**S4 Table: Characteristics of included studies**

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|  | **Author** | **Year** | **Study Title** | **Study** | **Country** | **Na** | **Intervention/Exposure** | **Guideline Referenced** | **Synonym (alternative/ additional)**  |
| 1 | Abd Ellatif [65] | 2014 | Long term predictors of success after laparoscopic sleeve gastrectomy | cohort | Egypt  | 1089 | Surgery | None  | resolution |
| 2 | Abu-Abeid [66] | 2018 | Diabetes resolution after one anastomosis gastric bypass | cohort | Israel | 102 | Surgery | 2009 report (2 definitions) | resolution |
| 3 | Adams [67] | 2012 | Health Benefits of Gastric Bypass Surgery After 6 Years | cohort | USA | 269 | Surgery  | None  | - |
| 4 | Ahuja [48] | 2018 | Predicting remission of diabetes post metabolic surgery: A comparison of ABCD, diarem, and DRS scores | cohort | India | 102 | Surgery | 2009 report (3 definitions) | resolution |
| 5 | Alhambra-Exposito [39] | 2017 | Variations in diabetes resmission rates after bariatric surgery in Spanish adults according to the use of different diagnostic criteria for diabetes | cohort | Spain | 127 | Surgery | 1. Rubio MA, Monereo S, Lecube A, Resa J, Masdevall C, de la Cruz VF, et al. Joint position statement of the SEEN-SECO-SEEDO-SED societies on metabolic surgery for type 2 diabetes mellitus. Endocrinol Nutr. 2013;60(10):547–8.2. American Diabetes Association. Diagnosis and classification of diabetes mellitus. Standard of medical care of diabetes −2017. Diabetes Care. 2017;40 (Suppl 1):S1–2. | - |
| 6 | Al-Khyatt [68] | 2016 | Laparoscopic Roux en-Y Gastric Bypass Using a Modified Retrocolic–Supracolic Approach: Outcomes from 300 Patients | cohort | UK | 110 | Surgery | None | resolution |
| 7 | Almalki [69] | 2018 | Laparoscopic gastric bypass for the treatment of type 2 diabetes: a comparison of Roux-en-Y versus single anastomosis gastric bypass | cohort | Taiwan | 406 | Surgery | 2009 report (2 definitions) | - |
| 8 | Al-Sabah [70] | 2014 | Remission of Type 2 Diabetes Mellitus after Laparoscopic Sleeve Gastrectomy | cohort | Kuwait | 107 | Surgery | None | cure |
| 9 | Aminian [71] | 2020 | Late Relapse of Diabetes after Bariatric Surgery: Not Rare, but Not a Failure | cohort | USA | 736 | Surgery  | 1. Brethauer SA, Aminian A, Romero-Talamas H, Batayyah E, Mackey J, Kennedy L, et al. Can diabetes be surgically cured? Long-term metabolic effects of bariatric surgery in obese patients with type 2 diabetes mellitus. Ann Surg. 2013; 258:628–636. 2. Brethauer SA, Kim J, el Chaar M, Papasavas P, Eisenberg D, Rogers A et al. Standardized outcomes reporting in metabolic and bariatric surgery. Surg Obes Relat Dis. 2015;11(3):489–506. 3. Aminian A, Brethauer SA, Andalib A, Punchai S, Mackey J, Rodriguez J et al. Can Sleeve Gastrectomy “Cure” Diabetes? Long-term Metabolic Effects of Sleeve Gastrectomy in Patients with Type 2 Diabetes. Ann Surg. 2016; 264: 674-681. | - |
| 10 | Aminian [72] | 2017 | Individualized Metabolic Surgery Score: Procedure Selection Based on Diabetes Severity | cohort | USA | 900 | Surgery | 2009 report (2 definitions) | - |
| 11 | Aminian [73] | 2016 | Can Sleeve Gastrectomy “Cure” Diabetes? Long-term Metabolic Effects of Sleeve Gastrectomy in Patients With Type 2 Diabetes | cohort  | USA | 134 | Surgery | 1. 2009 report (3 definitions) 2. Brethauer SA, Aminian A, Romero-Talamas H, Batayyah E, Mackey J, Kennedy L, et al. Can diabetes be surgically cured? Long-term metabolic effects of bariatric surgery in obese patients with type 2 diabetes mellitus. Ann Surg. 2013; 258:628–636.3.Brethauer SA, Kim J, el Chaar M, Papasavas P, Eisenberg D, Rogers A et al. Standardized outcomes reporting in metabolic and bariatric surgery. Surg Obes Relat Dis. 2015;11(3):489–506. | cure |
| 12 | Aminian [49]  | 2014 | Risk prediction of complications of metabolic syndrome before and 6 years after gastric bypass | cohort | USA | 131 | Surgery | Brethauer SA, Aminian A, Romero-Talamas H, Batayyah E, Mackey J, Kennedy L, et al. Can diabetes be surgically cured? Long-term metabolic effects of bariatric surgery in obese patients with type 2 diabetes mellitus. Ann Surg. 2013; 258:628–636. | - |
| 13 | Araia [50] | 2014 | Resolution of Diabetes After Bariatric Surgery Among Predominantly African-American Patients Race has no Effect in Remission of Diabetes After Bariatric Surgery | cohort | USA | 119 | Surgery | 2009 report (1 definition) | resolution |
| 14 | Ardestani [74] | 2015 | Insulin Cessation and Diabetes Remission After Bariatric Surgery in Adults With Insulin-Treated Type 2 Diabetes | cohort | USA | 5225 | Surgery | DeMaria EJ, Winegar DA, Pate VW, Hutcher NE, Ponce J, Pories WJ. 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. Ann Surg. 2010; 252:559–566 | resolution |
| 15 | Aron-Wisnewsky [51] | 2017 | The advanced-DiaRem score improves prediction of diabetes remission 1 year post-Roux-en-Y gastric bypass | cohort | France, Israel | 213 | Surgery | 2009 report (2 definitions) | - |
| 16 | Arterburn [34] | 2013 | Comparative Effectiveness of Bariatric Surgery versus Nonsurgical Treatment of Type 2 Diabetes among Severely Obese Adults | cohort | USA | 63622 | Surgery vs usual care | None | resolution |
| 17 | Arterburn [35] | 2013 | A multisite study of long-term remission and relapse of type 2 diabetes mellitus following gastric bypass | cohort | USA | 4434 | Surgery | 2009 report (2 definitions) | resolution, cure |
| 18 | Aung [75] | 2016 | Bariatric Surgery for Patients With Early-Onset vs Late-Onset Type 2 Diabetes | cohort | Taiwan | 558 | Surgery | 2009 report (3 definitions) | - |
| 19 | Bayham [76] | 2012 | Early Resolution of Type 2 Diabetes Seen After Roux-en-Y Gastric Bypass and Vertical Sleeve Gastrectomy  | cohort | USA | 109 | Surgery | None | resolution |
| 20 | Behbehani [77] | 2014 | Metabolic outcomes 2 years following gastric bypass surgery in people with type 2 diabetes: an observational cohort study | cohort | UK | 101 | Surgery | 2009 report (2 definitions) | resolution |
| 21 | Bhasker [78] | 2018 | Selection of Bypass vs Sleeve for the Management of Type-2 Diabetes in Severely Obese: Could Ethnicity Play a Role? | cohort | India  | 186 | Surgery | None | - |
| 22 | Bhasker [25] | 2015 | Predictors of Remission of T2DM and Metabolic Effects after Laparoscopic Roux-en-y Gastric Bypass in Obese Indian Diabetics—a 5-Year Study | cohort | India | 106 | Surgery | “ADA criteria” | resolution |
| 23 | Biertho [79] | 2014 | Laparoscopic Sleeve Gastrectomy: With or without Duodenal Switch? A Consecutive Series of 800 Cases | cohort | Canada | 193 | Surgery | None | resolution |
| 24 | Blackstone [41] | 2012 | Type 2 diabetes after gastric bypass: Remission in five models using HbA1c, fasting blood glucose, and medication status | cohort | USA | 505 | Surgery | 2009 report (5 definitions) | - |
| 25 | Bohula [36] | 2018 | Effect of lorcaserin on prevention and remission of type 2 diabetes in overweight and obese patients (CAMELLIA-TIMI 61): a randomised, placebo-controlled trial | RCT | USA | 6816 | Pharmacological | None | Persistent remission of hyper-glycaemia, sustained remission of hyper-glycaemia, any remission of hyper-glycaemia, persistent normo-glycaemia, sustained normo-glycaemia, any normo-glycaemia |
| 26 | Boza [52] | 2014 | Metabolic Surgery: Roux-en-Y Gastric Bypass and Variables Associated with Diabetes Remission in Patients with BMI <35 | cohort | Chile | 100 | Surgery | American Diabetes Association. Standards of medical care in diabetes—2012. Diabetes Care. 2012;35 Suppl 1: S11–63. | resolution |
| 27 | Brethauer [80] | 2013 | Can Diabetes Be Surgically Cured? Long-Term Metabolic Effects of Bariatric Surgery in Obese Patients with Type 2 Diabetes Mellitus | cohort | USA | 217 | Surgery | 1. 2009 report (3 definitions) 2. Schauer PR, Burguera B, Ikramuddin S, Cottam D, Gourash W, Hamad G, et al. Effect of laparoscopic Roux-en Y gastric bypass on type 2 diabetes mellitus. Ann Surg. 2003; 238: 467–484. | cure |
| 28 | Bruno [81] | 2015 | What is the impact of sleeve gastrectomy and gastric bypass on metabolic control of diabetes? A clinic-based cohort of Mediterranean diabetic patients | cohort | Italy | 135 | Surgery | 2009 report (1 definition)  | - |
| 29 | Camerini [82] | 2016 | 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 | cohort | Italy | 120 | Surgery | None | resolution |
| 30 | Chen [83] | 2012 | Attitudes Toward Diabetes Affect Maintenance of Drug-Free Remission in Patients With Newly Diagnosed Type 2 Diabetes After Short-Term Continuous Subcutaneous Insulin Infusion Treatment | cohort | China | 158 | Pharmacological | None | - |
| 31 | Chen [53] | 2018 | Prediction of type 2 diabetes remission after metabolic surgery: a comparison of the individualized metabolic surgery score and the ABCD score | cohort | Taiwan | 310 | Surgery | 2009 report (1 definition)  | - |
| 32 | Chen [84] | 2016 | Gastric bypass surgery leads to long-term remission or improvement of type 2 diabetes and significant decrease of microvascular and macrovascular complications | cohort | USA | 173 | Surgery | None | resolution |
| 33 | Chikunguwo [85] | 2010 | Analysis of factors associated with durable remission of diabetes after Roux-en-Y gastric bypass | cohort | USA | 177 | surgery | None | resolution |
| 34 | Cottam [86] | 2018 | An Analysis of Mid-Term Complications, Weight Loss, and Type 2 Diabetes Resolution of Stomach Intestinal Pylorus-Sparing Surgery (SIPS) Versus Roux-En-Y Gastric Bypass (RYGB) with Three-Year Follow-Up | cohort | USA | 186 | Surgery | None | resolution |
| 35 | Courcoulas [87] | 2018 | Seven-Year Weight Trajectories and Health Outcomes in the Longitudinal Assessment of Bariatric Surgery (LABS) Study | cohort | USA | 747 | Surgery  | None | resolution |
| 36 | Craig Wood [54] | 2018 | Performance of the DiaRem Score for Predicting Diabetes Remission in Two Health Systems Following Bariatric Surgery Procedures in Hispanic and non-Hispanic White Patients | cohort | USA | 491 | Surgery  | Buchwald H, Estok R, Fahrbach K, Banel D, Jensen MD, Pories WJ, et al. Weight and type 2 diabetes after bariatric surgery: systematic review and meta-analysis. Am J Med. 2009;122(3):248–56. | - |
| 37 | Dambha-Miller [88] | 2020 | Behaviour change, weight loss and remission of Type 2 Diabetes: a community-based prospective cohort study | cohort | UK | 730 | Lifestyle | None | - |
| 38 | Dang [89] | 2019 | Predictive factors for diabetes remission after bariatric surgery  | cohort | Canada | 207 | Surgery | None | - |
| 39 | Davies [90] | 2014 | Long-Term Diabetic Response to Gastric Bypass | cohort | USA | 707 | Surgery  | None | resolution |
| 40 | Debedat [91] | 2018 | Long-term Relapse of Type 2 Diabetes After Roux-en-Y Gastric Bypass: Prediction and Clinical Relevance | cohort | France, Italy, Germany | 175 | Surgery  | 2009 report (1 definition) | - |
| 41 | de Oliveira [92] | 2018 | Predictors of Long-Term Remission and Relapse of Type 2 Diabetes Mellitus Following Gastric Bypass in Severely Obese Patients | cohort | Brazil | 254 | Surgery | 2009 report (2 definitions) | - |
| 42 | Dicker [93] | 2019 | Prediction of Long-Term Diabetes Remission After RYGB, Sleeve Gastrectomy, and Adjustable Gastric Banding Using DiaRem and Advanced-DiaRem Scores | cohort | Israel | 1459 | Surgery | 2009 report (2 definitions) | resolution |
| 43 | Dicker [26] | 2016 | Long-Term Outcomes of Three Types of Bariatric Surgery on Obesity and Type 2 Diabetes Control and Remission | cohort | Israel | 1685 | Surgery | None | resolution |
| 44 | Dixon [94] | 2013 | Predicting the glycemic response to gastric bypass surgery in patients with type 2 diabetes | cohort | Taiwan | 154 | Surgery | None | - |
| 45 | Dorman [95] | 2012 | Case-Matched Outcomes in Bariatric Surgery for Treatment of Type 2 Diabetes in the Morbidly Obese Patient | cohort | USA | 172 | Surgery & pharmacological | None | resolution |
| 46 | Douglas [33] | 2015 | Bariatric Surgery in the United Kingdom: A Cohort Study of Weight Loss and Clinical Outcomes in Routine Clinical Care | cohort | UK | 2616 | Surgery  | None | resolution |
| 47 | Du [96] | 2018 | Effects of Laparoscopic Roux-en-Y Gastric Bypass on Chinese Type 2 Diabetes Mellitus Patients with Different Levels of Obesity: Outcomes After 3 Years' Follow-Up | cohort | China | 103 | Surgery | 2009 report (1 definition) | resolution |
| 48 | Durmush [97] | 2014 | Short-term outcomes of sleeve gastrectomy for morbid obesity: Does staple line reinforcement matter? | cohort | Australia | 128 | Surgery | None | resolution |
| 49 | Egan [98] | 2016 | The Impact of Laparoscopic Adjustable Gastric Banding on an NHS Cohort of Type 2 Diabetics: a Prospective Cohort Study | cohort | UK | 120 | Surgery | None | - |
| 50 | English [99] | 2015 | Predicting remission of diabetes after RYGB surgery following intensive management to optimize preoperative glucose control | cohort | USA | 245 | Surgery | None | resolution |
| 51 | Esposito [100] | 2014 | The effects of a Mediterranean diet on the need for diabetes drugs and remission of newly diagnosed type 2 diabetes: Follow-up of a randomized trial | RCT | Italy | 215 | Dietary | None | - |
| 52 | Finno [101] | 2020 | Single Versus Double-Anastomosis Duodenal Switch: Single-Site Comparative Cohort Study in 440 Consecutive Patients | cohort | Spain | 157 | Surgery | None | resolution |
| 53 | Friedman [29] | 2019 | The association Between Kidney Disease and Diabetes Remission in Bariatric Surgery Patients With Type 2 Diabetes | cohort | USA | 737 | Surgery | 2009 report (2 definitions) | - |
| 54 | Girundi [102] | 2016 | Type 2 Diabetes Mellitus remission eighteen months after Roux-en-Y gastric bypass | cohort | Brazil | 468 | Surgery | Sociedade Brasileira de Diabetes (SBD). Algoritmo para o tratamento do diabetes tipo 2 -atualização 2011.Posicionamento oficial SBD número-2011. | resolution |
| 55 | Gregg [14] | 2012 | Association of an intensive lifestyle intervention with remission of type 2 diabetes | cohort  | USA | 4503 | Lifestyle | 2009 report (2 definitions) | cure |
| 56 | Guerreiro [103] | 2019 | Long-Term Weight Loss and Metabolic Sundrome Remission after Bariatric Surgery: The Effect of Sex, Age, Metabolic Parameters and Surgical Technique- A 4-Year Follow-Up Study | cohort | Portugal  | 272 | Surgery  | None | resolution |
| 57 | Gullick [104] | 2015 | Association of Race and Socioeconomic Status with Outcomes Following Laparoscopic Roux-en-Y Gastric Bypass | cohort | USA | 254 | Surgery | None | - |
| 58 | Gulliford [105] | 2016 | Effect of Contemporary Bariatric Surgical Procedures on Type 2 Diabetes Remission. A Population-Based Matched Cohort Study | cohort | UK | 1652 | Surgery | None | - |
| 59 | Hall [106] | 2010 | Preoperative Factors Predicting Remission of Type 2 Diabetes Mellitus After Roux-en-Y Gastric Bypass Surgery for Obesity | cohort | UK | 110 | Surgery | 2009 report (1 definition) | resolution |
| 60 | Haider [107] | 2020 | Remission of type 2 diabetes following long-term treatment with injectable testosterone undecanoate in patients with hypogonadism and type 2 diabetes: 11-year data from a real-world registry study | cohort | Germany | 356 | Pharmacological  | None  | - |
| 61 | Hariri [108] | 2017 | Preoperative insulin therapy as a marker for type 2 diabetes remission in obese patients after bariatric surgery | cohort | USA | 180 | Surgery | Brethauer SA, Kim J, el Chaar M, Papasavas P, Eisenberg D, Rogers A et al. Standardized outcomes reporting in metabolic and bariatric surgery. Surg Obes Relat Dis. 2015;11(3):489–506. | resolution |
| 62 | Haruta [109] | 2017 | Long-Term Outcomes of Bariatric and Metabolic Surgery in Japan: Results of a Multi-Institutional Survey | cohort | Japan | 136 | Surgery | Brethauer SA, Kim J, el Chaar M, Papasavas P, Eisenberg D, Rogers A et al. Standardized outcomes reporting in metabolic and bariatric surgery. Surg Obes Relat Dis. 2015;11(3):489–506. | - |
| 63 | Hatoum [110] | 2016 | Clinical factors associated with remission of obesity-related comorbidities after bariatric surgery | cohort | USA | 4848 | Surgery | None | resolution |
| 64 | Hayes M [111] | 2011 | A Model for Predicting the Resolution of Type 2 Diabetes in Severely Obese Subjects Following Roux-en Y Gastric Bypass Surgery | cohort | NZ | 127 | Surgery | None | resolution |
| 65 | Hayes S [55] | 2015 | The effect of insurance status on pre- and post-operative bariatric surgery outcomes | cohort | USA | 684 | Surgery | None | - |
| 66 | Hoerger [112] | 2010 | Cost-effectiveness of bariatric surgery for severely obese adults with diabetes | cost-effectiveness model | USA | - | Surgery | None | - |
| 67 | Hofsø [113] | 2019 | Gastric bypass versus sleeve gastrectomy in patients with type 2 diabetes (Osebery): a single-centre, triple-blind, randomised controlled trial  | RCT | Norway  | 107 | Surgery  | 2009 report (1 definition) | - |
| 68 | Honarmand [114] | 2017 | Type 2 diabetes remission rates 1-year post-Roux-en-Y gastric bypass and validation of the DiaRem score: the Ontario Bariatric Network experience | cohort | Canada | 900 | Surgery | American Diabetes Association. Classification and diagnosis of diabetes. Sec. 2. Diabetes Care 2015; 38(Suppl. 1): S8–S16. | - |
| 69 |  Hsu [115] | 2015 | Effect of Bariatric Surgery vs Medical Treatment on Type 2 Diabetes in Patients With Body Mass Index Lower Than 35Five-Year Outcomes | RCT | Taiwan | 300 | Surgery & pharmacological | 2009 report (2 definitions) | - |
| 70 |  Hussain [116] | 2019 | Short- and Mid-term Outcomes of 527 One Anastomosis Gastric Bypass/Mini-Gastric Bypass (OAGB/MGB) Operations: Retrospective Study | cohort | UK | 124 | Surgery | None | resolution |
| 71 | Iacobellis [117] | 2015 | Predictors of Short-Term Diabetes Remission After Laparoscopic Roux-en-Y Gastric Bypass | cohort | USA | 206 | Surgery | 2009 report (1 definition)  | resolution |
| 72 | Ikramuddin [118] | 2016 | 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 | RCT | USA & Taiwan | 120 | Surgery | 2009 report (2 definitions) | - |
| 73 | Inabnet [119] | 2012 | Early Outcomes of Bariatric Surgery in Patients with Metabolic Syndrome: An Analysis of the Bariatric Outcomes Longitudinal Database | cohort | USA | 6103 | Surgery | None | resolution |
| 74 | Jakobsen [120] | 2018 | Association of Bariatric Surgery vs Medical Obesity Treatment With Long-term Medical Complications and Obesity-Related Comorbidities | cohort | Norway | 491 | Surgery | None | - |
| 75 | Jans [121] | 2019 | Duration of type 2 diabetes and remission rates after bariatric surgery in Sweden 2007-2015: A registry-based cohort study | cohort | Sweden | 3594 | Surgery | Brethauer SA, Kim J, el Chaar M, Papasavas P, Eisenberg D, Rogers A et al. Standardized outcomes reporting in metabolic and bariatric surgery. Surg Obes Relat Dis. 2015;11(3):489–506. | - |
| 76 | Jimenez [122] | 2012 | Long-term effects of sleeve gastrectomy and roux-en-y gastric bypass surgery on type 2 diabetes mellitus in morbidly obese subjects | cohort | Spain | 153 | Surgery | 2009 report (1 definition) | resolution |
| 77 | Jimenez [123] | 2015 | Remission of type 2 diabetes after roux-en-y gastric bypass or sleeve gastrectomy is associated with a distinct glycemic profile | cohort | Spain | 232 | Surgery | 2009 report (1 definition) | - |
| 78 | Jönsson [124] | 2017 | Diabetes Resolution and Work Absenteeism After Gastric Bypass: a 6-Year Study | cohort | Sweden | 656 | Surgery | None | resolution |
| 79 | Karter [21] | 2014 | Incidence of Remission in Adults With Type 2 Diabetes: The Diabetes & Aging Study | cohort | USA | 122781 | - | 2009 report (3 definitions) | - |
| 80 | Kaska [125] | 2014 | Dynamics of type 2 diabetes mellitus laboratory remission after Roux-en-Y gastric bypass in patients with body mass index lower than 35 kg/m2 and higher than 35 kg/m2 in a 3-year observation period | cohort | Poland | 112 | Surgery | 2009 report (1 definition) | regression, cure |
| 81 | Khalaj [126] | 2020 | Comparing the Efficacy and Safety of Roux-en-Y Gastric Bypass with One-Anastomosis Gastric Bypass with a Biliopancreatic Limb of 200 or 160 cm: 1-Year Results of the Tehran Obesity Treatment Study (TOTS) | cohort | Iran | 294 | Surgery | None  | - |
| 82 | Kim JW [127] | 2012 | Outcome after gastrectomy in gastric cancer patients with type 2 diabetes | cohort | S Korea | 403 | Surgery | None | resolution |
| 83 | Kim S [128] | 2010 | Long-term follow-up of the metabolic profiles in obese patients with type 2 diabetes mellitus after roux-en-Y gastric bypass | cohort | S korea | 219 | Surgery | American Diabetes Association. Standards of medical care in diabetes—2008. Diabetes Care. 2008;31(suppl 1):S12–S54. | resolution |
| 84 | Kothari [129] | 2017 | Long-term (>10-year) outcomes after laparoscopic Roux-en-Y gastric bypass | cohort | USA | 367 | Surgery | None | resolution |
| 85 | Kular [27] | 2015 | Seven Years of Mini-Gastric Bypass in Type II Diabetes Patients with a Body Mass Index <35 kg/m(2) | cohort | India | 983 | Surgery | 2009 report (2 definitions) | resolution |
| 86 | Lager [130] | 2018 | Metabolic Parameters, Weight Loss, and Comorbidities 4 Years After Roux-en-Y Gastric Bypass and Sleeve Gastrectomy | cohort | USA | 231 | Surgery  | 2009 report (1 definition)  | - |
| 87 | Lean [131] | 2019 | Durability of a primary care-led weight-management intervention for remission of type 2 diabetes: 2-year results of the DiRECT open label, cluster-randomised trial  | CRT | UK | 256 | Lifestyle  | McCombie L, Leslie W, Taylor R, Kennon B, Sattar N, Lean MEJ. Beating type 2 diabetes into remission. BMJ. 2017; 358 | - |
| 88 | Lean [13] | 2018 | Primary care-led weight management for remission of type 2 diabetes (DiRECT): an open-label, cluster-randomised trial | CRT | UK | 290 | Lifestyle | None  | - |
| 89 | Lee MH [132] | 2015 | Predictors of Long-Term Diabetes Remission After Metabolic Surgery | cohort | Taiwan | 157 | Surgery | 2009 report (3 definitions) | - |
| 90 | Lee PC [133] | 2018 | Ethnicity Does Not Influence Glycemic Outcomes or Diabetes Remission After Sleeve Gastrectomy or Gastric Bypass in a Multiethnic Asian Cohort | cohort | Singapore | 145 | Surgery | 2009 report (1 definition) | - |
| 91 | Lee SK [47] | 2016 | Roux-en-Y Gastric Bypass vs. Sleeve Gastrectomy vs. Gastric Banding: The First Multicenter Retrospective Comparative Cohort Study in Obese Korean Patients | cohort | S Korea | 102 | Surgery | None | resolution |
| 92 | Lee W [134] | 2012 | Comparative study of diabetes mellitus resolution according to reconstruction type after gastrectomy in gastric cancer patients with diabetes mellitus | cohort | S Korea | 229 | Surgery | 2009 report (3 definitions) | resolution |
| 93 | Lee WJ [135] | 2015 | The Effect and Predictive Score of Gastric Bypass and Sleeve Gastrectomy on Type 2 Diabetes Mellitus Patients with BMI < 30 kg/m(2) | cohort | Taiwan | 512 | Surgery  | 2009 report (2 definitions) | -- |
| 94 | Lee WJ [136] | 2016 | Bariatric versus diabetes surgery after five years of follow up | cohort | Taiwan | 618 | Surgery | 2009 report (2 definitions) |  |
| 95 | Lee WJ [137] | 2017 | Metabolic Surgery for Diabetes Treatment: Sleeve Gastrectomy or Gastric Bypass? | cohort | Taiwan | 579 | Surgery | 2009 report (2 definitions) | resolution |
| 96 | Lee WJ [138] | 2016 | Preoperative Prediction of Type 2 Diabetes Remission After Gastric Bypass Surgery: a Comparison of DiaRem Scores and ABCD Scores | cohort | Taiwan | 245 | Surgery | 2009 report (3 definitions) | resolution |
| 97 | Lee WJ [56] | 2012 | C-peptide Predicts the Remission of Type 2 Diabetes After Bariatric Surgery | cohort | Taiwan | 205 | Surgery | None | resolution |
| 98 | Lee WJ [139] | 2013 | Predicting success of metabolic surgery: age, body mass index, C-peptide, and duration score | cohort | Taiwan | 239 | Surgery | 2009 report (1 definition) | - |
| 99 | Lemus [140] | 2018 | The impact of bariatric surgery on insulin-treated type 2 diabetes patients | cohort | Canada | 2047 | Surgery | 1. 2009 report (2 definitions) 2. Rubino F, Nathan DM, Eckel RH, Schauer PR, Alberti KG, Zimmet PZ, et al. Metabolic surgery in the treatment algorithm for type 2 diabetes: a joint statement by International Diabetes Organizations. Diabetes Care. 2016; 39(6):861–877. | resolution |
| 100 | Liang H [141] | 2018 | The predictive factors for diabetic remission in Chinese patients with BMI > 30kg/m2 and BMI < 30kg/m2 are different | cohort | China | 144 | Surgery | None | - |
| 101 | Liang Z [142] | 2013 | Effect of laparoscopic Roux-en-Y gastric bypass surgery on type 2 diabetes mellitus with hypertension: A randomized controlled trial | RCT | China | 101 | Surgery & pharmacological | No definition  | - |
| 102 | Liu [143] | 2013 | Fasting plasma glucose after intensive insulin therapy predicted long-term glycemic control in newly diagnosed type 2 diabetic patients | cohort | China | 188 | Pharmacological | None | - |
| 103 | Liu [144] | 2015 | Insulin requirement profiles of short-term intensive insulin therapy in patients with newly diagnosed type 2 diabetes and its association with long-term glycemic remission | RCT | China | 100 | Pharmacological & lifestyle | Li Y, Xu W, Liao Z, Yao B, Chen X, Huang Z, et al. Induction of Long-term Glycemic Control in Newly Diagnosed Type 2 Diabetic Patients Is Associated With Improvement of β-Cell Function. Diabetes Care. 2004; 11: 2597-602. | - |
| 104 | Madsen [23] | 2019 | Effect of Roux-en-Y gastric bypass surgery on diabetes remission and complications in individuals with type 2 diabetes: a Danish population-based matched cohort study | cohort | Denmark | 2185 | Surgery | 2009 report (1 definition) | resolution |
| 105 | Mathew [145] | 2015 | Effect of metabolic surgery on type 2 diabetes remission: A matched group analysis | cohort | India | 305 | Surgery | None | - |
| 106 | Mathew [146] | 2015 | Metabolic effects of three different bariatric procedures-a retrospective study | cohort | India | 176 | Surgery | None | - |
| 107 | McTigue [37] | 2020 | Comparing the 5-year Diabetes Outcomes of Sleeve Gastrectomy and Gstric Bypass The National patient-Centred Clnical Research Network (PCORNet) Bariatric Study | cohort | USA | 9710 | Surgery | 2009 report (1 definition) | - |
| 108 | Moh [28] | 2020 | Matabolic Surgery Diabetes Remission (MDR) Score: a New Preoperative Scoring System for Predicting Type 2 Diabetes Remission at 1 Year After Metabolic Surgery in the Singapore Multi-ethnic Asian setting | cohort | Singapore | 114 | Surgery  | Lee WJ, Almulaifi A, Tsou JJ, Ser KH, Lee YC, Chen SC. Laparoscopic sleeve gastrectomy for type 2 diabetes mellitus: predicting the success by abcd score. Surg Obes Relat Dis. 2015; 11:991–6. | - |
| 109 | Mu [147] | 2012 | Effects of a combination of oral anti‐diabetes drugs with basal insulin therapy on β‐cell function and glycaemic control in patients with newly diagnosed type 2 diabetes | RCT | China | 125 | Pharmacological | None | -- |
| 110 | Murphy [42] | 2018 | Laparoscopic Sleeve Gastrectomy Versus Banded Roux-en-Y Gastric Bypass for Diabetes and Obesity: a Prospective Randomised Double-Blind Trial | RCT | NZ | 109 | Surgery | None | - |
| 111 | Musella [148] | 2014 | The laparoscopic mini-gastric bypass: The Italian experience: Outcomes from 974 consecutive cases in a multicenter review | cohort | Italy | 201 | Surgery | None (1 definition) | resolution |
| 112 | Musella [149] | 2016 | Efficacy of Bariatric Surgery in Type 2 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 | cohort | Italy, Germany, Netherlands, Portugal and Czech Republic | 206 | Surgery | 2009 report | - |
| 113 | Naitoh [150] | 2018 | Efficacy of Sleeve Gastrectomy with Duodenal-Jejunal Bypass for the Treatment of Obese Severe Diabetes Patients in Japan: a Retrospective Multicenter Study | cohort | Japan | 298 | Surgery | Brethauer SA, Kim J, el Chaar M, Papasavas P, Eisenberg D, Rogers A et al. Standardized outcomes reporting in metabolic and bariatric surgery. Surg Obes Relat Dis. 2015;11(3):489–506. | resolution |
| 114 | Ng [151] | 2015 | Ethnic variation in weight loss, but not co-morbidity remission, after laparoscopic gastric banding and Roux-en-Y gastric bypass | cohort | USA | 500 | Surgery | None | - |
| 115 | Nor Hanipah [152] | 2019 | Laparoscopic loop duodenaljejunal bypass with sleeve gastrectomy in type 2 diabetic patients | cohort | Taiwan  | 163 | Surgery | 2009 report (2 definitions) | resolution |
| 116 | Nora [31] | 2017 | Should Roux-en-Y gastric bypass biliopancreatic limb length be tailored to achieve improved diabetes outcomes? | cohort | Portugal | 114 | Surgery | None | - |
| 117 | O'Rourke [153] | 2019 | Serum biomarkers of inflammation and adiposity in the LABS cohort: associations with metabolic disease and surgical outcomes | cohort | USA | 352 | Surgery | None | - |
| 118 | Panunzi [154] | 2016 | Determinants of Diabetes Remission and Glycemic Control after Bariatric Surgery | cohort | Sweden, Italy, Australia | 624 | Surgery | None | - |
| 119 | Park [155] | 2016 | Prediction of Diabetes Remission in Morbidly Obese Patients After Roux-en-Y Gastric Bypass | cohort | South Korea | 102 | Surgery | 2009 report (2 definitions) | resolution |
| 120 | Park [156] | 2016 | Laparoscopic Roux-en-Y gastric bypass in obese Korean patients: efficacy and potential adverse events | cohort | South Korea | 104 | Surgery | None | resolution |
| 121 | Pereyra-Garcia Castro [40] | 2019 | Efficacy in type 2 diabetes mellitus remission in patients undergoing bariatric surgery | cohort | Spain | 106 | Surgery | 1. 2009 report (3 definitions) 2. Rubio MA, Monereo S, Lecube A, Resa J, Masdevall C, de la Cruz VF, et al. Joint position statement of the SEEN-SECO-SEEDO-SED societies on metabolic surgery for type 2 diabetes mellitus. Endocrinol Nutr. 2013;60(10):547–8. | - |
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| 129 | Ramos-Levi [161] | 2013 | Remission of Type 2 Diabetes Mellitus Should Not Be the Foremost Goal after Bariatric Surgery | cohort | Spain | 125 | Surgery | 2009 report (1 definition)  | - |
| 130 | Ruiz-Tovar [162] | 2019 | Long-term follow-up after sleeve gastrectomy versus Roux-en-Y gastric bypass versus one-anastomosis gastric bypass: a prospective randomized comparative study of weight loss and remission of comorbidities | cohort | Spain | 190 | Surgery | None | resolution |
| 131 | Samuel [163] | 2020 | Mid-term bariatric surgery outcomes for obese patients: does weight matter? | cohort | UK | 126 | Surgery | Standards of medical care in diabetes 2018. American Diabetes Association. Diabetes Care. 2018; 41 Suppl 1:S144-51 | - |
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| 133 | Scally [165] | 2016 | Video Ratings of Surgical Skill and Late Outcomes of Bariatric Surgery | cohort | USA | 1041 | Surgery | None | resolution |
| 134 | Schwoerer [166] | 2017 | The effect of close postoperative follow-up on co-morbidity improvement after bariatric surgery | cohort | USA | 18629 | Surgery | None | resolution |
| 135 | Scopinaro [32] | 2017 | Prediction of Diabetes Remission at Long Term Following Biliopancreatic Diversion | cohort | Italy | 108 | Surgery | 2009 report (1 definition) | resolution |
| 136 | Seki [167] | 2017 | Five-Year-Results of Laparoscopic Sleeve Gastrectomy with Duodenojejunal Bypass for Weight Loss and Type 2 Diabetes Mellitus | cohort | Japan | 117 | Surgery | 2009 report (1 definition) | - |
| 137 | Sepulveda [168] | 2018 | Metabolic Surgery Comparing Sleeve Gastrectomy with Jejunal Bypass and Roux-en-Y Gastric Bypass in Type 2 Diabetic Patients After 3 Years | cohort | Chile | 103 | Surgery | 2009 report (1 definition) | - |
| 138 | Ser [169] | 2019 | Laparoscopic single-anastomosis duodenal-jejunal bypass with sleeve gastrectomy (SADJB-SG): Surgical risk and long-term results | cohort | Taiwan | 118 | Surgery | 2009 report (3 definitions) | resolution |
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| 147 | Still [58] | 2014 | Preoperative prediction of type 2 diabetes remission after Roux-en-Y gastric bypass surgery: A retrospective cohort study | cohort | USA | 690 | Surgery | 2009 report (2 definitions) | resolution  |
| 148 | Sudan [178] | 2018 | Tailoring Bariatric Surgery: Sleeve gastrectomy, RYGB and Biliopancreatic diversion with duodenal switch | cohort | USA | 23222 | Surgery | None | resolution |
| 149 | Sudan [179] | 2017 | Comparative effectiveness of primary bariatric operations in the United States | cohort | USA | 35 841 | Surgery  | None | resolution |
| 150 | Sundbom [180] | 2017 | Substantial decrease in comorbidity 5 years after gastric bypass: A population-based study from the Scandinavian obesity surgery registry | cohort | Sweden | 4056 | Surgery | None | - |
| 151 | Taha [181] | 2017 | Outcomes of One Anastomosis Gastric Bypass in 472 Diabetic Patients | cohort | Egypt  | 472 | Surgery | American Diabetes Association. Standards of medical care in diabetes 2012. Diabetes Care. 2012;35(Suppl 1):S11–63 | resolution |
| 152 | Taylor [182] | 2017 | Effects of statin therapy on weight loss and diabetes in bariatric patients | cohort | USA | 557 | Pharmacological | None | resolves |
| 153 | Techagumpuch [60] | 2019 | A Prospective Randomized Control Trial: Two Years Outcome in Diabetes Control after Bariatric Surgery Comparison between Laparoscopic Sleeve Gastrectomy and Laparoscopic Roux-En-Y Gastric Bypass | RCT | Thailand | 104 | Surgery | None | - |
| 154 | Tharakan [183] | 2017 | Limitations of the DiaRem Score in Predicting Remission of Diabetes Following Roux-En-Y Gastric Bypass (RYGB) in an ethnically Diverse Population from a Single Institution in the UK | cohort | UK | 262 | Surgery | 2009 report (2 definitions) | - |
| 155 | Thereaux [184] | 2015 | Comparison of results after one year between sleeve gastrectomy and gastric bypass in patients with BMI >= 50 kg/m2 | cohort | France | 138 | Surgery | 2009 report (1 definition) | resolution |
| 156 | Toh [185] | 2018 | Five-year long-term clinical outcome after bariatric metabolic surgery: A multi-ethnic Asian population in Singapore | cohort | Singapore | 189 | Surgery | None | - |
| 157 | Valencia [59] | 2019 | The Impact of Ethnicity on Metabolic Outcomes after Bariatric Surgery | cohort | USA | 650 | Surgery | None | resolution |
| 158 | Van de Laar [186] | 2016 | Relationships between type 2 diabetes remission after gastric bypass and different weight loss metrics: Arguments against excess weight loss in metabolic surgery | cohort | Netherlands | 449 | Surgery | None | - |
| 159 | Van der Merwe [24] | 2015 | Baseline patient profiling and three-year outcome data after metabolic surgery at a South African centre of excellence | cohort | S Africa | 251 | Surgery | None | resolution |
| 160 | Velazquez-Fernandez [187] | 2019 | Development of an Interactive Outcome Estimation Tool for Laparoscopic Roux-en-Y Gastric Bypass in Mexico Based on a Cohort of 1002 Patients | cohort | Mexico | 1002 | Surgery  | None | resolution |
| 161 | Victorzon [188] | 2012 | Perioperative morbidity, mortality and early outcome of the first 360 gastric bypass operations performed in a district hospital | cohort | Finland | 170 | Surgery | None | resolution |
| 162 | Viscido [189] | 2019 | Obese Patients with Type 2 Diabetes: Outcomes After Laparoscopic Sleeve Gastrectomy | cohort | Argentina | 166 | Surgery | Brethauer SA, Kim J, el Chaar M, Papasavas P, Eisenberg D, Rogers A et al. Standardized outcomes reporting in metabolic and bariatric surgery. Surg Obes Relat Dis. 2015;11(3):489–506. | resolution |
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| 164 | Walker [191] | 2019 | Bariatric Surgery Among Medicare Subgroups: Short-and Long-Term Outcomes | cohort | USA | 637 | Surgery | None | - |
| 165 | Wazir [192] | 2019 | Two Years Remission of Type 2 Diabetes Mellitus after Bariatric Surgery  | cohort | UK | 121 | Surgery | 1. World Health Organization. Definition and diagnosis of diabetes mellitus and intermediate hyperglycemia. Geneva: World Health Organization; 2006. http://www.who.int.2. Report of a World Health Organization Consultation. Use of glycated haemoglobin (HbA1c) in the diagnosis of diabetes mellitus. Diabetes Res Clin Pract 2011; 93:299-309. | - |
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| 168 | Wood MH [195] | 2019 | Association of Race With Bariatric Surgery Outcomes | cohort | USA | 6022 | Surgery | None | - |
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| 170 | Yan [197] | 2019 | Analysis of Predictors of Type 2 Diabetes Mellitus Remission After Roux-en-Y Gastric Bypass in 101 Chinese Patients | cohort | China | 101 | Surgery | Chinese diabetes society. China guideline for type 2 diabetes. 2014. | - |
| 171 | Young [198] | 2019 | Long-term impact of bariatric surgery in diabetic nephropathy | cohort | USA | 101 | Surgery | 2009 report (1 definition) | resolution |
| 172 | Yska [30] | 2015 | Remission of type 2 diabetes mellitus in patients after different types of bariatric surgery: A population-based cohort study in the United Kingdom | cohort | UK | 2450 | Surgery | None | resolution |
| 173 | Zaman [199] | 2017 | The effects of optimal perioperative glucose control on morbidly obese patients undergoing bariatric surgery | cohort | USA | 155 | Surgery | None |  |
| 174 | Zaveri [200] | 2018 | Mid-term 4-Year Outcomes with Single Anastomosis Duodenal-Ileal Bypass with Sleeve Gastrectomy Surgery at a Single US Center | cohort | USA | 156 | Surgery | None | resolution |
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| 176 | Zhang [202] | 2015 | The Short-Term Remission of Diabetic Nephropathy After Roux-en-Y Gastric Bypass in Chinese Patients of T2DM with Obesity | cohort | China | 101 | Surgery | 2009 report (1 definition) | - |
| 177 | Zhang [203] | 2017 | Effect of Roux-en-Y Gastric Bypass on Remission of T2D: Medium-Term Follow-up in Chinese Patients with Different BMI Obesity Class | cohort | China | 120 | Surgery | Brethauer SA, Kim J, el Chaar M, Papasavas P, Eisenberg D, Rogers A et al. Standardized outcomes reporting in metabolic and bariatric surgery. Surg Obes Relat Dis. 2015;11(3):489–506. | resolution |
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a Guidelines or references were not always applied to all definitions

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