgery)	.	All Participants	90 after TKA days	Multiple surgeries	5918	77/5918 (1.3)		
Nickel 2016 27179771	TKA-related outcomes	AE: Revision (of the joint surgery)	.	All Participants	2 after TKA years	No surgery/Contr ols	6480	163/6480 (2.5)		
Nickel 2016 27179771	TKA-related outcomes	AE: Revision (of the joint surgery)	.	All Participants	2 after TKA years	No surgery/Contr ols	26616	1166/26616 (4.4)		
Nickel 2016 27179771	TKA-related outcomes	AE: Revision (of the joint surgery)	.	All Participants	2 after TKA years	Multiple surgeries	5918	437/5918 (7.4)		
Nickel 2016 27179771	TKA-related outcomes	AE: Periprosthetic infection	.	All Participants	90 after TKA days	No surgery/Contr ols	6480	37/6480 (0.6)		
Nickel 2016 27179771	TKA-related outcomes	AE: Periprosthetic infection	.	All Participants	90 after TKA days	No surgery/Contr ols	26616	460/26616 (1.7)		
Nickel 2016 27179771	TKA-related outcomes	AE: Periprosthetic infection	.	All Participants	90 after TKA days	Multiple surgeries	5918	104/5918 (1.8)		
Nickel 2016 27179771	TKA-related outcomes	AE: Periprosthetic infection	.	All Participants	2 after TKA years	No surgery/Contr ols	6480	128/6480 (2)		
Nickel 2016 27179771	TKA-related outcomes	AE: Periprosthetic infection	.	All Participants	2 after TKA years	No surgery/Contr ols	26616	1286/26616 (4.8)		
Nickel 2016 27179771	TKA-related outcomes	AE: Periprosthetic infection	.	All Participants	2 after TKA years	Multiple surgeries	5918	314/5918 (5.8)		
Nickel 2016 27179771	TKA-related outcomes	AE: urinary tract infection	.	All Participants	30 after TKA days	No surgery/Contr ols	6480	505/6480 (7.8)		
Nickel 2016 27179771	TKA-related outcomes	AE: urinary tract infection	.	All Participants	30 after TKA days	No surgery/Contr ols	26616	2880/26616 (10.8)		
Nickel 2016 27179771	TKA-related outcomes	AE: urinary tract infection	.	All Participants	30 after TKA days	Multiple surgeries	5918	1011/5918 (17.1)		
Nickel 2016 27179771	TKA-related outcomes	AE: Stroke	.	All Participants	30 after TKA days	No surgery/Contr ols	6480	30/6480 (0.5)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
Nickel 2016 27179771	TKA-related outcomes	AE: Stroke	.	All Participants	30 after TKA days	No surgery/Contr ols	26616	109/26616 (0.4)		
Nickel 2016 27179771	TKA-related outcomes	AE: Stroke	.	All Participants	30 after TKA days	Multiple surgeries	5918	57/5918 (1)		
Nickel 2016 27179771	TKA-related outcomes	AE: Pulmonary embolus	.	All Participants	30 after TKA days	No surgery/Contr ols	6480	57/6480 (0.9)		
Nickel 2016 27179771	TKA-related outcomes	AE: Pulmonary embolus	.	All Participants	30 after TKA days	No surgery/Contr ols	26616	458/26616 (1.7)		
Nickel 2016 27179771	TKA-related outcomes	AE: Pulmonary embolus	.	All Participants	30 after TKA days	Multiple surgeries	5918	128/5918 (2.2)		
Nickel 2016 27179771	TKA-related outcomes	AE: respiratory failure	.	All Participants	30 after TKA days	No surgery/Contr ols	6480	24/6480 (0.4)		
Nickel 2016 27179771	TKA-related outcomes	AE: respiratory failure	.	All Participants	30 after TKA days	No surgery/Contr ols	26616	394/26616 (1.5)		
Nickel 2016 27179771	TKA-related outcomes	AE: respiratory failure	.	All Participants	30 after TKA days	Multiple surgeries	5918	108/5918 (1.8)		
Nickel 2016 27179771	TKA-related outcomes	Mortality	.	All Participants	30 after TKA days	No surgery/Contr ols	6480	5/6480 (0.1)		
Nickel 2016 27179771	TKA-related outcomes	Mortality	.	All Participants	30 after TKA days	No surgery/Contr ols	26616	16/26616 (0.1)		
Nickel 2016 27179771	TKA-related outcomes	Mortality	.	All Participants	30 after TKA days	Multiple surgeries	5918	13/5918 (0.2)		
Nickel 2016 27179771	TKA-related outcomes	AE: Deep vein thrombosis	.	All Participants	30 after TKA days	No surgery/Contr ols	6480	177/6480 (2.7)		
Nickel 2016 27179771	TKA-related outcomes	AE: Deep vein thrombosis	.	All Participants	30 after TKA days	No surgery/Contr ols	26616	796/26616 (3)		
Nickel 2016 27179771	TKA-related outcomes	AE: Deep vein thrombosis	.	All Participants	30 after TKA days	Multiple surgeries	5918	295/5918 (5)		
Nickel 2016 27179771	TKA-related outcomes	AE: Extensor rupture	.	All Participants	90 after TKA days	No surgery/Contr	6480	20/6480 (0.3)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
						ols				
Nickel 2016 27179771	TKA-related outcomes	AE: Extensor rupture	.	All Participants	90 after TKA days	No surgery/Contr ols	26616	114/26616 (0.4)		
Nickel 2016 27179771	TKA-related outcomes	AE: Extensor rupture	.	All Participants	90 after TKA days	Multiple surgeries	5918	37/5918 (0.6)		
Nickel 2016 27179771	TKA-related outcomes	AE: Extensor rupture	.	All Participants	2 after TKA years	No surgery/Contr ols	6480	43/6480 (0.7)		
Nickel 2016 27179771	TKA-related outcomes	AE: Extensor rupture	.	All Participants	2 after TKA years	No surgery/Contr ols	26616	378/26616 (1.4)		
Nickel 2016 27179771	TKA-related outcomes	AE: Extensor rupture	.	All Participants	2 after TKA years	Multiple surgeries	5918	125/5918 (2.1)		
Nickel 2016 27179771	TKA-related outcomes	AE: osteolysis	.	All Participants	2 after TKA years	No surgery/Contr ols	6480	25/6480 (0.4)		
Nickel 2016 27179771	TKA-related outcomes	AE: osteolysis	.	All Participants	2 after TKA years	No surgery/Contr ols	26616	75/26616 (0.3)		
Nickel 2016 27179771	TKA-related outcomes	AE: osteolysis	.	All Participants	2 after TKA years	Multiple surgeries	5918	26/5918 (0.4)		
Nickel 2016 27179771	TKA-related outcomes	AE: heart failure	.	All Participants	30 after TKA days	No surgery/Contr ols	6480	173/6480 (2.7)		
Nickel 2016 27179771	TKA-related outcomes	AE: heart failure	.	All Participants	30 after TKA days	No surgery/Contr ols	26616	2081/26616 (7.8)		
Nickel 2016 27179771	TKA-related outcomes	AE: heart failure	.	All Participants	30 after TKA days	Multiple surgeries	5918	597/5918 (10.1)		
Nickel 2016 27179771	TKA-related outcomes	AE: Myocardial Infarction	.	All Participants	30 after TKA days	No surgery/Contr ols	6480	62/6480 (1)		
Nickel 2016 27179771	TKA-related outcomes	AE: Myocardial Infarction	.	All Participants	30 after TKA days	No surgery/Contr ols	26616	370/26616 (1.4)		
Nickel 2016 27179771	TKA-related outcomes	AE: Myocardial Infarction	.	All Participants	30 after TKA days	Multiple surgeries	5918	97/5918 (1.6)		
Nickel 2016	TKA-related	AE:	.	All Participants	30 after TKA	No	6480	87/6480 (1.3)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
27179771	outcomes	pneumonia	.		days	surgery/Contr ols				
Nickel 2016 27179771	TKA-related outcomes	AE: pneumonia	.	All Participants	30 after TKA days	No surgery/Contr ols	26616	484/26616 (1.8)		
Nickel 2016 27179771	TKA-related outcomes	AE: pneumonia	.	All Participants	30 after TKA days	Multiple surgeries	5918	316/5918 (5.3)		
Werner 2015 26071250	TKA-related outcomes	Infection (Diag. and/or I&D)	Infection (diagnosis and/or Incision and drainage)	All Participants	90 days	TKA alone	66523	781/66523 (1.2)		
Werner 2015 26071250	TKA-related outcomes	Infection (Diag. and/or I&D)	Infection (diagnosis and/or Incision and drainage)	All Participants	90 days	Bariatric and TKA	219	4/219 (1.8)		
Werner 2015 26071250	TKA-related outcomes	Infection (Diag. and/or I&D)	Infection (diagnosis and/or Incision and drainage)	All Participants	90 days	TKA alone	11294	560/11294 (5)		
Werner 2015 26071250	TKA-related outcomes	Stiffness (Diag. and/or MUA)	Stiffness (diagnosis and/or Manipulation Under Anaesthesia)	All Participants	90 days	TKA alone	66523	1295/66523 (1.9)		
Werner 2015 26071250	TKA-related outcomes	Stiffness (Diag. and/or MUA)	Stiffness (diagnosis and/or Manipulation Under Anaesthesia)	All Participants	90 days	Bariatric and TKA	219	5/219 (2.3)		
Werner 2015 26071250	TKA-related outcomes	Stiffness (Diag. and/or MUA)	Stiffness (diagnosis and/or Manipulation Under Anaesthesia)	All Participants	90 days	TKA alone	11294	252/11294 (2.2)		
Valderas 2009 19517199	Vitamins/Nutri tion	25OHD (ng/ml)	25- hydroxyvitamin D	All Participants	3.5 years	No surgery/Contr ols	26		17.4 (5.9)	
Valderas 2009 19517199	Vitamins/Nutri tion	25OHD (ng/ml)	25- hydroxyvitamin D	All Participants	3.5 years	RYGB	26		18.8 (7.6)	
Praveenraj 2016	Vitamins/Nutri tion	Long term nutritional	.	All Participants	nd months	RYGB	32	2/32 (6.3)		

Study	Outcome Category 1	Outcome	Outcome Description	Subgroup	Timepoint	Intervention	N Analyzed Clean	n/N (%)	Mean (SD)	Median (25th, 75th)
27279392		complications								
Praveenraj 2016 27279392	Vitamins/Nutrition	Long term nutritional complications	.	All Participants	nd months	SG	54	0/54 (0)		
Michaud 2016 26130180	Vitamins/Nutrition	Calcium deficiency	<2 g/L	All Participants	5 years	BPD-DS	105	3/105 (2.9)		
Michaud 2016 26130180	Vitamins/Nutrition	hypoalbuminemia	<30 g/L	All Participants	0 years	BPD-DS	105	1/105 (0.9)		
Michaud 2016 26130180	Vitamins/Nutrition	hypoalbuminemia	<30 g/L	All Participants	5 years	BPD-DS	105	0/105 (0)		
Michaud 2016 26130180	Vitamins/Nutrition	albumin	albumin level ≥30 but <34.9 g/L	All Participants	5 years	BPD-DS	102	18/102 (18.1)		

Appendix I. Risk of Bias - Comparative Studies

Study	Bias due to confounding	Bias in selection of participants into the study	Bias in classification of interventions	Bias due to deviations from intended interventions	Bias due to missing data	Bias in measurement of outcomes	Bias in selection of the reported result	Overall bias
Ardestani	Moderate	Moderate	Low	Low	No information	Moderate	Low	Moderate
Boules	Moderate	High	Low	Low	No information	High	Low	High
Davidson	Moderate	Low	Low	Low	No information	Low	Low	Moderate
Irwin	High	Moderate	Low	Low	Low	Moderate	Low	High
Johnson	Low	Moderate	Low	Low	Moderate	Low	Low	Moderate
Lee	Moderate	Low	Low	Low	No information	Moderate	Low	Moderate
Leonetti	Moderate	Low	Low	Low	No information	Moderate	Low	Moderate
Martin	High	High	Low	Low	No information	Moderate	Low	High
Perry	Low	Low	Low	Low	No information	Moderate	Low	Low
Ritz	Moderate	Low	Low	Low	No information	Moderate	Low	Moderate
Scott	Low	Moderate	Low	Low	Moderate	Low	Low	Low
Spaniolas	Moderate	Low	Low	Low	No information	Moderate	Low	Moderate
Valderas	Moderate	High	Low	Low	No information	High	Low	High