Appendix L: Excluded studies

L.1 Review Question 1: Which pharmacological blood glucose lowering therapies should be used to control blood glucose levels in people with type 2 diabetes?

Table 1: Excluded studies of full text papers

Number	Reference	Reason for exclusion
1	Aas,A.M., Hanssen,K.F., Berg,J.P., Thorsby,P.M. Insulin-stimulated increase in serum leptin levels precedes and correlates with weight gain during insulin therapy in type 2 diabetes. Journal of Clinical Endocrinology and Metabolism.2009;94(8):2900-2906.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
2	Aas,A.M., Ohrvik,J., Malmberg,K., Ryden,L., Birkeland,K.I. Insulin-induced weight gain and cardiovascular events in patients with type 2 diabetes. A report from the DIGAMI 2 study. Diabetes, Obesity & Metabolism 2009;11(4):323-29.	drug comparison not of interest-insulin vs. insulin
3	Ahren,B., Foley,J.E., Ferrannini,E., Matthews,D.R., Zinman,B., Dejager,S. Changes in prandial glucagon levels after a 2-year treatment with vildagliptin or glimepiride in patients with type 2 diabetes inadequately controlled with metformin monotherapy. Diabetes Care 2010;33(4):730-32.	outcomes not of interest
4	Ahren,B., Leguizamo,DA., Miossec,P. Efficacy and safety of lixisenatide once-daily morning or evening injections in type 2 diabetes inadequately controlled on metformin (GetGoal-M). Diabetes Care 2013;36(9):2543-50.	focus on timing of administration
5	Ahren,B., Schweizer,A., Dejager,S., Dunning,B.E., Nilsson,P.M., Persson,M. Vildagliptin enhances islet responsiveness to both hyper- and hypoglycemia in patients with type 2 diabetes. Journal of Clinical Endocrinology & Metabolism 2009;94(4):1236-43.	<12 week treatment duration
6	Al,Sifri S., Basiounny,A., Echtay,A., Al,Omari M., Harman-Boehm,I., Kaddaha,G., et al. The incidence of hypoglycaemia in Muslim patients with type 2 diabetes treated with sitagliptin or a sulphonylurea during Ramadan: a randomised trial. International Journal of Clinical Practice 2011;65(11):1132-40.	unclear if previous blood glucose lowering therapies were washed out/discontinued
7	Althouse,A.D., Abbott,J.D., Forker,A.D., Bertolet,M., Barinas-Mitchell,E., Thurston,R.C., Mulukutla,S. Risk factors for incident peripheral arterial disease in type 2 diabetes: Results from the bypass angioplasty revascularization investigation in type 2 diabetes (BARI 2D) trial.	unclear treatment groups or intervention

Number	Reference	Reason for exclusion
	Diabetes Care 2014;(5):1346-52.	
8	Althouse,A.D., Abbott,J.D., Sutton-Tyrrell,K., Forker,A.D., Lombardero,M.S., Buitron,L.V., Pena-Sing,I. Favorable effects of insulin sensitizers pertinent to peripheral arterial disease in type 2 diabetes. Diabetes Care 2013;(10):3269-75.	unclear treatment groups or intervention
9	Altuntas,Y., Ozen,B., Ozturk,B., Sengul,A., Ucak,S., Ersoy,O. Comparison of additional metformin or NPH insulin to mealtime insulin lispro therapy with mealtime human insulin therapy in secondary OAD failure. Diabetes, Obesity and Metabolism 2003;5(6):371-78.	unclear if previous blood glucose lowering therapies were washed out/discontinued
10	Alvarsson,M., Sundkvist,G., Lager,I., Berntorp,K., Fernqvist-Forbes,E., Steen,L., et al. Effects of insulin vs. glibenclamide in recently diagnosed patients with type 2 diabetes: a 4-year follow-up. Diabetes, Obesity & Metabolism 2008;10(5):421-29.	drug comparison not of interest-insulin vs. 1 oral antidiabetic drug
11	Alvarsson M, Sundkvist G, Lager I, Henricsson M, Berntorp K, Fernqvist-Forbes E, et al. Beneficial Effects of Insulin Versus Sulphonylurea on Insulin Secretion and Metabolic Control in Recently Diagnosed Type 2 Diabetic Patients. Diabetes Care 2003;26(8):2231-37.	drug comparison not of interest-insulin vs. 1 oral antidiabetic drug
12	Amador-Licona,N, Guizar-Mendoza,JM, Vargas,E, Sanchez-Camargo,G. The short-term effect of a switch from glybenclamide to metformin on blood pressure and microalbuminuria in patients with type 2 diabetes mellitus. Archives of medical research 2000;31(6):571-75.	unclear if previous blood glucose lowering therapies were washed out/discontinued
13	Amori,R.E. & Lau,J. Efficacy and safety of incretin therapy in type 2 diabetes: Systematic review and meta-analysis. Journal of the American Medical Association 2007;(2):194-206.	systematic review/meta-analysis/pooled analysis/review
14	Anderson,J.H., Jr, Brunelle,R.L. MEaltime treatment with insulin analog improves postprandial hyperglycemia and hypoglycemia in patients with non-insulin-dependent diabetes mellitus. Archives of Internal Medicine 1997;157(11):1249-55.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
15	Anderson,JH., Brunelle,RL., Koivisto,VA., Trautmann,ME., Vignati,L. Improved mealtime treatment of diabetes mellitus using an insulin analogue. Clinical Therapeutics 1997 Jan-Feb;19(1):62-72.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
16	Anon. A critical analysis of the clinical use of incretin-based therapies: The benefits by far outweigh the potential risks. Diabetes Care 2013;(7):2126-32.	systematic review/meta-analysis/pooled analysis/review
17	Anon. Addition of linagliptin to metformin improves glycaemic control in type 2 diabetes. Australian Journal of Pharmacy 2012;(1110):97.	abstract only/not full paper
18	Anon. Changes in bone biological markers after treatment of Iranian diabetic patients with	proportion or all patients taking pre-existing oral antidiabetic drugs

Number	Reference	Reason for exclusion
	pioglitazone: No relation to polymorphism of PPAR- (Pro12Ala). Journal of Research in Medical Sciences 2013;18(4):366-67.	(contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
19	Anon. Characteristics associated with maintenance of mean A1C<6.5% in people with dysglycemia in the ORIGIN trial. Diabetes Care 2013;36(10):2915-22.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
20	Anon. Combining incretin-based therapies with insulin: realizing the potential in type 2 diabetes. [Review][Erratum appears in Diabetes Care. 2013 Dec;36(12):4172]. Diabetes Care 2013;36:Suppl-32.	systematic review/meta-analysis/pooled analysis/review
21	Anon. Corrections to Acarbose compared with metformin as initial therapy in patients with newly diagnosed type 2 diabetes: An open-label, non-inferiority randomised trial. [Lancet Diabetes Endocrinol, 2, (2014), 46-55]. Lancet Diabetes and Endocrinology 2014;(2).	duplicate or same study results
22	Anon. Corrigendum to A comparison of efficacy and safety of vildagliptin and gliclazide in combination with metformin in patients with Type 2 diabetes inadequately controlled with metformin alone: A 52-week, randomized study [Diabet. Med., 27 (2010) 318-326]. Diabetic Medicine 2013;30(5):632.	abstract only/not full paper
23	Anon. Erratum: Clinical practice considerations and review of the literature for the use of DPP-4 inhibitors in patients with type 2 diabetes and chronic kidney disease (Endocrine Practice 6 (1025-1034)). Endocrine Practice 2014;(4):379.	systematic review/meta-analysis/pooled analysis/review
24	Anon. Erratum: Efficacy and safety of sitagliptin in patients with type 2 diabetes and ESRD receiving dialysis: A 54-week randomized trial (American Journal of Kidney Diseases (2013) 61:4 (579-587)). American Journal of Kidney Diseases 2013;62(4):847.	abstract only/not full paper
25	Anon. Erratum to Assessing the cardio-cerebrovascular safety of vildagliptin: Meta-analysis of adjudicated events from a large Phase III type 2 diabetes population. [Diabetes Obes Metab, 12, (2010), 485-494]. Diabetes, Obesity and Metabolism 2010;12(9):832.	systematic review/meta-analysis/pooled analysis/review
26	Anon. GLP-1 receptor agonists vs. DPP-4 inhibitors for type 2 diabetes: is one approach more successful or preferable than the other? International Journal of Clinical Practice 2014;68(5):557-67.	systematic review/meta-analysis/pooled analysis/review
27	Anon. Glucose control: Non-insulin therapies. South African Family Practice 2014;56(1):S21-31.	systematic review/meta-analysis/pooled analysis/review
28	Anon. Insulin aspart : an evidence-based medicine review. Clinical Drug Investigation 2004;24(12):695-717.	systematic review/meta-analysis/pooled analysis/review
29	Anon. Insulin therapy and cancer. [Review]. Diabetes Care 2013;36:Suppl-4.	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
30	Anon. LY2605541-A preferential hepato-specific insulin analogue. Diabetes 2014;63(2):390-92.	commentary/letter/editorial
31	Anon. Pathophysiological and pharmacological rationale for the use of exenatide once weekly in patients with type 2 diabetes. Advances in Therapy 2014;31(3):247-63.	systematic review/meta-analysis/pooled analysis/review
32	Anon. The importance of incretin therapies for managing type 2 diabetes. Lancet Diabetes and Endocrinology 2014;(2):95-97.	systematic review/meta-analysis/pooled analysis/review
33	Anon. The safety of incretin based drugs. BMJ 2014;348:g2779.	systematic review/meta-analysis/pooled analysis/review
34	Anon. Tolerability of saxagliptin in patients with inadequately controlled type 2 diabetes: Results from 6 phase III studies. Journal of Managed Care Pharmacy 2014;20(2):120-29.	systematic review/meta-analysis/pooled analysis/review
35	Apovian,C.M., Bergenstal,R.M., Cuddihy,R.M., Qu,Y., Lenox,S., Lewis,M.S. Effects of Exenatide Combined with Lifestyle Modification in Patients with Type 2 Diabetes. American Journal of Medicine 2010;123(5):468:e9-17.	across treatment strategy
36	Arakaki,R.F., Blevins,T.C., Wise,J.K., Liljenquist,D.R., Jiang,H.H., Jacobson,J.G. Comparison of insulin lispro protamine suspension versus insulin glargine once daily added to oral antihyperglycaemic medications and exenatide in type 2 diabetes: a prospective randomized open-label trial. Diabetes, Obesity and Metabolism 2014;16(6):510-18.	drug comparison not of interest - insulin + 3 oral antidiabetic drugs vs insulin + 3 oral antidiabetic drugs
37	Araki,E., Kawamori,R., Inagaki,N., Watada,H., Hayashi,N., Horie,Y., et al. Long-term safety of linagliptin monotherapy in Japanese patients with type 2 diabetes. Diabetes, Obesity & Metabolism 2013;15(4):364-71.	dose comparison of same drug
38	Aravind,S.R., Ismail,S.B., Balamurugan,R., Gupta,J.B., Wadhwa,T., Loh,S.M., et al. Hypoglycemia in patients with type 2 diabetes from India and Malaysia treated with sitagliptin or a sulfonylurea during Ramadan: a randomized, pragmatic study. Current Medical Research & Opinion 2012;28(8):1289-96.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
39	Arjona Ferreira,J.C., Corry,D., Mogensen,C.E., Sloan,L., Xu,L., Golm,G.T., et al. Efficacy and safety of sitagliptin in patients with type 2 diabetes and ESRD receiving dialysis: a 54-week randomized trial. American Journal of Kidney Diseases 2013;61(4):579-87.	duplicate or same study results
40	Armstrong,M.J., Barton,D., Gaunt,P., Hull,D., Guo,K., Stocken,D., et al. Liraglutide efficacy and action in non-alcoholic steatohepatitis (LEAN): Study protocol for a phase II multicentre, double-blinded, randomised, controlled trial. BMJ Open 2013;3(11):16.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
41	Aroda,V.R., Henry,R.R., Han,J., Huang,W., DeYoung,M.B., Darsow,T. Efficacy of GLP-1 Receptor Agonists and DPP-4 Inhibitors: Meta-Analysis and Systematic Review. Clinical	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
	Therapeutics 2012;34(6):1247-58.	
42	Asche,C.V., Bode,B., Busk,A.K. The economic and clinical benefits of adequate insulin initiation and intensification in people with type 2 diabetes mellitus. Diabetes, Obesity and Metabolism 2012;14(1):47-57.	systematic review/meta-analysis/pooled analysis/review
43	Aschner,P., Chan,J., Owens,D.R., Picard,S., Wang,E., Dain,M.P., et al. Insulin glargine versus sitagliptin in insulin-naive patients with type 2 diabetes mellitus uncontrolled on metformin (EASIE): a multicentre, randomised open-label trial. Lancet 2012;379(9833):2262-69.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. 2 oral antidiabetic drugs
44	Asnani,S., Kunhiraman,B., Jawa,A., Akers,D. Pioglitazone restores endothelial function in patients with type 2 diabetes treated with insulin. Metabolic Syndrome & Related Disorders 2006;4(3):179-84.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
45	August,P., Hardison,R.M., Hage,F.G., Marroquin,O.C., McGill,J.B., Rosenberg,Y., Steffes,M. Change in albuminuria and eGFR following insulin sensitization therapy versus insulin provision therapy in the BARI 2D study. Clinical Journal of the American Society of Nephrology 2014;9(1):64-71.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
46	Aulinger,B.A., Bedorf,A., Kutscherauer,G., De,Heer J., Holst,J.J. Defining the Role of GLP-1 in the Enteroinsulinar Axis in Type 2 Diabetes Using DPP-4 Inhibition and GLP-1 Receptor Blockade. Diabetes 2014;63(3):1079-92.	<12 week treatment duration
47	Bachmann,W., Petzinna,D., Raptis,S.A., Wascher,T. Long-term improvement of metabolic control by acarbose in type 2 diabetes patients poorly controlled with maximum sulfonylurea therapy. Clinical Drug Investigation 2003;23(10):679-86.	across treatment strategy
48	Bader,G. Vildagliptin more effectively achieves a composite endpoint of HbA1c<7.0% without hypoglycaemia and weight gain compared with glimepiride after 2 years of treatment. Diabetes Research and Clinical Practice 2013;100(3):e78-81.	duplicate or same study results
49	Baldwin,D., Zander,J., Munoz,C., Raghu,P., DeLange-Hudec,S., Lee,H., et al. A randomized trial of two weight-based doses of insulin glargine and glulisine in hospitalized subjects with type 2 diabetes and renal insufficiency. Diabetes Care 2012;35(10):1970-74.	<12 week treatment duration
50	Baradari,A.G., Zeydi,A.E., Aarabi,M. Metformin as an adjunct to insulin for glycemic control in patients with type 2 diabetes after CABG surgery: a randomized double blind clinical trial. Pakistan journal of biological sciences: PJBS 2011;14(23):1047-54.	<12 week treatment duration
51	Barbieri,M., Rizzo,M.R., Marfella,R., Boccardi,V., Esposito,A. Decreased carotid atherosclerotic process by control of daily acute	unclear if previous blood glucose lowering therapies were washed out/discontinued

Number	Reference	Reason for exclusion
	glucose fluctuations in diabetic patients treated by DPP-IV inhibitors. Atherosclerosis 2013;227(2):349-54.	
52	Barnett,A. Dosing of insulin glargine in the treatment of type 2 diabetes. Clinical Therapeutics 2007;29(6):987-99.	systematic review/meta-analysis/pooled analysis/review
53	Barnett,A.H. Complementing insulin therapy to achieve glycemic control. [Review]. Advances in Therapy 2013;30(6):557-76.	systematic review/meta-analysis/pooled analysis/review
54	Barnett,A.H., Burger,J., Johns,D., Brodows,R., Kendall,D.M., Roberts,A. Tolerability and efficacy of exenatide and titrated insulin glargine in adult patients with type 2 diabetes previously uncontrolled with metformin or a sulfonylurea: a multinational, randomized, open-label, two-period, crossover noninferiority trial. Clinical Therapeutics 2007;29(11):2333-48.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
55	Barnett,A.H., Charbonnel,B., Donovan,M., Fleming,D. Effect of saxagliptin as add-on therapy in patients with poorly controlled type 2 diabetes on insulin alone or insulin combined with metformin. Current Medical Research and Opinion 2012;28(4):513-23.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. insulin + 2 oral antidiabetic drugs
56	Barnett,A.H., Charbonnel,B., Li,J., Donovan,M. Saxagliptin add-on therapy to insulin with or without metformin for type 2 diabetes mellitus: 52-week safety and efficacy. Clinical Drug Investigation 2013;33(10):707-17.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
57	Barnett,A.H., Huisman,H., Jones,R., von,Eynatten M. Linagliptin for patients aged 70 years or older with type 2 diabetes inadequately controlled with common antidiabetes treatments: A randomised, double-blind, placebo-controlled trial. The Lancet 2013;382(9902):1413-23.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
58	Bazzano,L.A., Lee,L.J., Shi,L., Reynolds,K., Jackson,J.A. Safety and efficacy of glargine compared with NPH insulin for the treatment of Type 2 diabetes: A meta-analysis of randomized controlled trials. Diabetic Medicine 2008;25(8):924-32.	systematic review/meta-analysis/pooled analysis/review
59	Bebakar,W.M., Chow,C.C., Kadir,K.A., Suwanwalaikorn,S., Vaz,J.A., Bech,O.M. Adding biphasic insulin aspart 30 once or twice daily is more efficacious than optimizing oral antidiabetic treatment in patients with type 2 diabetes. Diabetes, Obesity & Metabolism 2007;9(5):724-32.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
60	Bech,P & Moses,R. The effect of prandial glucose regulation with repaglinide on treatment satisfaction, wellbeing and health status in patients with pharmacotherapy-naive Type 2 diabetes: A placebo-controlled, multicentre study. Quality of Life Research 2003;12(4):413-25.	outcomes not of interest
61	Beisswenger,P.J., Brown,W.V., Ceriello,A., Le,N.A., Goldberg,R.B., Cooke,J.P., et al. Meal-induced increases in C-reactive protein,	focus on test meals in substudy

Number	Reference	Reason for exclusion
	interleukin-6 and tumour necrosis factor alpha are attenuated by prandial + basal insulin in patients with Type 2 diabetes. Diabetic Medicine 2011;28(9):1088-95.	
62	Bell,D.S., Dharmalingam,M., Kumar,S. Triple oral fixed-dose diabetes polypill versus insulin plus metformin efficacy demonstration study in the treatment of advanced type 2 diabetes (TrIED study-II). Diabetes, Obesity & Metabolism 2011;13(9):800-05.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
63	Belsey,J. Glycaemic control and adverse events in patients with type 2 diabetes treated with metformin + sulphonylurea: a meta-analysis. Diabetes, Obesity & Metabolism 2008;10:Suppl-7.	systematic review/meta-analysis/pooled analysis/review
64	Bengel,F.M., Abletshauser,C., Neverve,J., Schnell,O., Nekolla,S.G., Standl,E. Effects of nateglinide on myocardial microvascular reactivity in Type 2 diabetes mellitus--a randomized study using positron emission tomography. Diabetic Medicine 2005;22(2):158-63.	comparison with unlicensed drug or drug indication
65	Bennett,W.L., Maruthur,N.M., Singh,S., Segal,J.B., Wilson,L.M., Chatterjee,R., et al. Comparative effectiveness and safety of medications for type 2 diabetes: An update including new drugs and 2-drug combinations. Annals of Internal Medicine 2011;154(9):602-18.	systematic review/meta-analysis/pooled analysis/review
66	Bergenstal,R.M., Li,Y., Porter,T.K. Exenatide once weekly improved glycaemic control, cardiometabolic risk factors and a composite index of an HbA1c < 7%, without weight gain or hypoglycaemia, over 52 weeks. Diabetes, Obesity & Metabolism 2013;15(3):264-71.	systematic review/meta-analysis/pooled analysis/review
67	Bergenstal,R.M., Rosenstock,J., Arakaki,R.F., Prince,M.J., Qu,Y., Sinha,V.P. A randomized, controlled study of once-daily LY2605541, a novel long-acting basal insulin, versus insulin glargine in basal insulin-treated patients with type 2 diabetes. Diabetes Care 2012;35(11):2140-47.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
68	Berhanu,P. & Perez,A. Effect of pioglitazone in combination with insulin therapy on glycaemic control, insulin dose requirement and lipid profile in patients with type 2 diabetes previously poorly controlled with combination therapy. Diabetes, Obesity & Metabolism 2007;9(4):512-20.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. insulin + 2 oral antidiabetic drugs
69	Berlie,H. Glucagon-like peptide-1 receptor agonists as add-on therapy to basal insulin in patients with type 2 diabetes: a systematic review. Diabetes, Metabolic Syndrome and Obesity Targets and Therapy 2012;5:165-74.	systematic review/meta-analysis/pooled analysis/review
70	Berlie,H.D. & Kalus,J.S. Thiazolidinediones and the risk of edema: A meta-analysis. Diabetes Research and Clinical Practice 2007;76(2):279-89.	systematic review/meta-analysis/pooled analysis/review
71	Berndt-Zipfel,C., Michelson,G., Dworak,M.,	unclear if previous blood glucose

Number	Reference	Reason for exclusion
	Mitry,M., Loffler,A. Vildagliptin in addition to metformin improves retinal blood flow and erythrocyte deformability in patients with type 2 diabetes mellitus - results from an exploratory study. Cardiovascular Diabetology 2013;12(1): 59.	lowering therapies were washed out/discontinued
72	Berneis,K., Rizzo,M., Stettler,C., Chappuis,B., Braun,M., Diem,P. Comparative effects of rosiglitazone and pioglitazone on fasting and postprandial low-density lipoprotein size and subclasses in patients with Type 2 diabetes. Expert Opinion on Pharmacotherapy 2008;9(3):343-49.	comparison with unlicensed drug or drug indication
73	Best,J.H., Boye,K.S., Rubin,R.R., Cao,D., Kim,T.H. Improved treatment satisfaction and weight-related quality of life with exenatide once weekly or twice daily. Diabetic Medicine 2009;26(7):722-28.	comparison with unlicensed drug or drug indication
74	Best,J.H., Rubin,R.R., Peyrot,M., Li,Y., Yan,P., Malloy,J. Weight-related quality of life, health utility, psychological well-being, and satisfaction with exenatide once weekly compared with sitagliptin or pioglitazone after 26 weeks of treatment. Diabetes Care 2011;34(2):314-19.	outcomes not of interest
75	Beyer,J., Haas,R., Enzmann,F., Lauerbach,M., Rademacher,J., Althoff,P.H., et al. 12 month's therapy with biosynthetic human insulin. Results of a double-blind comparative study with swine and bovine insulin in insulin-dependent diabetics during a multicenter study. MMW, Munchener medizinische Wochenschrift 1983;S69.	not in English
76	Bibra,H., Siegmund,T., Ceriello,A., Volozhyna,M. Optimized postprandial glucose control is associated with improved cardiac/vascular function - comparison of three insulin regimens in well-controlled type 2 diabetes. Hormone & Metabolic Research 2009;41(2):109-15.	drug comparison not of interest-insulin vs. insulin
77	Birkeland,K.I., Hanssen,K.F., Urdal,P., Berg,K. A long-term, randomized, comparative study of insulin versus sulfonylurea therapy in type 2 diabetes. Journal of Internal Medicine 1994;236(3):305-13.	drug comparison not of interest-insulin vs. 1 oral antidiabetic drug
78	Birkeland,K.I., Kilhovd,B., Thorsby,P., Torjesen,P.A., Ganss,R., Vaaler,S. Heterogeneity of non-insulin-dependent diabetes expressed as variability in insulin sensitivity, beta-cell function and cardiovascular risk profile. Diabetic Medicine 2003;20(1):37-45.	not a randomised controlled trial (no randomisation)
79	Birkeland,K.I., Rishaug,U., Hanssen,K.F. NIDDM: a rapid progressive disease Results from a long-term, randomised, comparative study of insulin or sulphonylurea treatment. 1996;39(12):1629-33.	drug comparison not of interest-insulin vs. 1 oral antidiabetic drug
80	Black,C, Donnelly,P, McIntyre,L, Royle,P, Shepherd,JJ. Meglitinide analogues for type 2 diabetes mellitus. Cochrane Database of	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
	Systematic Reviews 2007.	
81	Blevins,T., Han,J., Nicewarner,D., Chen,S., Oliveira,J.H.A. Exenatide is non-inferior to insulin in reducing HbA1c: An integrated analysis of 1423 patients with type 2 diabetes. Postgraduate Medicine 2010;122(3):118-28.	systematic review/meta-analysis/pooled analysis/review
82	Blevins,T., Pullman,J., Malloy,J., Yan,P., Taylor,K., Schulteis,C., Trautmann,M. DURATION-5: Exenatide once weekly resulted in greater improvements in glycemic control compared with exenatide twice daily in patients with type 2 diabetes. Journal of Clinical Endocrinology and Metabolism 2011;96(5):1301-10.	unclear if previous blood glucose lowering therapies were washed out/discontinued
83	Blickle,J.F., Hancu,N., Piletic,M., Profozic,V., Shestakova,M., Dain,M.P., Jacqueminet,S. Insulin glargine provides greater improvements in glycaemic control vs. intensifying lifestyle management for people with type 2 diabetes treated with OADs and 7-8% A1c levels. The TULIP study. Diabetes, Obesity & Metabolism 2009;11(4):379-86.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
84	Blonde,L., Dagogo-Jack,S., Banerji,M.A., Pratley,R.E., Marcellari,A., Braceras,R., Purkayastha,D. Comparison of vildagliptin and thiazolidinedione as add-on therapy in patients inadequately controlled with metformin: results of the GALIANT trial--a primary care, type 2 diabetes study. Diabetes, Obesity & Metabolism 2009;11(10):978-86.	comparing different types of sulfonylurea alone
85	Blonde,L., Klein,E.J., Han,J., Zhang,B., Mac,S.M., Poon,T.H., et al. Interim analysis of the effects of exenatide treatment on A1C, weight and cardiovascular risk factors over 82 weeks in 314 overweight patients with type 2 diabetes. Diabetes, Obesity & Metabolism 2006;8(4):436-47.	dose comparison of same drug
86	Blonde,L., Rosenstock,J., Mooradian,A.D., Piper,B.-A. Glyburide/metformin combination product is safe and efficacious in patients with type 2 diabetes failing sulphonylurea therapy. Diabetes, Obesity and Metabolism 2002;4(6):368-75.	unclear washout of previous blood glucose lowering therapy but termed monotherapy and <12 month duration
87	Bode,B.W., Brett,J., Falahati,A. Comparison of the efficacy and tolerability profile of liraglutide, a once-daily human GLP-1 analog, in patients with type 2 diabetes >=65 and <65 years of age: A pooled analysis from phase III studies. American Journal Geriatric Pharmacotherapy 2011;9(6):423-33.	systematic review/meta-analysis/pooled analysis/review
88	Bode,B.W., Testa,M.A., Magwire,M., Hale,P.M., Hammer,M., Blonde,L., Garber,A. Patient-reported outcomes following treatment with the human GLP-1 analogue liraglutide or glimepiride in monotherapy: results from a randomized controlled trial in patients with type 2 diabetes. Diabetes, Obesity & Metabolism	comparison with unlicensed drug or drug indication

Number	Reference	Reason for exclusion
	2010;12(7):604-12.	
89	Boehm,B.O., Home,P.D., Behrend,C., Kamp,N.M. Premixed insulin aspart- 30 vs. premixed human insulin 30/70 twice daily: a randomized trial in Type 1 and Type 2 diabetic patients. Diabetic Medicine 2002;19(5):393-99.	unclear if previous blood glucose lowering therapies were washed out/discontinued
90	Bolen,S., Feldman,L., Vassy,J., Wilson,L., Yeh,H.C., Marinopoulos,S., et al. Systematic review: comparative effectiveness and safety of oral medications for type 2 diabetes mellitus. Annals of Internal Medicine 2007;147(6):386-99.	systematic review/meta-analysis/pooled analysis/review
91	Bolli,G.B., Munteanu,M., Dotsenko,S., Niemoeller,E., Boka,G. Efficacy and safety of lixisenatide once daily vs. placebo in people with Type 2 diabetes insufficiently controlled on metformin (GetGoal-F1). Diabetic Medicine 2014 Feb;31(2):176-84.	rescue medication was provided to participants and unclear if analysis has been adjusted or switching of treatment
92	Bosi,E., Camisasca,R.P., Collober,C., Rochotte,E. Effects of vildagliptin on glucose control over 24 weeks in patients with type 2 diabetes inadequately controlled with metformin. Diabetes Care 2007;30(4):890-95.	dose comparison of same drug
93	Boussageon,R. & Gamble,J.M. Clinically relevant efficacy of insulin therapy in patients with type 2 diabetes. Therapie 2013;68(6):415-17.	commentary/letter/editorial
94	Boussageon,R., Supper,I., Bejan-Angoulvant,T., Kellou,N., Cucherat,M., Boissel,J.-P., et al. Reappraisal of metformin efficacy in the treatment of type 2 diabetes: A meta-analysis of randomised controlled trials. PLoS Medicine 2012;9(4):e1001204.	systematic review/meta-analysis/pooled analysis/review
95	Bowering,K., Reed,V.A., Felicio,J.S., Landry,J. A study comparing insulin lispro mix 25 with glargine plus lispro therapy in patients with Type 2 diabetes who have inadequate glycaemic control on oral anti-hyperglycaemic medication: results of the PARADIGM study. Diabetic Medicine 2012;29(9):e263-72.	unclear if previous blood glucose lowering therapies were washed out/discontinued
96	Boye,K.S., Matza,L.S., Oglesby,A., Malley,K., Kim,S., Hayes,R.P. Patient-reported outcomes in a trial of exenatide and insulin glargine for the treatment of type 2 diabetes. Health and Quality of Life Outcomes 2006;4:80.	outcomes not of interest
97	Bretzel,R.G., Eckhard,M., Landgraf,W., Owens,D.R. Initiating insulin therapy in type 2 diabetic patients failing on oral hypoglycemic agents: basal or prandial insulin? The APOLLO trial and beyond. Diabetes Care 2009;32:Suppl-5.	abstract only/not full paper
98	Bretzel,R.G., Nuber,U., Landgraf,W., Owens,D.R., Bradley,C. Once-daily basal insulin glargine versus thrice-daily prandial insulin lispro in people with type 2 diabetes on oral hypoglycaemic agents (APOLLO): an open randomised controlled trial. The Lancet 2008;371(9618):1073-84.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study

Number	Reference	Reason for exclusion
99	Bretzel,RG., Arnolds,S, Medding,J. A Direct Efficacy and Safety Comparison of Insulin Aspart, Human Soluble Insulin, and Human Premix Insulin (70/30) in Patients With Type 2 Diabetes. Diabetes Care 2004;27(5):1023-27.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
100	Briet,C., Saraval-Gross,M., Kajbaf,F., Fournier,A. Erythrocyte metformin levels in patients with type 2 diabetes and varying severity of chronic kidney disease. Clinical Kidney Journal 2012;5(1):65-67.	not a randomised controlled trial (no randomisation)
101	Brown,N.J., Byiers,S., Carr,D., Maldonado,M. Dipeptidyl peptidase-IV inhibitor use associated with increased risk of ACE inhibitor-associated angioedema. Hypertension 2009;54(3):516-23.	systematic review/meta-analysis/pooled analysis/review
102	Bunck,M.C., Corner,A., Eliasson,B., Heine,R.J., Shaginian,R.M., Taskinen,M.R., et al. Effects of exenatide on measures of beta-cell function after 3 years in metformin-treated patients with type 2 diabetes. Diabetes Care 2011;34(9):2041-47.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. 2 oral antidiabetic drugs
103	Bunck,M.C., Corner,A., Eliasson,B., Heine,R.J., Shaginian,R.M., Wu,Y., et al. One-year treatment with exenatide vs. insulin glargine: effects on postprandial glycemia, lipid profiles, and oxidative stress. Atherosclerosis 2010;212(1):223-29.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. 2 oral antidiabetic drugs
104	Bunck,M.C., Diamant,M., Eliasson,B., Corner,A., Shaginian,R.M., Heine,R.J., et al. Exenatide affects circulating cardiovascular risk biomarkers independently of changes in body composition. Diabetes Care 2010;33(8):1734-37.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. 2 oral antidiabetic drugs
105	Bunck,M.C., Eliasson,B., Corner,A., Heine,R.J., Shaginian,R.M., Taskinen,M.R., et al. Exenatide treatment did not affect bone mineral density despite body weight reduction in patients with type 2 diabetes. Diabetes, Obesity & Metabolism 2011;13(4):374-77.	outcomes not of interest
106	Bunck,M.C., Poelma,M., Eekhoff,E.M., Schweizer,A., Heine,R.J., Nijpels,G., Foley,J.E. Effects of vildagliptin on postprandial markers of bone resorption and calcium homeostasis in recently diagnosed, well-controlled type 2 diabetes patients. Journal Of Diabetes 2012;4(2):181-85.	no Hba1c measures
107	Burant,C.F., Viswanathan,P., Marcinak,J., Cao,C., Vakilynejad,M. TAK-875 versus placebo or glimepiride in type 2 diabetes mellitus: a phase 2, randomised, double-blind, placebo-controlled trial. Lancet 2012;379(9824):1403-11.	inadequate wash out period (<4 weeks)
108	Buse J, Sesti G,Schmidt WE, Montanya E, Chang CT, Xu Y,et al. Switching from twice-daily exenatide to once-daily liraglutide improves glycemic control in T2D on oral agents. Diabetes Care. 2010 Jun;33(6):1300-3.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
109	Buse,J.B., Bergenstal,R.M., Glass,L.C., Heilmann,C.R., Lewis,M.S., Kwan,A.Y., Hoogwerf,B.J. Use of twice-daily exenatide in	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study

Number	Reference	Reason for exclusion
	Basal insulin-treated patients with type 2 diabetes: a randomized, controlled trial. Annals of Internal Medicine 2011;154(2):103-12.	
110	Buse,J.B., Drucker,D.J., Taylor,K.L., Kim,T., Walsh,B., Hu,H., et al. DURATION-1: exenatide once weekly produces sustained glycemic control and weight loss over 52 weeks. Diabetes Care 2010;33(6):1255-61.	dose comparison of same drug
111	Buse,J.B., Henry,R.R., Han,J., Kim,D.D., Fineman,M.S., Baron,A.D. Effects of exenatide (exendin-4) on glycemic control over 30 weeks in sulfonylurea-treated patients with type 2 diabetes. Diabetes Care 2004;27(11):2628-35.	dose comparison of same drug
112	Buse,J.B., Nauck,M., Forst,T., Sheu,W.H., Shenouda,S.K., Heilmann,C.R., et al. Exenatide once weekly versus liraglutide once daily in patients with type 2 diabetes (DURATION-6): a randomised, open-label study. Lancet 2013;381(9861):117-24.	unclear if previous blood glucose lowering therapies were washed out/discontinued
113	Buse,J.B., Rosenstock,J., Sesti,G., Schmidt,W.E., Montanya,E., Brett,J.H., et al. Liraglutide once a day versus exenatide twice a day for type 2 diabetes: a 26-week randomised, parallel-group, multinational, open-label trial (LEAD-6). Lancet 2009;374(9683):39-47.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
114	Buse,J.B., Wolffenbuttel,B.H., Herman,W.H., Hippler,S., Martin,S.A., Jiang,H.H., Shenouda,S.K. The DURAbility of Basal versus Lispro mix 75/25 insulin Efficacy (DURABLE) trial: comparing the durability of lispro mix 75/25 and glargine. Diabetes Care 2011;34(2):249-55.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
115	Buse,J.B., Wolffenbuttel,B.H., Herman,W.H., Shemonsky,N.K., Jiang,H.H., Fahrbach,J.L., Scism-Bacon,J.L. DURAbility of basal versus lispro mix 75/25 insulin efficacy (DURABLE) trial 24-week results: safety and efficacy of insulin lispro mix 75/25 versus insulin glargine added to oral antihyperglycemic drugs in patients with type 2 diabetes. Diabetes Care 2009;32(6):1007-13.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
116	Cai,L., Cai,Y., Lu,Z.J., Zhang,Y. The efficacy and safety of vildagliptin in patients with type 2 diabetes: a meta-analysis of randomized clinical trials. Journal of Clinical Pharmacy & Therapeutics 2012;37(4):386-98.	systematic review/meta-analysis/pooled analysis/review
117	Cai,X. & Han,X. Comparisons of the efficacy of alpha glucosidase inhibitors on type 2 diabetes patients between Asian and Caucasian. PLoS ONE 2013;8(11):e79421.	systematic review/meta-analysis/pooled analysis/review
118	Callaghan,B.C. & Little,A.A. Enhanced glucose control for preventing and treating diabetic neuropathy. [Review]. Cochrane Database of Systematic Reviews 2012;6():CD007543.	duplicate or same study results
119	Campbell I, Robertson-Mackay F, Streets E, Gibbons F, Holman RR. Maintenance of glycaemic control with acarbose in diet treated Type 2 diabetic patients.	abstract only/not full paper

Number	Reference	Reason for exclusion
120	Campbell-Scherer,D.L. Exenatide may improve maintenance of HbA1c targets, with less hypoglycaemia, but more early adverse effects when compared with low-dose glimepiride. Evidence-Based Medicine 2013;18(5):e42.	commentary/letter/editorial
121	Ceriello,A., Del,Prato S., Bue-Valleskey,J., Beattie,S., Gates,J., de la Pena,A. Premeal insulin lispro plus bedtime NPH or twice-daily NPH in patients with type 2 diabetes: acute postprandial and chronic effects on glycemic control and cardiovascular risk factors. Journal of Diabetes & its Complications 2007;21(1):20-27.	drug comparison not of interest-insulin vs. insulin
122	Chan WB,Chow DD,Yeung VTF,Chan JCN,So WY,Cochram CS. Effect of insulin lispro on glycaemic control in chinese diabetic patients receiving twice-daily regimens of insulin. Chin Med J (Engl). 2004 Sep;117(9):1404-7.	not specifically type 2 diabetes
123	Chan,J.C., Scott,R., Arjona Ferreira,J.C., Sheng,D., Gonzalez,E., Davies,M.J., et al. Safety and efficacy of sitagliptin in patients with type 2 diabetes and chronic renal insufficiency. Diabetes, Obesity & Metabolism 2008;10(7):545-55.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
124	Chan,J.Y., Leyk,M., Frier,B.M. Relationship between HbA1c and hypoglycaemia in patients with type 2 diabetes treated with different insulin regimens in combination with metformin. Diabetes/Metabolism Research Reviews 2009;25(3):224-31.	systematic review/meta-analysis/pooled analysis/review
125	Charbonnel,B., DeFronzo,R., Davidson,J., Schmitz,O., Birkeland,K., Pirags,V. Pioglitazone use in combination with insulin in the prospective pioglitazone clinical trial in macrovascular events study (PROactive19). Journal of Clinical Endocrinology and Metabolism 2010;95(5):2163-71.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
126	Charbonnel,B., Steinberg,H., Eymard,E., Xu,L., Thakkar,P., Prabhu,V. Efficacy and safety over 26 weeks of an oral treatment strategy including sitagliptin compared with an injectable treatment strategy with liraglutide in patients with type 2 diabetes mellitus inadequately controlled on metformin: A randomised clinical trial. Diabetologia 2013;56(7):1503-11.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
127	Charpentier,G., Fleury,F., Kabir,M., Vaur,L. Improved glycaemic control by addition of glimepiride to metformin monotherapy in Type 2 diabetic patients. Diabetic Medicine 2001;18(10):828-34.	unclear washout of previous blood glucose lowering therapy but termed monotherapy and <12 month duration
128	Chaudhuri,A., Ghanim,H., Vora,M., Sia,C.L., Korzeniewski,K., Dhindsa,S., Makdissi,A. Exenatide exerts a potent antiinflammatory effect. Journal of Clinical Endocrinology and Metabolism 2012;97(1):198-207.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
129	Chaudhuri,A., Rosenstock,J., DiGenio,A., Meneghini,L., Hollander,P., McGill,J.B., et al.	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
	Comparing the effects of insulin glargine and thiazolidinediones on plasma lipids in type 2 diabetes: a patient-level pooled analysis. Diabetes/Metabolism Research Reviews 2012;28(3):258-67.	
130	Chen,H.S., Wu,T.E., Jap,T.S., Hsiao,L.C., Lee,S.H. Beneficial effects of insulin on glycemic control and beta-cell function in newly diagnosed type 2 diabetes with severe hyperglycemia after short-term intensive insulin therapy. Diabetes Care 2008;31(10):1927-32.	drug comparison not of interest-insulin vs. insulin
131	Chia,C.W. Incretin-based therapies in type 2 diabetes mellitus. Journal of Clinical Endocrinology & Metabolism 2008;93(10):3703-16.	systematic review/meta-analysis/pooled analysis/review
132	Chien,H.-H., Chang,C.-T., Chu,N.-F., Hsieh,S.-H., Huang,Y.-Y., Lee,I.-T., et al. Effect of glyburide-metformin combination tablet in patients with type 2 diabetes. Journal of the Chinese Medical Association 2007;70(11):473-80.	inadequate wash out period (<4 weeks)
133	Chilcott,J., Wight,J., Jones,M.L. The clinical effectiveness and cost-effectiveness of pioglitazone for type 2 diabetes mellitus: A rapid and systematic review. Health Technology Assessment 2001;5(19).	systematic review/meta-analysis/pooled analysis/review
134	Chou,H.S., Truitt,K.E., Moberly,J.B., Merante,D., Choi,Y. A 26-week, placebo- and pioglitazone-controlled monotherapy study of rivoglitazone in subjects with type 2 diabetes mellitus. Diabetes, Obesity & Metabolism 2012;14(11):1000-09.	inadequate wash out period (<4 weeks)
135	Chuang L,Tai T,Juang JH,Chiang YD,Ki K,Jorgensen LN,Yeo LP. Effect of a prandial glucose regulator (NovoNorm) at two doses (0.5 mg and 2 mg) on glycemic control in type 2 diabetes in Taiwan. JAMA SE Asia 1999; 51: 22-5.	unclear if previous blood glucose lowering therapies were washed out/discontinued
136	Clar,C. & Royle,P. Adding pioglitazone to insulin containing regimens in type 2 diabetes: systematic review and meta-analysis. PLoS ONE [Electronic Resource] 2009;4(7):e6112.	systematic review/meta-analysis/pooled analysis/review
137	Clements,M.R., Tits,J., Kinsley,B.T., Rastam,J. Improved glycaemic control of thrice-daily biphasic insulin aspart compared with twice-daily biphasic human insulin; a randomized, open-label trial in patients with type 1 or type 2 diabetes. Diabetes, Obesity and Metabolism 2008;10(3):229-37.	drug comparison not of interest-insulin vs. insulin
138	Colca,J.R., VanderLugt,J.T., Adams,W.J., Shashlo,A., McDonald,W.G., Liang,J. Clinical proof-of-concept study with MSDC-0160, a prototype mTOT-modulating insulin sensitizer. Clinical pharmacology and therapeutics 2013;93(4):352-59.	abstract only/not full paper
139	Comaschi,M., Corsi,A., Di,Pietro C., Bellatreccia,A., Mariz,S. The effect of pioglitazone as add-on therapy to metformin or	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral

Number	Reference	Reason for exclusion
	sulphonylurea compared to a fixed-dose combination of metformin and glibenclamide on diabetic dyslipidaemia. Nutrition Metabolism & Cardiovascular Diseases 2008;18(5):373-79.	antidiabetic drug/insulin (with no subgroup analyses)
140	Comaschi,M., Demicheli,A., Di,Pietro C., Bellatreccia,A., Mariz,S. Effects of pioglitazone in combination with metformin or a sulfonylurea compared to a fixed-dose combination of metformin and glibenclamide in patients with type 2 diabetes. Diabetes Technology & Therapeutics 2007;9(4):387-98.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
141	Coniff RF,Shapiro JA,Seaton TB. Long-term efficacy and safety of acarbose in the treatment of obese subjects with non-insulin-dependent diabetes mellitus. Arch Intern Med. 1994 Nov 14;154(21):2442-8.	dosing regimen includes higher than recommended doses and no details of mean doses or proportion of people taking different doses
142	Cooper,M.B., Al,Majali K., Bailey,C.J. Reduced postprandial proinsulinaemia and 32-33 split proinsulinaemia after a mixed meal in type 2 diabetic patients following sensitization to insulin with pioglitazone. Clinical Endocrinology 2008;68(5):738-46.	aim to maintain glycaemic control at baseline level
143	Cross,BL. Potential use of GLP-1 receptor agonists in type 2 diabetes mellitus. American Journal of Pharmacy Benefits 2013;5(6):139-50.	systematic review/meta-analysis/pooled analysis/review
144	Cucinotta,D., Smirnova,O., Christiansen,J.S., Kanc,K., le,Devehat C., Wojciechowska,M., Lopez,de la Torre. Three different premixed combinations of biphasic insulin aspart - comparison of the efficacy and safety in a randomized controlled clinical trial in subjects with type 2 diabetes. Diabetes, Obesity & Metabolism 2009;11(7):700-08.	unclear treatment groups or intervention
145	Cummins,E., Royle,P., Snaith,A., Greene,A., Robertson,L., McIntyre,L. Clinical effectiveness and cost-effectiveness of continuous subcutaneous insulin infusion for diabetes: Systematic review and economic evaluation. Health Technology Assessment 2010;14(11):1-208).	systematic review/meta-analysis/pooled analysis/review
146	Curtis,B.H., Rees,T.M., Gaskins,K.A., Sierra-Johnson,J., Liu,R. Efficacy and safety of insulin lispro in geriatric patients with type 2 diabetes: a retrospective analysis of seven randomized controlled clinical trials. Aging-Clinical and Experimental Research 2014;26(1):77-88.	systematic review/meta-analysis/pooled analysis/review
147	Dailey,G., Admane,K., Mercier,F. Relationship of insulin dose, A1c lowering, and weight in type 2 diabetes: Comparing insulin glargine and insulin detemir. Diabetes Technology and Therapeutics 2010;12(12):1019-27.	systematic review/meta-analysis/pooled analysis/review
148	D'Alessio,D.A., Denney,A.M., Hermiller,L.M., Prigeon,R.L., Martin,J.M., Tharp,W.G., et al. Treatment with the dipeptidyl peptidase-4 inhibitor vildagliptin improves fasting islet-cell function in subjects with type 2 diabetes. Journal of Clinical Endocrinology & Metabolism	unclear if previous blood glucose lowering therapies were washed out/discontinued

Number	Reference	Reason for exclusion
	2009;94(1):81-88.	
149	Dalzell GW,Hadden DR. A randomized trial tolbutamide and metformin for persistent severe hyperglycaemia in non insulin dependent diabetes mellitus (NIDDM).	abstract only/not full paper
150	Dashora,U.K., Sibal,L., Ashwell,S.G. Insulin glargine in combination with nateglinide in people with Type 2 diabetes: a randomized placebo-controlled trial. Diabetic Medicine 2007;24(4):344-49.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
151	Davey,P., Grainger,D., MacMillan,J., Rajan,N., Aristides,M. Clinical outcomes with insulin lispro compared with human regular insulin: A meta-analysis. Clinical Therapeutics 1997;19(4):656-74.	systematic review/meta-analysis/pooled analysis/review
152	Davidson,J., Vexiau,P., Cucinotta,D., Vaz,J. Biphasic insulin aspart 30: Literature review of adverse events associated with treatment. Clinical Therapeutics 2006;27(SUPPL. 2):S75-88.	systematic review/meta-analysis/pooled analysis/review
153	Davidson,J.A. & Perez,A. Addition of pioglitazone to stable insulin therapy in patients with poorly controlled type 2 diabetes: Results of a double-blind, multicentre, randomized study. Diabetes, Obesity and Metabolism 2006;8(2):164-74.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
154	Davidson,J.A., Wolffenbuttel,B.H., Arakaki,R.F., Caballero,A.E. Impact of race/ethnicity on efficacy and safety of two starter insulin regimens in patients with type 2 diabetes: a posthoc analysis of the DURABLE trial. Ethnicity and Disease 2013;23(4):393-400.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
155	Davidson,J.A., Brett,J., Falahati,A. Mild renal impairment and the efficacy and safety of liraglutide. Endocrine Practice 2011;17(3):345-55.	systematic review/meta-analysis/pooled analysis/review
156	Davidson,J.A., Lacaya,L.B., Jiang,H., Heilmann,C.R., Scism-Bacon,J.L., Gates,J.R. Impact of race/ethnicity on the efficacy and safety of commonly used insulin regimens: a post hoc analysis of clinical trials in type 2 diabetes mellitus. Endocrine Practice 2010;16(5):818-28.	systematic review/meta-analysis/pooled analysis/review
157	Davidson,J.A., Liebl,A., Christiansen,J.S., Fulcher,G., Ligthelm,R.J., Brown,P., Gylvin,T. Risk for nocturnal hypoglycemia with biphasic insulin aspart 30 compared with biphasic human insulin 30 in adults with type 2 diabetes mellitus: a meta-analysis. Clinical Therapeutics 2009;31(8):1641-51.	systematic review/meta-analysis/pooled analysis/review
158	Davidson,M.B., Raskin,P., Tanenberg,R.J., Vlajnic,A. A stepwise approach to insulin therapy in patients with type 2 diabetes mellitus and basal insulin treatment failure. Endocrine practice : official journal of the American College of Endocrinology and the American Association of Clinical Endocrinologists 2011;17(3):395-403.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study

Number	Reference	Reason for exclusion
159	Davies,M., Evans,R., Storms,F., Gomis,R. Initiation of insulin glargine in suboptimally controlled patients with type 2 diabetes: sub-analysis of the AT.LANTUS trial comparing treatment outcomes in subjects from primary and secondary care in the UK. Diabetes, Obesity & Metabolism 2007;9(5):706-13.	focus on algorithms (patient vs. physican driven)
160	Davies,M., Heller,S., Sreenan,S., Sapin,H., Adetunji,O. Once-weekly exenatide versus once- or twice-daily insulin detemir: randomized, open-label, clinical trial of efficacy and safety in patients with type 2 diabetes treated with metformin alone or in combination with sulfonylureas. Diabetes Care 2013;36(5):1368-76.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
161	Davies,M., Lavalle-Gonzalez,F., Storms,F., Gomis,R. Initiation of insulin glargine therapy in type 2 diabetes subjects suboptimally controlled on oral antidiabetic agents: results from the AT.LANTUS trial. Diabetes, Obesity & Metabolism 2008;10(5):387-99.	focus on algorithms (patient vs. physican driven)
162	Davies,M., Pratley,R., Hammer,M., Thomsen,A.B. Liraglutide improves treatment satisfaction in people with Type 2 diabetes compared with sitagliptin, each as an add on to metformin. Diabetic medicine : a journal of the British Diabetic Association 2011;28(3):333-37.	outcomes not of interest
163	Davies,M., Sinnassamy,P., Storms,F., Gomis,R. Insulin glargine-based therapy improves glycemic control in patients with type 2 diabetes sub-optimally controlled on premixed insulin therapies. Diabetes Research & Clinical Practice 2008;79(2):368-75.	focus on algorithms (patient vs. physican driven)
164	Davies,M.J., Derezinski,T., Pedersen,C.B. Reduced weight gain with insulin detemir compared to NPH insulin is not explained by a reduction in hypoglycemia. Diabetes Technology & Therapeutics 2008;10(4):273-77.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
165	Davies,M.J., Donnelly,R., Barnett,A.H., Jones,S., Nicolay,C. Exenatide compared with long-acting insulin to achieve glycaemic control with minimal weight gain in patients with type 2 diabetes: results of the Helping Evaluate Exenatide in patients with diabetes compared with Long-Acting insulin (HEELA) study. Diabetes, Obesity & Metabolism 2009;11(12):1153-62.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
166	Davies,M.J., Thaware,P.K., Tringham,J.R., Howe,J., Jarvis,J., Johnston,V., et al. A randomized controlled trial examining combinations of repaglinide, metformin and NPH insulin. Diabetic Medicine 2007;24(7):714-19.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
167	Davis,S.N., Johns,D., Maggs,D., Xu,H., Northrup,J.H. Exploring the substitution of exenatide for insulin in patients with type 2 diabetes treated with insulin in combination with oral antidiabetes agents. Diabetes Care	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study

Number	Reference	Reason for exclusion
	2007;30(11):2767-72.	
168	de,Jager J., Kooy,A., Lehert,Ph, Bets,D., Wulffele,M.G., Teerlink,T., et al. Effects of short-term treatment with metformin on markers of endothelial function and inflammatory activity in type 2 diabetes mellitus: A randomized, placebo-controlled trial. Journal of Internal Medicine 2005;257(1):100-09.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. insulin
169	De,Mattia G. & Laurenti,O. Comparison of glycaemic control in patients with Type 2 diabetes on basal insulin and fixed combination oral antidiabetic treatment: results of a pilot study. Acta Diabetologica 2009;46(1):67-73.	cross over trial (no washout details or inappropriate analyses and no outcomes reported for first treatment period)
170	Deacon,C.F. & Mannucci,E. Glycaemic efficacy of glucagon-like peptide-1 receptor agonists and dipeptidyl peptidase-4 inhibitors as add-on therapy to metformin in subjects with type 2 diabetes-a review and meta analysis. Diabetes, Obesity & Metabolism 2012;14(8):762-67.	systematic review/meta-analysis/pooled analysis/review
171	DeFronzo,R.A., Tripathy,D., Schwenke,D.C., Banerji,M.A., Bray,G.A., Buchanan,T.A., et al. Prevention of diabetes with pioglitazone in ACT NOW: Physiologic correlates. Diabetes 2013;62(11):3920-26.	not specifically type 2 diabetes
172	DeFronzo,R.A., Ratner,R.E., Han,J., Kim,D.D., Fineman,M.S. Effects of exenatide (exendin-4) on glycemic control and weight over 30 weeks in metformin-treated patients with type 2 diabetes. Diabetes Care 2005;28(5):1092-1000.	dose comparison of same drug
173	DeFronzo,R.A., Stonehouse,A.H., Han,J. Relationship of baseline HbA1c and efficacy of current glucose-lowering therapies: a meta-analysis of randomized clinical trials. Diabetic Medicine 2010;27(3):309-17.	systematic review/meta-analysis/pooled analysis/review
174	Dejgaard,A., Lynggaard,H., Rastam,J. No evidence of increased risk of malignancies in patients with diabetes treated with insulin detemir: a meta-analysis. Diabetologia 2009;52(12):2507-12.	systematic review/meta-analysis/pooled analysis/review
175	Del,Prato S. & Bianchi,C. Insulin as an early treatment for type 2 diabetes: ORIGIN or end of an old question? Diabetes Care 2013;36:Suppl-204.	commentary/letter/editorial
176	Del,Prato S. Linagliptin for the treatment of type 2 diabetes. Expert Opinion on Pharmacotherapy 2011;12(17):2759-62.	commentary/letter/editorial
177	Del,Prato S., Barnett,A.H., Huisman,H., Neubacher,D., Woerle,H.J. Effect of linagliptin monotherapy on glycaemic control and markers of beta-cell function in patients with inadequately controlled type 2 diabetes: a randomized controlled trial. Diabetes, Obesity & Metabolism 2011;13(3):258-67.	rescue medication was provided to participants and unclear if analysis has been adjusted or switching of treatment
178	Del,Prato S., Heine,R.J., Keilson,L., Guitard,C., Shen,S.G. Treatment of patients over 64 years of age with type 2 diabetes: experience from nateglinide pooled database retrospective	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
	analysis. Diabetes Care 2003;26(7):2075-80.	
179	DeLawter,DE. Human Insulin: A Double-Blind Clinical Study of Its Effectiveness. Southern medical journal 1985;78(6):633-35.	not a randomised controlled trial (no randomisation)
180	Derosa G,Franzetti I,Gadaleta G,Ciccarelli L,Fogari R. Metabolic variations with oral antidiabetic drugs in patients with Type 2 diabetes: comparison between glimepiride and metformin. Diabetes Nutr Metab. 2004 Jun;17(3):143-50.	newly diagnosed participants but not explicit if they are drug naive
181	Derosa,G. Efficacy and safety profile evaluation of acarbose alone and in association with other antidiabetic drugs: a systematic review. [Review]. Clinical Therapeutics 2012;34(6):1221-36.	duplicate or same study results
182	Derosa,G., Ragonesi,P.D., Fogari,E., Cicero,A.F.G., Bianchi,L., Bonaventura,A. Sitagliptin added to previously taken antidiabetic agents on insulin resistance and lipid profile: A 2-year study evaluation. Fundamental and Clinical Pharmacology 2014;28(2):221-29.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
183	Derosa,G., Carbone,A., D'Angelo,A., Querci,F., Fogari,E. A randomized, double-blind, placebo-controlled trial evaluating sitagliptin action on insulin resistance parameters and beta-cell function. Expert Opinion on Pharmacotherapy 2012;13(17):2433-42.	across treatment strategy
184	Derosa,G., Cicero,A.F., Franzetti,I.G., Querci,F., Carbone,A., Piccinni,M.N., D'Angelo,A. A randomized, double-blind, comparative therapy evaluating sitagliptin versus glibenclamide in type 2 diabetes patients already treated with pioglitazone and metformin: a 3-year study. Diabetes Technology & Therapeutics 2013;15(3):214-22.	no inclusion/exclusion criteria or patients drug naive and not representative
185	Derosa,G., Cicero,A.F.G., Franzetti,I.G., Querci,F., Carbone,A., Piccinni,M.N., D'Angelo,A. A comparison between sitagliptin or glibenclamide in addition to metformin + pioglitazone on glycaemic control and beta-cell function: The triple oral therapy. Diabetic Medicine 2013;30(7):846-54.	drug comparison not of interest - insulin + 3 oral antidiabetic drugs vs insulin + 3 oral antidiabetic drugs
186	Derosa,G., D'Angelo,A., Fogari,E., Salvadeo,S., Gravina,A., Ferrari,I. Nateglinide and glibenclamide metabolic effects in naive type 2 diabetic patients treated with metformin. Journal of Clinical Pharmacy & Therapeutics 2009;34(1):13-23.	duplicate or same study results
187	Derosa,G., Dangelo,A., Ragonesi,P.D., Ciccarelli,L., Piccinni,M.N., Pricolo,F., et al. Effects of rosiglitazone and pioglitazone combined with metformin on the prothrombotic state of patients with type 2 diabetes mellitus and metabolic syndrome. Journal of International Medical Research 2006;34(5):545-55.	comparison with unlicensed drug or drug indication
188	Derosa,G., D'Angelo,A., Ragonesi,P.D.,	comparison with unlicensed drug or

Number	Reference	Reason for exclusion
	Ciccarelli,L., Piccinni,M.N., Pricolo,F., et al. Metabolic effects of pioglitazone and rosiglitazone in patients with diabetes and metabolic syndrome treated with metformin. Internal Medicine Journal 2007;37(2):79-86.	drug indication
189	Derosa,G., D'Angelo,A., Ragonesi,P.D., Ciccarelli,L., Piccinni,M.N., Pricolo,F., et al. Metformin-pioglitazone and metformin-rosiglitazone effects on non-conventional cardiovascular risk factors plasma level in type 2 diabetic patients with metabolic syndrome. Journal of Clinical Pharmacy and Therapeutics 2006;31(4):375-83.	comparison with unlicensed drug or drug indication
190	Derosa,G., Fogari,E., Cicero,A.F., D'Angelo,A., Ciccarelli,L., Piccinni,M.N., et al. Blood pressure control and inflammatory markers in type 2 diabetic patients treated with pioglitazone or rosiglitazone and metformin. Hypertension Research - Clinical & Experimental 2007;30(5):387-94.	comparison with unlicensed drug or drug indication
191	Derosa,G., Maffioli,P., D'Angelo,A., Fogari,E., Bianchi,L. Acarbose on insulin resistance after an oral fat load: a double-blind, placebo controlled study. Journal of Diabetes & its Complications 2011;25(4):258-66.	duplicate or same study results
192	Derosa,G., Maffioli,P., Ferrari,I., Mereu,R., Ragonesi,P.D., Querci,F., et al. Effects of one year treatment of vildagliptin added to pioglitazone or glimepiride in poorly controlled type 2 diabetic patients. Hormone & Metabolic Research 2010;42(9):663-69.	unclear if previous blood glucose lowering therapies were washed out/discontinued
193	Derosa,G., Maffioli,P., Salvadeo,S.A., Ferrari,I., Ragonesi,P.D., Querci,F., et al. Exenatide versus glibenclamide in patients with diabetes. Diabetes Technology & Therapeutics 2010;12(3):233-40.	unclear if previous blood glucose lowering therapies were washed out/discontinued
194	Derosa,G., Ragonesi,P.D., Carbone,A., Fogari,E., D'Angelo,A. Vildagliptin action on some adipocytokine levels in type 2 diabetic patients: a 12-month, placebo-controlled study. Expert Opinion on Pharmacotherapy 2012;13(18):2581-91.	across treatment strategy
195	DeVries,J.H., Bain,S.C., Rodbard,H.W., Seufert,J., D'Alessio,D., Thomsen,A.B., Zychma,M. Sequential intensification of metformin treatment in type 2 diabetes with liraglutide followed by randomized addition of basal insulin prompted by A1C targets. Diabetes Care 2012;35(7):1446-54.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. 2 oral antidiabetic drugs
196	Dicembrini,I. Lixisenatide: Clinical profile and available evidence. Diabetes Management 2014;4(1):71-84.	systematic review/meta-analysis/pooled analysis/review
197	Diehl,AK. & Sugarek,NJ. Medication Compliance in Non-insulin-dependent Diabetes: A Randomized Comparison of Chlorpropamide and Insulin. Diabetes Care 1985;8(3):219-23.	drug comparison not of interest-insulin vs. 1 oral antidiabetic drug
198	Dimic,D., Velojic,Golubovic M., Antic,S.	not a randomised controlled trial (no

Number	Reference	Reason for exclusion
	Evaluation of the repaglinide efficiency in comparison to the glimepiride in the type 2 diabetes patients poorly regulated by the metmorfine administration. Bratislavske Lekarske Listy 2009;110(6):335-39.	randomisation)
199	Dorkhan,M. & Frid,A. Differences in effects of insulin glargine or pioglitazone added to oral anti-diabetic therapy in patients with type 2 diabetes: what to add--insulin glargine or pioglitazone? Diabetes Research & Clinical Practice 2008;82(3):340-45.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
200	Dorkhan,M., Dencker,M., Stagmo,M. Effect of pioglitazone versus insulin glargine on cardiac size, function, and measures of fluid retention in patients with type 2 diabetes. Cardiovascular Diabetology 2009;8:15.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
201	Dornan,TL., Heller,SR., Peck,GM. Double-Blind Evaluation of Efficacy and Tolerability of Metformin in NIDDM. Diabetes Care 1991;14(4):342-44.	follow up period outside protocol specified range
202	Doucet,J., Chacra,A., Maheux,P., Lu,J., Harris,S. Efficacy and safety of saxagliptin in older patients with type 2 diabetes mellitus. Current Medical Research & Opinion 2011;27(4):863-69.	systematic review/meta-analysis/pooled analysis/review
203	Drucker,D.J., Buse,J.B., Taylor,K., Kendall,D.M., Trautmann,M., Zhuang,D. Exenatide once weekly versus twice daily for the treatment of type 2 diabetes: a randomised, open-label, non-inferiority study. The Lancet 2008;372(9645):1240-50.	unclear if previous blood glucose lowering therapies were washed out/discontinued
204	Ebato,C., Shimizu,T., Arakawa,M., Mita,T., Fujitani,Y., Watada,H., Kawamori,R. Effect of sulfonylureas on switching to insulin therapy (twice-daily biphasic insulin aspart 30): comparison of twice-daily biphasic insulin aspart 30 with or without glimepiride in type 2 diabetic patients poorly controlled with sub-maximal glimepiride. Diabetes Research & Clinical Practice 2009;86(1):31-36.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
205	Einarson,T.R. & Garg,M. Composite endpoints in trials of type-2 diabetes. Diabetes, Obesity and Metabolism 2014;16(6):492-99.	systematic review/meta-analysis/pooled analysis/review
206	Eldor,R. In vivo actions of peroxisome proliferator-activated receptors: Glycemic control, insulin sensitivity, and insulin secretion. Diabetes Care 2013;36(SUPPL.2):S162-74.	commentary/letter/editorial
207	Engel,S.S., Round,E., Golm,G.T. Erratum to Safety and tolerability of Sitagliptin in type 2 diabetes: Pooled analysis of 25 clinical studies (Diabetes Ther, (2013), 4, (119-145), 10.1007/s13300-013-0024-0). Diabetes Therapy 2013;4(2):487.	systematic review/meta-analysis/pooled analysis/review
208	Engel,S.S., Williams-Herman,D.E., Golm,G.T., Clay,R.J., MacHotka,S.V., Kaufman,K.D. Sitagliptin: Review of preclinical and clinical data regarding incidence of pancreatitis. International	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
	Journal of Clinical Practice 2010;64(7):984-90.	
209	Engelen,L., Lund,S.S., Ferreira,I., Tarnow,L., Parving,H.H., Gram,J., et al. Improved glycemic control induced by both metformin and repaglinide is associated with a reduction in blood levels of 3-deoxyglucosone in nonobese patients with type 2 diabetes. European Journal of Endocrinology 2011;164(3):371-79.	cross over trial (no washout details or inappropriate analyses and no outcomes reported for first treatment period)
210	Erdmann,E. & Spanheimer,R. Pioglitazone and the risk of cardiovascular events in patients with Type 2 diabetes receiving concomitant treatment with nitrates, renin-angiotensin system blockers, or insulin: Results from the PROactive study (PROactive 20). Journal of Diabetes 2010;2(3):212-20.	unclear treatment groups or intervention
211	Erdmann,E., Dormandy,J.A., Charbonnel,B., Massi-Benedetti,M., Moules,I.K. The Effect of Pioglitazone on Recurrent Myocardial Infarction in 2,445 Patients With Type 2 Diabetes and Previous Myocardial Infarction. Results From the PROactive (PROactive 05) Study. Journal of the American College of Cardiology 2007;49(17):1772-80.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
212	Eshghi,S.R.T. Effects of aerobic exercise with or without metformin on plasma incretins in type 2 diabetes. Canadian Journal of Diabetes 2013;37(6):375-80.	<12 week treatment duration
213	Esposito,K. & Chiodini,P. A nomogram to estimate the proportion of patients at hemoglobin A1c target <7% with noninsulin antidiabetic drugs in type 2 diabetes: a systematic review of 137 randomized controlled trials with 39,845 patients. Acta Diabetologica 2014;51(2):305-11.	systematic review/meta-analysis/pooled analysis/review
214	Esposito,K., Chiodini,P., Capuano,A., Maiorino,M.I. Baseline glycemic parameters predict the hemoglobin A1c response to DPP-4 inhibitors: Meta-regression analysis of 78 randomized controlled trials with 20, 053 patients. Endocrine 2014;46(1):43-51.	systematic review/meta-analysis/pooled analysis/review
215	Esposito,K., Chiodini,P., Bellastella,G., Maiorino,M.I. Proportion of patients at HbA1c target <7% with eight classes of antidiabetic drugs in type 2 diabetes: systematic review of 218 randomized controlled trials with 78 945 patients. [Review]. Diabetes, Obesity & Metabolism 2012;14(3):228-33.	systematic review/meta-analysis/pooled analysis/review
216	Esposito,K., Ciotola,M., Maiorino,M.I., Gualdiero,R., Schisano,B., Ceriello,A., et al. Addition of neutral protamine lispro insulin or insulin glargine to oral type 2 diabetes regimens for patients with suboptimal glycemic control: a randomized trial.[Summary for patients in Ann Intern Med. 2008 Oct 21;149(8):I-52; PMID: 18936499], [Summary for patients in Ann Intern Med. 2008 Oct 21;149(8):I-46; PMID: 18936498]. Annals of Internal Medicine	comparison with unlicensed drug or drug indication

Number	Reference	Reason for exclusion
	2008;149(8):531-39.	
217	Esposito,K., Cozzolino,D., Bellastella,G., Maiorino,M.I., Chiodini,P., Ceriello,A. Dipeptidyl peptidase-4 inhibitors and HbA1c target of <7% in type 2 diabetes: meta-analysis of randomized controlled trials. Diabetes, Obesity & Metabolism 2011;13(7):594-603.	systematic review/meta-analysis/pooled analysis/review
218	Esposito,K., Giugliano,D., Nappo,F., Marfella,R. Regression of carotid atherosclerosis by control of postprandial hyperglycemia in type 2 diabetes mellitus. Circulation 2004;110(2):214-19.	dosing regimen includes higher than recommended doses and no details of mean doses or proportion of people taking different doses
219	Esposito,K., Mosca,C., Brancario,C., Chiodini,P., Ceriello,A. GLP-1 receptor agonists and HBA1c target of <7% in type 2 diabetes: meta-analysis of randomized controlled trials. Current Medical Research & Opinion 2011;27(8):1519-28.	systematic review/meta-analysis/pooled analysis/review
220	Esteghamati,A., Noshad,S., Rabizadeh,S., Ghavami,M. Comparative effects of metformin and pioglitazone on omentin and leptin concentrations in patients with newly diagnosed diabetes: a randomized clinical trial. Regulatory Peptides 2013;182:1-6.	outcomes not of interest
221	Esterson,Y.B., Zhang,K., Koppaka,S., Kehlenbrink,S., Kishore,P., Raghavan,P., Maginley,S.R. Insulin sensitizing and anti-inflammatory effects of thiazolidinediones are heightened in obese patients. Journal of Investigative Medicine 2013;61(8):1152-60.	<12 week treatment duration
222	F”lsch UR,Spengler M,Boehme K,Sommerauer B. Efficacy of glucosidase inhibitors compared to sulphonylureas in the treatment and metabolic control of diet treated Type II diabetic subjects: Two long-term comparative studies.	dosing regimen includes higher than recommended doses and no details of mean doses or proportion of people taking different doses
223	Fadini,G.P., De Kreutzenberg,S.V., Mariano,V., Boscaro,E., Bertolini,F., Mancuso,P., et al. Optimized glycaemic control achieved with add-on basal insulin therapy improves indexes of endothelial damage and regeneration in type 2 diabetic patients with macroangiopathy: A randomized crossover trial comparing detemir versus glargine. Diabetes, Obesity and Metabolism 2011;13(8):718-25.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
224	Fajardo,MC. & Hernandez,HC. Less weight gain and hypoglycaemia with once-daily insulin detemir than NPH insulin in intensification of insulin therapy in overweight Type 2 diabetes patients: the PREDICTIVE BMI clinical trial. Diabetic Medicine 2008;25(8):916-23.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
225	Fakhoury,W., Lockhart,I., Kotchie,R.W., Aagren,M. Indirect comparison of once daily insulin detemir and glargine in reducing weight gain and hypoglycaemic episodes when administered in addition to conventional oral anti-diabetic therapy in patients with type-2 diabetes. Pharmacology 2008;82(2):156-63.	systematic review/meta-analysis/pooled analysis/review
226	Fakhoury,W.K. & LeReun,C. A meta-analysis of	systematic review/meta-

Number	Reference	Reason for exclusion
	placebo-controlled clinical trials assessing the efficacy and safety of incretin-based medications in patients with type 2 diabetes (Structured abstract). Pharmacology 2010;86(1):44-57.	analysis/pooled analysis/review
227	Fanghänel G, Sánchez-Reyes L, Trujillo C, Sotres D, Espinosa-Campos J. Metformin's Effects on Glucose and Lipid Metabolism in Patients with Secondary Failure to Sulfonylureas. Diabetes Care 1996;19(11):1185-89.	drug comparison not of interest-insulin vs. 1 oral antidiabetic drug
228	Farcasiu,E., Ivanyi,T., Mozejko-Pastewka,B., Birkus,Z., Csog,J., Kowalska,I., et al. Efficacy and safety of prandial premixed therapy using insulin lispro mix 50/50 3 times daily compared with progressive titration of insulin lispro mix 75/25 or biphasic insulin aspart 70/30 twice daily in patients with type 2 diabetes mellitus: a randomized, 16-week, open-label study. Clinical Therapeutics 2011;33(11):1682-93.	rescue medication was provided to participants and unclear if analysis has been adjusted or switching of treatment
229	Feinbock,C. & Luger,A. Prospective multicentre trial comparing the efficacy of, and compliance with, glimepiride or acarbose treatment in patients with Type 2 diabetes not controleld with diet alone. Diabetes, Nutrition & Metabolism-Clinical & Experimental 2003;16(4):214-21.	inadequate wash out period (<4 weeks)
230	Feinglos,M.N., Saad,M.F., Pi-Sunyer,F.X., An,B., Santiago,O. Effects of liraglutide (NN2211), a long-acting GLP-1 analogue, on glycaemic control and bodyweight in subjects with Type 2 diabetes. Diabetic Medicine 2005;22(8):1016-23.	comparison with unlicensed drug or drug indication
231	Ferrannini,E., Betteridge,D.J., Dormandy,J.A., Charbonnel,B., Wilcox,R.G., Spanheimer,R., et al. High-density lipoprotein-cholesterol and not HbA1c was directly related to cardiovascular outcome in PROactive. Diabetes, Obesity and Metabolism 2011;13(8):759-64.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
232	Fineberg,S.E. Glipizide versus tolbutamide, an open trial. Diabetologia. 1980 Jan;18(1):49-54.	comparing different types of sulfonylurea alone
233	Fineman,M.S., Mace,K.F., Diamant,M., Darsow,T., Cirincione,B.B., Booker Porter,T.K., Kinninger,L.A. Clinical relevance of anti-exenatide antibodies: Safety, efficacy and cross-reactivity with long-term treatment. Diabetes, Obesity and Metabolism 2012;14(6):546-54.	systematic review/meta-analysis/pooled analysis/review
234	Fletcher,J.A., Barnett,A.H., Pyke,D.A., Volkmann,H.P., Hartog,M., Perrett,A.D., et al. Transfer from animal insulins to semisynthetic human insulin: a study in four centres. Diabetes research (Edinburgh, Scotland) 1990;14(4):151-58.	not specifically type 2 diabetes
235	Fogelfeld,L., Dharmalingam,M., Robling,K., Jones,C., Swanson,D. A randomized, treat-to-target trial comparing insulin lispro protamine suspension and insulin detemir in insulin-naive patients with Type 2 diabetes. Diabetic Medicine 2010;27(2):181-88.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study

Number	Reference	Reason for exclusion
236	Fonseca,V., Davidson,J., Home,P., Snyder,J., Jellinger,P., Dyhr,Toft A. Starting insulin therapy with basal insulin analog or premix insulin analog in T2DM: A pooled analysis of treat-to-target trials. Current Medical Research and Opinion 2010;26(7):1621-28.	systematic review/meta-analysis/pooled analysis/review
237	Fonseca,V., Gill,J., Zhou,R. An analysis of early insulin glargine added to metformin with or without sulfonylurea: impact on glycaemic control and hypoglycaemia. Diabetes, Obesity & Metabolism 2011;13(9):814-22.	systematic review/meta-analysis/pooled analysis/review
238	Fonseca,V., Schweizer,A., Albrecht,D., Baron,M.A., Chang,I. Addition of vildagliptin to insulin improves glycaemic control in type 2 diabetes. Diabetologia 2007;50(6):1148-55.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
239	Fonseca,V.A., DeVries,J.H., Henry,R.R., Donsmark,M. Reductions in systolic blood pressure with liraglutide in patients with type 2 diabetes: Insights from a patient-level pooled analysis of six randomized clinical trials. Journal of Diabetes and its Complications 2014;28(3):399-405.	systematic review/meta-analysis/pooled analysis/review
240	Fonseca,V.A., Alvarado-Ruiz,R., Raccah,D., Boka,G., Miossec,P., Gerich,J.E. Efficacy and safety of the once-daily GLP-1 receptor agonist lixisenatide in monotherapy: a randomized, double-blind, placebo-controlled trial in patients with type 2 diabetes (GetGoal-Mono). Diabetes Care 2012;35(6):1225-31.	comparison with unlicensed drug or drug indication
241	Fonseca,V, Bell,DS., Berger,S, Thomson,S. A comparison of bedtime insulin glargine with bedtime neutral protamine hagedorn insulin in patients with type 2 diabetes: subgroup analysis of patients taking once-daily insulin in a multicenter, randomized, parallel group study. The American journal of the medical sciences 2004;328(5):274-80.	duplicate or same study results
242	Forst T, Hohberg C, Fuellert SD, Lübben G, Konrad T, Löbig M, et al. Pharmacological PPARgamma stimulation in contrast to beta cell stimulation results in an improvement in adiponectin and proinsulin intact levels and reduces intima media thickness in patients with type 2 diabetes. Horm Metab Res. 2005 Aug;37(8):521-7.	unclear if previous blood glucose lowering therapies were washed out/discontinued
243	Forst,T., Dworak,M., Berndt-Zipfel,C., Loffler,A., Klamp,I. Effect of vildagliptin compared to glimepiride on postprandial proinsulin processing in the beta cell of patients with type 2 diabetes mellitus. Diabetes, Obesity & Metabolism 2013;15(6):576-79.	abstract only/not full paper
244	Forst,T., Larbig,M., Hohberg,C., Forst,S., Diessel,S., Borchert,M., Roth,W. Adding insulin glargine vs. NPH insulin to metformin results in a more efficient postprandial beta-cell protection in individuals with type 2 diabetes. Diabetes, Obesity & Metabolism 2010;12(5):437-41.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study

Number	Reference	Reason for exclusion
245	Forti,A., Garcia,E.G., Yu,M.B., Jimenez,M.C., Brodows,R.G. Efficacy and safety of exenatide administered before the two largest daily meals of Latin American patients with type 2 diabetes. Current Medical Research & Opinion 2008;24(9):2437-47.	unclear if previous blood glucose lowering therapies were washed out/discontinued
246	Frederich,R., Alexander,J.H., Fiedorek,F.T., Donovan,M., Berglind,N., Harris,S., et al. A systematic assessment of cardiovascular outcomes in the saxagliptin drug development program for type 2 diabetes. Postgraduate Medicine 2010;122(3):16-27.	systematic review/meta-analysis/pooled analysis/review
247	Frederich,R., McNeill,R., Berglind,N. The efficacy and safety of the dipeptidyl peptidase-4 inhibitor saxagliptin in treatment-naive patients with type 2 diabetes mellitus: a randomized controlled trial. Diabetology & metabolic syndrome 2012;4(1):36.	rescue medication was provided to participants and unclear if analysis has been adjusted or switching of treatment
248	Fritsche,A., Larbig,M., Owens,D., Haring,H.U. Comparison between a basal-bolus and a premixed insulin regimen in individuals with type 2 diabetes-results of the GINGER study. Diabetes, Obesity & Metabolism 2010;12(2):115-23.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
249	Fujioka,K. & Pans,M. Glycemic control in patients with type 2 diabetes mellitus switched from twice-daily immediate-release metformin to a once-daily extended-release formulation. Clinical Therapeutics 2003;25(2):515-29.	inadequate wash out period (<4 weeks)
250	Galle,J., Kleophas,W., Dellanna,F., Schmid,V.H., Forkel,C., Dikta,G., et al. Comparison of the Effects of Pioglitazone versus Placebo when Given in Addition to Standard Insulin Treatment in Patients with Type 2 Diabetes Mellitus Requiring Hemodialysis: Results from the PIOren Study. Nephron Extra 2012;2(1):104-14.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
251	Gallwitz,B. How do we continue treatment in patients with type 2 diabetes when therapeutic goals are not reached with oral antidiabetes agents and lifestyle? Incretin versus insulin treatment. [Review]. Diabetes Care 2013;36:Suppl-9.	systematic review/meta-analysis/pooled analysis/review
252	Gallwitz,B., Bohmer,M., Segiet,T., Molle,A., Milek,K., Becker,B., et al. Exenatide twice daily versus premixed insulin aspart 70/30 in metformin-treated patients with type 2 diabetes: a randomized 26-week study on glycemic control and hypoglycemia. Diabetes Care 2011;34(3):604-06.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. 2 oral antidiabetic drugs
253	Gallwitz,B., Vaag,A., Falahati,A. Adding liraglutide to oral antidiabetic drug therapy: onset of treatment effects over time. International Journal of Clinical Practice 2010;64(2):267-76.	duplicate or same study results
254	Gamble,J., Simpson,S.H., Brown,L.C. Insulin versus an oral antidiabetic agent as add-on therapy in type 2 diabetes after failure of an oral	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
	antidiabetic regimen: a meta-analysis. Open Medicine : A Peer-reviewed, Independent, Open-access Journal 2008;2(2):e26-38.	
255	Gangji,A.S., Cukierman,T., Gerstein,H.C., Goldsmith,C.H. A systematic review and meta-analysis of hypoglycemia and cardiovascular events: a comparison of glyburide with other secretagogues and with insulin. Diabetes Care 2007;30(2):389-94.	systematic review/meta-analysis/pooled analysis/review
256	Gao,H., Xiao,W., Wang,C., Zhang,J., Yang,Y., Yang,J., Yang,W. The metabolic effects of once daily extended-release metformin in patients with type 2 diabetes: a multicentre study. International Journal of Clinical Practice 2008;62(5):695-700.	inadequate wash out period (<4 weeks)
257	Gao,W., Dong,J., Liu,J., Li,Y., Liu,F., Yang,L. Efficacy and safety of initial combination of DPP-IV inhibitors and metformin versus metformin monotherapy in type 2 diabetes: A systematic review of randomized controlled trials. Diabetes, Obesity and Metabolism 2014;16(2):179-85.	systematic review/meta-analysis/pooled analysis/review
258	Gao,X. Multicentre, double-blind, randomized study of mitiglinide compared with nateglinide in type 2 diabetes mellitus patients in China. Journal of International Medical Research 2009;37(3):812-21.	comparison with unlicensed drug or drug indication
259	Garber,A., Henry,R., Ratner,R., Garcia-Hernandez,P.A., Rodriguez-Pattzi,H., Olvera-Alvarez,I., et al. Liraglutide versus glimepiride monotherapy for type 2 diabetes (LEAD-3 Mono): a randomised, 52-week, phase III, double-blind, parallel-treatment trial. Lancet 2009;373(9662):473-81.	comparison with unlicensed drug or drug indication
260	Garber,A., Henry,R.R., Ratner,R., Hale,P., Chang,C.T., Bode,B. Liraglutide, a once-daily human glucagon-like peptide 1 analogue, provides sustained improvements in glycaemic control and weight for 2 years as monotherapy compared with glimepiride in patients with type 2 diabetes. Diabetes, Obesity & Metabolism 2011;13(4):348-56.	comparison with unlicensed drug or drug indication
261	Garber,A.J., Clauson,P., Pedersen,C.B. Lower risk of hypoglycemia with insulin detemir than with neutral protamine hagedorn insulin in older persons with type 2 diabetes: a pooled analysis of phase III trials. Journal of the American Geriatrics Society 2007;55(11):1735-40.	systematic review/meta-analysis/pooled analysis/review
262	Garber,A.J., King,A.B., Del,Prato S., Sreenan,S., Balci,M.K., Munoz-Torres,M., et al. Insulin degludec, an ultra-longacting basal insulin, versus insulin glargine in basal-bolus treatment with mealtime insulin aspart in type 2 diabetes (BEGIN Basal-Bolus Type 2): a phase 3, randomised, open-label, treat-to-target non-inferiority trial. Lancet 2012;379(9825):1498-5007.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
263	Garber,A.J., Schweizer,A., Baron,M.A.	Drug comparison not of interest - 2

Number	Reference	Reason for exclusion
	Vildagliptin in combination with pioglitazone improves glycaemic control in patients with type 2 diabetes failing thiazolidinedione monotherapy: A randomized, placebo-controlled study. Diabetes, Obesity and Metabolism 2007;9(2):166-74.	oral antidiabetic drugs vs 1 oral antidiabetic drug
264	Garg,S.K. & Aurand,L.A. Diabetes duration and the efficacy and safety of insulin glargine versus comparator treatment in patients with type 2 diabetes mellitus. Endocrine Practice 2014;20(2):120-28.	systematic review/meta-analysis/pooled analysis/review
265	Gastaldelli,A. The effect of chronic twice daily exenatide treatment on beta-cell function in new onset type 2 diabetes. Clinical Endocrinology 2014;80(4):545-53.	comparison with unlicensed drug or drug indication
266	Gastaldelli,A., Ferrannini,E., Miyazaki,Y., Matsuda,M., Mari,A. Thiazolidinediones improve beta-cell function in type 2 diabetic patients. American Journal of Physiology - Endocrinology & Metabolism 2007;292(3):E871-83.	unclear dosing regimen and no details relating to mean doses
267	Geng,D.-F., Jin,D.-M., Wu,W., Fang,C. Effect of alpha-glucosidase inhibitors on the progression of carotid intima-media thickness: A meta-analysis of randomized controlled trials. Atherosclerosis 2011;218(1):214-19.	systematic review/meta-analysis/pooled analysis/review
268	Gentile,S., Turco,S., Guarino,G., Oliviero,B., Rustici,A. [Non-insulin-dependent diabetes mellitus associated with nonalcoholic liver cirrhosis: an evaluation of treatment with the intestinal alpha-glucosidase inhibitor acarbose]. Annali italiani di medicina interna: organo ufficiale della Societa italiana di medicina interna 1998;14(1):7-14.	not in English
269	Gerrald,K.R., Van,Scoyoc E., Wines,R.C., Runge,T. Saxagliptin and sitagliptin in adult patients with type 2 diabetes: A systematic review and meta-analysis. Diabetes, Obesity and Metabolism 2012;14(6):481-92.	systematic review/meta-analysis/pooled analysis/review
270	Gerstein,H.C., Yale,J.F., Harris,S.B., Issa,M., Stewart,J.A. A randomized trial of adding insulin glargine vs. avoidance of insulin in people with Type 2 diabetes on either no oral glucose-lowering agents or submaximal doses of metformin and/or sulphonylureas. The Canadian INSIGHT (Implementing New Strategies with Insulin Glargine for Hyperglycaemia Treatment) Study. Diabetic Medicine 2006;23(7):736-42.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
271	Giles,T.D., Elkayam,U., Bhattacharya,M., Perez,A. Comparison of pioglitazone vs glyburide in early heart failure: insights from a randomized controlled study of patients with type 2 diabetes and mild cardiac disease. Congestive Heart Failure 2010;16(3):111-17.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
272	Giles,T.D., Miller,A.B., Elkayam,U., Bhattacharya,M. Pioglitazone and Heart Failure: Results From a Controlled Study in Patients With Type 2 Diabetes Mellitus and Systolic	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study

Number	Reference	Reason for exclusion
	Dysfunction. Journal of Cardiac Failure 2008;14(6):445-52.	
273	Giugliano,D., Maiorino,M., Bellastella,G., Chiodini,P. Relationship of baseline HbA1c, HbA1c change and HbA1c target of < 7% with insulin analogues in type 2 diabetes: a meta-analysis of randomised controlled trials. [Review]. International Journal of Clinical Practice 2011;65(5):602-12.	systematic review/meta-analysis/pooled analysis/review
274	Giugliano,D., Maiorino,M.I., Bellastella,G., Chiodini,P. Multiple HbA1c targets and insulin analogues in type 2 diabetes: A systematic review. Journal of Diabetes and its Complications 2011;25(4):275-81.	systematic review/meta-analysis/pooled analysis/review
275	Giugliano,D., Maiorino,M.I., Bellastella,G., Chiodini,P. Treatment regimens with insulin analogues and haemoglobin A1c target of <7% in type 2 diabetes: A systematic review. Diabetes Research and Clinical Practice 2011;92(1):1-10.	systematic review/meta-analysis/pooled analysis/review
276	Glass,L.C., Qu,Y., Lenox,S., Kim,D., Gates,J.R., Brodows,R., Trautmann,M. Effects of exenatide versus insulin analogues on weight change in subjects with type 2 diabetes: a pooled post-hoc analysis. Current Medical Research & Opinion 2008;24(3):639-44.	systematic review/meta-analysis/pooled analysis/review
277	Goergen,S.K., Rumbold,G., Compton,G. Systematic review of current guidelines, and their evidence base, on risk of lactic acidosis after administration of contrast medium for patients receiving metformin. Radiology 2010;254(1):261-69.	systematic review/meta-analysis/pooled analysis/review
278	Goldberg,R.B., Einhorn,D., Lucas,C.P., Rendell,M.S., Damsbo,P., Huang,W.C., Strange,P. A randomized placebo-controlled trial of repaglinide in the treatment of type 2 diabetes. Diabetes Care 1998;21(11):1897-9003.	inadequate wash out period (<4 weeks)
279	Goldenberg,R. Insulin plus incretin agent combination therapy in type 2 diabetes: a systematic review. Current Medical Research and Opinion 2014;30(3):431-45.	systematic review/meta-analysis/pooled analysis/review
280	Goldstein,B.J. & Pans,M. Multicenter, randomized, double-masked, parallel-group assessment of simultaneous glipizide/metformin as second-line pharmacologic treatment for patients with type 2 diabetes mellitus that is inadequately controlled by a sulfonylurea. Clinical Therapeutics 2003;25(3):890-903.	unclear washout of previous blood glucose lowering therapy but termed monotherapy and <12 month duration
281	Gomis,R. & Raptis,S.A. Appropriate timing of Glimepiride administration in patients with type 2 diabetes millitus: A study in Mediterranean countries. Endocrine 2000;13(1):117-21.	focus on timing of administration
282	Gomis,R., Owens,D.R., Taskinen,M.R., Del,Prato S., Patel,S., Pivovarova,A. Long-term safety and efficacy of linagliptin as monotherapy or in combination with other oral glucose-	not a randomised controlled trial (no randomisation)

Number	Reference	Reason for exclusion
	lowering agents in 2121 subjects with type 2 diabetes: Up to 2 years exposure in 24-week phase III trials followed by a 78-week open-label extension. International Journal of Clinical Practice 2012;66(8):731-40.	
283	Gonzalez-Clemente,J.M. Improvement of glycaemic control by nateglinide decreases systolic blood pressure in drug-naive patients with type 2 diabetes. European Journal of Clinical Investigation 2008;38(3):174-79.	comparison with unlicensed drug or drug indication
284	Gonzalez-Ortiz,M., Guerrero-Romero,J.F., Violante-Ortiz,R., Wacher-Rodarte,N., Martinez-Abundis,E., Aguilar-Salinas,C., et al. Efficacy of glimepiride/metformin combination versus glibenclamide/metformin in patients with uncontrolled type 2 diabetes mellitus. Journal of Diabetes & its Complications 2009;23(6):376-79.	unclear if previous blood glucose lowering therapies were washed out/discontinued
285	Goodman AM. Efficacy and safety of metformin Results of a multicenter trial.	abstract only/not full paper
286	Goodman,M. & Thurston,H. Efficacy and tolerability of vildagliptin in patients with type 2 diabetes inadequately controlled with metformin monotherapy. Hormone & Metabolic Research 2009;41(5):368-73.	focus on timing of administration
287	Goosen,K. Longer term safety of dipeptidyl peptidase-4 inhibitors in patients with type 2 diabetes mellitus: systematic review and meta-analysis. Diabetes, Obesity and Metabolism 2012;14(12):1061-72.	systematic review/meta-analysis/pooled analysis/review
288	Goring,S., Hawkins,N., Wygant,G., Roudaut,M., Townsend,R. Dapagliflozin compared with other oral anti-diabetes treatments when added to metformin monotherapy: a systematic review and network meta-analysis. Diabetes, Obesity and Metabolism 2014;16(5):433-42.	systematic review/meta-analysis/pooled analysis/review
289	Goudswaard,AN., Furlong,NJ., Valk,GD., Stolk,RP. Insulin monotherapy versus combinations of insulin with oral hypoglycaemic agents in patients with type 2 diabetes mellitus. Cochrane Database of Systematic Reviews 2004.	systematic review/meta-analysis/pooled analysis/review
290	Gough,S.C., Bhargava,A., Jain,R., Mersebach,H. Low-volume insulin degludec 200 units/ml once daily improves glycemic control similarly to insulin glargine with a low risk of hypoglycemia in insulin-naive patients with type 2 diabetes: a 26-week, randomized, controlled, multinational, treat-to-target trial: the BEGIN LOW VOLUME trial. Diabetes Care 2013;36(9):2536-42.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
291	Grant,PJ. The Effects of High- and Medium-Dose Metformin Therapy on Cardiovascular Risk Factors in Patients With Type II Diabetes. Diabetes Care 1996;19(1):64-66.	unclear if previous blood glucose lowering therapies were washed out/discontinued
292	Grey,A., Bolland,M., Fenwick,S., Horne,A., Gamble,G. The skeletal effects of pioglitazone in type 2 diabetes or impaired glucose tolerance: A	not specifically type 2 diabetes

Number	Reference	Reason for exclusion
	randomized controlled trial. European Journal of Endocrinology 2014;170(2):255-62.	
293	Groop,P.H., Cooper,M.E., Perkovic,V., Emser,A. Linagliptin lowers albuminuria on top of recommended standard treatment in patients with type 2 diabetes and renal dysfunction. Diabetes Care 2013;36(11):3460-68.	systematic review/meta-analysis/pooled analysis/review
294	Groop,P.H., Del,Prato S., Taskinen,M.R., Owens,D.R., Gong,Y., Crowe,S., Patel,S. Linagliptin treatment in subjects with type 2 diabetes with and without mild-to-moderate renal impairment. Diabetes, Obesity and Metabolism 2014;16(6):560-68.	systematic review/meta-analysis/pooled analysis/review
295	Gross,J.L., Kramer,C.K., Leitao,C.B., Hawkins,N., Viana,L.V., Schaan,B.D., et al. Effect of antihyperglycemic agents added to metformin and a sulfonylurea on glycemic control and weight gain in type 2 diabetes: a network meta-analysis. [Review]. Annals of Internal Medicine 2011;154(10):672-79.	systematic review/meta-analysis/pooled analysis/review
296	Gross,J.L., Nakano,M., Colon-Vega,G., Ortiz-Carasquillo,R., Ferguson,J.A., Althouse,S., et al. Initiation of prandial insulin therapy with AIR inhaled insulin or insulin lispro in patients with type 2 diabetes: A randomized noninferiority trial. Diabetes Technology & Therapeutics 2009;11:Suppl-34.	comparison with unlicensed drug or drug indication
297	Gupta,A.K., Bray,G.A., Greenway,F.L., Martin,C.K., Johnson,W.D. Pioglitazone, but not metformin, reduces liver fat in Type-2 diabetes mellitus independent of weight changes. Journal of Diabetes & its Complications 2010;24(5):289-96.	unclear if previous blood glucose lowering therapies were washed out/discontinued
298	Gupta,A.K., Smith,S.R., Greenway,F.L. Pioglitazone treatment in type 2 diabetes mellitus when combined with portion control diet modifies the metabolic syndrome. Diabetes, Obesity & Metabolism 2009;11(4):330-37.	unclear if previous blood glucose lowering therapies were washed out/discontinued
299	Gutniak,M & Karlander,SG. Glyburide Decreases Insulin Requirement, Increases beta-cell Response to Mixed Meal, and Does Not Affect Insulin Sensitivity: Effects of Short-and Long-Term Combined Treatment in Secondary Failure to Sulfonylurea. Diabetes Care 1987;10(5):545-54.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
300	Haak,T., Meinicke,T., Jones,R., Weber,S. Initial combination of linagliptin and metformin in patients with type 2 diabetes: efficacy and safety in a randomised, double-blind 1-year extension study. International Journal of Clinical Practice 2013;67(12):1283-93.	Drug comparison not of interest - 2 oral antidiabetic drugs vs 1 oral antidiabetic drug
301	Haffner SM, Hanefeld M, Fischer S, Fuçker K, Leonhardt W. Glibenclamide, but Not Acarbose, Increases Leptin Concentrations Parallel to Changes in Insulin in Subjects With NIDDM. Diabetes Care 1997;20(9):1430-34.	unclear if previous blood glucose lowering therapies were washed out/discontinued
302	Han,S., Iglay,K., Davies,M.J., Zhang,Q.	systematic review/meta-

Number	Reference	Reason for exclusion
	Glycemic effectiveness and medication adherence with fixed-dose combination or coadministered dual therapy of antihyperglycemic regimens: A meta-analysis. Current Medical Research and Opinion 2012;28(6):969-77.	analysis/pooled analysis/review
303	Hanefeld,M., Bouter,K.P., Dickinson,S. Rapid and short-acting mealtime insulin secretion with nateglinide controls both prandial and mean glycemia. Diabetes Care 2000;23(2):202-07.	comparison with unlicensed drug or drug indication
304	Hanefeld,M, Fischer,S, Schulze,J, Spengler,M, Wargenau,M, Schollberg,K. Therapeutic Potentials of Acarbose as First-Line Drug in NIDDM Insufficiently Treated With Diet Alone. Diabetes Care 1991;14(8):732-37.	critical inconsistencies in reported data
305	Harashima,K., Hayashi,J., Miwa,T. Long-term pioglitazone therapy improves arterial stiffness in patients with type 2 diabetes mellitus. Metabolism: Clinical & Experimental 2009;58(6):739-45.	not a randomised controlled trial (no randomisation)
306	Harrison,L.B., Adams-Huet,B., Li,X. Intensive therapy in newly diagnosed type 2 diabetes: results of a 6-year randomized trial. Journal of Investigative Medicine 2014;62(4):676-86.	duplicate or same study results
307	Harrison,L.B., Adams-Huet,B., Raskin,P. beta-cell function preservation after 3.5 years of intensive diabetes therapy. Diabetes Care 2012;35(7):1406-12.	rescue medication was provided to participants and unclear if analysis has been adjusted or switching of treatment
308	Hasche,H., Mertes,G., Bruns,C., Englert,R., Genthner,P., Heim,D., et al. Effects of acarbose treatment in Type 2 diabetic patients under dietary training: A multicentre, double-blind, placebo-controlled, 2-year study. Diabetes, Nutrition and Metabolism - Clinical and Experimental 1999;12(4):277-85.	rescue medication was provided to participants and unclear if analysis has been adjusted or switching of treatment
309	Hayes,R.P., Curtis,B., Ilag,L., Nelson,D.R. Expectations about insulin therapy, perceived insulin-delivery system social acceptability, and insulin treatment satisfaction contribute to decreases in insulin therapy self-efficacy in patients with type 2 diabetes after 36 weeks insulin therapy. Journal Of Diabetes 2013;5(3):358-67.	outcomes not of interest
310	He,S., Tang,Y.H., Zhao,G., Yang,X. Pioglitazone prescription increases risk of bladder cancer in patients with type 2 diabetes: an updated meta-analysis. Tumour Biology 2014;35(3):2095-1002.	systematic review/meta-analysis/pooled analysis/review
311	Heise,T., Mathieu,C., Hey-Hadavi,J., Strack,T. Glycemic control with preprandial versus basal insulin in patients with type 2 diabetes mellitus poorly controlled by oral antidiabetes agents. Diabetes Technology & Therapeutics 2010;12(2):135-41.	comparison with unlicensed drug or drug indication
312	Heliovaara,M.K., Herz,M., Teppo,A.M., Leinonen,E. Pioglitazone has anti-inflammatory effects in patients with Type 2 diabetes. Journal	unclear if previous blood glucose lowering therapies were washed out/discontinued

Number	Reference	Reason for exclusion
	of Endocrinological Investigation 2007;30(4):292-97.	
313	Hemmingsen B,Schroll JB,Lund SS,Wetterslev J,Gluud C,Vaag A,Sonne DP,Lundstrom LH,Almdal T. Sulphonylurea monotherapy for patients with type 2 diabetes mellitus. Cochrane Database Syst Rev. 2013 Apr 30;4:CD009008.	systematic review/meta-analysis/pooled analysis/review
314	Hemmingsen,B., Christensen,L.L., Wetterslev,J., Vaag,A., Gluud,C., Lund,S.S. Comparison of metformin and insulin versus insulin alone for type 2 diabetes: systematic review of randomised clinical trials with meta-analyses and trial sequential analyses. [Review]. BMJ 2012;344:e1771.	systematic review/meta-analysis/pooled analysis/review
315	Henry,R., Buse,J., Sesti,G., Davies,M., Jensen,K., Brett,J. Efficacy of anthiyperglycemic therapies and the influence of baseline hemoglobin A1C: A meta-analysis of the liraglutide development program. Endocrine Practice 2011;17(6):906-13.	systematic review/meta-analysis/pooled analysis/review
316	Henry,R.R., Staels,B., Fonseca,V.A., Chou,M.Z., Teng,R., Golm,G.T., et al. Efficacy and safety of initial combination treatment with sitagliptin and pioglitazone-a factorial study. Diabetes, Obesity and Metabolism 2014;16(3):223-30.	rescue medication was provided to participants and unclear if analysis has been adjusted or switching of treatment
317	Henry,R.R., Smith,S.R., Schwartz,S.L., Mudaliar,S.R., Deacon,C.F., Holst,J.J., et al. Effects of saxagliptin on beta-cell stimulation and insulin secretion in patients with type 2 diabetes. Diabetes, Obesity & Metabolism 2011;13(9):850-58.	no Hba1c measures
318	Hermann LS,Bitzen PO,Kjellstrom T,Lindgarde F,Schersten B. Comparative efficacy of metformin and glibenclamide in patients with non-insulin-dependent diabetes mellitus. Diabete Metab. 1991 May;17(1 Pt 2):201-8.	duplicate or same study results
319	Hermann LS,Kjellstrom T,Nilsson EP. Effects of metformin and glibenclamide alone and in combination on serum lipids and lipoproteins in patients with non-insulin-dependent diabetes mellitus. Diabete Metab. 1991 May;17(1 Pt 2):174-9.	duplicate or same study results
320	Hermann LS,Ranstam J,Vaaler S,Melander A. Effects of antihyperglycaemic therapies on proinsulin and relation between proinsulin and cardiovascular risk factors in type 2 diabetes. Diabetes Obes Metab. 1999 Jul;1(4):227-32.	duplicate or same study results
321	Hermann,L.S. & Karlsson,J.E. Prospective comparative study in NIDDM patients of metformin and glibenclamide with special reference to lipid profiles. 1991;41(3):263-65.	unclear if previous blood glucose lowering therapies were washed out/discontinued
322	Hermann LS, Scherstén B, Melander A. Antihyperglycaemic Efficacy, Response Prediction and Dose-Response Relations of Treatment with Metformin and Sulphonylurea, Alone and in Primary Combination. Diabetic Medicine 1994;11(10):953-60.	duplicate or same study results

Number	Reference	Reason for exclusion
323	Hermann,L.S., Kalen,J., Katzman,P., Lager,I., Nilsson,A., Norrhamn,O., Sartor,G. Long-term glycaemic improvement after addition of metformin to insulin in insulin-treated obese type 2 diabetes patients. Diabetes, Obesity and Metabolism 2001;3(6):428-34.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. insulin
324	Hermansen,K., Kipnes,M., Luo,E., Fanurik,D. Efficacy and safety of the dipeptidyl peptidase-4 inhibitor, sitagliptin, in patients with type 2 diabetes mellitus inadequately controlled on glimepiride alone or on glimepiride and metformin. Diabetes, Obesity and Metabolism 2007;9(5):733-45.	proportion or all patients taking pre-existing oral antidiabetic drug s (contamination) or other oral antidiabetic drug /insulin (with no subgroup analyses)
325	Hermansen,K., Kolotkin,R.L., Hammer,M., Zdravkovic,M. Patient-reported outcomes in patients with type 2 diabetes treated with liraglutide or glimepiride, both as add-on to metformin. Primary care diabetes 2010;4(2):113-17.	outcomes not of interest
326	Hernandez,A.V., Usmani,A., Rajamanickam,A. Thiazolidinediones and risk of heart failure in patients with or at high risk of type 2 diabetes mellitus: a meta-analysis and meta-regression analysis of placebo-controlled randomized clinical trials (Structured abstract). American Journal of Cardiovascular Drugs 2011;11(2):115-28.	systematic review/meta-analysis/pooled analysis/review
327	Hillebrand I,Englert R. Efficacy and tolerability of a 12-week treatment with acarbose (BAY g5421), miglitol (BAY m1099) and glibenclamide.	abstract only/not full paper
328	Hirao,K., Arai,K., Yamauchi,M., Takagi,H. Six-month multicentric, open-label, randomized trial of twice-daily injections of biphasic insulin aspart 30 versus multiple daily injections of insulin aspart in Japanese type 2 diabetic patients (JDDM 11). Diabetes Research and Clinical Practice 2008;79(1):171-76.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
329	Hirsch,I.B., Yuan,H., Campaigne,B.N. Impact of prandial plus basal vs basal insulin on glycemic variability in type 2 diabetic patients. Endocrine Practice 2009;15(4):343-48.	systematic review/meta-analysis/pooled analysis/review
330	Hirst,J.A., Farmer,A.J., Ali,R., Roberts,N.W. Quantifying the effect of metformin treatment and dose on glycemic control. Diabetes Care 2012;35(2):446-54.	systematic review/meta-analysis/pooled analysis/review
331	Ho,L.T., Lam,H.C., Wu,M.S., Kwok,C.F., Jap,T.S., Tang,K.T., Wang,L.M. A twelve month double-blind randomized study of the efficacy and immunogenicity of human and porcine insulins in non-insulin-dependent diabetics. Zhonghua yi xue za zhi= Chinese medical journal; Free China ed 1991;47(5):313-19.	unclear if previous blood glucose lowering therapies were washed out/discontinued
332	Hoffmann J. Acarbose and glibenclamide in type-II diabetes. A comparative study on efficacy and side effects (therapeutical news).	not in English
333	Hollander P,Bunkerslawson T,Bergenstal	abstract only/not full paper

Number	Reference	Reason for exclusion
	R,Mazze R. A randomized clinical trial of glyburide versus insulin using staged diabetes management to achieve euglycemia in NIDDM.	
334	Hollander,P., Cooper,J., Bregnh›j,J. A 52-week, multinational, open-label, parallel-group, noninferiority, treat-to-target trial comparing insulin detemir with insulin glargine in a basal-bolus regimen with mealtime insulin aspart in patients with type 2 diabetes. Clinical Therapeutics 2008;30(11):1976-87.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
335	Hollander,P., Raslova,K., Skjoth,T.V., Rastam,J. Efficacy and safety of insulin detemir once daily in combination with sitagliptin and metformin: the TRANSITION randomized controlled trial. Diabetes, Obesity & Metabolism 2011;13(3):268-75.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
336	Holman,R.R. & Steemson,J. Sulphonylurea failure in type 2 diabetes: treatment with a basal insulin supplement. Diabetic Medicine 1987;4(5):457-62.	<12 week treatment duration
337	Holman,R.R., Farmer,A.J., Davies,M.J., Levy,J.C., Darbyshire,J.L., Keenan,J.F., Paul,S.K. Three-year efficacy of complex insulin regimens in type 2 diabetes. New England Journal of Medicine 2009;361(18):1736-47.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
338	Holman,R.R., Thorne,K.I., Farmer,A.J., Davies,M.J., Keenan,J.F., Paul,S., Levy,J.C. Addition of biphasic, prandial, or basal insulin to oral therapy in type 2 diabetes. New England Journal of Medicine 2007;357(17):1716-30.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
339	Home,P.D., Fritsche,A., Schinzel,S. Meta-analysis of individual patient data to assess the risk of hypoglycaemia in people with type 2 diabetes using NPH insulin or insulin glargine. [Review]. Diabetes, Obesity & Metabolism 2010;12(9):772-79.	systematic review/meta-analysis/pooled analysis/review
340	Hompesch,M., Morrow,L., Watkins,E., Roepstorff,C. Pharmacokinetic and pharmacodynamic responses of insulin degludec in african american, white, and hispanic/latino patients with type 2 diabetes mellitus. Clinical Therapeutics 2014;36(4):507-15.	<12 week treatment duration
341	Hompesch,M., Muchmore,D.B., Morrow,L. Improved postprandial glycemic control in patients with type 2 diabetes from subcutaneous injection of insulin lispro with hyaluronidase. Diabetes Technology and Therapeutics 2013;15(SUPPL.1):S45-47.	abstract only/not full paper
342	Hong,E.S., Khang,A.R., Yoon,J.W., Kang,S.M., Choi,S.H., Park,K.S., et al. Comparison between sitagliptin as add-on therapy to insulin and insulin dose-increase therapy in uncontrolled Korean type 2 diabetes: CSI study. Diabetes, Obesity & Metabolism 2012;14(9):795-802.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
343	Hong,J. Metformin reduced CV events compared with glipizide in patients with type 2	abstract only/not full paper

Number	Reference	Reason for exclusion
	diabetes and CAD. Annals of Internal Medicine 2013;158(8):JC4.	
344	Hong,J., Zhang,Y., Lai,S., Lv,A., Su,Q., Dong,Y., et al. Effects of metformin versus glipizide on cardiovascular outcomes in patients with type 2 diabetes and coronary artery disease. Diabetes Care 2013;36(5):1304-11.	rescue medication was provided to participants and unclear if analysis has been adjusted or switching of treatment
345	Horowitz,M., Vilsboll,T., Zdravkovic,M., Hammer,M. Patient-reported rating of gastrointestinal adverse effects during treatment of type 2 diabetes with the once-daily human GLP-1 analogue, liraglutide. Diabetes, Obesity & Metabolism 2008;10(7):593-96.	comparison with unlicensed drug or drug indication
346	Horvath,K., Jeitler,K., Berghold,A., Ebrahim,S.H., Gratzer,T.W., Plank,J., et al. Long-acting insulin analogues versus NPH insulin (human isophane insulin) for type 2 diabetes mellitus. Cochrane Database of Systematic Reviews 2007;(2).	systematic review/meta-analysis/pooled analysis/review
347	Houlden,R., Ross,S., Harris,S., Yale,J.F., Sauriol,L. Treatment satisfaction and quality of life using an early insulinization strategy with insulin glargine compared to an adjusted oral therapy in the management of Type 2 diabetes: the Canadian INSIGHT Study. Diabetes Research & Clinical Practice 2007;78(2):254-58.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
348	Hsia,S.H. Insulin glargine compared to NPH among insulin-naive, U.S. inner city, ethnic minority type 2 diabetic patients. Diabetes Research & Clinical Practice 2011;91(3):293-99.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
349	Hsieh,C.-H., He,C.-T., Lee,C.-H., Wu,L.-Y. Both slow-release and regular-form metformin improve glycemic control without altering plasma visfatin level in patients with type 2 diabetes mellitus. Metabolism: Clinical and Experimental 2007;56(8):1087-92.	inadequate wash out period (<4 weeks)
350	Hsieh,S.H., Lin,J.D., Cheng,H.Y., Ho,C. Sustained-release versus immediate-release glipizide for treatment of type 2 diabetes mellitus in chinese patients: A randomized, double-blind, double-dummy, parallel-group, 12-week clinical study. Clinical Therapeutics 2006;28(9):1318-26.	unclear if previous blood glucose lowering therapies were washed out/discontinued
351	Hughes,A.D., Park,C., March,K., Coady,E., Khir,A. A randomized placebo controlled double blind crossover study of pioglitazone on left ventricular diastolic function in type 2 diabetes. International Journal of Cardiology 2013;167(4):1329-32.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
352	Hwang,Y.C., Kang,M., Ahn,C.W., Park,J.S., Baik,S.H., Chung,D.J., et al. Efficacy and safety of glimepiride/metformin sustained release once daily vs. glimepiride/metformin twice daily in patients with type 2 diabetes. International Journal of Clinical Practice 2013;67(3):236-43.	unclear if previous blood glucose lowering therapies were washed out/discontinued
353	Hwu,CM, Ho,LT, Fuh,MMT., Siu,SC, Sutanegara,D, Piliang,S. Acarbose improves glycemic control in insulin-treated Asian type 2	Drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. insulin

Number	Reference	Reason for exclusion
	diabetic patients: Results from a multinational, placebo-controlled study. Diabetes Research and Clinical Practice 2003;60(2):111-18.	
354	Ilag,L.L., Kerr,L., Malone,J.K. Prandial Premixed Insulin Analogue Regimens Versus Basal Insulin Analogue Regimens in the Management of Type 2 Diabetes: An Evidence-Based Comparison. Clinical Therapeutics 2007;29(6 PART 1):1254-70.	systematic review/meta-analysis/pooled analysis/review
355	Iltz,J.L., Baker,D.E., Setter,S.M. Exenatide: An incretin mimetic for the treatment of type 2 diabetes mellitus. Clinical Therapeutics.28 (5) (pp 652-665), 2006.Date of Publication: May 2006. 2006;(5):652-65.	Systematic review/meta-analysis/pooled analysis/review
356	Inagaki,N., Ueki,K., Yamamura,A. Long-term safety and efficacy of exenatide twice daily in Japanese patients with suboptimally controlled type 2 diabetes. Journal of Diabetes Investigation 2011;2(6):448-56.	duplicate or same study results
357	Inagaki,N., Watada,H., Murai,M., Kagimura,T., Gong,Y. Linagliptin provides effective, well-tolerated add-on therapy to pre-existing oral antidiabetic therapy over 1 year in Japanese patients with type 2 diabetes. Diabetes, Obesity and Metabolism 2013;15(9):833-43.	rescue medication was provided to participants and unclear if analysis has been adjusted or switching of treatment
358	Inagaki,N., Atsumi,Y., Oura,T. Efficacy and safety profile of exenatide once weekly compared with insulin once daily in Japanese patients with type 2 diabetes treated with oral antidiabetes drug(s): results from a 26-week, randomized, open-label, parallel-group, multicenter, noninferiority study. Clinical Therapeutics 2012;34(9):1892-9008.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
359	Iqbal,N., Parker,A., Frederich,R. Assessment of the cardiovascular safety of saxagliptin in patients with type 2 diabetes mellitus: Pooled analysis of 20 clinical trials. Cardiovascular Diabetology 2014;13(1):33.	systematic review/meta-analysis/pooled analysis/review
360	Jacob,A.N., Salinas,K., Adams-Huet,B. Weight gain in type 2 diabetes mellitus. Diabetes, Obesity & Metabolism 2007;9(3):386-93.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
361	Jacober,S.J. & Scism-Bacon,J.L. A comparison of intensive mixture therapy with basal insulin therapy in insulin-naive patients with type 2 diabetes receiving oral antidiabetes agents. Diabetes, Obesity & Metabolism 2006;8(4):448-55.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
362	Jacober,S.J., Rosenstock,J., Bergenstal,R.M., Prince,M.J. Contrasting weight changes with LY2605541, a novel long-acting insulin, and insulin glargine despite similar improved glycaemic control in T1DM and T2DM. Diabetes, Obesity and Metabolism 2014;16(4):351-56.	duplicate or same study results
363	Jadzinsky,M., Pfutzner,A., Paz-Pacheco,E., Xu,Z., Allen,E., Chen,R. Saxagliptin given in combination with metformin as initial therapy improves glycaemic control in patients with type	across treatment strategy

Number	Reference	Reason for exclusion
	2 diabetes compared with either monotherapy: a randomized controlled trial. Diabetes, Obesity & Metabolism 2009;11(6):611-22.	
364	Jain,S.M., Mao,X., Escalante-Pulido,M., Vorokhobina,N., Lopez,I. Prandial-basal insulin regimens plus oral antihyperglycaemic agents to improve mealtime glycaemia: initiate and progressively advance insulin therapy in type 2 diabetes. Diabetes, Obesity & Metabolism 2010;12(11):967-75.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
365	Jarnert,C., Landstedt-Hallin,L., Malmberg,K., Melcher,A., Ohrvik,J., Persson,H. A randomized trial of the impact of strict glycaemic control on myocardial diastolic function and perfusion reserve: A report from the DADD (Diabetes mellitus and Diastolic Dysfunction) study. European Journal of Heart Failure 2009;11(1):39-47.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
366	Jeong,K.-H. The efficacy and safety of liraglutide. International Journal of Clinical Pharmacy 2011;33(5):740-49.	systematic review/meta-analysis/pooled analysis/review
367	Jibran,R., Suliman,M.I., Qureshi,F. Safety and efficay of repaglinide compared with glibenclamide in the management of type 2 diabetic Pakistani patients. Pakistan Journal of Medical Sciences 2006;22(4):385-90.[a]	duplicate or same study results
368	Johansen,O.E., Boehm,B.O., Grill,V., Torjesen,P.A., Bhattacharya,S., Patel,S. C-peptide levels in latent autoimmune diabetes in adults treated with linagliptin versus glimepiride: Exploratory results from a 2-year double-blind, randomized, controlled study. Diabetes Care 2014;37(1):e11-12.	duplicate or same study results
369	Jonker,J.T., Wang,Y., de,Haan W., Diamant,M., Rijzewijk,L.J., van der Meer,R.W., et al. Pioglitazone decreases plasma cholesteryl ester transfer protein mass, associated with a decrease in hepatic triglyceride content, in patients with type 2 diabetes. Diabetes Care 2010;33(7):1625-28.	duplicate or same study results
370	Jovanovic,L. & Peters,A.L. Durability of glycemic control with insulin lispro mix 75/25 versus insulin glargine for older patients with type 2 diabetes. Aging Clinical and Experimental Research 2014;26(2):115-21.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
371	Jovanovic,L., Hassman,D.R., Gooch,B., Jain,R., Greco,S., Khutoryansky,N. Treatment of type 2 diabetes with a combination regimen of repaglinide plus pioglitazone. Diabetes Research & Clinical Practice 2004;63(2):127-34.	inadequate wash out period (<4 weeks)
372	Joya-Galeana,J., Fernandez,M., Cervera,A., Reyna,S., Ghosh,S., Triplitt,C., et al. Effects of insulin and oral anti-diabetic agents on glucose	Drug comparison not of interest-unclear pre-existing therapy which is

a In November 2015, close to publication, NICE became aware that the following 3 papers on repaglinide (Jibran 2006, Saleem 2011 and Shah 2011) were referred for suspected scientific misconduct. The Pakistan Journal of Medical and Health Sciences has subsequently retracted Saleem 2011 and Shah 2011 because of ethical misconduct.

Number	Reference	Reason for exclusion
	metabolism, vascular dysfunction and skeletal muscle inflammation in type 2 diabetic subjects. Diabetes/Metabolism Research Reviews 2011;27(4):373-82.	continued throughout the study
373	Jung,J.A., Kaku,K., Kim,J.H., Kim,J.R., Ko,J.W. Additive postprandial glucose-lowering effects of mitiglinide and sitagliptin in patients with type 2 diabetes mellitus. Advances in Therapy 2013;30(11):1018-29.	comparison with unlicensed drug or drug indication
374	Juurinen,L., Tiikkainen,M., Saltevo,J., Nikkila,K., Lanki,H., Leppavuori,E., et al. Nateglinide combination therapy with basal insulin and metformin in patients with Type 2 diabetes. Diabetic Medicine 2009;26(4):409-15.	drug comparison not of interest- insulin + 1 oral antidiabetic drug vs. insulin + 2 oral antidiabetic drugs
375	Kadowaki,T. 28-week, randomized, multicenter, open-label, parallel-group phase III trial to investigate the efficacy and safety of biphasic insulin aspart 70 thrice-daily injections vs twice-daily injections of biphasic insulin aspart 30 in patients with type 2 diabetes. Journal of Diabetes Investigation 2010;1(3):103-10.	drug comparison not of interest- insulin vs. insulin
376	Kadowaki,T., Namba,M., Imaoka,T., Yamamura,A., Goto,W., Boardman,M.K. Improved glycemic control and reduced bodyweight with exenatide: A double-blind, randomized, phase 3 study in Japanese patients with suboptimally controlled type 2 diabetes over 24 weeks. Journal of Diabetes Investigation 2011;2(3):210-17.	unclear if previous blood glucose lowering therapies were washed out/discontinued
377	Kadowaki,T., Namba,M., Yamamura,A., Sowa,H., Wolka,A.M. Exenatide exhibits dose-dependent effects on glycemic control over 12 weeks in Japanese patients with suboptimally controlled type 2 diabetes. Endocrine Journal 2009;56(3):415-24.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
378	Kaku,K. & Rasmussen,M.F. Improved glycaemic control with minimal hypoglycaemia and no weight change with the once-daily human glucagon-like peptide-1 analogue liraglutide as add-on to sulphonylurea in Japanese patients with type 2 diabetes. Diabetes, Obesity and Metabolism 2010;12(4):341-47.	Drug comparison not of interest - 2 oral antidiabetic drugs vs 1 oral antidiabetic drug
379	Kaku,K., Daida,H., Kashiwagi,A., Yamashina,A., Yamazaki,T., Momomura,S., et al. Long-term effects of pioglitazone in Japanese patients with type 2 diabetes without a recent history of macrovascular morbidity. Current Medical Research & Opinion 2009;25(12):2925-32.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
380	Kaku,K., Rasmussen,M.F., Nishida,T. Fifty-two-week, randomized, multicenter trial to compare the safety and efficacy of the novel glucagon-like peptide-1 analog liraglutide vs glibenclamide in patients with type2 diabetes. Journal of Diabetes Investigation 2011;2(6):441-47.	comparison with unlicensed drug or drug indication
381	Kalra,S., Plata-Que,T., Kumar,D., Mumtaz,M., Sondergaard,F., Kozlovski,P. Initiation with once-daily BIAsp 30 results in superior outcome	unclear if previous blood glucose lowering therapies were washed out/discontinued

Number	Reference	Reason for exclusion
	compared to insulin glargine in Asians with type 2 diabetes inadequately controlled by oral anti-diabetic drugs. Diabetes Research & Clinical Practice 2010;88(3):282-88.	
382	Kamel AN,Cetinarslan B,Uysal AR,Baskal N,Corapcioglu D,Tonyukuk V. Efficacy of monotherapy with acarbose, glibenclamide, gliclazide, metformin or placebo in NIDDM patients.	abstract only/not full paper
383	Kanazawa,I., Yamaguchi,T., Yano,S., Yamamoto,M., Yamauchi,M., Kurioka,S. Baseline atherosclerosis parameter could assess the risk of bone loss during pioglitazone treatment in type 2 diabetes mellitus. Osteoporosis International 2010;21(12):2013-18.	unclear if previous blood glucose lowering therapies were washed out/discontinued
384	Kanazawa,I., Yamamoto,M., Yamaguchi,T. Effects of metformin and pioglitazone on serum pentosidine levels in type 2 diabetes mellitus. Experimental & Clinical Endocrinology & Diabetes 2011;119(6):362-65.	3rug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
385	Kanazu,S., Horie,Y., Narukawa,M., Nonaka,K., Taniguchi,T., Arjona Ferreira,J.C. Predicting steady-state HbA1c responses to sitagliptin in patients with type 2 diabetes mellitus. Diabetes, Obesity & Metabolism 2009;11(8):813-18.	systematic review/meta-analysis/pooled analysis/review
386	Kanda T. Effects of oral antidiabetic agent on carbohydrate and lipid metabolism in mildly obese patients with diabetes mellitus: a randomized comparative study of acarbose and sulfonylurea.	not available from the British library
387	Kania,D.S. & Gonzalvo,J.D. Saxagliptin: a clinical review in the treatment of type 2 diabetes mellitus. [Review]. Clinical Therapeutics 2011;33(8):1005-22.	systematic review/meta-analysis/pooled analysis/review
388	Kann,P.H., Wascher,T., Zackova,V., Moeller,J., Medding,J., Szocs,A., et al. Starting insulin therapy in type 2 diabetes: twice-daily biphasic insulin Aspart 30 plus metformin versus once-daily insulin glargine plus glimepiride. Experimental & Clinical Endocrinology & Diabetes 2006;114(9):527-32.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
389	Kapitza,C., Forst,T., Coester,H.V., Poitiers,F. Pharmacodynamic characteristics of lixisenatide once daily versus liraglutide once daily in patients with type 2 diabetes insufficiently controlled on metformin. Diabetes, Obesity & Metabolism 2013;15(7):642-49.	<12 week treatment duration
390	Karagiannis,T., Paschos,P., Paletas,K., Matthews,D.R. Dipeptidyl peptidase-4 inhibitors for treatment of type 2 diabetes mellitus in the clinical setting: systematic review and meta-analysis. BMJ 2012;344:e1369.	systematic review/meta-analysis/pooled analysis/review
391	Karl,D., Zhou,R., Vlajnic,A. Fasting plasma glucose 6-12weeks after starting insulin glargine predicts likelihood of treatment success: A pooled analysis. Diabetic Medicine 2012;29(7):933-36.	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
392	Kashiwagi,A., Kadowaki,T., Tajima,N., Nonaka,K., Taniguchi,T., Nishii,M. Sitagliptin added to treatment with ongoing pioglitazone for up to 52 weeks improves glycemic control in Japanese patients with type 2 diabetes. Journal of Diabetes Investigation 2011;2(5):381-90.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
393	Katavetin,P. & Eiam-Ong,S. Pioglitazone reduces urinary protein and urinary transforming growth factor-beta excretion in patients with type 2 diabetes and overt nephropathy. Journal of the Medical Association of Thailand 2006;89(2):170-77.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
394	Kato,T. & Inoue,T. Postprandial endothelial dysfunction in subjects with new-onset type 2 diabetes: an acarbose and nateglinide comparative study. Cardiovascular Diabetology 2010;9:12.	comparison with unlicensed drug or drug indication
395	Kawai,T., Funae,O., Shimada,A., Tabata,M., Hirata,T., Atsumi,Y. Effects of pretreatment with low-dose metformin on metabolic parameters and weight gain by pioglitazone in Japanese patients with type 2 diabetes. Internal Medicine 2008;47(13):1181-88.	not a randomised controlled trial (no randomisation)
396	Kawalec,P. The safety of dipeptidyl peptidase-4 (DPP-4) inhibitors or sodium-glucose cotransporter 2 (SGLT-2) inhibitors added to metformin background therapy in patients with type 2 diabetes mellitus: a systematic review and meta-analysis. Diabetes/Metabolism Research Reviews 2014;30(4):269-83.	systematic review/meta-analysis/pooled analysis/review
397	Kawamori,R., Kaku,K., Hanafusa,T., Oikawa,T. Effect of combination therapy with repaglinide and metformin hydrochloride on glycemic control in Japanese patients with type 2 diabetes mellitus. Journal of Diabetes Investigation 2014;5(1):70-79.	Drug comparison not of interest - 2 oral antidiabetic drugs vs 1 oral antidiabetic drug
398	Kawamori,R., Iwamoto,Y., Kadowaki,T., Iwasaki,M., Kim,S.W., Woo,J.T., Baik,S.H. Effects of insulin glulisine as mono- or add-on therapy in patients with type 2 diabetes mellitus. Diabetes, Obesity & Metabolism 2009;11(9):900-09.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
399	Kawamori,R., Kaku,K., Hanafusa,T., Kashiwabara,D., Kageyama,S. Efficacy and safety of repaglinide vs nateglinide for treatment of Japanese patients with type 2 diabetes mellitus. Journal of Diabetes Investigation 2012;3(3):302-08.	comparison with unlicensed drug or drug indication
400	Kazda,C., Hulstrunk,H., Helsberg,K., Langer,F., Forst,T. Prandial insulin substitution with insulin lispro or insulin lispro mid mixture vs. basal therapy with insulin glargine: A randomized controlled trial in patients with type 2 diabetes beginning insulin therapy. Journal of Diabetes and its Complications 2006;20(3):145-52.	drug comparison not of interest-insulin vs. insulin
401	Kendall,D.M., Riddle,M.C., Rosenstock,J., Zhuang,D., Kim,D.D., Fineman,M.S. Effects of	Drug comparison not of interest - 3 oral antidiabetic drugs vs. 2 oral

Number	Reference	Reason for exclusion
	exenatide (exendin-4) on glycemic control over 30 weeks in patients with type 2 diabetes treated with metformin and a sulfonylurea. Diabetes Care 2005;28(5):1083-91.	antidiabetic drugs
402	Khan,M. & Murray,F.T. Pioglitazone and reductions in post-challenge glucose levels in patients with type 2 diabetes. Diabetes, Obesity and Metabolism 2006;8(1):31-38.	parent paper included and data extracted
403	Khunti,K., Srinivasan,B.T., Shutler,S. Effect of insulin glargine on glycaemic control and weight in obese and non-obese people with type 2 diabetes: data from the AT.LANTUS trial. Diabetes, Obesity & Metabolism 2010;12(8):683-88.	focus on algorithms (patient vs. physican driven)
404	Kim,D., Macconell,L., Zhuang,D., Kothare,P.A., Trautmann,M., Fineman,M. Effects of once-weekly dosing of a long-acting release formulation of exenatide on glucose control and body weight in subjects with type 2 diabetes. Diabetes Care 2007;30(6):1487-93.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
405	Kim,S.W., Baik,S.H., Yoon,K.H., Lee,H.W. Efficacy and safety of vildagliptin/pioglitazone combination therapy in Korean patients with diabetes. World Journal of Diabetes 2010;1(5):153-60.	parent paper included and data extracted
406	Kim,Y.G., Hahn,S., Oh,T.J., Kwak,S.H. Differences in the glucose-lowering efficacy of dipeptidyl peptidase-4 inhibitors between Asians and non-Asians: a systematic review and meta-analysis. [Review]. Diabetologia 2013;56(4):696-708.	systematic review/meta-analysis/pooled analysis/review
407	King,D.E. The impact of pioglitazone on ADMA and oxidative stress markers in patients with type 2 diabetes. Primary care diabetes 2012;6(2):157-61.	outcomes not of interest
408	Koivisto,V., Cleall,S., Pontiroli,A.E. Comparison of insulin lispro protamine suspension versus insulin glargine once daily in basal-bolus therapies with insulin lispro in type 2 diabetes patients: a prospective randomized open-label trial. Diabetes, Obesity & Metabolism 2011;13(12):1149-57.	comparison with unlicensed drug or drug indication
409	Kooy,A., de,Jager J., Lehert,P., Bets,D., Wulffele,M.G., Donker,A.J. Long-term effects of metformin on metabolism and microvascular and macrovascular disease in patients with type 2 diabetes mellitus. Archives of Internal Medicine 2009;169(6):616-25.	Drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. 1 oral antidiabetic drug
410	Koren,S., Shemesh-Bar,L., Tirosh,A., Peleg,R.K., Berman,S., Hamad,R.A., et al. The effect of sitagliptin versus glibenclamide on arterial stiffness, blood pressure, lipids, and inflammation in type 2 diabetes mellitus patients. Diabetes Technology & Therapeutics 2012;14(7):561-67.	unclear if previous blood glucose lowering therapies were washed out/discontinued
411	Koska,J., Saremi,A., Bahn,G. The effect of intensive glucose lowering on lipoprotein particle	not a randomised controlled trial (no randomisation)

Number	Reference	Reason for exclusion
	profiles and inflammatory markers in the Veterans Affairs Diabetes Trial (VADT). Diabetes Care 2013;36(8):2408-14.	
412	Kothny,W. & Shao,Q. One-year safety, tolerability and efficacy of vildagliptin in patients with type 2 diabetes and moderate or severe renal impairment. Diabetes, Obesity & Metabolism 2012;14(11):1032-39.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
413	Koyama,H., Tanaka,S., Monden,M., Shoji,T., Morioka,T., Fukumoto,S., et al. Comparison of effects of pioglitazone and glimepiride on plasma soluble RAGE and RAGE expression in peripheral mononuclear cells in type 2 diabetes: Randomized controlled trial (PioRAGE). Atherosclerosis 2014;234(2):329-34.	unclear if previous blood glucose lowering therapies were washed out/discontinued
414	Kozlovski,P., Foley,J., Shao,Q. Vildagliptin-insulin combination improves glycemic control in Asians with type 2 diabetes. World Journal of Diabetes 2013;4(4):151-56.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
415	Krasner,N.M. & Ido,Y. Glucagon-Like Peptide-1 (GLP-1) Analog Liraglutide Inhibits Endothelial Cell Inflammation through a Calcium and AMPK Dependent Mechanism. PLoS ONE [Electronic Resource] 2014;9(5):e97554.	not a randomised controlled trial (no randomisation)
416	Kusaka,I., Nagasaka,S., Horie,H. Metformin, but not pioglitazone, decreases postchallenge plasma ghrelin levels in type 2 diabetic patients: a possible role in weight stability? Diabetes, Obesity & Metabolism 2008;10(11):1039-46.	unclear if previous blood glucose lowering therapies were washed out/discontinued
417	Kvapil,M. & Swatko,A. Biphasic insulin aspart 30 plus metformin: An effective combination in type 2 diabetes. Diabetes, Obesity and Metabolism 2006;8(1):39-48.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. 2 oral antidiabetic drugs
418	Labrousse-Lhermine,F., Cazals,L., Ruidavets,J.B., GEDEC Study Group. Long-term treatment combining continuous subcutaneous insulin infusion with oral hypoglycaemic agents is effective in type 2 diabetes. Diabetes & Metabolism 2007;33(4):253-60.	focus on continuous subcutaneous insulin
419	Lago,R.M. & Singh,P.P. Congestive heart failure and cardiovascular death in patients with prediabetes and type 2 diabetes given thiazolidinediones: a meta-analysis of randomised clinical trials. Lancet 2007;370(9593):1129-36.	systematic review/meta-analysis/pooled analysis/review
420	Lam,H.C., Tang,K.T., Wang,J.T., Liu,Y.F., Wang,L.M. Immunogenicity of monocomponent human and porcine insulin in non-insulin dependent diabetes mellitus. Zhonghua yi xue za zhi= Chinese medical journal; Free China ed 1988;41(3):217.	unclear if previous blood glucose lowering therapies were washed out/discontinued
421	Lamanna,C., Monami,M., Marchionni,N. Effect of metformin on cardiovascular events and mortality: a meta-analysis of randomized clinical trials. Diabetes, Obesity & Metabolism 2011;13(3):221-28.	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
422	Landgraf,R. & Bilo,H.J. A comparison of repaglinide and glibenclamide in the treatment of type 2 diabetic patients previously treated with sulphonylureas. European Journal of Clinical Pharmacology 1999;55(3):165-71.	unclear if previous blood glucose lowering therapies were washed out/discontinued
423	Landman,G.W., de Bock,G.H., van Hateren,K.J., van Dijk,P.R., Groenier,K.H., Gans,R.O., Houweling,S.T. Safety and efficacy of gliclazide as treatment for type 2 diabetes: a systematic review and meta-analysis of randomized trials. PLoS ONE [Electronic Resource] 2014;9(2):e82880.	systematic review/meta-analysis/pooled analysis/review
424	Lankisch,M.R., Ferlinz,K.C., Leahy,J.L., Scherbaum,W.A. Introducing a simplified approach to insulin therapy in type 2 diabetes: a comparison of two single-dose regimens of insulin glulisine plus insulin glargine and oral antidiabetic drugs. Diabetes, Obesity & Metabolism 2008;10(12):1178-85.	focus on timing of administration
425	Larkins,R.G., Zajac,J., Saunders,R., Read,A. A comparative double-blind trial of the effectiveness and antigenicity of semisynthetic human insulin and purified porcine insulin in newly treated diabetic subjects. Australian and New Zealand journal of medicine 1986;16(2):206-10.	not specifically type 2 diabetes
426	Lasserson,D.S., Glasziou,P., Perera,R., Holman,R.R. Optimal insulin regimens in type 2 diabetes mellitus: Systematic review and meta-analyses. Diabetologia 2009;52(10):1990-2000.	systematic review/meta-analysis/pooled analysis/review
427	Lavalle-Gonzalez,F.J., Januszewicz,A., Davidson,J., Tong,C., Qiu,R. Efficacy and safety of canagliflozin compared with placebo and sitagliptin in patients with type 2 diabetes on background metformin monotherapy: a randomised trial. Diabetologia 2013;56(12):2582-92.	comparison with unlicensed drug or drug indication
428	Lee,L.J., Fahrbach,J.L., Nelson,L.M., McLeod,L.D., Martin,S.A., Sun,P. Effects of insulin initiation on patient-reported outcomes in patients with type 2 diabetes: results from the durable trial. Diabetes Research & Clinical Practice 2010;89(2):157-66.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
429	Lee,P., Chang,A., Blaum,C., Vlajnic,A., Gao,L. Comparison of safety and efficacy of insulin glargine and neutral protamine hagedorn insulin in older adults with type 2 diabetes mellitus: Results from a pooled analysis. Journal of the American Geriatrics Society 2012;60(1):51-59.	systematic review/meta-analysis/pooled analysis/review
430	Lee,Y.H., Lee,B.W., Chun,S.W., Cha,B.S. Predictive characteristics of patients achieving glycaemic control with insulin after sulfonylurea failure. International Journal of Clinical Practice 2011;65(10):1076-84.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
431	Levin,P.A., Zhang,Q., Mersey,J.H., Lee,F.Y., Bromberger,L.A., Bhushan,M. Glycemic Control With Insulin Glargine Plus Insulin Glulisine	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study

Number	Reference	Reason for exclusion
	Versus Premixed Insulin Analogues in Real-World Practices: A Cost-Effectiveness Study With a Randomized Pragmatic Trial Design. Clinical Therapeutics 2011;33(7):841-50.	
432	Lexis,C.P.H. Metformin for cardiovascular disease: Promise still unproven. Lancet Diabetes and Endocrinology 2014;(2):94-95.	commentary/letter/editorial
433	Li,H., Li,W., Gu,Y., Han,Y., Wang,J., Xu,B., et al. Comparison of continual insulin or secretagogue treatment in type 2 diabetic patients with alternate insulin-secretagogue administration. Diabetes Research and Clinical Practice 2009;84(2):158-62.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
434	Li,J., Tian,H., Li,Q., Wang,N., Wu,T., Liu,Y., et al. Improvement of insulin sensitivity and beta-cell function by nateglinide and repaglinide in type 2 diabetic patients - a randomized controlled double-blind and double-dummy multicentre clinical trial. Diabetes, Obesity & Metabolism 2007;9(4):558-65.	comparing different types of sulfonylurea alone
435	Li,L., Shen,J., Bala,M.M., Busse,J.W., Ebrahim,S., Vandvik,P.O., et al. Incretin treatment and risk of pancreatitis in patients with type 2 diabetes mellitus: systematic review and meta-analysis of randomised and non-randomised studies. BMJ 2014;348:g2366.	systematic review/meta-analysis/pooled analysis/review
436	Li,L., Yang,M., Li,Z., Yan,X., Guo,H., Pan,H., et al. Efficacy and safety of mitiglinide versus nateglinide in newly diagnose patients with type 2 diabetes mellitus: a randomized double blind trial. Diabetes, Obesity & Metabolism 2012;14(2):187-89.	comparison with unlicensed drug or drug indication
437	Li,W.-X., Gou,J.-F., Tian,J.-H., Yan,X. Glucagon-like peptide-1 receptor agonists versus insulin glargine for type 2 diabetes mellitus: A systematic review and meta-analysis of randomized controlled trials. Current Therapeutic Research - Clinical and Experimental 2010;71(4):211-38.	systematic review/meta-analysis/pooled analysis/review
438	Liao,L., Yang,M., Qiu,L.L., Mou,Y.R., Zhao,J.J. Appropriate insulin initiation dosage for insulin-naive type 2 diabetes outpatients receiving insulin monotherapy or in combination with metformin and/or pioglitazone. Chinese Medical Journal 2010;123(24):3684-88.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. insulin + 2 oral antidiabetic drugs
439	Liebl,A., Davidson,J., Mersebach,H., Dykiel,P. A novel insulin combination of insulin degludec and insulin aspart achieves a more stable overnight glucose profile than insulin glargine: results from continuous glucose monitoring in a proof-of-concept trial. Journal of Diabetes Science & Technology 2013;7(5):1328-36.	outcomes not of interest
440	Liebl,A., Prager,R., Binz,K., Kaiser,M., Bergenstal,R., Gallwitz,B. Comparison of insulin analogue regimens in people with type 2 diabetes mellitus in the PREFER Study: a randomized controlled trial. Diabetes, Obesity &	drug comparison not of interest-insulin vs. insulin

Number	Reference	Reason for exclusion
	Metabolism 2009;11(1):45-52.	
441	Ligthelm,R.J., Gylvin,T., DeLuzio,T. A comparison of twice-daily biphasic insulin aspart 70/30 and once-daily insulin glargine in persons with type 2 diabetes mellitus inadequately controlled on basal insulin and oral therapy: a randomized, open-label study. Endocrine Practice 2011;17(1):41-50.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
442	Ligthelm,R.J., Mouritzen,U., Lynggaard,H., Landin-Olsson,M., Fox,C., le,Devehat C., Romero,E. Biphasic insulin aspart given thrice daily is as efficacious as a basal-bolus insulin regimen with four daily injections: a randomised open-label parallel group four months comparison in patients with type 2 diabetes. Experimental & Clinical Endocrinology & Diabetes 2006;114(9):511-19.	drug comparison not of interest-insulin vs. insulin
443	Ligueros-Saylan,M., Foley,J.E., Schweizer,A., Couturier,A. An assessment of adverse effects of vildagliptin versus comparators on the liver, the pancreas, the immune system, the skin and in patients with impaired renal function from a large pooled database of Phase II and III clinical trials. Diabetes, Obesity and Metabolism 2010;12(6):495-509.	systematic review/meta-analysis/pooled analysis/review
444	Lin,S.D., Wang,J.S., Hsu,S.R., Sheu,W.H., Tu,S.T., Lee,I.T., et al. The beneficial effect of alpha-glucosidase inhibitor on glucose variability compared with sulfonylurea in Taiwanese type 2 diabetic patients inadequately controlled with metformin: preliminary data. Journal of Diabetes & its Complications 2011;25(5):332-38.	unclear if previous blood glucose lowering therapies were washed out/discontinued
445	Lincoff,A.M., Wolski,K., Nicholls,S.J. Pioglitazone and risk of cardiovascular events in patients with type 2 diabetes mellitus: A meta-analysis of randomized trials. Journal of the American Medical Association 2007;298(10):1180-88.	systematic review/meta-analysis/pooled analysis/review
446	Lingvay,I., Legendre,J.L., Kaloyanova,P.F., Zhang,S., Adams-Huet,B. Insulin-based versus triple oral therapy for newly diagnosed type 2 diabetes: which is better? Diabetes Care 2009;32(10):1789-95.	rescue medication was provided to participants and unclear if analysis has been adjusted or switching of treatment
447	Lingvay,I., Roe,E.D., Duong,J. Effect of insulin versus triple oral therapy on the progression of hepatic steatosis in type 2 diabetes. Journal of Investigative Medicine 2012;60(7):1059-63.	rescue medication was provided to participants and unclear if analysis has been adjusted or switching of treatment
448	Liu,S.C. & Tu,Y.K. Effect of antidiabetic agents added to metformin on glycaemic control, hypoglycaemia and weight change in patients with type 2 diabetes: A network meta-analysis. Diabetes, Obesity and Metabolism 2012;14(9):810-20.	systematic review/meta-analysis/pooled analysis/review
449	Liutkus,J., Rosas,Guzman J., Norwood,P., Pop,L., Northrup,J. A placebo-controlled trial of exenatide twice-daily added to thiazolidinediones alone or in combination with	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no

Number	Reference	Reason for exclusion
	metformin. Diabetes, Obesity and Metabolism 2010;12(12):1058-65.	subgroup analyses)
450	Loke,Y.K. & Kwok,C.S. Comparative cardiovascular effects of thiazolidinediones: Systematic review and meta-analysis of observational studies. BMJ 2011;342(7799):692.	systematic review/meta-analysis/pooled analysis/review
451	Lu,C.-H., Chang,C.-C., Chuang,L.-M., Wang,C.Y., Jiang,Y.D. Double-blind, randomized, multicentre study of the efficacy and safety of gliclazide-modified release in the treatment of Chinese type 2 diabetic patients. Diabetes, Obesity and Metabolism 2006;8(2):184-91.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
452	Lukashevich,V. & Prato,S.D. Efficacy and safety of vildagliptin in patients with type 2 diabetes mellitus inadequately controlled with dual combination of metformin and sulphonylurea. Diabetes, Obesity and Metabolism 2014;16(5):403-09.	drug comparison not of interest - 3 oral antidiabetic drugs vs. 2 oral antidiabetic drugs
453	Lukashevich,V., Schweizer,A., Foley,J.E., Dickinson,S. Efficacy of vildagliptin in combination with insulin in patients with type 2 diabetes and severe renal impairment. Vascular Health & Risk Management 2013;9:21-28.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
454	Lukashevich,V., Schweizer,A., Shao,Q., Groop,P.-H. Safety and efficacy of vildagliptin versus placebo in patients with type 2 diabetes and moderate or severe renal impairment: A prospective 24-week randomized placebo-controlled trial. Diabetes, Obesity and Metabolism 2011;13(10):947-54.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
455	Lund,S.S. Effects of metformin versus glipizide on cardiovascular outcomes in patients with type 2 diabetes and coronary artery disease. Diabetes Care 2013;36:1304-1311. Diabetes Care 2014;37(1):e19-20.	commentary/letter/editorial
456	Lund,S.S., Tarnow,L., Stehouwer,C.D., Schalkwijk,C.G., Frandsen,M., Smidt,U.M., et al. Targeting hyperglycaemia with either metformin or repaglinide in non-obese patients with type 2 diabetes: results from a randomized crossover trial. Diabetes, Obesity & Metabolism 2007;9(3):394-407.	cross over trial (no washout details or inappropriate analyses and no outcomes reported for first treatment period)
457	Lund,S.S., Tarnow,L., Stehouwer,C.D., Schalkwijk,C.G., Teerlink,T., Gram,J., et al. Impact of metformin versus repaglinide on non-glycaemic cardiovascular risk markers related to inflammation and endothelial dysfunction in non-obese patients with type 2 diabetes. European Journal of Endocrinology 2008;158(5):631-41.	cross over trial (no washout details or inappropriate analyses and no outcomes reported for first treatment period)
458	Luo,J., Jacober,S.J., Prince,M.J. The effect of adjusting for baseline hypoglycemia when analyzing hypoglycemia data: a systematic analysis of 15 diabetes clinical trials. Diabetes Technology and Therapeutics 2013;15(8):654-61.	systematic review/meta-analysis/pooled analysis/review
459	Lupoli,R., Di,Minno A., Tortora,A., Ambrosino,P.	systematic review/meta-

Number	Reference	Reason for exclusion
	Effects of treatment with metformin on TSH levels: A meta-analysis of literature studies. Journal of Clinical Endocrinology and Metabolism 2014;99(1):E143-48.	analysis/pooled analysis/review
460	Mabilleau,G. Use of glucagon-like peptide-1 receptor agonists and bone fractures: A meta-analysis of randomized clinical trials (-1:meta). Journal Of Diabetes 2014;6(3):260-66.	not available from the British library
461	Macconell,L., Brown,C., Gurney,K. Safety and tolerability of exenatide twice daily in patients with type 2 diabetes: Integrated analysis of 5594 patients from 19 placebo-controlled and comparator-controlled clinical trials. Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy 2012;5:29-41.	systematic review/meta-analysis/pooled analysis/review
462	MacConell,L., Pencek,R., Li,Y. Exenatide once weekly: sustained improvement in glycemic control and cardiometabolic measures through 3 years. Diabetes, Metabolic Syndrome and Obesity Targets and Therapy 2013;6:31-41.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
463	Machado,H.A., Vieira,M., Cunha,M.R., Correia,M.R., Fukui,R.T., Santos,R.F., et al. Metformin, but not glimepiride, improves carotid artery diameter and blood flow in patients with type 2 diabetes mellitus. Clinics (Sao Paulo, Brazil) 2012;67(7):711-17.	cross over trial (no washout details or inappropriate analyses and no outcomes reported for first treatment period)
464	Mafauzy,M. Repaglinide versus glibenclamide treatment of Type 2 diabetes during Ramadan fasting. Diabetes Research & Clinical Practice 2002;58(1):45-53.	dosing regimen includes higher than recommended doses and no details of mean doses or proportion of people taking different doses
465	Maiti,R., Jaida,J., Leander,P.J., Irfanuddin,M. Cardioprotective role of insulin: Advantage analogues. Journal of Research in Medical Sciences 2012;17(7):642-48.	unclear if previous blood glucose lowering therapies were washed out/discontinued
466	Makdissi,A., Ghanim,H., Vora,M., Green,K., Abuaysheh,S., Chaudhuri,A. Sitagliptin exerts an antinflammatory action. Journal of Clinical Endocrinology & Metabolism 2012;97(9):3333-41.	unclear if previous blood glucose lowering therapies were washed out/discontinued
467	Malha,L.P. & Taan,G. Glycemic effects of vildagliptin in patients with type 2 diabetes before, during and after the period of fasting in Ramadan. Therapeutic Advances in Endocrinology and Metabolism 2014;5(1):3-9.	<12 week treatment duration
468	Mannucci,E. & Monami,M. The impossible return to the Garden of Eden: the ORIGIN trial and the original sin of early insulin treatment of type 2 diabetes. Nutrition Metabolism and Cardiovascular Diseases 2013;23(8):e35-36.	commentary/letter/editorial
469	Mannucci,E., Monami,M., Lamanna,C., Gensini,G.F. Pioglitazone and cardiovascular risk. A comprehensive meta-analysis of randomized clinical trials. Diabetes, Obesity and Metabolism 2008;10(12):1221-38.	systematic review/meta-analysis/pooled analysis/review
470	Mari,A., Gastaldelli,A., Foley,J.E., Pratley,R.E. Beta-cell function in mild type 2 diabetic patients: effects of 6-month glucose lowering	comparison with unlicensed drug or drug indication

Number	Reference	Reason for exclusion
	with nateglinide. Diabetes Care 2005;28(5):1132-38.	
471	Mari,A., Scherbaum,W.A., Nilsson,P.M., Lalanne,G., Schweizer,A., Dunning,B.E., Jauffret,S. Characterization of the influence of vildagliptin on model-assessed -cell function in patients with type 2 diabetes and mild hyperglycemia. Journal of Clinical Endocrinology & Metabolism 2008;93(1):103-09.	duplicate or same study results
472	Marre,M., Howlett,H., Lehert,P. Improved glycaemic control with metformin-glibenclamide combined tablet therapy (Glucovance) in Type 2 diabetic patients inadequately controlled on metformin. Diabetic Medicine 2002;19(8):673-80.	inadequate wash out period (<4 weeks)
473	Marre,M., Shaw,J., Brandle,M., Bebakar,W.M., Kamaruddin,N.A., Strand,J., et al. Liraglutide, a once-daily human GLP-1 analogue, added to a sulphonylurea over 26 weeks produces greater improvements in glycaemic and weight control compared with adding rosiglitazone or placebo in subjects with Type 2 diabetes (LEAD-1 SU). Diabetic Medicine 2009;26(3):268-78.	across treatment strategy
474	Marrero,D., Pan,Q., Barrett-Connor,E., de,Groot M., Zhang,P., Percy,C., et al. Impact of diagnosis of diabetes on health-related quality of life among high risk individuals: the Diabetes Prevention Program outcomes study. Quality of Life Research 2014;23(1):75-88.	not specifically type 2 diabetes
475	Marso,S.P., Poulter,N.R., Nissen,S.E., Nauck,M.A., Zinman,B., Daniels,G.H., et al. Design of the liraglutide effect and action in diabetes: evaluation of cardiovascular outcome results (LEADER) trial. American Heart Journal 2013;166(5):823-30.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
476	Masuda,H., Sakamoto,M., Irie,J., Kitaoka,A., Shiono,K., Inoue,G., Atsuda,K. Comparison of twice-daily injections of biphasic insulin lispro and basal-bolus therapy: glycaemic control and quality-of-life of insulin-naive type 2 diabetic patients. Diabetes, Obesity & Metabolism 2008;10(12):1261-65.	drug comparison not of interest-insulin vs. insulin
477	Matikainen,N. The effect of vildagliptin therapy on atherogenic postprandial remnant particles and LDL particle size in subjects with type 2 diabetes. Diabetic Medicine 2013;30(6):756-57.	abstract only/not full paper
478	Mattoo,V., Eckland,D., Widel,M., Duran,S., Fajardo,C., Strand,J., et al. Metabolic effects of pioglitazone in combination with insulin in patients with type 2 diabetes mellitus whose disease is not adequately controlled with insulin therapy: Results of a six-month, randomized, double-blind, prospective, multicenter, parallel-group study. Clinical Therapeutics 2005;27(5):554-67.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
479	McCormick,L.M., Kydd,A.C., Read,P.A., Ring,L.S., Bond,S.J. Chronic dipeptidyl	outcomes not of interest

Number	Reference	Reason for exclusion
	peptidase-4 inhibition with sitagliptin is associated with sustained protection against ischemic left ventricular dysfunction in a pilot study of patients with type 2 diabetes mellitus and coronary artery disease. Circulation 2014; Cardiovascular(2):274-81.	
480	McFarland,M.S. & Brock,M. Place in therapy for liraglutide and saxagliptin for type 2 diabetes. [Review]. Southern Medical Journal 2011;104(6):426-39.	systematic review/meta-analysis/pooled analysis/review
481	McGill,J.B. Insights from the Liraglutide Clinical Development Program--the Liraglutide Effect and Action in Diabetes (LEAD) studies. Postgraduate Medicine 2009;121(3):16-25.	systematic review/meta-analysis/pooled analysis/review
482	McGill,J.B., Vlajnic,A., Knutsen,P.G., Recklein,C. Effect of gender on treatment outcomes in type 2 diabetes mellitus. Diabetes Research and Clinical Practice 2013;102(3):167-74.	systematic review/meta-analysis/pooled analysis/review
483	McGill,J.B., Sloan,L., Newman,J., Patel,S., Sauce,C. Long-term efficacy and safety of linagliptin in patients with type 2 diabetes and severe renal impairment: a 1-year, randomized, double-blind, placebo-controlled study. Diabetes Care 2013;36(2):237-44.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
484	McIntosh,B., Cameron,C., Singh,S.R., Yu,C. Choice of therapy in patients with type 2 diabetes inadequately controlled with metformin and a sulphonylurea: a systematic review and mixed-treatment comparison meta-analysis. Open Medicine : A Peer-reviewed, Independent, Open-access Journal 2012;6(2):e62-74.	systematic review/meta-analysis/pooled analysis/review
485	McIntosh,B., Cameron,C., Singh,S.R., Yu,C., Ahuja,T., Welton,N.J. Second-line therapy in patients with type 2 diabetes inadequately controlled with metformin monotherapy: a systematic review and mixed-treatment comparison meta-analysis. [Review]. Open Medicine : A Peer-reviewed, Independent, Open-access Journal 2011;5(1):e35-48.	systematic review/meta-analysis/pooled analysis/review
486	Meneghini,L., Atkin,S.L., Gough,S.C., Raz,I., Blonde,L., Shestakova,M., et al. The efficacy and safety of insulin degludec given in variable once-daily dosing intervals compared with insulin glargine and insulin degludec dosed at the same time daily: a 26-week, randomized, open-label, parallel-group, treat-to-target trial in individuals with type 2 diabetes. Diabetes Care 2013;36(4):858-64.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
487	Meneghini,L., Mersebach,H., Kumar,S., Svendsen,A.L. Comparison of 2 intensification regimens with rapid-acting insulin aspart in type 2 diabetes mellitus inadequately controlled by once-daily insulin detemir and oral antidiabetes drugs: The step-wise randomized study. Endocrine Practice 2011;17(5):727-36.	focus on timing of administration
488	Meneghini,L.F. & Traylor,L. Improved glycemic	drug comparison not of interest-

Number	Reference	Reason for exclusion
	control with insulin glargine versus pioglitazone as add-on therapy to sulfonylurea or metformin in patients with uncontrolled type 2 diabetes mellitus. Endocrine Practice 2010;16(4):588-99.	unclear pre-existing therapy which is continued throughout the study
489	Meneilly,G.S., Ryan,E.A., Radziuk,J., Lau,D.C., Yale,J.F., Morais,J., et al. Effect of acarbose on insulin sensitivity in elderly patients with diabetes. Diabetes Care 2000;23(8):1162-67.	duplicate or same study results
490	Miller,M.E., Williamson,J.D., Gerstein,H.C., Byington,R.P., Cushman,W.C., Ginsberg,H.N., Ambrosius,W.T. Effects of randomization to intensive glucose control on adverse events, cardiovascular disease, and mortality in older versus younger adults in the ACCORD trial. Diabetes Care 2014;37(3):634-43.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
491	Mimori N,Terao S,Holmes D. Vildagliptin improves glucose control as evidenced by HbA1c after 12 weeks in Japanese patients with type 2 diabetes.	abstract only/not full paper
492	Mintz,M.L. Saxagliptin versus glipizide as add-on therapy to metformin: assessment of hypoglycemia. Current Medical Research and Opinion 2014;30(5):761-70.	duplicate or same study results
493	Mirmiranpour,H., Mousavizadeh,M., Noshad,S., Ghavami,M., Ebadi,M., Ghasemiesfe,M. Comparative effects of pioglitazone and metformin on oxidative stress markers in newly diagnosed type 2 diabetes patients: A randomized clinical trial. Journal of Diabetes and its Complications 2013;27(5):501-07.	not placebo controlled or unclear placebo
494	Miser,W.F., Arakaki,R., Jiang,H., Scism-Bacon,J., Anderson,P.W. Randomized, open-label, parallel-group evaluations of basal-bolus therapy versus insulin lispro premixed therapy in patients with type 2 diabetes mellitus failing to achieve control with starter insulin treatment and continuing oral antihyperglycemic drugs: a noninferiority intensification substudy of the DURABLE trial. Clinical Therapeutics 2010;32(5):896-908.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
495	Miwa,S., Watada,H., Ohmura,C., Tanaka,Y. Efficacy and safety of once daily gliclazide (20 mg/day) compared with nateglinide. Endocrine Journal 2004;51(4):393-98.	comparison with unlicensed drug or drug indication
496	Miyashita,Y., Nishimura,R., Nemoto,M., Matsudaira,T., Kurata,H., Yokota,T., et al. Prospective randomized study for optimal insulin therapy in type 2 diabetic patients with secondary failure. Cardiovascular Diabetology 2008;7:16.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
497	Moffitt,P.S., Colagiuri,St, Miller,J.J. Human (semisynthetic) insulin and porcine insulin in the treatment of non-insulin-dependent diabetes. A double-blind, comparative clinical trial. The Medical journal of Australia 1984;140(4):200-02.	unclear if previous blood glucose lowering therapies were washed out/discontinued
498	Monami,M. & Marchionni,N. Glucagon-like peptide-1 receptor agonists in type 2 diabetes: a	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
	meta-analysis of randomized clinical trials. European Journal of Endocrinology 2009;160(6):909-17.	
499	Monami,M. & Marchionni,N. Long-acting insulin analogues versus NPH human insulin in type 2 diabetes: a meta-analysis. Diabetes Research & Clinical Practice 2008;81(2):184-89.	systematic review/meta-analysis/pooled analysis/review
500	Monami,M. Dipeptidyl peptidase-4 inhibitors and pancreatitis risk: a meta-analysis of randomized clinical trials. Diabetes, Obesity and Metabolism 2014;16(1):48-56.	systematic review/meta-analysis/pooled analysis/review
501	Monami,M., Adalsteinsson,J.E., Desideri,C.M., Ragghianti,B. Fasting and post-prandial glucose and diabetic complication. A meta-analysis. Nutrition, Metabolism and Cardiovascular Diseases 2013;23(7):591-98.	systematic review/meta-analysis/pooled analysis/review
502	Monami,M., Dicembrini,I., Nardini,C. Glucagon-like peptide-1 receptor agonists and pancreatitis: A meta-analysis of randomized clinical trials. Diabetes Research and Clinical Practice 2014;103(2):269-75.	systematic review/meta-analysis/pooled analysis/review
503	Monami,M., Cremasco,F., Lamanna,C., Colombi,C., Desideri,C.M., Iacomelli,I., Marchionni,N. Glucagon-like peptide-1 receptor agonists and cardiovascular events: A meta-analysis of randomized clinical trials. Experimental Diabetes Research 2011; 215764.	systematic review/meta-analysis/pooled analysis/review
504	Monami,M., Cremasco,F., Lamanna,C., Marchionni,N. Predictors of response to dipeptidyl peptidase-4 inhibitors: evidence from randomized clinical trials. Diabetes/Metabolism Research Reviews 2011;27(4):362-72.	systematic review/meta-analysis/pooled analysis/review
505	Monami,M., Dicembrini,I., Antenore,A. Dipeptidyl peptidase-4 inhibitors and bone fractures: a meta-analysis of randomized clinical trials. Diabetes Care 2011;34(11):2474-76.	systematic review/meta-analysis/pooled analysis/review
506	Monami,M., Dicembrini,I., Marchionni,N., Rotella,C.M. Effects of glucagon-like Peptide-1 receptor agonists on body weight: a meta-analysis. Experimental Diabetes Research 2012;2012:672658.	systematic review/meta-analysis/pooled analysis/review
507	Monami,M., Dicembrini,I., Martelli,D. Safety of dipeptidyl peptidase-4 inhibitors: A meta-analysis of randomized clinical trials. Current Medical Research and Opinion 2011;27(SUPPL. 3):57-64.	systematic review/meta-analysis/pooled analysis/review
508	Monami,M., Iacomelli,I., Marchionni,N. Dipeptydil peptidase-4 inhibitors in type 2 diabetes: a meta-analysis of randomized clinical trials. Nutrition Metabolism & Cardiovascular Diseases 2010;20(4):224-35.	systematic review/meta-analysis/pooled analysis/review
509	Monami,M., Lamanna,C., Desideri,C.M. DPP-4 inhibitors and lipids: Systematic review and meta-analysis. Advances in Therapy 2012;29(1):14-25.	systematic review/meta-analysis/pooled analysis/review
510	Monami,M., Lamanna,C., Marchionni,N.	systematic review/meta-

Number	Reference	Reason for exclusion
	Comparison of different drugs as add-on treatments to metformin in type 2 diabetes: a meta-analysis. Diabetes Research & Clinical Practice 2008;79(2):196-203.	analysis/pooled analysis/review
511	Monami,M., Lamanna,C., Marchionni,N. Continuous subcutaneous insulin infusion versus multiple daily insulin injections in type 2 diabetes: a meta-analysis. Experimental & Clinical Endocrinology & Diabetes 2009;117(5):220-22.	systematic review/meta-analysis/pooled analysis/review
512	Monnier,L., Colette,C., Comenducci,A. Add-on therapies to metformin in type 2 diabetes: what modulates the respective decrements in postprandial and basal glucose? Diabetes Technology & Therapeutics 2012;14(10):943-50.	systematic review/meta-analysis/pooled analysis/review
513	Moon,J.S., Ha,K.S., Yoon,J.S., Lee,H.W., Lee,H.C. The effect of glargine versus glimepiride on pancreatic beta-cell function in patients with type 2 diabetes uncontrolled on metformin monotherapy: open-label, randomized, controlled study. Acta Diabetologica 2014;51(2):277-85.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. 2 oral antidiabetic drugs
514	Moretto,T.J., Milton,D.R., Ridge,T.D., Macconell,L.A., Okerson,T., Wolka,A.M. Efficacy and tolerability of exenatide monotherapy over 24 weeks in antidiabetic drug-naive patients with type 2 diabetes: a randomized, double-blind, placebo-controlled, parallel-group study. Clinical Therapeutics 2008;30(8):1448-60.	comparison with unlicensed drug or drug indication
515	Morikawa,A., Ishizeki,K., Iwashima,Y., Yokoyama,H., Muto,E., Oshima,E., et al. Pioglitazone reduces urinary albumin excretion in renin-angiotensin system inhibitor-treated type 2 diabetic patients with hypertension and microalbuminuria: The APRIME study. Clinical and Experimental Nephrology 2011;15(6):848-53.	unclear if previous blood glucose lowering therapies were washed out/discontinued
516	Mosenzon,O. Intensification of insulin therapy for type 2 diabetic patients in primary care: basal-bolus regimen versus premix insulin analogs: when and for whom?. [Review]. Diabetes Care 2013;36:Suppl-8.	systematic review/meta-analysis/pooled analysis/review
517	Mosenzon,O., Raz,I., Scirica,B.M., Hirshberg,B., Stahre,C.I., Steg,P.G., et al. Baseline characteristics of the patient population in the Saxagliptin Assessment of Vascular Outcomes Recorded in patients with diabetes mellitus (SAVOR)-TIMI 53 trial. Diabetes/Metabolism Research Reviews 2013;29(5):417-26.	unclear if previous blood glucose lowering therapies were washed out/discontinued
518	Moses,R. Repaglinide in combination therapy with metformin in Type 2 diabetes. Experimental & Clinical Endocrinology & Diabetes 1999;107:Suppl-9.	unclear washout of previous blood glucose lowering therapy but termed monotherapy and <12 month duration
519	Moses,R., Slobodniuk,R., Boyages,S., Colagiuri,S., Kidson,W., Carter,J., et al. Effect of repaglinide addition to metformin monotherapy on glycemic control in patients with type 2	unclear washout of previous blood glucose lowering therapy but termed monotherapy and <12 month duration

Number	Reference	Reason for exclusion
	diabetes. Diabetes Care 1999;22(1):119-24.	
520	Moses,R.G., Kalra,S., Brook,D., Sockler,J., Monyak,J., Visvanathan,J. A randomized controlled trial of the efficacy and safety of saxagliptin as add-on therapy in patients with type 2 diabetes and inadequate glycaemic control on metformin plus a sulphonylurea. Diabetes, Obesity and Metabolism 2014;16(5):443-50.	Drug comparison not of interest - 3 oral antidiabetic drugs vs. 2 oral antidiabetic drugs
521	Mu,P.-W., Chen,Y.-M., Lu,H.-Y., Wen,X.-Q., Zhang,Y.-H., Xie,R.-Y., et al. Effects of a combination of oral anti-diabetes drugs with basal insulin therapy on beta-cell function and glycaemic control in patients with newly diagnosed type 2 diabetes. Diabetes/Metabolism Research and Reviews 2012;28(3):236-40.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
522	Mudaliar,S., Chang,A.R., Aroda,V.R., Chao,E., Burke,P., Baxi,S., et al. Effects of intensive insulin therapy alone and with added pioglitazone on renal salt/water balance and fluid compartment shifts in type 2 diabetes. Diabetes, Obesity and Metabolism 2010;12(2):133-38.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. insulin
523	Mukai,J., Tada,H., Watanabe,Y., Miura,M., Katsuyama,S., Shoji,T., et al. Lipids behavior and adverse effects for oral antidiabetic agents in patients with Type 2 diabetes treated with sulfonylureas alone based on systematic review. Yakugaku Zasshi - Journal of the Pharmaceutical Society of Japan 2007;127(10):1747-56.	systematic review/meta-analysis/pooled analysis/review
524	Mukherjee,J.J. Assessment of glycaemic control in patients with diabetes mellitus on insulin therapy. Journal of the Indian Medical Association 2013;111(11):761-65.	systematic review/meta-analysis/pooled analysis/review
525	Nagajothi,N., Adigopula,S., Balamuthusamy,S., Velazquez-Cecena,J.-L., Raghunathan,K., Khraisat,A., et al. Pioglitazone and the risk of myocardial infarction and other major adverse cardiac events: A meta-analysis of randomized, controlled trials. American Journal of Therapeutics 2008;15(6):506-11.	systematic review/meta-analysis/pooled analysis/review
526	Nakano,K., Hasegawa,G., Fukui,M., Yamasaki,M., Ishihara,K., Takashima,T., et al. Effect of pioglitazone on various parameters of insulin resistance including lipoprotein subclass according to particle size by a gel-permeation high-performance liquid chromatography in newly diagnosed patients with type 2 diabetes. Endocrine Journal 2010;57(5):423-30.	unclear if previous blood glucose lowering therapies were washed out/discontinued
527	Nathan, DM. & Rousell,A. Glyburide or Insulin for Metabolic Control in Non-Insulin-Dependent Diabetes Mellitus. A Randomized, Double-Blind Study. Annals of Internal Medicine 1988;108(3):334-40.	Drug comparison not of interest-insulin vs. 1 oral antidiabetic drug
528	Nauck,M. Adding liraglutide to oral antidiabetic drug monotherapy: efficacy and weight benefits.	comparison with unlicensed drug or drug indication

Number	Reference	Reason for exclusion
	Postgraduate Medicine 2009;121(3):5-15.	
529	Nauck,M., Frid,A., Hermansen,K., Thomsen,A.B., During,M., Shah,N., Tankova,T. Long-term efficacy and safety comparison of liraglutide, glimepiride and placebo, all in combination with metformin in type 2 diabetes: 2-year results from the LEAD-2 study. [Review]. Diabetes, Obesity & Metabolism 2013;15(3):204-12.	systematic review/meta-analysis/pooled analysis/review
530	Nauck,M.A. Pancreatitis and incretin-based drugs: Clarity or confusion? Lancet Diabetes and Endocrinology 2014;(2):92-93.	commentary/letter/editorial
531	Nauck,M.A., Meininger,G., Sheng,D., Terranella,L., Stein,P.P., Tesone,P., et al. Efficacy and safety of the dipeptidyl peptidase-4 inhibitor, sitagliptin, compared with the sulfonylurea, glipizide, in patients with type 2 diabetes inadequately controlled on metformin alone: A randomized, double-blind, non-inferiority trial. Diabetes, Obesity and Metabolism 2007;9(2):194-205.	duplicate or same study results
532	Nelson,S.E. Detemir as a once-daily basal insulin in type 2 diabetes. Clinical Pharmacology: Advances and Applications 2011;3(1):27-37.	systematic review/meta-analysis/pooled analysis/review
533	Neugebauer,R. & Fireman,B. Impact of specific glucose-control strategies on microvascular and macrovascular outcomes in 58,000 adults with type 2 diabetes. Diabetes Care 2013;36(11):3510-16.	not a randomised controlled trial (no randomisation)
534	Nikfar,S. & Abdollahi,M. The efficacy and tolerability of exenatide in comparison to placebo; a systematic review and meta-analysis of randomized clinical trials. [Review]. Journal of Pharmacy & Pharmaceutical Sciences 2012;15(1):1-30.	systematic review/meta-analysis/pooled analysis/review
535	Niskanen,L., Jensen,L.E., Rastam,J., Nygaard-Pedersen,L., Erichsen,K. Randomized, multinational, open-label, 2-period, crossover comparison of biphasic insulin aspart 30 and biphasic insulin lispro 25 and pen devices in adult patients with type 2 diabetes mellitus. Clinical Therapeutics 2004;26(4):531-40.	drug comparison not of interest-insulin vs. insulin
536	Niskanen,L., Leiter,L.A., Franek,E., Weng,J., Damci,T., Munoz-Torres,M., et al. Comparison of a soluble co-formulation of insulin degludec/insulin aspart vs biphasic insulin aspart 30 in type 2 diabetes: a randomised trial. European Journal of Endocrinology 2012;167(2):287-94.	critical inconsistencies in reported data
537	Nissen,S.E., Nicholls,S.J., Wolski,K., Nesto,R., Kupfer,S., Perez,A., et al. Comparison of pioglitazone vs glimepiride on progression of coronary atherosclerosis in patients with type 2 diabetes: the PERISCOPE randomized controlled trial. JAMA 2008;299(13):1561-73.	proportion or all patients taking pre-existing oral antidiabetic drug s (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
538	Niswender,K., Pi-Sunyer,X., Buse,J.,	systematic review/meta-

Number	Reference	Reason for exclusion
	Jensen,K.H., Toft,A.D. Weight change with liraglutide and comparator therapies: An analysis of seven phase 3 trials from the liraglutide diabetes development programme. Diabetes, Obesity and Metabolism 2013;15(1):42-54.	analysis/pooled analysis/review
539	Nonaka K,Kakikawa T,Sato A,et al. Twelve-week efficacy and tolerability of sitagliptin, a dipeptidyl peptidase-IV inhibitor, in Japanese patients with T2DM.	abstract only/not full paper
540	Norris,S.L. & Carson,S. Comparative effectiveness of pioglitazone and rosiglitazone in type 2 diabetes, prediabetes, and the metabolic syndrome: A meta-analysis. Current Diabetes Reviews 2007;3(2):127-40.	systematic review/meta-analysis/pooled analysis/review
541	Norris,S.L., Lee,N., Thakurta,S. Exenatide efficacy and safety: a systematic review. Diabetic Medicine 2009;26(9):837-46.	systematic review/meta-analysis/pooled analysis/review
542	Noury J,Nandeuil A. Comparative three-month study of the efficacies of metformin and gliclazide in the treatment of NIDD. Diabete Metab. 1991 May;17(1 Pt 2):209-12.	unclear if previous blood glucose lowering therapies were washed out/discontinued
543	Nowicki,M., Rychlik,I., Haller,H., Warren,M.L., Suchower,L., Gause-Nilsson,I. Saxagliptin improves glycaemic control and is well tolerated in patients with type 2 diabetes mellitus and renal impairment. Diabetes, Obesity & Metabolism 2011;13(6):523-32.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
544	Nunez,D.J., Bush,M.A., Collins,D.A., McMullen,S.L., Gillmor,D., Apseloff,G., et al. Gut Hormone Pharmacology of a Novel GPR119 Agonist (GSK1292263), Metformin, and Sitagliptin in Type 2 Diabetes Mellitus: Results from Two Randomized Studies. PLoS ONE [Electronic Resource] 2014;9(4):e92494.	systematic review/meta-analysis/pooled analysis/review
545	Nyback-Nakell,A. & Adamson,U. Adding glimepiride to insulin+metformin in type 2 diabetes of more than 10 years' duration-A randomised, double-blind, placebo-controlled, cross-over study. Diabetes Research and Clinical Practice 2014;103(2):286-91.	cross over trial (no washout details or inappropriate analyses and no outcomes reported for first treatment period)
546	Ohta,A., Suwa,T., Sada,Y., Kato,H., Koganei,R., Asai,S. Comparison of daily glucose excursion by continuous glucose monitoring between type 2 diabetic patients receiving biphasic insulin aspart 30 or biphasic human insulin 30. Journal of Diabetes Investigation 2011;2(5):406-11.	drug comparison not of interest-insulin vs. insulin
547	O'Keefe,J.H. & Abuannadi,M. Strategies for optimizing glycemic control and cardiovascular prognosis in patients with type 2 diabetes mellitus. Mayo Clinic Proceedings 2011;86(2):128-38.	systematic review/meta-analysis/pooled analysis/review
548	Okerson,T., Yan,P., Stonehouse,A. Effects of exenatide on systolic blood pressure in subjects with type 2 diabetes. American Journal of Hypertension 2010;23(3):334-39.	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
549	Onishi,Y., Ono,Y., Rabol,R. Superior glycaemic control with once-daily insulin degludec/insulin aspart versus insulin glargine in Japanese adults with type 2 diabetes inadequately controlled with oral drugs: a randomized, controlled phase 3 trial. Diabetes, Obesity & Metabolism 2013;15(9):826-32.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
550	ORIGIN,Trial,I, Mellbin,L.G., Ryden,L., Riddle,M.C., Probstfield,J., Rosenstock,J., Diaz,R. Does hypoglycaemia increase the risk of cardiovascular events? A report from the ORIGIN trial. European Heart Journal 2013;34(40):3137-44.	unclear treatment groups or intervention
551	Ott,C., Raff,U., Schmidt,S., Kistner,I., Friedrich,S., Bramlage,P. Effects of saxagliptin on early microvascular changes in patients with type 2 diabetes. Cardiovascular Diabetology 2014;13:19.	<12 week treatment duration
552	Owens,D.R., Luzio,S.D., Sert-Langeron,C. Effects of initiation and titration of a single pre-prandial dose of insulin glulisine while continuing titrated insulin glargine in type 2 diabetes: a 6-month 'proof-of-concept' study. Diabetes, Obesity & Metabolism 2011;13(11):1020-27.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
553	Oz,Gul O., Tuncel,E., Yilmaz,Y., Ulukaya,E., Gul,C.B., Kiyici,S., et al. Comparative effects of pioglitazone and rosiglitazone on plasma levels of soluble receptor for advanced glycation end products in type 2 diabetes mellitus patients. Metabolism: Clinical and Experimental 2010;59(1):64-69.	not placebo controlled or unclear placebo
554	Oz,O., Tuncel,E., Eryilmaz,S., Fazlioglu,M., Gul,C.B., Ersoy,C., et al. Arterial elasticity and plasma levels of adiponectin and leptin in type 2 diabetic patients treated with thiazolidinediones. Endocrine 2008;33(1):101-05.	newly diagnosed participants but not explicit if they are drug naive
555	Ozbek,M., Erdogan,M., Karadeniz,M., Cetinkalp,S., Ozgen,A.G., Saygili,F., Yilmaz,C. Preprandial repaglinide decreases exogenous insulin requirements and HbA1c levels in type 2 diabetic patients taking intensive insulin treatment. Acta Diabetologica 2006;43(4):148-51.	not a randomised controlled trial (no randomisation)
556	Pala,L., Mannucci,E., Dicembrini,I. A comparison of mealtime insulin aspart and human insulin in combination with metformin in type 2 diabetes patients. Diabetes Research & Clinical Practice 2007;78(1):132-35.	abstract only/not full paper
557	Pan,C., Xing,X., Han,P., Zheng,S., Ma,J., Liu,J., et al. Efficacy and tolerability of vildagliptin as add-on therapy to metformin in Chinese patients with type 2 diabetes mellitus. Diabetes, Obesity & Metabolism 2012;14(8):737-44.	dose comparison of same drug
558	Pan,Q., Delahanty,L.M., Jablonski,K.A., Knowler,W.C., Kahn,S.E., Florez,J.C. Variation at the melanocortin 4 receptor gene and response to weight-loss interventions in the	outcomes not of interest

Number	Reference	Reason for exclusion
	diabetes prevention program. Obesity 2013;21(9):E520-26.	
559	Papa,G., Fedele,V., Chiavetta,A., Lorenti,I., Leotta,C., Luca,S., et al. Therapeutic options for elderly diabetic subjects: open label, randomized clinical trial of insulin glargine added to oral antidiabetic drugs versus increased dosage of oral antidiabetic drugs. Acta Diabetologica 2008;45(1):53-59.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
560	Papanas,N., Tziakas,D., Chalikias,G., Floros,D., Trypsianis,G., Papadopoulou,E., et al. Gliclazide treatment lowers serum ICAM-1 levels in poorly controlled type 2 diabetic patients. Diabetes and Metabolism.32 (4) (pp 344-349), 2006.Date of Publication: September 2006. 2006;(4):344-49.	inadequate wash out period (<4 weeks)
561	Pencek,R., Brunell,S.C., Li,Y., Hoogwerf,B.J. Use of concomitant glucose-lowering therapies and associated treatment results observed in clinical trials of twice-daily exenatide. Endocrine Practice 2012;18(2):227-37.	Systematic review/meta-analysis/pooled analysis/review
562	Perez,A., Jacks,R., Arora,V. Effects of pioglitazone and metformin fixed-dose combination therapy on cardiovascular risk markers of inflammation and lipid profile compared with pioglitazone and metformin monotherapy in patients with type 2 diabetes. Journal of Clinical Hypertension 2010;12(12):973-82.	inadequate wash out period (<4 weeks)
563	Perez,A., Zhao,Z., Jacks,R. Efficacy and safety of pioglitazone/metformin fixed-dose combination therapy compared with pioglitazone and metformin monotherapy in treating patients with T2DM. Current Medical Research & Opinion 2009;25(12):2915-23.	inadequate wash out period (<4 weeks)
564	Perez-Monteverde,A., Seck,T., Xu,L., Lee,M.A., Sisk,C.M., Williams-Herman,D.E., et al. Efficacy and safety of sitagliptin and the fixed-dose combination of sitagliptin and metformin vs. pioglitazone in drug-naive patients with type 2 diabetes. International Journal of Clinical Practice 2011;65(9):930-38.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
565	Perriello,G., Pampanelli,S., Brunetti,P., Di,Pietro C., Mariz,S. Long-term effects of pioglitazone versus gliclazide on hepatic and humoral coagulation factors in patients with type 2 diabetes. Diabetes & Vascular Disease Research 2007;4(3):226-30.	unclear if previous blood glucose lowering therapies were washed out/discontinued
566	Perriello,G., Pampanelli,S., Di,Pietro C. Comparison of glycaemic control over 1 year with pioglitazone or gliclazide in patients with Type 2 diabetes. Diabetic Medicine 2006;23(3):246-52.	unclear if previous blood glucose lowering therapies were washed out/discontinued
567	Petrica,L., Petrica,M., Vlad,A., Dragos,Jianu C., Gluhovschi,G., Ianculescu,C., et al. Nephro- and neuroprotective effects of rosiglitazone versus glimepiride in normoalbuminuric patients with type 2 diabetes mellitus: a randomized	unclear if previous blood glucose lowering therapies were washed out/discontinued

Number	Reference	Reason for exclusion
	controlled trial. Wiener Klinische Wochenschrift 2009;121(23-24):765-75.	
568	Pfutzner,A., Paz-Pacheco,E., Allen,E., Frederich,R., Chen,R. Initial combination therapy with saxagliptin and metformin provides sustained glycaemic control and is well tolerated for up to 76 weeks. Diabetes, Obesity & Metabolism 2011;13(6):567-76.	across treatment strategy
569	Philis-Tsimikas,A., Brod,M., Niemeyer,M. Insulin degludec once-daily in type 2 diabetes: simple or step-wise titration (BEGIN: once simple use). Advances in Therapy 2013;30(6):607-22.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
570	Philis-Tsimikas,A., Del,Prato S., Satman,I., Bhargava,A., Dharmalingam,M., Skjoth,T.V. Effect of insulin degludec versus sitagliptin in patients with type 2 diabetes uncontrolled on oral antidiabetic agents. Diabetes, Obesity and Metabolism 2013;15(8):760-66.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
571	Philis-Tsimikas,A., Charpentier,G., Clauson,P., Ravn,G.M., Roberts,V.L. Comparison of once-daily insulin detemir with NPH insulin added to a regimen of oral antidiabetic drugs in poorly controlled type 2 diabetes. Clinical Therapeutics 2006;28(10):1569-81.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
572	Phillips,P, Karrasch,J, Scott,R, Wilson,D. Acarbose Improves Glycemic Control in Overweight Type 2 Diabetic Patients Insufficiently Treated With Metformin. Diabetes Care 2003;26(2):269-73.	across treatment strategy
573	Phung,O.J. & Sobieraj,D.M. Early combination therapy for the treatment of type 2 diabetes mellitus: systematic review and meta-analysis. Diabetes, Obesity and Metabolism 2014;16(5):410-17.	systematic review/meta-analysis/pooled analysis/review
574	Phung,O.J., Scholle,J.M., Talwar,M. Effect of noninsulin antidiabetic drugs added to metformin therapy on glycemic control, weight gain, and hypoglycemia in type 2 diabetes. JAMA 2010;303(14):1410-18.	systematic review/meta-analysis/pooled analysis/review
575	Pinelli,N.R. Efficacy and safety of long-acting glucagon-like peptide-1 receptor agonists compared with exenatide twice daily and sitagliptin in type 2 diabetes mellitus: A systematic review and meta-analysis OT - Efficacite et securite des agonistes de longue duree d'action des recepteurs au peptide-1 glucagon-like comparativement a l'exenatide biquotidien et a la sitagliptine dans le diabete de type 2: Revue systematique et meta-analyse. Annals of Pharmacotherapy 2011;45(7-8):850-60.	systematic review/meta-analysis/pooled analysis/review
576	Pinelli,N.R., Cha,R., Brown,M.B. Addition of thiazolidinedione or exenatide to oral agents in type 2 diabetes: A meta-analysis. Annals of Pharmacotherapy 2008;42(11):1541-51.	systematic review/meta-analysis/pooled analysis/review
577	Pinget,M., Goldenberg,R., Niemoeller,E., Muehlen-Bartmer,I. Efficacy and safety of	proportion or all patients taking pre-existing oral antidiabetic drugs

Number	Reference	Reason for exclusion
	lixisenatide once daily versus placebo in type 2 diabetes insufficiently controlled on pioglitazone (GetGoal-P). Diabetes, Obesity and Metabolism 2013;15(11):1000-07.	(contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
578	Pistrosch,F., Kohler,C., Schaper,F., Landgraf,W. Effects of insulin glargine versus metformin on glycemic variability, microvascular and beta-cell function in early type 2 diabetes. Acta Diabetologica 2013;50(4):587-95.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
579	Polonsky,W., Traylor,L., Wei,W., Shi,R., Ameer,B. More satisfied, but why? A pooled patient-level analysis of treatment satisfaction following the initiation of insulin glargine vs. comparators in insulin-naive patients with type 2 diabetes mellitus. Diabetes, Obesity and Metabolism 2014;16(3):255-61.	systematic review/meta-analysis/pooled analysis/review
580	Ponssen,H.H., Elte,J.W.F., Lehert,P., Schouten,J.P. Combined metformin and insulin therapy for patients with type 2 diabetes mellitus. Clinical Therapeutics 2000;22(6):709-18.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. insulin
581	Pontiroli,A.E. & Miele,L. Increase of body weight during the first year of intensive insulin treatment in type 2 diabetes: systematic review and meta-analysis. [Review]. Diabetes, Obesity & Metabolism 2011;13(11):1008-19.	systematic review/meta-analysis/pooled analysis/review
582	Pontiroli,A.E. & Miele,L. Metabolic control and risk of hypoglycaemia during the first year of intensive insulin treatment in type 2 diabetes: systematic review and meta-analysis. [Review]. Diabetes, Obesity & Metabolism 2012;14(5):433-46.	systematic review/meta-analysis/pooled analysis/review
583	Pontiroli,A.E., Dino,G., Capra,F. Combined therapy with glibenclamide and ultralente insulin in lean patients with NIDDM with secondary failure of sulfonylureas. Follow up at two years. Diabete & metabolisme 1989;16(4):323-27.	comparison with unlicensed drug or drug indication
584	Poolsup,N. & Suksomboon,N. Efficacy of various antidiabetic agents as add-on treatments to metformin in type 2 diabetes mellitus: systematic review and meta-analysis. Isrn Endocrinology Print 2012;2012:798146.	systematic review/meta-analysis/pooled analysis/review
585	Pop-Busui,R., Lu,J., Brooks,M.M., Albert,S., Althouse,A.D., Escobedo,J., et al. Impact of glycemic control strategies on the progression of diabetic peripheral neuropathy in the Bypass Angioplasty Revascularization Investigation 2 Diabetes (BARI 2D) Cohort. Diabetes Care 2013;36(10):3208-15.	unclear treatment groups or intervention
586	Pradhan,A.D., Everett,B.M., Cook,N.R., Rifai,N. Effects of initiating insulin and metformin on glycemic control and inflammatory biomarkers among patients with type 2 diabetes: the LANCET randomized trial. JAMA 2009;302(11):1186-94.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
587	Pratley,R.E., Nauck,M.A., Barnett,A.H., Feinglos,M.N., Ovalle,F., Harman-Boehm,I., et	not available from the British library

Number	Reference	Reason for exclusion
	al. Once-weekly albiglutide versus once-daily liraglutide in patients with type 2 diabetes inadequately controlled on oral drugs (HARMONY 7): a randomised, open-label, multicentre, non-inferiority phase 3 study. Lancet Diabetes and Endocrinology 2014;2(4):289-97.	
588	Pratley,R.E., Kipnes,M.S., Fleck,P.R., Wilson,C., Mekki,Q. Efficacy and safety of the dipeptidyl peptidase-4 inhibitor alogliptin in patients with type 2 diabetes inadequately controlled by glyburide monotherapy. Diabetes, Obesity & Metabolism 2009;11(2):167-76.	comparison with unlicensed drug or drug indication; across treatment strategy
589	Pratley,R.E., Nauck,M.A., Bailey,T., Montanya,E., Filetti,S., Garber,A.J., et al. Efficacy and safety of switching from the DPP-4 inhibitor sitagliptin to the human GLP-1 analog liraglutide after 52 weeks in metformin-treated patients with type 2 diabetes: a randomized, open-label trial. Diabetes Care 2012;35(10):1986-93.	dose comparison of same drug
590	Pratley,R.E., Rosenstock,J., Pi-Sunyer,F.X., Banerji,M.A., Schweizer,A., Couturier,A. Management of type 2 diabetes in treatment-naive elderly patients: Benefits and risks of vildagliptin monotherapy. Diabetes Care 2007;30(12):3017-22.	systematic review/meta-analysis/pooled analysis/review
591	Pugh,J.A. Sitagliptin improved glycemic control and beta-cell function in type 2 diabetes. ACP Journal Club 2007;146(2):39.	commentary/letter/editorial
592	Punthakee,Z., Bosch,J., Dagenais,G., Diaz,R., Holman,R., Probstfield,J., et al. Design, history and results of the Thiazolidinedione Intervention with vitamin D Evaluation (TIDE) randomised controlled trial. Diabetologia 2012;55(1):36-45.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
593	Qayyum,R., Bolen,S., Maruthur,N., Feldman,L., Wilson,L.M., Marinopoulos,S.S., et al. Systematic review: comparative effectiveness and safety of premixed insulin analogues in type 2 diabetes. Annals of Internal Medicine 2008;149(8):549-59.	systematic review/meta-analysis/pooled analysis/review
594	Raccah,D., Haak,T.J., Huet,D., Monnier,L., Robertson,D., Labard,P. Comparison of stepwise addition of prandial insulin to a basal-bolus regimen when basal insulin is insufficient for glycaemic control in type 2 diabetes: results of the OSIRIS study. Diabetes & Metabolism 2012;38(6):507-14.	unclear if previous blood glucose lowering therapies were washed out/discontinued
595	Rakel,A., Renier,G., Roussin,A., Buithieu,A. Beneficial effects of gliclazide modified release compared with glibenclamide on endothelial activation and low-grade inflammation in patients with type 2 diabetes. Diabetes, Obesity and Metabolism 2007;9(1):127-29.	outcomes not of interest
596	Raskin,P. Glycaemic control with liraglutide: the phase 3 trial programme. [Review]. International Journal of Clinical Practice 2010;Supplement.(167):21-27.	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
597	Raskin,P., Heller,S., Honka,M., Chang,P.C., Boss,A.H. Pulmonary function over 2 years in diabetic patients treated with prandial inhaled Technosphere insulin or usual antidiabetes treatment: A randomized trial. Diabetes Technology and Therapeutics 2013;15(SUPPL.1):S56.	abstract only/not full paper
598	Raskin,P., Allen,E., Hollander,P., Lewin,A., Gabbay,R.A., Hu,P., Bode,B. Initiating insulin therapy in type 2 diabetes: A comparison of biphasic and basal insulin analogs. Diabetes Care 2005;28(2):260-65.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
599	Raskin,P., Gylvin,T., Weng,W. Comparison of insulin detemir and insulin glargine using a basal-bolus regimen in a randomized, controlled clinical study in patients with type 2 diabetes. Diabetes/Metabolism Research Reviews 2009;25(6):542-48.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
600	Raskin,P., Klaff,L., McGill,J., South,S.A., Hollander,P., Khutoryansky,N., Hale,P.M. Efficacy and safety of combination therapy: repaglinide plus metformin versus nateglinide plus metformin. Diabetes Care 2003;26(7):2063-68.	unclear if previous blood glucose lowering therapies were washed out/discontinued
601	Raskin,P., Lewin,A., Reinhardt,R., Lyness,W. Twice-daily and three-times-daily dosing of a repaglinide/metformin fixed-dose combination tablet provide similar glycaemic control. Diabetes, Obesity & Metabolism 2009;11(10):947-52.	dose comparison of same drug
602	Raskin,P., Lewin,A., Reinhardt,R., Lyness,W. Twice-daily dosing of a repaglinide/metformin fixed-dose combination tablet provides glycaemic control comparable to rosiglitazone/metformin tablet. Diabetes, Obesity & Metabolism 2009;11(9):865-73.	dose comparison of same drug
603	Raskin,P., Matfin,G., Schwartz,S.L., Chaykin,L., Chu,P.L., Braceras,R. Addition of biphasic insulin aspart 30 to optimized metformin and pioglitazone treatment of type 2 diabetes mellitus: The ACTION Study (Achieving Control Through Insulin plus Oral ageNts). Diabetes, Obesity & Metabolism 2009;11(1):27-32.	Drug comparison not of interest-insulin + 2 oral antidiabetic drugs vs. 2 oral antidiabetic drugs
604	Raslovÿ,K., Tamer,S.C., Clauson,P. Insulin detemir results in less weight gain than NPH insulin when used in basal-bolus therapy for type 2 diabetes mellitus, and this advantage increases with baseline body mass index. Clinical Drug Investigation 2007;27(4):279-85.	systematic review/meta-analysis/pooled analysis/review
605	Ratner,R., Han,J., Nicewarner,D., Yushmanova,I., Hoogwerf,B.J. Cardiovascular safety of exenatide BID: An integrated analysis from controlled clinical trials in participants with type 2 diabetes. Cardiovascular Diabetology 2011;10: 22.	systematic review/meta-analysis/pooled analysis/review
606	Ratner,R., Wynne,A., Nakhle,S., Brusco,O., Vlajnic,A. Influence of preprandial vs.	focus on timing of administration

Number	Reference	Reason for exclusion
	postprandial insulin glulisine on weight and glycaemic control in patients initiating basal-bolus regimen for type 2 diabetes: a multicenter, randomized, parallel, open-label study (NCT00135096). Diabetes, Obesity & Metabolism 2011;13(12):1142-48.	
607	Ravnik-Oblak,M. Insulin versus a combination of insulin and sulfonylurea in the treatment of NIDDM patients with secondary oral failure. Diabetes Research and Clinical Practice 1995;30(1):27-35.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
608	Rawdaree,P., Deerochanawong,C., Peerapatdit,T., Thongtang,N., Suwanwalaikorn,S., Khemkha,A., et al. Efficacy and safety of generic and original pioglitazone in type 2 diabetes mellitus: a multicenter, a double-blinded, randomized-controlled study. Journal of the Medical Association of Thailand 2010;93(11):1249-55.	comparing different types of sulfonylurea alone
609	Rayman,G. & Profozic,V. Insulin glulisine imparts effective glycaemic control in patients with Type 2 diabetes. Diabetes research and clinical practice 2007;76(2):304-12.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
610	Raz,I., Wilson,P.W., Strojek,K., Kowalska,I., Bozikov,V., Gitt,A.K., et al. Effects of prandial versus fasting glycemia on cardiovascular outcomes in type 2 diabetes: the HEART2D trial. Diabetes Care 2009;32(3):381-86.	drug comparison not of interest-insulin vs. insulin
611	Rees,T., Curtis,B., Gaskins,K., Sierra-Johnson,J., Jiang,H. Efficacy and safety of insulin lispro in obese patients with type 2 diabetes: A retrospective metaanalysis of 7 randomized controlled trials. Endocrine Practice 2014;20(5):389-98.	systematic review/meta-analysis/pooled analysis/review
612	Retnakaran,R., Qi,Y., Opsteen,C., Vivero,E. Initial short-term intensive insulin therapy as a strategy for evaluating the preservation of beta-cell function with oral antidiabetic medications: a pilot study with sitagliptin. Diabetes, Obesity & Metabolism 2010;12(10):909-15.	Drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. insulin + 2 oral antidiabetic drugs
613	Richard,K.R. & Shelburne,J.S. Tolerability of dipeptidyl peptidase-4 inhibitors: A review. Clinical Therapeutics 2011;33(11):1609-29.	systematic review/meta-analysis/pooled analysis/review
614	Riche,D.M. & East,H.E. Impact of sitagliptin on markers of beta-cell function: A meta-analysis. American Journal of the Medical Sciences 2009;337(5):321-28.	systematic review/meta-analysis/pooled analysis/review
615	Richter,B., Bandeira-Echtler,E., Bergerhoff,K. Dipeptidyl peptidase-4 (DPP-4) inhibitors for type 2 diabetes mellitus. Cochrane Database of Systematic Reviews 2008.	systematic review/meta-analysis/pooled analysis/review
616	Richter,B., Bandeira-Echtler,E., Bergerhoff,K. Emerging role of dipeptidyl peptidase-4 inhibitors in the management of type 2 diabetes. Vascular Health and Risk Management 2008;4(4):753-68.	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
617	Richter,B., Bandeira-Echtler,E., Bergerhoff,K., Clar,C. Pioglitazone for type 2 diabetes mellitus. Cochrane Database of Systematic Reviews 2006.	systematic review/meta-analysis/pooled analysis/review
618	Riddle,M.C., Henry,R.R., Poon,T.H., Zhang,B., Mac,S.M., Holcombe,J.H., Kim,D.D. Exenatide elicits sustained glycaemic control and progressive reduction of body weight in patients with type 2 diabetes inadequately controlled by sulphonylureas with or without metformin. Diabetes/Metabolism Research Reviews 2006;22(6):483-91.	systematic review/meta-analysis/pooled analysis/review
619	Rissanen,A., Howard,C.P., Botha,J. Effect of anti-IL-1beta antibody (canakinumab) on insulin secretion rates in impaired glucose tolerance or type 2 diabetes: results of a randomized, placebo-controlled trial. Diabetes, Obesity and Metabolism 2012;14(12):1088-96.	<12 week treatment duration
620	Rizos,E.C., Ntzani,E.E., Papanas,N., Tsimihodimos,V., Mitrogianni,Z. Combination Therapies of DPP4 Inhibitors and GLP1 Analogues with Insulin in Type 2 Diabetic Patients: A Systematic Review. Current Vascular Pharmacology 2014;11(6):992-1000.	systematic review/meta-analysis/pooled analysis/review
621	Rizzo,M., Chandalia,M., Patti,A.M., Di,Bartolo,V, Rizvi,A.A. Liraglutide decreases carotid intima-media thickness in patients with type 2 diabetes: 8-month prospective pilot study. Cardiovascular Diabetology 2014;13(1):49.	not a randomised controlled trial (no randomisation)
622	Rizzo,M.R. & Barbieri,M. Reduction of oxidative stress and inflammation by blunting daily acute glucose fluctuations in patients with type 2 diabetes: role of dipeptidyl peptidase-IV inhibition. Diabetes Care 2012;35(10):2076-82.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
623	Roach,P. & Yue,L. Improved postprandial glycemic control during treatment with Humalog Mix25, a novel protamine-based insulin lispro formulation. Humalog Mix25 Study Group. Diabetes Care 1999;22(8):1258-61.	comparison with unlicensed drug or drug indication
624	Roach,P. Comparison of insulin lispro mixture 25/75 with insulin glargine during a 24-h standardized test-meal period in patients with Type 2 diabetes. Diabetic Medicine 2006;23(7):743-49.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
625	Robles,G.I. A review of exenatide as adjunctive therapy in patients with type 2 diabetes. Drug Design, Development and Therapy 2009;(3):219-40.	systematic review/meta-analysis/pooled analysis/review
626	Rodbard,H.W., Cariou,B., Zinman,B., Handelsman,Y., Philis-Tsimikas,A., Skjoth,T.V., Rana,A. Comparison of insulin degludec with insulin glargine in insulin-naive subjects with Type 2 diabetes: a 2-year randomized, treat-to-target trial. Diabetic Medicine 2013;30(11):1298-3004.	critical inconsistencies in reported data
627	Rodbard,H.W., Gough,S., Lane,W., Korsholm,L. Reduced risk of hypoglycemia with insulin	not available from the British library

Number	Reference	Reason for exclusion
	degludec versus insulin glargine in patients with type 2 diabetes requiring high doses of Basal insulin: a meta-analysis of 5 randomized begin trials. Endocrine Practice 2014;20(4):285-92.	
628	Rodbard,H.W., Visco,V.E., Andersen,H. Treatment intensification with stepwise addition of prandial insulin aspart boluses compared with full basal-bolus therapy (FullSTEP Study): a randomised, treat-to-target clinical trial. Lancet Diabetes and Endocrinology 2014;2(1):30-37.	not available from the British library
629	Roden,M., Mariz,S., Brazzale,A.R. Free fatty acid kinetics during long-term treatment with pioglitazone added to sulfonylurea or metformin in Type 2 diabetes. Journal of Internal Medicine 2009;265(4):476-87.	duplicate or same study results
630	Rogala,H. & Czyzyk,A. [Immunogenicity of semisynthetic human insulin Novo--five year prospective studies]. Polskie Archiwum Medycyny Wewnetrznej 1993;89(6):492-98.	Not in English
631	Rosenstock,J. & Marx,N. Cardiovascular effects of diabetes drugs: Making the dark ages brighter with CAROLINA. Annals of Internal Medicine 2013;158(6):499.	abstract only/not full paper
632	Rosenstock,J. & Niggli,M. Long-term 2-year safety and efficacy of vildagliptin compared with rosiglitazone in drug-naive patients with type 2 diabetes mellitus. Diabetes, Obesity & Metabolism 2009;11(6):571-78.	comparison with unlicensed drug or drug indication
633	Rosenstock,J. & Sankoh,S. Glucose-lowering activity of the dipeptidyl peptidase-4 inhibitor saxagliptin in drug-naive patients with type 2 diabetes. Diabetes, Obesity & Metabolism 2008;10(5):376-86.	inadequate wash out period (<4 weeks)
634	Rosenstock,J., Hanefeld,M., Shamanna,P., Min,K.W., Boka,G., Miossec,P., Zhou,T. Beneficial effects of once-daily lixisenatide on overall and postprandial glycemic levels without significant excess of hypoglycemia in Type 2 diabetes inadequately controlled on a sulfonylurea with or without metformin (GetGoal-S). Journal of Diabetes and its Complications 2014;28(3):386-92.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
635	Rosenstock,J., Rodbard,H.W., Bain,S.C., D'Alessio,D., Seufert,J., Thomsen,A.B., Svendsen,C.B. One-year sustained glycemic control and weight reduction in type 2 diabetes after addition of liraglutide to metformin followed by insulin detemir according to HbA1c target. Journal of Diabetes and its Complications 2013;27(5):492-500.	Drug comparison not of interest-insulin + 2 oral antidiabetic drugs vs. 2 oral antidiabetic drugs
636	Rosenstock,J., Aggarwal,N., Polidori,D., Zhao,Y., Arbit,D., Usiskin,K., Capuano,G. Dose-ranging effects of canagliflozin, a sodium-glucose cotransporter 2 inhibitor, as add-on to metformin in subjects with type 2 diabetes. Diabetes Care 2012;35(6):1232-38.	duplicate or same study results
637	Rosenstock,J., Aguilar-Salinas,C., Klein,E.,	inadequate wash out period (<4

Number	Reference	Reason for exclusion
	Nepal,S., List,J. Effect of saxagliptin monotherapy in treatment-naive patients with type 2 diabetes. Current Medical Research and Opinion 2009;25(10):2401-11.	weeks)
638	Rosenstock,J., Ahmann,A.J., Colon,G., Scism-Bacon,J., Jiang,H. Advancing insulin therapy in type 2 diabetes previously treated with glargine plus oral agents: prandial premixed (insulin lispro protamine suspension/lispro) versus basal/bolus (glargine/lispro) therapy. Diabetes Care 2008;31(1):20-25.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
639	Rosenstock,J., Davies,M., Home,P.D., Larsen,J., Koenen,C. A randomised, 52-week, treat-to-target trial comparing insulin detemir with insulin glargine when administered as add-on to glucose-lowering drugs in insulin-naive people with type 2 diabetes. Diabetologia 2008;51(3):408-16.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
640	Rosenstock,J., Fonseca,V., McGill,J.B., Riddle,M., Halle,J.P., Hramiak,I., Johnston,P. Similar progression of diabetic retinopathy with insulin glargine and neutral protamine Hagedorn (NPH) insulin in patients with type 2 diabetes: a long-term, randomised, open-label study. Diabetologia 2009;52(9):1778-88.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
641	Rosenstock,J., Gross,J.L., Aguilar-Salinas,C., Hissa,M., Berglind,N. Long-term 4-year safety of saxagliptin in drug-naive and metformin-treated patients with Type 2 diabetes. Diabetic Medicine 2013;30(12):1472-76.	dose comparison of same drug
642	Rosenstock,J., Hassman,D.R., Madder,R.D., Brazinsky,S.A., Farrell,J., Khutoryansky,N., Hale,P.M. Repaglinide versus nateglinide monotherapy: a randomized, multicenter study. Diabetes Care 2004;27(6):1265-70.	comparison with unlicensed drug or drug indication
643	Rosenstock,J., Lorber,D.L., Gnudi,L., Howard,C.P., Bilheimer,D.W., Chang,P.-C., et al. Prandial inhaled insulin plus basal insulin glargine versus twice daily biaspart insulin for type 2 diabetes: a multicentre randomised trial. The Lancet 2010;375(9733):2244-53.	comparison with unlicensed drug or drug indication
644	Rosenstock,J., Seman,L.J., Jelaska,A., Hantel,S., Pinnetti,S. Efficacy and safety of empagliflozin, a sodium glucose cotransporter 2 (SGLT2) inhibitor, as add-on to metformin in type 2 diabetes with mild hyperglycaemia. Diabetes, Obesity and Metabolism 2013;15(12):1154-60.	drug comparison not of interest - 2 oral antidiabetic drugs vs 1 oral antidiabetic drug
645	Rosenstock,J., Shen,S.G., Gatlin,M.R. Combination therapy with nateglinide and a thiazolidinedione improves glycemic control in type 2 diabetes. Diabetes Care 2002;25(9):1529-33.	comparison with unlicensed drug or drug indication
646	Rosenstock,J., Shenouda,S.K., Bergenstal,R.M., Buse,J.B., Glass,L.C., Heilmann,C.R., et al. Baseline factors associated with glycemic control and weight loss when exenatide twice	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study

Number	Reference	Reason for exclusion
	daily is added to optimized insulin glargine in patients with type 2 diabetes. Diabetes Care 2012;35(5):955-58.	
647	Rosenstock,J, Schwartz,SL., Clark,CM., Park,GD., Donley,DW. Basal insulin therapy in type 2 diabetes 28-week comparison of insulin glargine (HOE 901) and NPH insulin. Diabetes Care 2001;24(4):631-36.	duplicate or same study results
648	Rosenthal,J. E002: Hypertension in type 2-diabetic patients: effects of endogenous insulin and antidiabetic therapies. American Journal of Hypertension 2000;13(S2):81A.	abstract only/not full paper
649	Ross,S.A., Rafeiro,E., Meinicke,T., Toorawa,R. Efficacy and safety of linagliptin 2.5mg twice daily versus 5mg once daily in patients with type 2 diabetes inadequately controlled on metformin: a randomised, double-blind, placebo-controlled trial. Current Medical Research & Opinion 2012;28(9):1465-74.	rescue medication was provided to participants and unclear if analysis has been adjusted or switching of treatment
650	Round,E.M., Engel,S.S., Golm,G.T., Davies,M.J. Safety of sitagliptin in elderly patients with type 2 diabetes: a pooled analysis of 25 clinical studies. Drugs and Aging 2014;31(3):203-14.	systematic review/meta-analysis/pooled analysis/review
651	Russell,S. Incretin-based therapies for type 2 diabetes mellitus: A review of direct comparisons of efficacy, safety and patient satisfaction. International Journal of Clinical Pharmacy 2013;35(2):159-72.	systematic review/meta-analysis/pooled analysis/review
652	Russell-Jones,D., Cuddihy,R.M., Hanefeld,M., Kumar,A., Gonzalez,J.G., Chan,M., et al. Efficacy and safety of exenatide once weekly versus metformin, pioglitazone, and sitagliptin used as monotherapy in drug-naive patients with type 2 diabetes (DURATION-4): a 26-week double-blind study. Diabetes Care 2012;35(2):252-58.	unclear if previous blood glucose lowering therapies were washed out/discontinued
653	Rybka. European comparative study of 2 alpha-glucosidase inhibitors, miglitol and acarbose.	abstract only/not full paper
654	Rys,P., Wojciechowski,P., Siejka,S., Malecki,P. A comparison of biphasic insulin aspart and insulin glargine administered with oral antidiabetic drugs in type 2 diabetes mellitus - a systematic review and meta-analysis. International Journal of Clinical Practice 2014;68(3):304-13.	systematic review/meta-analysis/pooled analysis/review
655	Rys,P., Pankiewicz,O., Lach,K., Kwaskowski,A., Skrzekowska-Baran,I. Efficacy and safety comparison of rapid-acting insulin aspart and regular human insulin in the treatment of type 1 and type 2 diabetes mellitus: A systematic review. Diabetes and Metabolism 2011;37(3):190-200.	systematic review/meta-analysis/pooled analysis/review
656	Saenz,A., Fernandez-Esteban,I., Mataix,A., Ausejo,M., Roque,M. Metformin monotherapy for type 2 diabetes mellitus. Cochrane Database of Systematic Reviews 2005;(3):CD002966.	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
657	Sakharova,O.V., Lleva,R.R., Dziura,J.D., Spollett,G.R., Howell,S.K., Beisswenger,P.J. Effects on post-prandial glucose and AGE precursors from two initial insulin strategies in patients with type 2 diabetes uncontrolled by oral agents. Journal of Diabetes and its Complications 2012;26(4):333-38.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
658	Salari,P. & Nikfar,S. No Superiority of exenatide over insulin in diabetic patients in Terms of Weight Reduction or Incidence of Adverse Effects: A Meta-analysis. International Journal of Pharmacology 2011;7(7):749-56.	systematic review/meta-analysis/pooled analysis/review
659	Saloranta,C., Hershon,K., Ball,M., Dickinson,S. Efficacy and safety of nateglinide in type 2 diabetic patients with modest fasting hyperglycemia. Journal of Clinical Endocrinology & Metabolism 2002;87(9):4171-76.	comparison with unlicensed drug or drug indication
660	Salpeter,S.R., Greyber,E., Pasternak,G.A. Risk of fatal and nonfatal lactic acidosis with metformin use in type 2 diabetes mellitus. Cochrane Database of Systematic Reviews 2010;(4):CD002967.	systematic review/meta-analysis/pooled analysis/review
661	Sam,S., Haffner,S., Davidson,M.H., D'Agostino,R.,Sr., Perez,A. Pioglitazone-mediated changes in lipoprotein particle composition are predicted by changes in adiponectin level in type 2 diabetes. Journal of Clinical Endocrinology & Metabolism 2012;97(1):E110-14.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
662	Schatz,H. Preclinical and clinical studies on safety and tolerability of repaglinide. Experimental & Clinical Endocrinology & Diabetes 1999;107():Suppl-8.	systematic review/meta-analysis/pooled analysis/review
663	Scheen,A.J., Tan,M.H., Betteridge,D.J., Birkeland,K., Schmitz,O., Charbonnel,B. Long-term glycaemic effects of pioglitazone compared with placebo as add-on treatment to metformin or sulphonylurea monotherapy in PROactive (PROactive 18). Diabetic Medicine 2009;26(12):1242-49.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
664	Schernthaner,G. Cardiovascular risk and thiazolidinediones--what do meta-analyses really tell us?. [Review]. Diabetes, Obesity & Metabolism 2010;12(12):1023-35.	systematic review/meta-analysis/pooled analysis/review
665	Schernthaner,G., Barnett,A.H., Emser,A., Patel,S., Troost,J., Woerle,H.-J. Safety and tolerability of linagliptin: A pooled analysis of data from randomized controlled trials in 3572 patients with type 2 diabetes mellitus. Diabetes, Obesity and Metabolism 2012;14(5):470-78.	systematic review/meta-analysis/pooled analysis/review
666	Schiel,R. Efficacy and treatment satisfaction of once-daily insulin glargine plus one or two oral antidiabetic agents versus continuing premixed human insulin in patients with type 2 diabetes previously on long-term conventional insulin therapy: the Switch pilot study. Experimental & Clinical Endocrinology & Diabetes	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. insulin + 2 oral antidiabetic drugs

Number	Reference	Reason for exclusion
	2007;115(10):627-33.	
667	Schmidt,W.E., Christiansen,J.S., Hammer,M., Zychma,M.J. Patient-reported outcomes are superior in patients with Type 2 diabetes treated with liraglutide as compared with exenatide, when added to metformin, sulphonylurea or both: results from a randomized, open-label study. Diabetic Medicine 2011;28(6):715-23.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
668	Schnell,O., Mertes,G., Standl,E. Acarbose and metabolic control in patients with type 2 diabetes with newly initiated insulin therapy. Diabetes, Obesity & Metabolism 2007;9(6):853-58.	drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. insulin
669	Schondorf,T., Musholt,P.B., Hohberg,C., Forst,T., Lehmann,U., Fuchs,W., Lobig,M. The fixed combination of pioglitazone and metformin improves biomarkers of platelet function and chronic inflammation in type 2 diabetes patients: Results from the PIOfIx study. Journal of Diabetes Science and Technology 2011;5(2):426-32.	parent paper included and data extracted
670	Schopman,J.E., Simon,A.C., Hoefnagel,S.J., Hoekstra,J.B. The incidence of mild and severe hypoglycaemia in patients with type 2 diabetes mellitus treated with sulfonylureas: a systematic review and meta-analysis. Diabetes/Metabolism Research Reviews 2014;30(1):11-22.	systematic review/meta-analysis/pooled analysis/review
671	Schwartz,S. Is incretin-based therapy ready for the care of hospitalized patients with type 2 diabetes? the time has come for GLP-1 receptor agonists! Diabetes Care 2013;36(7):2107-11.	systematic review/meta-analysis/pooled analysis/review
672	Schwartz,S.L. Treatment of elderly patients with type 2 diabetes mellitus: A systematic review of the benefits and risks of dipeptidyl peptidase-4 inhibitors. American Journal Geriatric Pharmacotherapy 2010;8(5):405-18.	systematic review/meta-analysis/pooled analysis/review
673	Schweizer,A. & Dejager,S. Impact of insulin resistance, body mass index, disease duration, and duration of metformin use on the efficacy of vildagliptin. Diabetes Therapy Research, Treatment and Education of Diabetes and Related Disorders 2012;3(1):8.	systematic review/meta-analysis/pooled analysis/review
674	Schweizer,A. Experience with vildagliptin in patients > 75 years with type 2 diabetes and moderate or severe renal impairment. Diabetes Therapy 2013;4(2):257-67.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
675	Schweizer,A., Dejager,S., Foley,J.E. Assessing the general safety and tolerability of vildagliptin: value of pooled analyses from a large safety database versus evaluation of individual studies. Vascular Health & Risk Management 2011;7:49-57.	systematic review/meta-analysis/pooled analysis/review
676	Schweizer,A., Dejager,S., Foley,J.E., Couturier,A., Ligueros-Saylan,M. Assessing the cardio-cerebrovascular safety of vildagliptin: meta-analysis of adjudicated events from a large Phase III type 2 diabetes population. Diabetes,	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
	Obesity & Metabolism 2010;12(6):485-94.	
677	Schweizer,A., Dejager,S., Foley,J.E., Shao,Q. Clinical experience with vildagliptin in the management of type 2 diabetes in a patient population >=75 years: a pooled analysis from a database of clinical trials. Diabetes, Obesity & Metabolism 2011;13(1):55-64.	systematic review/meta-analysis/pooled analysis/review
678	Scirica,B.M., Bhatt,D.L., Braunwald,E., Steg,P.G., Davidson,J., Hirshberg,B., et al. Saxagliptin and cardiovascular outcomes in patients with type 2 diabetes mellitus. New England Journal of Medicine 2013;369(14):1317-26.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
679	Scott,D.A., Boye,K.S., Timlin,L. A network meta-analysis to compare glycaemic control in patients with type 2 diabetes treated with exenatide once weekly or liraglutide once daily in comparison with insulin glargine, exenatide twice daily or placebo. [Review]. Diabetes, Obesity & Metabolism 2013;15(3):213-23.	systematic review/meta-analysis/pooled analysis/review
680	Scott,R., Loeys,T., Davies,M.J., Engel,S.S. Efficacy and safety of sitagliptin when added to ongoing metformin therapy in patients with type 2 diabetes. Diabetes, Obesity & Metabolism 2008;10(10):959-69.	comparison with unlicensed drug or drug indication
681	Seaquist,E.R., Miller,M.E., Fonseca,V., Ismail-Beigi,F., Launer,L.J. Effect of thiazolidinediones and insulin on cognitive outcomes in ACCORD-MIND. Journal of Diabetes and its Complications 2013;27(5):485-91.	across treatment strategy
682	Segal,P., Eliahou,H.E., Petzinna,D., Neuser,D. Long-term efficacy and tolerability of acarbose treatment in patients with type 2 diabetes mellitus. Clinical Drug Investigation 2005;25(9):589-95.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
683	Seino,Y. & Rasmussen,M.F. Glucagon-like peptide-1 analog liraglutide in combination with sulfonylurea safely improves blood glucose measures vs sulfonylurea monotherapy in Japanese patients with type 2 diabetes: Results of a 52-week, randomized, multicenter trial. Journal of Diabetes Investigation 2011;2(4):280-86.	comparison with unlicensed drug or drug indication
684	Seino,Y., Min,K.W., Niemoeller,E. Randomized, double-blind, placebo-controlled trial of the once-daily GLP-1 receptor agonist lixisenatide in Asian patients with type 2 diabetes insufficiently controlled on basal insulin with or without a sulfonylurea (GetGoal-L-Asia). Diabetes, Obesity & Metabolism 2012;14(10):910-17.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
685	Seino,Y., Rasmussen,M.F., Nishida,T. Efficacy and safety of the once-daily human GLP-1 analogue, liraglutide, vs glibenclamide monotherapy in Japanese patients with type 2 diabetes. Current Medical Research & Opinion 2010;26(5):1013-22.	comparison with unlicensed drug or drug indication
686	Seino,Y., Rasmussen,M.F., Zdravkovic,M.	comparison with unlicensed drug or

Number	Reference	Reason for exclusion
	Dose-dependent improvement in glycemia with once-daily liraglutide without hypoglycemia or weight gain: A double-blind, randomized, controlled trial in Japanese patients with type 2 diabetes. Diabetes Research & Clinical Practice 2008;81(2):161-68.	drug indication
687	Selam,J.L., Koenen,C., Weng,W. Improving glycemic control with insulin detemir using the 303 Algorithm in insulin naive patients with type 2 diabetes: a subgroup analysis of the US PREDICTIVE 303 study. Current Medical Research & Opinion 2008;24(1):11-20.	focus on algorithms (patient vs. physican driven)
688	Selvin,E., Bolen,S., Yeh,H.C., Wiley,C., Wilson,L.M., Marinopoulos,S.S., et al. Cardiovascular outcomes in trials of oral diabetes medications: a systematic review. Archives of Internal Medicine 2008;168(19):2070-80.	systematic review/meta-analysis/pooled analysis/review
689	Seufert,J., Brath,H., Pscherer,S., Borck,A. Composite efficacy parameters and predictors of hypoglycaemia in basal-plus insulin therapy-a combined analysis of 713 type 2 diabetic patients. Diabetes, Obesity and Metabolism 2014;16(3):248-54.	systematic review/meta-analysis/pooled analysis/review
690	Shah,P.K., Mudaliar,S., Chang,A.R., Aroda,V., Andre,M., Burke,P. Effects of intensive insulin therapy alone and in combination with pioglitazone on body weight, composition, distribution and liver fat content in patients with type 2 diabetes. Diabetes, Obesity & Metabolism 2011;13(6):505-10.	Drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. insulin
691	Shank,Myron L. & Del Prato,Stefano. Bedtime insulin/daytime glipizide: effective therapy for sulfonylurea failures in NIDDM. Diabetes 1995;44(2):165-72.	unclear treatment groups or intervention
692	Sharma,P.K., Bhansali,A., Sialy,R., Malhotra,S. Effects of pioglitazone and metformin on plasma adiponectin in newly detected type 2 diabetes mellitus. Clinical Endocrinology 2006;65(6):722-28.	comparing different types of sulfonylurea alone
693	Sherifali,D., Nerenberg,K., Pullenayegum,E., Cheng,J.E. The effect of oral antidiabetic agents on A1C levels: a systematic review and meta-analysis. [Review]. Diabetes Care 2010;33(8):1859-64.	systematic review/meta-analysis/pooled analysis/review
694	Shimoda,S., Iwashita,S., Sekigami,T., Furukawa,N., Matsuo,Y., Ichimori,S., et al. Comparison of the efficacy of sitagliptin and glimepiride dose-up in Japanese patients with type 2 diabetes poorly controlled by sitagliptin and glimepiride in combination. Journal of Diabetes Investigation 2014;5(3):320-26.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
695	Shimpi,R.D., Patil,P.H., Kuchake,V.G., Ingle,P.V., Surana,S.J. Comparison of effect of metformin in combination with glimepiride and glibenclamide on glycaemic control in patient with type 2 Diabetes Mellitus. International	unclear if previous blood glucose lowering therapies were washed out/discontinued

Number	Reference	Reason for exclusion
	Journal of PharmTech Research 2009;1(1):50-61.	
696	Shyangdan,D.S., Royle,P.L., Clar,C., Sharma,P. Glucagon-like peptide analogues for type 2 diabetes mellitus: systematic review and meta-analysis. BMC Endocrine Disorders 2010;10:20.	systematic review/meta-analysis/pooled analysis/review
697	Siebenhofer,Andrea, Plank,Johannes, Berghold,Andrea, Jeitler,Klaus, Horvath,Karl, Narath,Markus, Gfrerer,Robert. Short acting insulin analogues versus regular human insulin in patients with diabetes mellitus. Cochrane Database of Systematic Reviews 2006.	systematic review/meta-analysis/pooled analysis/review
698	Siegelaar,S.E., Kerr,L., Jacober,S.J. A decrease in glucose variability does not reduce cardiovascular event rates in type 2 diabetic patients after acute myocardial infarction: a reanalysis of the HEART2D study. Diabetes Care 2011;34(4):855-57.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
699	Signorovitch,J.E., Wu,E.Q., Swallow,E., Kantor,E., Fan,L. Comparative efficacy of vildagliptin and sitagliptin in Japanese patients with type 2 diabetes mellitus: a matching-adjusted indirect comparison of randomized trials. Clinical Drug Investigation 2011;31(9):665-74.	systematic review/meta-analysis/pooled analysis/review
700	Singh,A.K. Advances in basal insulin therapy: Lessons from current evidence. Journal of the Indian Medical Association 2013;111(11):735-42.	systematic review/meta-analysis/pooled analysis/review
701	Singh,S.R., Ahmad,F., Lal,A., Yu,C., Bai,Z. Efficacy and safety of insulin analogues for the management of diabetes mellitus: a meta-analysis. CMAJ Canadian Medical Association Journal 2009;180(4):385-97.	systematic review/meta-analysis/pooled analysis/review
702	Singh-Franco,D., McLaughlin-Middlekauff,J., Elrod,S. The effect of linagliptin on glycaemic control and tolerability in patients with type 2 diabetes mellitus: a systematic review and meta-analysis. Diabetes, Obesity & Metabolism 2012;14(8):694-708.	systematic review/meta-analysis/pooled analysis/review
703	Skov,V., Cangemi,C., Gram,J., Christensen,M.M., Grodum,E., Sorensen,D., Argraves,W.S. Metformin, but not rosiglitazone, attenuates the increasing plasma levels of a new cardiovascular marker, Fibulin-1, in patientswith Type 2 diabetes. Diabetes Care 2014;37(3):760-66.	duplicate or same study results
704	Smith,S.R., De,Jonge L., Volaufova,J., Li,Y., Xie,H. Effect of pioglitazone on body composition and energy expenditure: A randomized controlled trial. Metabolism: Clinical and Experimental 2005;54(1):24-32.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
705	Snaith,A., McIntyre,L., Rothnie,H., Thomas,S., Royle,P. Glucagon-like peptide analogues for type 2 diabetes mellitus. Cochrane Database of Systematic Reviews 2007.	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
706	Sourij,H. & Zweiker,R. Effects of pioglitazone on endothelial function, insulin sensitivity, and glucose control in subjects with coronary artery disease and new-onset type 2 diabetes. Diabetes Care 2006;29(5):1039-45.	newly diagnosed participants but not explicit if they are drug naive
707	Spanheimer,R., Betteridge,D.J., Tan,M.H., Ferrannini,E. Long-Term Lipid Effects of Pioglitazone by Baseline Anti-Hyperglycemia Medication Therapy and Statin Use from the PROactive Experience (PROactive 14). American Journal of Cardiology 2009;104(2):234-39.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
708	Spengler M,H„nsel G,Boehme K. Efficacy of 6 months monotherapy with glucosidase inhibitor acarbose versus sulphonylurea glibenclamid on metabolic control of dietary treated type II diabetics. Hormone and metabolic research. Supplement series 26: 1992 pg 50-1	dosing regimen includes higher than recommended doses and no details of mean doses or proportion of people taking different doses
709	Sridhar,S. & Walia,R. Effect of pioglitazone on testosterone in eugonadal men with type 2 diabetes mellitus: a randomized double-blind placebo-controlled study. Clinical Endocrinology 2013;78(3):454-59.	across treatment strategy
710	Srivastava,S. & Saxena,G.N. Comparing the efficacy and safety profile of sitagliptin versus glimepiride in patients of type 2 diabetes mellitus inadequately controlled with metformin alone. Journal of the Association of Physicians of India 2012;60:27-30.	duplicate or same study results
711	Standl,E. & Maxeiner,S. Once-daily insulin glargine administration in the morning compared to bedtime in combination with morning glimepiride in patients with type 2 diabetes: An assessment of treatment flexibility. Hormone and Metabolic Research 2006;38(3):172-77.	focus on timing of administration
712	Storms,G.E.M.G. & Lutterman,J.A. Efficacy and immunogenicity of human and monocomponent porcine insulin: a randomized double blind study in diabetic patients previously treatment with insulin. Human Insulin 1986;:67.	not specifically type 2 diabetes
713	Strain,W.D., Lukashevich,V., Kothny,W. Individualised treatment targets for elderly patients with type 2 diabetes using vildagliptin add-on or lone therapy (INTERVAL): a 24 week, randomised, double-blind, placebo-controlled study. Lancet 2013;382(9890):409-16.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
714	Strojek,K., Bebakar,W.M., Khutsoane,D.T., Pesic,M., Smahelova,A., Thomsen,H.F. Once-daily initiation with biphasic insulin aspart 30 versus insulin glargine in patients with type 2 diabetes inadequately controlled with oral drugs: an open-label, multinational RCT. Current Medical Research & Opinion 2009;25(12):2887-94.	unclear if previous blood glucose lowering therapies were washed out/discontinued
715	Strojek,K., Shi,C., Carey,M.A. Addition of insulin lispro protamine suspension or insulin glargine to oral type 2 diabetes regimens: a randomized	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study

Number	Reference	Reason for exclusion
	trial. Diabetes, Obesity & Metabolism 2010;12(10):916-22.	
716	Su,Y., Su,Y.L., Lv,L.F., Wang,L.M. A randomized controlled clinical trial of vildagliptin plus metformin combination therapy in patients with type II diabetes mellitus. Experimental and Therapeutic Medicine 2014;7(4):799-803.	Drug comparison not of interest - 2 oral antidiabetic drugs vs 1 oral antidiabetic drug
717	Suzuki,K. & Morikawa,H. Investigation of the introduction of three times daily injections of Insulin Lispro Mixture-50 on an outpatient basis: therapeutic effects of 12 months' treatment with and without concomitant sulfonylurea. Journal Of Diabetes 2012;4(3):262-63.	abstract only/not full paper
718	Swinnen,S.G., Dain,M.P., Aronson,R., Davies,M., Gerstein,H.C., Pfeiffer,A.F., et al. A 24-week, randomized, treat-to-target trial comparing initiation of insulin glargine once-daily with insulin detemir twice-daily in patients with type 2 diabetes inadequately controlled on oral glucose-lowering drugs. Diabetes Care 2010;33(6):1176-78.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
719	Swinnen,S.G., Dain,M.P., Mauricio,D., DeVries,J.H., Hoekstra,J.B. Continuation versus discontinuation of insulin secretagogues when initiating insulin in type 2 diabetes. Diabetes, Obesity & Metabolism 2010;12(10):923-25.	abstract only/not full paper
720	Swinnen,Sanne G., Simon-Airin,C.R., Holleman,Frits, Hoekstra,Joost B. Insulin detemir versus insulin glargine for type 2 diabetes mellitus. Cochrane Database of Systematic Reviews 2011.	systematic review/meta-analysis/pooled analysis/review
721	Tabatabaei,Malazy O., Heshmat,R., Taheri,E. Comparison of a generic and a brand metformin products in type II diabetes: A double blind randomized clinical trial study. Daru 2007;15(2):113-17.	comparing different types of sulfonylurea alone
722	Tajima,N., Kadowaki,T., Okamoto,T., Sato,A., Okuyama,K. Sitagliptin added to voglibose monotherapy improves glycemic control in patients with type 2 diabetes. Journal of Diabetes Investigation 2013;4(6):595-604.	Drug comparison not of interest - 2 oral antidiabetic drugs vs 1 oral antidiabetic drug
723	Tajima,N., Kadowaki,T., Odawara,M., Nishii,M., Taniguchi,T. Addition of sitagliptin to ongoing glimepiride therapy in Japanese patients with type 2 diabetes over 52 weeks leads to improved glycemic control. Diabetology International 2011;2(1):32-44.	Drug comparison not of interest - 2 oral antidiabetic drugs vs 1 oral antidiabetic drug
724	Takai,M., Ishikawa,M., Maeda,H., Kanamori,A., Kubota,A., Amemiya,H., et al. Safety and efficacy of adding sitagliptin to insulin in patients with type 2 diabetes: The ASSIST-K study. Diabetes Research and Clinical Practice 2014;103(3):e30-33.	not a randomised controlled trial (no randomisation)
725	Takihata,M., Nakamura,A., Tajima,K., Inazumi,T., Komatsu,Y., Tamura,H., et al. Comparative study of sitagliptin with pioglitazone in Japanese type 2 diabetic patients: the	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no

Number	Reference	Reason for exclusion
	COMPASS randomized controlled trial. Diabetes, Obesity & Metabolism 2013;15(5):455-62.	subgroup analyses)
726	Tamemoto,H., Ikoma,A., Saitoh,T., Ishikawa,S.E. Comparison of once-daily glargine plus sulfonylurea with twice-daily 70/30 aspart premix in insulin-naive Japanese patients with diabetes. Diabetes Technology & Therapeutics 2007;9(3):246-53.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
727	Tamez Perez HE,Gomez de Ossio MD,Ibarra Martinez IB. Normoglucemia in newly diagnosed no insulin dependent diabetes mellitus. Non pharmacologic therapy vs. pharmacologic therapy.	not available from the British library
728	Tan,A., Cao,Y., Xia,N., Mo,Z. The addition of pioglitazone in type 2 diabetics poorly controlled on insulin therapy: A meta-analysis. European Journal of Internal Medicine 2010;21(5):398-403.	systematic review/meta-analysis/pooled analysis/review
729	Tan,M., Johns,D., Galvez,G.G., Antunez,O., Fabian,G., Flores-Lozano,F., et al. Effects of pioglitazone and glimepiride on glycemic control and insulin sensitivity in Mexican patients with type 2 diabetes mellitus: A multicenter, randomized, double-blind, parallel-group trial. Clinical Therapeutics 2004;26(5):680-93.	inadequate wash out period (<4 weeks)
730	Tan,M.H., Johns,D., Strand,J., Halse,J., Madsbad,S., Eriksson,J.W., et al. Sustained effects of pioglitazone vs. glibenclamide on insulin sensitivity, glycaemic control, and lipid profiles in patients with Type 2 diabetes. Diabetic Medicine 2004;21(8):859-66.	inadequate wash out period (<4 weeks)
731	Tang JZ,Mao JP,Yang ZF,Zhou ZG,Tang WL,Feng Q. Effects of glimepiride and metformin on free fatty acid in patients with Type 2 diabetes mellitus.	Not in English
732	Tatosian,D.A., Guo,Y., Schaeffer,A.K., Gaibu,N., Popa,S., Stoch,A. Dipeptidyl peptidase-4 inhibition in patients with type 2 diabetes treated with saxagliptin, sitagliptin, or vildagliptin. Diabetes Therapy Research, Treatment and Education of Diabetes and Related Disorders 2013;4(2):431-42.	<12 week treatment duration
733	Taylor,R., Davies,R., Fox,C., Sampson,M., Weaver,J.U. Appropriate insulin regimes for type 2 diabetes: A multicenter randomized crossover study. Diabetes Care 2000;23(11):1612-18.	drug comparison not of interest-insulin vs. insulin
734	Testa,M.A., Gill,J., Su,M., Turner,R.R. Comparative effectiveness of basal-bolus versus premix analog insulin on glycemic variability and patient-centered outcomes during insulin intensification in type 1 and type 2 diabetes: a randomized, controlled, crossover trial. Journal of Clinical Endocrinology & Metabolism 2012;97(10):3504-14.	unclear if previous blood glucose lowering therapies were washed out/discontinued
735	The University Group Diabetes Program. A study of the effects of hypoglycemic agents on	unclear if previous blood glucose lowering therapies were washed

Number	Reference	Reason for exclusion
	vascular complications in patients with adult-onset diabetes. II. Mortality results.	out/discontinued
736	The University Group Diabetes Program. A study of the effects of hypoglycemic agents on vascular complications in patients with adult-onset diabetes. VI. Supplementary report on nonfatal events in patients treated with tolbutamide.	unclear if previous blood glucose lowering therapies were washed out/discontinued
737	Thomann,R., Schutz,P., Muller,B., Thomke,S. Evaluation of an algorithm for intensive subcutaneous insulin therapy in noncritically ill hospitalised patients with hyperglycaemia in a randomised controlled trial. Swiss Medical Weekly 2013;143():w13808.	drug comparison not of interest-insulin vs. insulin
738	Thompson,A.M. & Linnebur,S.A. Glycemic targets and medication limitations for type 2 diabetes mellitus in the older adult. Consultant Pharmacist 2014;29(2):110-23.	systematic review/meta-analysis/pooled analysis/review
739	Thrasher,J. & Daniels,K. Black/African American patients with type 2 diabetes mellitus: study design and baseline patient characteristics from a randomized clinical trial of linagliptin. Expert Opinion on Pharmacotherapy 2012;13(17):2443-52.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
740	Thrasher,J., Daniels,K., Patel,S. Efficacy and Safety of Linagliptin in Black/African American Patients with Type 2 Diabetes: A 6-month, Randomized, Double-blind, Placebo-controlled Study. Endocrine Practice 2014;20(5):412-20.	duplicate or same study results
741	Tindall,H., Bodansky,H.J., Stickland,M. A strategy for selection of elderly type 2 diabetic patients for insulin therapy, and a comparison of two insulin preparations. Diabetic Medicine 1988;5(6):533-36.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
742	Tolman,K.G., Freston,J.W., Kupfer,S. Liver safety in patients with type 2 diabetes treated with pioglitazone: results from a 3-year, randomized, comparator-controlled study in the US. Drug Safety 2009;32(9):787-800.	unclear if previous blood glucose lowering therapies were washed out/discontinued
743	Tong,G., Hua,X., Zhong,Y., Zhang,K., Gu,G., Feng,W., et al. Intensive insulin therapy increases sex hormone-binding globulin in newly diagnosed type 2 diabetic patients. European Journal of Endocrinology 2014;170(2):237-45.	<12 week treatment duration
744	Torekov,S.S. Dose response of continuous subcutaneous infusion of recombinant glucagon-like peptide-1 in combination with metformin and sulphonylurea over 12weeks in patients with type 2 diabetes mellitus. Diabetes, Obesity and Metabolism 2014;16(5):451-56.	comparison with unlicensed drug or drug indication
745	Tripathy,D., Clement,S.C., Schwenke,D.C., Banerji,M., Bray,G.A., Buchanan,T.A., et al. Baseline Adiponectin Levels Do Not Influence the Response to Pioglitazone in ACT NOW. Diabetes Care 2014;37(6):1706-11.	outcomes not of interest
746	Trippe,B.S., Shepherd,M.D., Coulter,F.C., Bhargava,A., Brett,J. Efficacy and safety of	proportion or all patients taking pre-existing oral antidiabetic drugs

Number	Reference	Reason for exclusion
	biphasic insulin aspart 70/30 in type 2 diabetes patients of different race or ethnicity (INITIATEplus trial). Current Medical Research & Opinion 2012;28(7):1203-11.	(contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
747	Uchida,T., Kawai,J., Fujitani,Y., Kawamori,R., Watada,H. Efficacy and adverse effects of low-dose nateglinide in early type 2 diabetes: Comparison with acarbose in a crossover study. Diabetology International 2010;1(1):35-41.	comparison with unlicensed drug or drug indication
748	UK Prospective Diabetes Study (UKPDS) Group. Effect of intensive blood-glucose control with metformin on complications in overweight patients with type 2 diabetes (UKPDS 34). The Lancet 1998;352(9131):854-65.	unclear dosing regimen and no details relating to mean doses
749	Umpierrez,G.E. Is incretin-based therapy ready for the care of hospitalized patients with type 2 diabetes? Insulin therapy has proven itself and is considered the mainstay of treatment. Diabetes Care 2013;36(7):2112-17.	systematic review/meta-analysis/pooled analysis/review
750	Umpierrez,G.E., Gianchandani,R., Smiley,D., Jacobs,S., Wesorick,D.H., Newton,C., et al. Safety and efficacy of sitagliptin therapy for the inpatient management of general medicine and surgery patients with type 2 diabetes: a pilot, randomized, controlled study. Diabetes Care 2013;36(11):3430-35.	<12 week treatment duration
751	Umpierrez,G.E., Smiley,D., Hermayer,K., Khan,A., Olson,D.E., Newton,C., et al. Randomized study comparing a Basal-bolus with a basal plus correction insulin regimen for the hospital management of medical and surgical patients with type 2 diabetes: basal plus trial. Diabetes Care 2013;36(8):2169-74.	<12 week treatment duration
752	Umpierrez,G.E., Smiley,D., Jacobs,S., Peng,L., Temponi,A., Mulligan,P., et al. Randomized study of basal-bolus insulin therapy in the inpatient management of patients with type 2 diabetes undergoing general surgery (RABBIT 2 surgery). Diabetes Care 2011;34(2):256-61.	drug comparison not of interest-insulin vs. insulin
753	Vaccaro,O., Masulli,M., Bonora,E., Del,Prato S., Giorda,C.B., Maggioni,A.P., et al. Addition of either pioglitazone or a sulfonylurea in type 2 diabetic patients inadequately controlled with metformin alone: impact on cardiovascular events. A randomized controlled trial. Nutrition Metabolism & Cardiovascular Diseases 2012;22(11):997-1006.	outcomes not of interest
754	Vaccaro,O., Masulli,M., Bonora,E., Del,Prato S., Nicolucci,A. The TOSCA.IT trial: A study designed to evaluate the effect of pioglitazone versus sulfonylureas on cardiovascular disease in type 2 diabetes. Diabetes Care 2012;35(12):e82.	abstract only/not full paper
755	Vahatalo,M. & Ronnemaa,T. Recognition of fasting or overall hyperglycaemia when starting insulin treatment in patients with type 2 diabetes in general practice. Scandinavian Journal of	unclear if previous blood glucose lowering therapies were washed out/discontinued

Number	Reference	Reason for exclusion
	Primary Health Care 2007;25(3):147-53.	
756	Vahatalo,M.A. Starting bedtime glargine versus NPH insulin in poorly controlled type 2 diabetic patients with various hyperglycemia types (fasting type or postprandial type). Acta Diabetologica 2014;51(2):233-38.	drug comparison not of interest-insulin vs. insulin
757	van de Laar,F.A., Lucassen,P.L., Akkermans,R.P., Van de Lisdonk,E.H., Rutten,G.E. alpha-Glucosidase inhibitors for patients with type 2 diabetes: Results from a Cochrane systematic review and meta-analysis. Diabetes Care 2005;28(1):154-63.	systematic review/meta-analysis/pooled analysis/review
758	van de Laar,Floris A., Lucassen,Peter L.B.J., Kemp,Jaco, van de Lisdonk,Eloy H., van Weel,Chris. Is acarbose equivalent to tolbutamide as first treatment for newly diagnosed type 2 diabetes in general practice?: A randomised controlled trial. Diabetes Res Clin Pract. 2004 Jan;63(1):57-65.	newly diagnosed participants but not explicit if they are drug naive
759	Van de Laar,Floris A., Lucassen-Peter,L.B.J., Akkermans,Reinier P., Van de Lisdonk,Eloy H., Rutten-Guy,E.H.M. Alpha-glucosidase inhibitors for type 2 diabetes mellitus. Cochrane Database of Systematic Reviews 2005.	systematic review/meta-analysis/pooled analysis/review
760	van Poppel,P.C., Gresnigt,M.S., Smits,P. The dipeptidyl peptidase-4 inhibitor vildagliptin does not affect ex vivo cytokine response and lymphocyte function in patients with type 2 diabetes mellitus. Diabetes Research and Clinical Practice 2014;103(3):395-401.	<12 week treatment duration
761	Van Raalte,D.H., Van Genugten,R.E., Eliasson,B., Moller-Goede,D.L., Mari,A., Tura,A., et al. The effect of alogliptin and pioglitazone combination therapy on various aspects of beta-cell function in patients with recent-onset type 2 diabetes. European Journal of Endocrinology 2014;170(4):565-74.	comparison with unlicensed drug or drug indication; across treatment strategy
762	van,Dieren S., Kengne,A.P., Chalmers,J., Beulens,J.W., Davis,T.M., Fulcher,G., et al. Intensification of medication and glycaemic control among patients with type 2 diabetes - the ADVANCE trial. Diabetes, Obesity and Metabolism 2014;16(5):426-32.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
763	Vardarli,I., Arndt,E., Deacon,C.F. Effects of sitagliptin and metformin treatment on incretin hormone and insulin secretory responses to oral and isoglycemic intravenous glucose. Diabetes.63 (pp 663-674), 2014.Date of Publication: February 2014. 2014;(2):663-74.	<12 week treatment duration
764	Velojic-Golubovic,M., Mikic,D., Pesic,M., Dimic,D., Radenkovic,S. Biphasic insulin aspart 30: better glycemic control than with premixed human insulin 30 in obese patients with Type 2 diabetes. Journal of Endocrinological Investigation 2009;32(1):23-27.	not a randomised controlled trial (no randomisation)
765	Vignati,L. & Anderson,Jr. Efficacy of insulin lispro in combination with NPH human insulin	drug comparison not of interest-insulin vs. insulin

Number	Reference	Reason for exclusion
	twice per day in patients with insulin-dependent or non-insulin-dependent diabetes mellitus. Clinical Therapeutics 1997;19(6):1408-21.	
766	Vilsboll,T., Brock,B., Perrild,H., Levin,K., Lervang,H.H., Klendorf,K., et al. Liraglutide, a once-daily human GLP-1 analogue, improves pancreatic B-cell function and arginine-stimulated insulin secretion during hyperglycaemia in patients with Type 2 diabetes mellitus. Diabetic medicine : a journal of the British Diabetic Association 2008;25(2):152-56.	comparison with unlicensed drug or drug indication
767	Vilsboll,T., Christensen,M., Junker,A.E., Knop,F.K. Effects of glucagon-like peptide-1 receptor agonists on weight loss: Systematic review and meta-analyses of randomised controlled trials. BMJ (Online) 2012;344(7841):d7771.	systematic review/meta-analysis/pooled analysis/review
768	Vilsboll,T., Rosenstock,J., Yki-Jarvinen,H., Cefalu,W.T., Chen,Y., Luo,E., et al. Efficacy and safety of sitagliptin when added to insulin therapy in patients with type 2 diabetes. Diabetes, Obesity & Metabolism 2010;12(2):167-77.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
769	Vinik,A.I. Adding insulin glargine versus rosiglitazone: health-related quality-of-life impact in type 2 diabetes. Diabetes Care 2007;30(4):795-800.	comparison with unlicensed drug or drug indication
770	von,Eynatten M. & Gong,Y. Efficacy and safety of linagliptin in type 2 diabetes subjects at high risk for renal and cardiovascular disease: a pooled analysis of six phase III clinical trials. Cardiovascular Diabetology 2013;12():60.	systematic review/meta-analysis/pooled analysis/review
771	Vora,J., Hollander,P., Tamer,S.C. Insulin degludec does not increase antibody formation compared to insulin glargine: An evaluation of phase 3a clinical trials. Diabetes Technology and Therapeutics 2013;15(SUPPL.1):S132.	abstract only/not full paper
772	Walford,G.A., Ma,Y., Christophi,C.A., Goldberg,R.B., Jarolim,P., Horton,E., et al. Circulating natriuretic peptide concentrations reflect changes in insulin sensitivity over time in the Diabetes Prevention Program. Diabetologia 2014;57(5):935-39.	outcomes not of interest
773	Wallace,J.P. Comparing Dosing of Basal Insulin Analogues Detemir and Glargine: Is It Really Unit-Per-Unit and Dose-Per-Dose? Annals of Pharmacotherapy 2014;48(3):361-68.	systematic review/meta-analysis/pooled analysis/review
774	Wang,J.S., Huang,C.N., Hung,Y.J., Kwok,C.F., Sun,J.H., Pei,D., et al. Acarbose plus metformin fixed-dose combination outperforms acarbose monotherapy for type 2 diabetes. Diabetes Research and Clinical Practice 2013;102(1):16-24.	Drug comparison not of interest - 2 oral antidiabetic drugs vs 1 oral antidiabetic drug
775	Wang,L., Sun,X., Du,L., Yuan,Q., Li,H., Tian,H. Effects and patient compliance of sustained-release versus immediate-release glipizides in patients with type 2 diabetes mellitus: A	systematic review/meta-analysis/pooled analysis/review

Number	Reference	Reason for exclusion
	systematic review and meta-analysis. Journal of Evidence-Based Medicine 2011;4(4):232-41.	
776	Wang,X.L., Lu,J.M., Pan,C.Y., Mu,Y.M., Dou,J.T., Ba,J.M. Evaluation of the superiority of insulin glargine as basal insulin replacement by continuous glucose monitoring system. Diabetes Research & Clinical Practice 2007;76(1):30-36.	comparison with unlicensed drug or drug indication
777	Wang,Y., Li,L., Yang,M., Liu,H., Boden,G. Glucagon-like peptide-1 receptor agonists versus insulin in inadequately controlled patients with type 2 diabetes mellitus: a meta-analysis of clinical trials. [Review]. Diabetes, Obesity & Metabolism 2011;13(11):972-81.	systematic review/meta-analysis/pooled analysis/review
778	Wang,Y., Ye,S., Hu,Y. The effect of hydrochloride pioglitazone on urinary 8-hydroxy -deoxyguanosine excretion in type 2 diabetics. Journal of Diabetes & its Complications 2013;27(1):75-77.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
779	Webb,D.R., Davies,M.J., Gray,L.J., Abrams,K.R., Srinivasan,B., Das,S., et al. Searching for the right outcome? A systematic review and meta-analysis of controlled trials using carotid intima-media thickness or pulse wave velocity to infer antiatherogenic properties of thiazolidinediones. Diabetes, Obesity and Metabolism 2010;12(2):124-32.	systematic review/meta-analysis/pooled analysis/review
780	White,J.L. & Buchanan,P. A randomized controlled trial of the efficacy and safety of twice-daily saxagliptin plus metformin combination therapy in patients with type 2 diabetes and inadequate glycemic control on metformin monotherapy. BMC Endocrine Disorders 2014;14(1):17.	Drug comparison not of interest - 2 oral antidiabetic drugs vs 1 oral antidiabetic drug
781	Wilcox,R. & Kupfer,S. Effects of pioglitazone on major adverse cardiovascular events in high-risk patients with type 2 diabetes: Results from PROspective pioglitAzone Clinical Trial In macro Vascular Events (PROactive 10). American Heart Journal 2008;155(4):712-17.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
782	Wilding,J.P. & Leonsson-Zachrisson,M. Dose-ranging study with the glucokinase activator AZD1656 in patients with type 2 diabetes mellitus on metformin. Diabetes, Obesity and Metabolism 2013;15(8):750-59.	Drug comparison not of interest - 2 oral antidiabetic drugs vs 1 oral antidiabetic drug
783	Williams-Herman,D., Engel,S.S., Round,E., Johnson,J., Golm,G.T., Guo,H., et al. Safety and tolerability of sitagliptin in clinical studies: a pooled analysis of data from 10,246 patients with type 2 diabetes. BMC Endocrine Disorders 2010;10:7.	systematic review/meta-analysis/pooled analysis/review
784	Williams-Herman,D., Round,E., Swern,A.S., Musser,B., Davies,M.J., Stein,P.P., Kaufman,K.D. Safety and tolerability of sitagliptin in patients with type 2 diabetes: a pooled analysis. BMC Endocrine Disorders 2008;8:14.	systematic review/meta-analysis/pooled analysis/review
785	Williams-Herman,D., Xu,L., Teng,R., Golm,G.T.,	no Hba1c measures

Number	Reference	Reason for exclusion
	Johnson,J., Davies,M.J., Kaufman,K.D. Effect of initial combination therapy with sitagliptin and metformin on beta-cell function in patients with type 2 diabetes. Diabetes, Obesity & Metabolism 2012;14(1):67-76.	
786	Wolever,Thomas MS, Assiff,Lila, Basu,Tapan, Chiasson,Jean Louis, Boctor,M., Gerstein,Hertzel C., et al. Miglitol, an alpha-glucosidase inhibitor, prevents the metformin-induced fall in serum folate and vitamin B12 in subjects with type 2 diabetes. Nutrition Research 2000;20(10):1447–56.	duplicate or same study results
787	Wolffenbuttel,B.H. A 1-year multicenter randomized double-blind comparison of repaglinide and glyburide for the treatment of type 2 diabetes. Dutch and German Repaglinide Study Group. Diabetes Care 1999;22(3):463-67.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
788	Wolffenbuttel,B.H., Klaff,L.J., Bhushan,R., Fahrbach,J.L., Jiang,H. Initiating insulin therapy in elderly patients with Type 2 diabetes: efficacy and safety of lispro mix 25 vs. basal insulin combined with oral glucose-lowering agents. Diabetic Medicine 2009;26(11):1147-55.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
789	Wolffenbuttel,B.H.R., Weber,R.F.A., van Koetsveld,P.M., Weeks,L. A Randomized Crossover Study of Sulphonylurea and Insulin Treatment in Patients with Type 2 Diabetes Poorly Controlled on Dietary Therapy. Diabetic Medicine 1989;6(6):520-25.	Drug comparison not of interest-insulin vs. 1 oral antidiabetic drug
790	Wolffenbuttel,BHR, Sels,JPJE, Rondas-Colbers,GJWM, Menheere,PPCA. Comparison of different insulin regimens in elderly patients with NIDDM. Diabetes Care 1996;19(12):1326-32.	unclear if previous blood glucose lowering therapies were washed out/discontinued
791	Wong,M.C.S., Wang,H.H.X., Kwan,M.W.M., Zhang,D.D.X., Liu,K.Q.L., Chan,S.W.M., et al. Comparative effectiveness of dipeptidyl peptidase-4 (DPP-4) inhibitors and human glucagon-like peptide-1 (GLP-1) analogue as add-on therapies to sulphonylurea among diabetes patients in the asia-pacific region: A systematic review. PLoS ONE 2014;9(3).	systematic review/meta-analysis/pooled analysis/review
792	Wu,C.-Z., Pei,D., Hsieh,A.-T., Wang,K., Lin,J.-D., Lee,L.-H., et al. Comparison of insulin sensitivity, glucose sensitivity, and first phase insulin secretion in patients treated with repaglinide or gliclazide. Archives of Pharmacal Research 2010;33(3):411-16.	unclear if previous blood glucose lowering therapies were washed out/discontinued
793	Wu,T., Bound,M.J., Zhao,B.R., Standfield,S.D., Bellon,M., Jones,K.L. Effects of a D-xylose preload with or without sitagliptin on gastric emptying, glucagon-like peptide-1, and postprandial glycemia in type 2 diabetes. Diabetes Care 2013;36(7):1913-18.	<12 week treatment duration
794	Wysham,C., Bergenstal,R., Malloy,J., Yan,P., Walsh,B., Malone,J. DURATION-2: efficacy and safety of switching from maximum daily	parent paper included and data extracted

Number	Reference	Reason for exclusion
	sitagliptin or pioglitazone to once-weekly exenatide. Diabetic Medicine 2011;28(6):705-14.	
795	Xing,Y. & Ye,S. Podocyte as a potential target of inflammation: role of pioglitazone hydrochloride in patients with type 2 diabetes. Endocrine Practice 2012;18(4):493-98.	unclear if previous blood glucose lowering therapies were washed out/discontinued
796	Xu,L., Man,C.D., Charbonnel,B., Meninger,G., Davies,M.J., Williams-Herman,D., Cobelli,C. Effect of sitagliptin, a dipeptidyl peptidase-4 inhibitor, on beta-cell function in patients with type 2 diabetes: a model-based approach. Diabetes, Obesity & Metabolism 2008;10(12):1212-20.	systematic review/meta-analysis/pooled analysis/review
797	Yajima,K., Shimada,A., Hirose,H., Kasuga,A. 'Low dose' metformin improves hyperglycemia better than acarbose in type 2 diabetics. The Review of Diabetic Studies 2004;1(2):89-94.	no inclusion/exclusion criteria or patients drug naive and not representative
798	Yamada,S., Watanabe,M., Kitaoka,A., Shiono,K., Atsuda,K., Tsukamoto,Y., Kawana,Y. Switching from premixed human insulin to premixed insulin lispro: a prospective study comparing the effects on glucose control and quality of life. Internal Medicine 2007;46(18):1513-17.	drug comparison not of interest-insulin vs. insulin
799	Yang,G., Li,C., Gong,Y., Li,J. A prospective, randomized, open-label study comparing the efficacy and safety of preprandial and prandial insulin in combination with acarbose in elderly, insulin-requiring patients with type 2 diabetes mellitus. Diabetes Technology and Therapeutics 2013;15(6):513-19.	unclear if previous blood glucose lowering therapies were washed out/discontinued
800	Yang,W., Ji,Q., Zhu,D., Yang,J., Chen,L., Liu,Z., Yu,D. Biphasic insulin aspart 30 three times daily is more effective than a twice-daily regimen, without increasing hypoglycemia, in Chinese subjects with type 2 diabetes inadequately controlled on oral antidiabetes drugs. Diabetes Care 2008;31(5):852-56.	dose comparison of same drug
801	Yasunari,E., Takeno,K., Funayama,H., Tomioka,S., Tamaki,M., Fujitani,Y., et al. Efficacy of pioglitazone on glycemic control and carotid intima-media thickness in type 2 diabetes patients with inadequate insulin therapy. Journal of Diabetes Investigation 2011;2(1):56-62.	drug comparison not of interest-unclear pre-existing therapy which is continued throughout the study
802	Yilmaz,H., Gursoy,A., Sahin,M. Comparison of insulin monotherapy and combination therapy with insulin and metformin or insulin and rosiglitazone or insulin and acarbose in type 2 diabetes. Acta Diabetologica 2007;44(4):187-92.	not a randomised controlled trial (no randomisation)
803	Yki-Jarvinen,H. Is there evidence to support use of premixed or prandial insulin regimens in insulin-naive or previously insulin-treated type 2 diabetic patients?. [Review]. Diabetes Care 2013;36():Suppl-11.	systematic review/meta-analysis/pooled analysis/review
804	Yki-Jarvinen,H., Rosenstock,J., Duran-Garcia,S., Pinnetti,S., Bhattacharya,S., Thiemann,S. Effects of Adding Linagliptin to	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral

Number	Reference	Reason for exclusion
	Basal Insulin Regimen for Inadequately Controlled Type 2 Diabetes: A >=52-week randomized, double-blind study. Diabetes Care 2013;36(12):3875-81.	antidiabetic drug/insulin (with no subgroup analyses)
805	Yokoyama,H., Sone,H., Yamada,D., Honjo,J. Contribution of glimepiride to basal-prandial insulin therapy in patients with type 2 diabetes. Diabetes Research & Clinical Practice 2011;91(2):148-53.	unclear treatment groups or intervention
806	Yudkin,J.S., Panahloo,A., Stehouwer,C., Emeis,J.J., Bulmer,K., Mohamed-Ali,V. The influence of improved glycaemic control with insulin and sulphonylureas on acute phase and endothelial markers in Type II diabetic subjects. Diabetologia 2000;43(9):1099-1006.	drug comparison not of interest-insulin vs. 1 oral antidiabetic drug
807	Zdarska,D.J., Kvapil,M., Rusavy,Z., Krcma,M., Broz,J. Comparison of glucose variability assessed by a continuous glucose-monitoring system in patients with type 2 diabetes mellitus switched from NPH insulin to insulin glargine: the COBIN2 study. Wiener Klinische Wochenschrift 2014;126(7-8):228-37.	not a randomised controlled trial (no randomisation)
808	Zhang,H. & Zhang,X. Exenatide reduces urinary transforming growth factor-beta1 and type IV collagen excretion in patients with type 2 diabetes and microalbuminuria. Kidney & Blood Pressure Research 2012;35(6):483-88.	proportion or all patients taking pre-existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
809	Zhang,Y., Hong,J., Chi,J., Gu,W. Head-to-head comparison of dipeptidyl peptidase-IV inhibitors and sulfonylureas - a meta-analysis from randomized clinical trials. Diabetes/Metabolism Research and Reviews 2014;30(3):241-56.	systematic review/meta-analysis/pooled analysis/review
810	Zhao,Y., Yang,L., Xiang,Y., Liu,L., Huang,G., Long,Z., et al. Dipeptidyl Peptidase 4 Inhibitor Sitagliptin Maintains beta-Cell Function in Patients with Recent-Onset Latent Autoimmune Diabetes in Adults: One Year Prospective Study. Journal of Clinical Endocrinology and Metabolism 2014;99(5):E876-80.	not specifically type 2 diabetes
811	Zheng GF,Wang JP,Zhang H,Hu ZX,Liu J,Xiao JZ,et al. Clinical observation on glucobay treatment for NIDDM.	Not in English
812	Zib,I., Jacob,A.N., Lingvay,I., Salinas,K., McGavock,J.M., Raskin,P. Effect of pioglitazone therapy on myocardial and hepatic steatosis in insulin-treated patients with type 2 diabetes. Journal of Investigative Medicine 2007;55(5):230-36.	Drug comparison not of interest-insulin + 1 oral antidiabetic drug vs. insulin
813	Zinman,B., DeVries,J.H., Bode,B., Russell-Jones,D., Leiter,L.A., Moses,A. Efficacy and safety of insulin degludec three times a week versus insulin glargine once a day in insulin-naive patients with type 2 diabetes: Results of two phase 3, 26 week, randomised, open-label, treat-to-target, non-inferiority trials. The Lancet Diabetes and Endocrinology 2013;1(2):123-31.	not available from the British library
814	Zinman,B., Philis-Tsimikas,A., Cariou,B.,	proportion or all patients taking pre-

Number	Reference	Reason for exclusion
	Handelsman,Y., Rodbard,H.W., Johansen,T., Endahl,L. Insulin degludec versus insulin glargine in insulin-naive patients with type 2 diabetes: a 1-year, randomized, treat-to-target trial (BEGIN Once Long). Diabetes Care 2012;35(12):2464-71.	existing oral antidiabetic drugs (contamination) or other oral antidiabetic drug/insulin (with no subgroup analyses)
815	Zinman,B., Schmidt,W.E., Moses,A., Lund,N. Achieving a clinically relevant composite outcome of an HbA1c of <7% without weight gain or hypoglycaemia in type 2 diabetes: a meta-analysis of the liraglutide clinical trial programme. Diabetes, Obesity & Metabolism 2012;14(1):77-82.	systematic review/meta-analysis/pooled analysis/review
816	Zinman B, Hoogwerf BJ, Durán García S, Milton DR, Giaconia JM, Kim DD, Trautmann ME, Brodows RG. The Effect of Adding Exenatide to a Thiazolidinedione in Suboptimally Controlled Type 2 DiabetesA Randomized Trial. Annals of Internal Medicine 2007;146(7):477-85.	comparison with unlicensed drug or drug indication

L.2 Review Question 2: What are the serious adverse effects of long-term use of pharmacological interventions to control blood glucose in people with type 2 diabetes?

Table 2: Excluded studies of full text papers

Number	Reference	Reason for exclusion
1	Adler,A.I., Levy,J.C., Matthews,D.R., Stratton,I.M., Hines,G.. Insulin sensitivity at diagnosis of Type 2 diabetes is not associated with subsequent cardiovascular disease (UKPDS 67). Diabetic Medicine 2005;22(3):306-11.	exposure to pharmacological therapy not reported
2	Alavudeen,S.S., Dhanapal,C.K., Khan,N.A., Al Akhali,K.M.. Prevalence and control of cardiovascular risk factors among type 2 diabetes mellitus patients in southern region of Saudi Arabia. Journal of Young Pharmacists 2013;5(4):144-147.	not a prospective cohort design
3	Althouse,A.D., Abbott,J.D., Forker,A.D., Bertolet,M., Barinas-Mitchell,E., Thurston,R.C., et al. Risk factors for incident peripheral arterial disease in type 2 diabetes: results from the Bypass Angioplasty Revascularization Investigation in type 2 Diabetes (BARI 2D) Trial. Diabetes Care 2014;37(5):1346-52.	rosiglitazone
4	An,S.-Y., Kim,H.J., Chun,K.H., Kim,T.H., Jeon,J.Y., Kim,D.J., et al. Clinical and economic outcomes in medication-adherent and -nonadherent patients with type 2 diabetes mellitus in the republic of Korea. Clinical Therapeutics 2014;36(2):245-254.	not a prospective cohort design
5	Andersson,C., Olesen,J.B., Hansen,P.R., Weeke,P., Norgaard,M.L., Jorgensen,C.H., et al. Metformin treatment is associated with a low risk of mortality in diabetic patients with heart failure: a retrospective nationwide cohort study. Diabetologia 2010;53(12):2546-53.	not a prospective cohort design
6	Anon. Pioglitazone ineffective in secondary prevention of macrovascular complications (PROactive). Journal of the National Medical Association 2006;98(1):102-03.	summary of study- insufficient data reported
7	Anon. U.K. prospective diabetes study 16. Overview of 6 years' therapy of type II diabetes: a progressive disease. U.K. Prospective Diabetes Study Group. Diabetes 1995;44(11):1249-58.	longer follow-up available and included
8	Anon. UKPDS 28: a randomized trial of efficacy of early addition of metformin in sulfonylurea-treated type 2 diabetes. U.K. Prospective Diabetes Study Group. Diabetes Care 1998;21(1):87-92.	relevant outcomes not reported
9	Assael,B.M., Kronfeld,K., Honer,M., Holl,R.W., Staden,U., Classen,M., et al. Open randomised prospective comparative multi-centre intervention study of patients with Cystic fibrosis and early diagnosed diabetes mellitus. BMC Pediatrics 2014;14(1).	abstract/study protocol
10	Azoulay,L., Schneider-Lindner,V., Dell'Aniello,S., Schiffrin,A.. Combination therapy with	not a prospective cohort design

Number	Reference	Reason for exclusion
	sulfonylureas and metformin and the prevention of death in type 2 diabetes: a nested case-control study. Pharmacoepidemiology & Drug Safety 2010;19(4):335-42.	
11	Banerjee,D., Leong,W.B., Arora,T., Nolen,M., Punamiya,V., Grunstein,R.. The potential association between obstructive sleep apnea and diabetic retinopathy in severe obesity - The role of hypoxemia. PLoS ONE.8 (11) , 2013.Article Number: e79521.Date	Exposure to pharmacological therapy not reported
12	Bayraktar,S., Hernadez-Aya,L.F., Lei,X., Meric-Bernstam,F., Litton,J.K., Hsu,L., Hortobagyi,G.N.. Effect of metformin on survival outcomes in diabetic patients with triple receptor-negative breast cancer. Cancer 2012;118(5):1202-11.	insufficient sample size
13	Best,J.D., Drury,P.L., Davis,T.M.E., Taskinen,M.-R., Kesaniemi,Y.A., Scott,R., et al. Glycemic control over 5 years in 4,900 people with type 2 diabetes: Real-world diabetes therapy in a clinical trial cohort. Diabetes Care 2012;35(5):1165-1170.	relevant outcomes not reported
14	Blaslov,K., Zibar,K., Bulum,T.. Relationship of vascular complications and exenatide therapy failure in type 2 diabetic patients. Acta Clinica Croatica 2013;52(3):328-36.	not a prospective cohort design
15	Blonde,L., Klein,E.J., Han,J., Zhang,B., Mac,S.M., Poon,T.H., et al. Interim analysis of the effects of exenatide treatment on A1C, weight and cardiovascular risk factors over 82 weeks in 314 overweight patients with type 2 diabetes. Diabetes Obes Metab. 2006;8(4):436-47.	relevant outcomes not reported
16	Bolen,S., Feldman,L., Vassy,J., Wilson,L., Yeh,H.C., Marinopoulos,S., et al. Systematic review: comparative effectiveness and safety of oral medications for type 2 diabetes mellitus. Annals of Internal Medicine 2007;147(6):386-99.	systematic review- included studies appraised individually
17	Bowker,S.L., Majumdar,S.R., Veugelers,P.. Increased cancer-related mortality for patients with type 2 diabetes who use sulfonylureas or insulin. Diabetes Care 2006;29(2):254-58.	not a prospective cohort design
18	Brandle,M., Goodall,G., Erny-Albrecht,K.M., Erdmann,E.. Cost-effectiveness of pioglitazone in patients with type 2 diabetes and a history of macrovascular disease in a Swiss setting. Swiss Medical Weekly 2009;139(11-12):173-84.	not a prospective cohort design
19	Bray,G.A., Smith,S.R., Banerji,M.A., Tripathy,D., Clement,S.C., Buchanan,T.A., et al. Effect of pioglitazone on body composition and bone density in subjects with prediabetes in the ACT NOW trial. Diabetes, Obesity & Metabolism 2013;15(10):931-37.	not a type two diabetes population
20	Brown,J.B., Nichols,G.A., Glauber,H.S.. Ten-year follow-up of antidiabetic drug use, nonadherence, and mortality in a defined population with type 2 diabetes mellitus. Clinical Therapeutics 1999;21(6):1045-57.	not a prospective cohort design

Number	Reference	Reason for exclusion
21	Buse,J.B., Klonoff,D.C., Nielsen,L.L., Guan,X., Bowlus,C.L., Holcombe,J.H., Maggs,D.G.. Metabolic effects of two years of exenatide treatment on diabetes, obesity, and hepatic biomarkers in patients with type 2 diabetes: an interim analysis of data from the open-label, uncontrolled extension of three double-blind, placebo-controlled trials. Clin Ther 2007;29(1):139-53.	relevant outcomes not reported
22	Cardoso,C.R.L.. Predictors of development and progression of microvascular complications in a cohort of Brazilian type 2 diabetic patients. Journal of Diabetes and its Complications 2008;22(3):pp 164-170.	exposure to pharmacological therapy not reported
23	Carney,G.A., Bassett,K., Wright,J.M.. Is thiazolidinediones use a factor in delaying the need for insulin therapy in type 2 patients with diabetes? A population-based cohort study. BMJ Open 2012;2(6).	not a prospective cohort design
24	Caro,J.J., Salas,M., Ward,A.J., Raggio,G., O'Brien,J.A.. Combination therapy for type 2 diabetes: What are the potential health and cost implications in Canada? Canadian Journal of Diabetes 2003;27(1):33-41.	not a prospective cohort design
25	Chang,C.-H., Lin,J.-W., Wu,L.-C., Lai,M.-S.. Oral insulin secretagogues, insulin, and cancer risk in type 2 diabetes mellitus. Journal of Clinical Endocrinology and Metabolism 2012;97(7):E1170-E1175.	not a prospective cohort design
26	Chaturvedi,N., Jarrett,J., Morrish,N., Keen,H.. Differences in mortality and morbidity in African Caribbean and European people with non-insulin dependent diabetes mellitus: Results of 20 year follow up of a London cohort of a multinational study. BMJ 1996;313:848.	exposure to pharmacological therapy not reported
27	Cho,Y.N., Lee,K.O., Jeong,J., Park,H.J., Kim,S.-M., Shin,H.Y., et al. The role of insulin resistance in diabetic neuropathy in Koreans with type 2 diabetes mellitus: A 6-year follow-up study. Yonsei Medical Journal 2014;55(3):700-708.	comparison not relevant
28	Choi,S.B., Lee,J.H., Lee,J.H., Kim,S., Han,S.D., Kim,I.H.. Improvement of beta-cell function after achievement of optimal glycaemic control via long-term continuous subcutaneous insulin infusion therapy in non-newly diagnosed type 2 diabetic patients with suboptimal glycaemic control. Diabetes Metab Res Rev 2013;29(6):473-82.	not a prospective cohort design
29	Clarke,P., Gray,A., Adler,A., Stevens,R., Raikou,M., Cull,C., et al. Cost-effectiveness analysis of intensive blood-glucose control with metformin in overweight patients with type II diabetes (UKPDS No. 51). Diabetologia 2001;44(3):298-304.	not a prospective cohort design
30	Cluxton,Jr, Li,Z., Heaton,P.C., Weiss,S.R., Zuckerman,I.H., Moomaw,C.J., Hsu,V.D.. Impact of regulatory labeling for troglitazone and rosiglitazone on hepatic enzyme monitoring	rosiglitazone

Number	Reference	Reason for exclusion
	compliance: Findings from the state of Ohio medicaid program. Pharmacoepidemiol Drug Saf 2005;14(1):1-9.	
31	Colhoun,H.M., Livingstone,S.J., Looker,H.C., Morris,A.D., Wild,S.H., Lindsay,R.S., et al. Hospitalised hip fracture risk with rosiglitazone and pioglitazone use compared with other glucose-Lowering drugs. Diabetologia 2012;55(11):2929-2937.	rosiglitazone
32	Colmers,I.N. & Bowker,S.L.. Thiazolidinedione use and cancer incidence in type 2 diabetes: A systematic review and meta-analysis. Diabetes and Metabolism 2012;38(6):475-84.	systematic review- included studies appraised individually
33	Corrao,G., Romio,S.A., Zambon,A., Merlino,L., Bosi,E.. Multiple outcomes associated with the use of metformin and sulphonylureas in type 2 diabetes: a population-based cohort study in Italy. European Journal of Clinical Pharmacology 2011;67(3):289-9.	not a prospective cohort design
34	Duckworth,W., Abraira,C., Moritz,T., Reda,D., Emanuele,N., Reaven,P.D., et al. Glucose control and vascular complications in veterans with type 2 diabetes. New England Journal of Medicine 2009;360(2):129-39.	rosiglitazone
35	Ekstrom,N., Schioler,L., Svensson,A.M., Eeg-Olofsson,K., Miao,Jonasson J., Zethelius,B., et al. Effectiveness and safety of metformin in 51 675 patients with type 2 diabetes and different levels of renal function: a cohort study from the Swedish National Register. BMJ Open 2012;2:e001076.	not a prospective cohort design
36	Eliasson,B., Eeg-Olofsson,K., Cederholm,J., Nilsson,P.M., Gudbjornsdottir,S.. Antihyperglycaemic treatment of type 2 diabetes: results from a national diabetes register. Diabetes & Metabolism 2007;33(4):269-76.	relevant outcomes not reported
37	Evans,J.M., Doney,A.S., AlZadjali,M.A., Ogston,S.A., Petrie,J.R., Morris,A.D., et al. Effect of Metformin on mortality in patients with heart failure and type 2 diabetes mellitus. American Journal of Cardiology 2010;106(7):1006-10.	not a prospective cohort design
38	Evans,J.M., Ogston,S.A., Emslie-Smith,A.. Risk of mortality and adverse cardiovascular outcomes in type 2 diabetes: a comparison of patients treated with sulfonylureas and metformin. Diabetologia 2006;49(5):930-36.	not a prospective cohort design
39	Evans,J.M., Ogston,S.A., Reimann,F., Gribble,F.M., Morris,A.D.. No differences in mortality between users of pancreatic-specific and non-pancreatic-specific sulphonylureas: a cohort analysis. Diabetes, Obesity & Metabolism 2008;10(4):350-52.	not a prospective cohort design
40	Faillie,J.-L., Azoulay,L., Patenaude,V., Hillaire-Buys,D.. Incretin based drugs and risk of acute pancreatitis in patients with type 2 diabetes: Cohort study. BMJ (Online) 2014;348: g2780.	not a prospective cohort design

Number	Reference	Reason for exclusion
41	Fisman,E.Z., Tenenbaum,A., Benderly,M., Goldbourt,U., Behar,S.. Antihyperglycemic treatment in diabetics with coronary disease: increased metformin-associated mortality over a 5-year follow-up. Cardiology 1999;91(3):195-202.	not a prospective cohort design
42	Fu,A.Z., Qiu,Y., Radican,L., Yin,D.D.. Impact of concurrent macrovascular co-morbidities on healthcare utilization in patients with type 2 diabetes in Europe: a matched study. Diabetes, Obesity & Metabolism 2010;12(7):631-37.	not a prospective cohort design
43	Fu,A.Z., Qiu,Y., Radican,L., Yin,D.D.. Pre-existing cardiovascular diseases and glycemic control in patients with type 2 diabetes mellitus in Europe: A matched cohort study. Cardiovascular Diabetology 2010;9:15.	relevant outcomes not reported
44	Gapstur,S.M., Patel,A.V., Diver,W.R., Hildebrand,J.S., Gaudet,M.M., Jacobs,E.J.. Type II diabetes mellitus and the incidence of epithelial ovarian cancer in the cancer prevention study-II nutrition cohort. Cancer Epidemiol Biomarkers Prev 2012;21(11):2000-5.	insufficient sample size
45	Garcia,De La Torre, Duran,A., Del,Valle L., Fuentes,M., Barca,I., Martin,P., et al. Early management of type 2 diabetes based on an SMBG strategy: The way to diabetes regression-the St. Carlos study: A 3-year, prospective, randomized, clinic-based, interventional study with parallel groups. Acta Diabetol 2013;50(4):607-14.	abstract/study protocol
46	Gerstein,H.C., Bosch,J., Dagenais,G.R., D¡az,R., Jung,H., Maggioni,A.P., et al. Basal insulin and cardiovascular and other outcomes in dysglycemia. The New England journal of medicine 2012;367(4):319-28.	mixed population with no subgroup analysis of the type 2 diabetes cohort
47	Goldberg,R.B., Temprosa,M., Haffner,S., Orchard,T.J., Ratner,R.E., Fowler,S.E., et al. Effect of progression from impaired glucose tolerance to diabetes on cardiovascular risk factors and its amelioration by lifestyle and metformin intervention: the Diabetes Prevention Program randomized trial by the Diabetes Prevention Program Research Group. Diabetes Care 2009;32(4):726-32.	not a type two diabetes population
48	Gosmanova,E.O., Canada,R.B., Mangold,T.A., Rawls,W.N.. Effect of metformin-containing antidiabetic regimens on all-cause mortality in veterans with type 2 diabetes mellitus. American Journal of the Medical Sciences 2008;336(3):241-47.	not a prospective cohort design
49	Gu,Y., Wang,C., Zheng,Y., Hou,X., Mo,Y., Yu,W., et al. Cancer incidence and mortality in patients with type 2 diabetes treated with human insulin: a cohort study in shanghai. PLoS ONE [Electronic Resource] 2013;8(1):e53411.	not a prospective cohort design
50	Gulliford,M.. Mortality in type 2 diabetic subjects prescribed metformin and sulphonylurea drugs in combination: cohort study. Diabetes/Metabolism Research Reviews 2004;20(3):239-45.	not a prospective cohort design

Number	Reference	Reason for exclusion
51	Hancu,N., Czupryniak,L., Genestin,E.. A pan-European and Canadian prospective survey to evaluate patient satisfaction with the SoloSTAR insulin injection device in Type 1 and Type 2 diabetes. Diabetes Technology and Therapeutics 2011;15 (SUPPL.1):S51.	abstract/study protocol
52	Hense,H.-W., Kajuter,H., Wellmann,J.. Cancer incidence in type 2 diabetes patients - First results from a feasibility study of the D2C cohort. Diabetology and Metabolic Syndrome 2011;3(1):15.	not a prospective cohort design
53	Holman,R.R., Cull,C.A., Fox,C.. United Kingdom prospective diabetes study (UKPDS) 13: Relative efficacy of randomly allocated diet, sulphonylurea, insulin, or metformin in patients with newly diagnosed non-insulin dependent diabetes followed for three years. BMJ 1995;310(6972):83-8.	relevant outcomes not reported
54	Hong,J.-S.. Relationship between continuity of ambulatory care and medication adherence in adult patients with type 2 diabetes in Korea: A longitudinal analysis. Medical Care 2014;52(5):446-453.	not a prospective cohort design
55	Hong,J.S.. Relationship between oral antihyperglycemic medication adherence and hospitalization, mortality, and healthcare costs in adult ambulatory care patients with type 2 diabetes in South Korea. Medical Care 2011;49(4):378-384.	not a prospective cohort design
56	Horsdal,H.T., Johnsen,S.P., Sondergaard,F., Jacobsen,J., Thomsen,R.W., Schmitz,O., Sorensen,H.T.. Sulfonylureas and prognosis after myocardial infarction in patients with diabetes: a population-based follow-up study. Diabetes Metab Res Rev 2009;25(6):515-22.	insufficient follow up
57	Horsdal,H.T., Johnsen,S.P., Sondergaard,F.. Type of preadmission glucose-lowering treatment and prognosis among patients hospitalised with myocardial infarction: a nationwide follow-up study. Diabetologia 2008;51(4):567-74.	insufficient follow up
58	Horsdal,H.T., Mehnert,F., Rungby,J.. Type of preadmission antidiabetic treatment and outcome among patients with ischemic stroke: a nationwide follow-up study. Journal of Stroke & Cerebrovascular Diseases 2012;21(8):717-25.	not a prospective cohort design
59	Hsu,C.C., Wahlqvist,M.L., Lee,M.S.. Incidence of dementia is increased in type 2 diabetes and reduced by the use of sulfonylureas and metformin. Journal of Alzheimer's Disease 2011;24(3):485-93.	not a prospective cohort design
60	Huang,E.S., Liu,J.Y., Moffet,H.H., John,P.M.. Glycemic control, complications, and death in older diabetic patients: The diabetes and aging study. Diabetes Care 2011;34(6):1329-1336.	not a prospective cohort design
61	Huerta,C. & Zhao,S.Z.. Risk of acute liver injury in patients with diabetes. Pharmacotherapy 2002;22(9 I):1091-1096.	not a prospective cohort design

Number	Reference	Reason for exclusion
62	Hung,Y.-J., Kuo,S.-W., Wang,C.-H., Chang,H.-Y., Hsieh,S.-H.. Postmarketing surveillance of acarbose treatment in Taiwanese patients with type 2 diabetes mellitus. Clinical Drug Investigation 2006;26(10):559-565.	insufficient follow up
63	Ioacara,S., Guja,C., Ionescu-Tirgoviste,C., Fica,S.. Cancer specific mortality in insulin-treated type 2 diabetes patients. PLoS ONE 2014;9(3): e93132.	not a prospective cohort design
64	Jain,R. & Kabadi,U.. Is beta-cell failure in type 2 diabetes mellitus reversible? International Journal Of Diabetes In Developing Countries 2008;28(1):1-5.	relevant outcomes not reported
65	Johannes,C.B., Koro,C.E., Quinn,S.G., Cutone,J.A.. The risk of coronary heart disease in type 2 diabetic patients exposed to thiazolidinediones compared to metforming and sulfonylurea therapy. Pharmacoepidemiology and Drug Safety 2007;16(5):504-512.	not a prospective cohort design
66	Johnson,J.A., Majumdar,S.R., Simpson,S.H.. Decreased mortality associated with the use of metformin compared with sulfonylurea monotherapy in type 2 diabetes. Diabetes Care 2002;25(12):2244-48.	not a prospective cohort design
67	Jones,C.D., Greenwood,R.H., Misra,A.. Incidence and progression of diabetic retinopathy during 17 years of a population-based screening program in England. Diabetes Care 2012;35(3):592-596.	exposure to pharmacological therapy not reported
68	Jorgensen,C.H., Gislason,G.H., Andersson,C., Ahlehoff,O., Charlot,M., Schramm,T.K., et al. Effects of oral glucose-lowering drugs on long term outcomes in patients with diabetes mellitus following myocardial infarction not treated with emergent percutaneous coronary intervention – a retrospective nationwide cohort study. Cardiovasc Diabetol 2010;9:54.	not a prospective cohort design
69	Juhaeri,J. & Gao,S.. Incidence rates of heart failure, stroke, and acute myocardial infarction among Type 2 diabetic patients using insulin glargine and other insulin. Pharmacoepidemiology & Drug Safety 2009;18(6):497-503.	not a prospective cohort design
70	Kawaguchi,T., Taniguchi,E., Morita,Y., Shirachi,M., Tateishi,I., Nagata,E.. Association of exogenous insulin or sulphonylurea treatment with an increased incidence of hepatoma in patients with hepatitis C virus infection. Liver International 2010;3.	not a prospective cohort design
71	Kolb,H., Schneider,B., Heinemann,L., Lodwig,V., Scherbaum,W.A.. Altered disease course after initiation of self-monitoring of blood glucose in noninsulin-treated type 2 diabetes (ROSSO 3). Journal of Diabetes Science & Technology 2007;1(4):487-95.	not a prospective cohort design
72	Koro,C. & Barrett,S.. Cancer risks in thiazolidinedione users compared to other anti-diabetic agents. Pharmacoepidemiology and Drug	not a prospective cohort design

Number	Reference	Reason for exclusion
	Safety 2007;16(5):485-492.	
73	Koro,C.E. & Bowlin,S.J.. Antidiabetic therapy and the risk of heart failure in type 2 diabetic patients: an independent effect or confounding by indication. Pharmacoepidemiology & Drug Safety 2005;14(10):697-703.	not a prospective cohort design
74	Koro,C.E. & Fu,Q.. An assessment of the effect of thiazolidinedione exposure on the risk of myocardial infarction in type 2 diabetic patients. Pharmacoepidemiology and Drug Safety 2008;17(10):989-996.	not a prospective cohort design
75	Lachin,J.M., Viberti,G., Zinman,B., Haffner,S.M., Aftring,R.P., Paul,G., et al. Renal function in type 2 diabetes with rosiglitazone, metformin, and glyburide monotherapy. Clinical Journal of The American Society of Nephrology: CJASN 2011;6(5):1032.	rosiglitazone
76	Leblond,J., Pilon,D., Beaudette,C.-P.. Predictors of nonpersistence with thiazolidinediones in patients with type 2 diabetes. Canadian Journal of Diabetes 2005;29(2):95-101.	relevant outcomes not reported
77	Lee,M.-S., Hsu,C.-C., Wahlqvist,M.L., Tsai,H.-N., Chang,Y.-H.. Type 2 diabetes increases and metformin reduces total, colorectal, liver and pancreatic cancer incidences in Taiwanese: A representative population prospective cohort study of 800,000 individuals. BMC Cancer 2011, 11:20.	not a prospective cohort design
78	Li,J., Zhang,H., Yan,L., Xie,M.. Fracture is additionally attributed to hyperhomocysteinemia in men and premenopausal women with type 2 diabetes. Journal of Diabetes Investigation 2014;5(2):236-241.	not a prospective cohort design
79	Li,L., Shen,J., Bala,M.M., Busse,J.W., Ebrahim,S., Vandvik,P.O., et al. Incretin treatment and risk of pancreatitis in patients with type 2 diabetes mellitus: Systematic review and meta-analysis of randomised and non-randomised studies. BMJ 2014;348:g2366	systematic review- included studies appraised individually
80	Liebl,A., Jones,S., Goday,A., Benroubi,M., Castell,C., Haupt,A., Nicolay,C.. Clinical Outcomes After Insulin Initiation in Patients with Type 2 Diabetes: 24-Month Results from INSTIGATE. Diabetes Ther 2012;3(1): 9.	relevant outcomes not reported
81	Lin,H.-C., Kachingwe,B.H., Lin,H.-L., Cheng,H.W., Uang,Y.-S.. Effects of metformin dose on cancer risk reduction in patients with type 2 diabetes mellitus: A 6-year follow-up study. Pharmacotherapy 2014;34(1):36-45.	not a prospective cohort design
82	Magliano,D.J., Davis,W.A., Shaw,J.E., Bruce,D.G.. Incidence and predictors of all-cause and site-specific cancer in type 2 diabetes: The Fremantle Diabetes Study. European Journal of Endocrinology 2012;167(4):589-599.	exposure to pharmacological therapy not reported
83	Malin,S.K., Samat,A., Wolski,K., Abood,B., Pothier,C.E., Bhatt,D.L., et al. Improved acylated ghrelin suppression at 2 years in obese patients with type 2 diabetes: Effects of bariatric surgery vs	exposure to pharmacological therapy not reported

Number	Reference	Reason for exclusion
	standard medical therapy. Int J Obes (Lond) 2014;38(3):364-70.	
84	Matthews,D.R., Cull,C.A., Stratton,I.M., Holman,R.R.. UKPDS 26: Sulphonylurea failure in non-insulin-dependent diabetic patients over six years. UK Prospective Diabetes Study (UKPDS) Group. Diabet Med 1998;15(4):297-303.	relevant outcomes not reported
85	Nichols,G.A. & Koo,Y.H.. Delay of insulin addition to oral combination therapy despite inadequate glycemic control: Delay of insulin therapy. Journal of General Internal Medicine 2007;22(4):453-458.	relevant outcomes not reported
86	Nichols,G.A. & Vupputuri,S.. Change in high-density lipoprotein cholesterol and risk of subsequent hospitalization for coronary artery disease or stroke among patients with type 2 diabetes mellitus. Am J Cardiol 2011;108(8):1124-8.	not a prospective cohort design
87	Onitilo,A.A., Donald,M., Stankowski,R.V., Engel,J.M., Williams,G. Breast and prostate cancer survivors in a diabetic cohort: Results from the living with diabetes study. Clinical Medicine and Research 2013;11(4):210-218.	not a prospective cohort design
88	Palmer,A.J. & Sendi,P.P.. Applying some UK Prospective Diabetes Study results to Switzerland: the cost-effectiveness of intensive glycaemic control with metformin versus conventional control in overweight patients with type-2 diabetes. Schweiz Med Wochenschr 2000;130(27-28):1034-40.	not a prospective cohort design
89	Pan,C.-Y. Post-marketing surveillance of acarbose treatment in patients with type 2 diabetes mellitus and subjects with impaired glucose tolerance in China. Clinical Drug Investigation 2007;27(6):397-405.	insufficient follow up
90	Penfornis,A., Bourdel-Marchasson,I., Quere,S. Real-life comparison of DPP4-inhibitors with conventional oral antidiabetics as add-on therapy to metformin in elderly patients with type 2 diabetes: The HYPOCRAS study. Diabetes & Metabolism 2012;38(6):5.	insufficient follow up
91	Pols-Vijlbrief,R., Dekker,J.M., Stehouwer,C.D., de Boer,M.R., Nijpels,G., Snoek,F.J. Symptom burden and its association with change in glucose metabolism status over a 7-year period: The Hoorn Study. Diabetic Medicine 2014;31(6):747-753.	exposure to pharmacological therapy not reported
92	Redaniel,M.T., Jeffreys,M., May,M.T., Ben-Shlomo,Y. Associations of type 2 diabetes and diabetes treatment with breast cancer risk and mortality: a population-based cohort study among British women. Cancer Causes & Control 2012;23(11):1785-95.	exposure to pharmacological therapy not reported
93	Roumie,C.L., Hung,A.M., Greevy,R.A., Grijalva,C.G., Liu,X., Murff,H.J., Elasy,T.A. Comparative effectiveness of sulfonylurea and metformin monotherapy on cardiovascular events in type 2 diabetes mellitus: a cohort study. Ann Intern Med 2012;157(9):601-10.	not a prospective cohort design

Number	Reference	Reason for exclusion
94	Roussel,R., Hadjadj,S., Pasquet,B., Wilson,P.W., Smith,S.C.,Jr., Goto,S., et al. Thiazolidinedione use is not associated with worse cardiovascular outcomes: a study in 28,332 high risk patients with diabetes in routine clinical practice: brief title: thiazolidinedione use and mortality. Int J Cardiol 2013;167(4):1380-4.	rosiglitazone
95	Scheen,A.J. [Proactive study: secondary cardiovascular prevention with pioglitazione in type 2 diabetic patients]. Revue medicale de Liege 2005;60(11):896-901.	not in English
96	Seck,T., Nauck,M., Sheng,D., Sunga,S., Davies,M.J., Stein,P.P., Kaufman,K.D. Safety and efficacy of treatment with sitagliptin or glipizide in patients with type 2 diabetes inadequately controlled on metformin: A 2-year study. Int J Clin Pract 2010;64(5):562-76.	included as part of pharamcological therapy
97	Sejil,S., Janand-Delenne,B., Avierinos,J.-F., Habib,G., Labastie,N., Raccah,D., Vague,P. Six-year follow-up of a cohort of 203 patients with diabetes after screening for silent myocardial ischaemia. Diabetic Medicine 2006;23(11): 1186-1191.	exposure to pharmacological therapy not reported
98	Shapiro,M.S. & Abrams,Z. Clinical experience with repaglinide in patients with non-insulin-dependent diabetes mellitus. Israel Medical Association Journal 2005;7(2):75-77.	insufficient follow up
99	Shenolikar,R.A., Balkrishnan,R., Camacho,F.T., Whitmire,J.T. Comparison of medication adherence and associated health care costs after introduction of pioglitazone treatment in African Americans versus all other races in patients with type 2 diabetes mellitus: a retrospective data analysis. Clin Ther 2006;28(8):1199-207.	not a prospective cohort design
100	Sullivan,S.D., Alfonso-Cristancho,R., Conner,C., Hammer,M. A simulation of the comparative long-term effectiveness of liraglutide and glimepiride monotherapies in patients with type 2 diabetes mellitus. Pharmacotherapy 2009;29(11):1280-88.	insufficient follow up
101	Tschope,D., Bramlage,P., Binz,C., Krekler,M., Plate,T., Deeg,E. Antidiabetic pharmacotherapy and anamnestic hypoglycemia in a large cohort of type 2 diabetic patients - an analysis of the DiaRegis registry. Cardiovascular Diabetology 2011;10.	relevant outcomes not reported
102	Tseng CH. Benign prostatic hyperplasia is a significant risk factor for bladder cancer in diabetic patients: a population-based cohort study using the National Health Insurance in Taiwan. BMC Cancer 2013;13:7.	not a prospective cohort design
103	Turner,R. & Cull,C. United Kingdom Prospective Diabetes Study 17: a 9-year update of a randomized, controlled trial on the effect of improved metabolic control on complications in non-insulin-dependent diabetes mellitus. Ann Intern Med 1996;124(1 Pt 2):136-45.	longer follow-up available and included
104	Turner,R., Murchison,L., Wright,A.D., Oakley,N.,	relevant outcomes not reported

Number	Reference	Reason for exclusion
	Kohner,E., Hayes,R., et al. United Kingdom prospective diabetes study 24: A 6-year, randomized, controlled trial comparing sulfonylurea, insulin, and metformin therapy in patients with newly diagnosed type 2 diabetes that could not be controlled with diet therapy. United Kingdom Prospective Diabetes Study Group. Ann Intern Med 1998;128(3):165-75.	
105	Turner,R.C., Cull,C.A., Frighi,V. Glycemic control with diet, sulfonylurea, metformin, or insulin in patients with type 2 diabetes mellitus: progressive requirement for multiple therapies (UKPDS 49). UK Prospective Diabetes Study (UKPDS) Group. JAMA. 1999;281(21):2005-12.	relevant outcomes not reported
106	Ved,P. Evaluation of vildagliptin and fixed dose combination of vildagliptin and metformin on glycemic control and insulin dose over 3 months in patients with type 2 diabetes mellitus. Indian Journal of Endocrinology and Metabolism 2012;16:Suppl-3.	relevant outcomes not reported
107	Vujasinovic,M., Zaletel,J., Tepes,B., Popic,B., Makuc,J., Epsek,Lenart M., Predikaka,M. Low prevalence of exocrine pancreatic insufficiency in patients with diabetes mellitus. Pancreatology 2013;13(4):343-46.	not a prospective cohort design
108	Wahlqvist,M.L., Lee,M.S., Chuang,S.Y., Hsu,C.C., Tsai,H.N., Yu,S.H. Increased risk of affective disorders in type 2 diabetes is minimized by sulfonylurea and metformin combination: a population-based cohort study. BMC Medicine 2012;10:150.	not a prospective cohort design
109	Wahlqvist,M.L., Lee,M.-S., Hsu,C.-C., Chuang,S.-Y., Lee,J.-T. Metformin-inclusive sulfonylurea therapy reduces the risk of Parkinson's disease occurring with Type 2 diabetes in a Taiwanese population cohort. Parkinsonism Relat Disord 2012;18(6):753-8.	not a prospective cohort design
110	Wenten,M., Gaebler,J.A., Hussein,M., Pelletier,E.M., Smith,D.B., Girase,P., et al. Relative risk of acute pancreatitis in initiators of exenatide twice daily compared with other anti-diabetic medication: A follow-up study. Diabet Med 2012;29(11):1412-8.	not a prospective cohort design
111	Wertz,D.A., Chang,C.-L., Sarawate,C.A., Willey,V.J., Cziraky,M.J. Risk of cardiovascular events and all-cause mortality in patients treated with thiazolidinediones in a managed-care population. Circ Cardiovasc Qual Outcomes 2010;3:538-545.	not a prospective cohort design
112	Yang,X., So,W.Y., Ma,R.C.W., Yu,L.W.Y., Ko,G.T.C., Kong,A.P.S., et al. Use of sulphonylurea and cancer in type 2 diabetes-The Hong Kong Diabetes Registry. Diabetes Research and Clinical Practice 2010;90(3):343-351.	not a prospective cohort design

L.3 Review Question 3: What are the optimal target values for HbA1c, fasting blood glucose and post prandial blood glucose in people with type 2 diabetes?

L.4 Review Question 4: Should intensive or conventional target values be used to control blood glucose levels in people with type 2 diabetes?

Table 3: Excluded studies of full text papers

Number	Reference	Reason for exclusion
1	Abougalambou SSI, Abougalambou AS. Prevalence and risk factors of microalbuminuria in type 2 diabetes mellitus outpatients at University Sains Malaysia Hospital. Diabetes & Metabolic Syndrome: Clinical Research & Reviews 2013;7:64-7.	cross-sectional study
2	Abraira C, Colwell J, Nuttall F, Sawin CT, Henderson W, Comstock JP, et al. Cardiovascular events and correlates in the Veterans Affairs Diabetes Feasibility Trial. Veterans Affairs Cooperative Study on Glycemic Control and Complications in Type II Diabetes. Arch Intern Med 1997;157(2):181-88.	feasibility trial; in Cochrane systematic review
3	Abraira C, Colwell JA, Nuttall FQ, Sawin CT, Nagel NJ, Comstock JP, et al. Veterans Affairs Cooperative Study on glycemic control and complications in type II diabetes (VA CSDM). Results of the feasibility trial. Veterans Affairs Cooperative Study in Type II Diabetes. Diabetes Care 1995;18(8):1113-23.	feasibility trial; in Cochrane systematic review
4	Abraira C, Duckworth W, McCarren M, Emanuele N, Arca D, Reda D, et al. Design of the cooperative study on glycemic control and complications in diabetes mellitus type 2: Veterans Affairs Diabetes Trial. Journal of Diabetes & its Complications 2003;17(6):314-22.	VADT; in Cochrane systematic review
5	Abraira C, Duckworth WC, Moritz T. Glycaemic separation and risk factor control in the Veterans Affairs Diabetes Trial: An interim report. Diabetes, Obesity and Metabolism 2009;11(2):150-56.	interim report; multifactorial intervention with confounding medications to decrease cardiovascular risk
6	Abraira C, Emanuele N, Colwell J, Henderson W, Comstock J, Levin S, et al. Glycemic control and complications in type II diabetes. Design of a feasibility trial. VA CS Group (CSDM). Diabetes Care 1992;15(11):1560-71.	trial protocol; in Cochrane systematic review
7	Abraira C, Henderson WG, Colwell JA, Nuttall FQ, Comstock JP, Emanuele NV, et al. Response to intensive therapy steps and to glipizide dose in combination with insulin in type 2 diabetes. VA feasibility study on glycemic control and complications (VA CSDM). Diabetes Care 1998;21(4):574-79.	feasibility study; in Cochrane systematic review
8	ACCORD Study Group, ACCORD Eye Study Group, Chew EY, Ambrosius WT, Davis MD, Danis RP, et al. Effects of medical therapies on retinopathy progression in type 2 diabetes. New Engl J Med 2010;363(3):233-44.	ACCORD; all participants had to be eligible for either the blood pressure trial or the lipid trial
9	ACCORD Study Group, Buse JB, Bigger JT, Byington RP, Cooper LS, Cushman WC, et al. Action to Control	ACCORD; design and methods; all participants

Number	Reference	Reason for exclusion
	Cardiovascular Risk in Diabetes (ACCORD) trial: design and methods. Am J Cardiol 2007;99(12A):21i-33i.	had to be eligible for either the blood pressure trial or the lipid trial
10	ACCORD Study Group, Gerstein HC, Miller ME, Genuth S, Ismail-Beigi F, Buse JB, et al. Long-term effects of intensive glucose lowering on cardiovascular outcomes. New Engl J Med 2011;364(9):818-28.	ACCORD; in Cochrane systematic review; all participants had to be eligible for either the blood pressure trial or the lipid trial
11	Action to Control Cardiovascular Risk in Diabetes Study Group, Gerstein HC, Miller ME, Byington RP, Goff DC, Bigger JT, et al. Effects of intensive glucose lowering in type 2 diabetes. New Engl J Med 2008;358(24):2545-59.	ACCORD; in Cochrane systematic review; all participants had to be eligible for either the blood pressure trial or the lipid trial
12	Adler AI, Erqou S, Lima TA, Robinson AH. Association between glycated haemoglobin and the risk of lower extremity amputation in patients with diabetes mellitus-review and meta-analysis. Diabetologia 2010;53(5):840-49.	primary papers included in Cochrane systematic review
13	Adler AI, Neil HA, Manley SE, Holman RR, Turner RC. Hyperglycemia and hyperinsulinemia at diagnosis of diabetes and their association with subsequent cardiovascular disease in the United Kingdom prospective diabetes study (UKPDS 47). Am Heart J 1999;138(5 Pt 1):S353-59.	in Cochrane systematic review
14	ADVANCE Collaborative Group. ADVANCE--Action in Diabetes and Vascular Disease: patient recruitment and characteristics of the study population at baseline. Diabetic Med 2005;22(7):882-88.	patient recruitment and characteristics of the study population; no study results provided. Not relevant to review question 4 (confounded by concomitant administration of blood pressure lowering drugs)
15	Agrawal L, Azad N, Emanuele NV, Bahn GD, Kaufman DG, Moritz TE, et al. Observation on renal outcomes in the Veterans Affairs Diabetes Trial. Diabetes Care 2011;34(9):2090-94.	VADT; multifactorial intervention with confounding medications to decrease cardiovascular risk
16	Agrawal L, Emanuele NV, Abraira C, Henderson WG, Levin SR, Sawin CT, et al. Ethnic differences in the glycemic response to exogenous insulin treatment in the Veterans Affairs Cooperative Study in Type 2 Diabetes Mellitus (VA CSDM). Diabetes Care 1998;21(4):510-15.	subgroup analysis; in Cochrane systematic review
17	Aguilar D, Bozkurt B, Ramasubbu K, Deswal A. Relationship of hemoglobin A1C and mortality in heart failure patients with diabetes. J Am Coll Cardiol 2009;54(5):422-28.	retrospective cohort
18	Ahmed AA, Alsharief E, Alsharief A. Intensive versus conventional glycemic control: what is best for patients with type 2 diabetes?. [Review]. Diabetes & Metabolic Syndrome 2013;7(1):48-51.	no new studies (ACCORD, ADVANCE, VADT)
19	Akalin S, Berntorp K, Ceriello A, Das AK, Kilpatrick ES, Koblik T, et al. Intensive glucose therapy and clinical implications of recent data: a consensus statement from the Global Task Force on Glycaemic Control.	consensus statement

Number	Reference	Reason for exclusion
	International Journal of Clinical Practice 2009;63(10):1421-25.	
20	Althouse AD, Abbott JD, Forker AD, Bertolet M, Barinas-Mitchell E, Thurston RC, Mulukutla S, Aboyans V, Brooks MM for the BARI 2D Study groupRisk factors for incident peripheral arterial disease in type 2 diabetes: results from the bypass angioplasty revascularization investigation in type 2 diabetes (BARI 2D) trial. 2014. Diabetes Care 37:1346-52	proportion of patients assumed to be taking rosiglitazone (from associated publication of same trial)
21	Anderson RJ, Bahn GD, Moritz TE, Kaufman D, Abraira C, Duckworth W, VADT Study Group. Blood pressure and cardiovascular disease risk in the Veterans Affairs Diabetes Trial. Diabetes Care 2011;34(1):34-38.	VADT; multifactorial intervention with confounding medications to decrease cardiovascular risk
22	Anderson RT, Narayan KM, Feeney P, Goff D, Ali MK, Simmons DL, et al. Effect of intensive glycemic lowering on health-related quality of life in type 2 diabetes: ACCORD trial. Diabetes Care 2011;34(4):807-12.	ACCORD; in Cochrane systematic review; all participants had to be eligible for either the blood pressure trial or the lipid trial; quality of life outcomes
23	Andersson C, Van GL, Caterson ID, Weeke P, James WP, Couthino W, et al. Relationship between HbA1c levels and risk of cardiovascular adverse outcomes and all-cause mortality in overweight and obese cardiovascular high-risk women and men with type 2 diabetes. Diabetologia 2012;55(9):2348-55.	post hoc analysis
24	Anon. Intensive control of blood sugar (HbA1c <7.0%) in DM2 may be harmful (ACCORD). Dialysis and Transplantation 2008;37(11):463-464.	commentary
25	Anon. The effect of intensive treatment of diabetes on the development and progression of long-term complications in insulin-dependent diabetes mellitus. The Diabetes Control and Complications Trial Research Group. The New England journal of medicine 1993;329(14):977-86.	Type 1 diabetes
26	Anon. Type 2 diabetes: target HbA1c of about 7%. Prescrire Int 2009;18(102):177.	commentary
27	Anon. U.K. prospective diabetes study 16. Overview of 6 years' therapy of type II diabetes: a progressive disease. U.K. Prospective Diabetes Study Group. Diabetes 1995;44(11):1249-58.	overview; in Cochrane systematic review
28	Araki A, Iimuro S, Sakurai T, Umegaki H, Iijima K, Nakano H, Oba K, Yokono K, Sone H, Yamada N, Ako J, Kozaki K, Miura H, Kashiwagi A, Kikkawa R, Yoshimura Y, Nakano T, Ohashi Y, Ito H and the Japanese Elderly Diabetes Intervention Trial Study group. Long-term multiple risk factor interventions in Japanese elderly diabetic patients: the Japanese Elderly Diabetes Intervention Trial - study design, baseline characteristics and effects of intervention. Geriatri Gerontol Int 2012;12(Suppl 1):7-17.	in Cochrane systematic review; multifactorial intervention; intensive control group received cardiovascular disease specific interventions but conventional control group received usual cardiovascular disease care
29	Azad N, Emanuele NV, Abraira C, Henderson WG, Colwell J, Levin SR, et al. The effects of intensive glycemic control on neuropathy in the VA cooperative study on type II diabetes mellitus (VA CSDM). Journal of Diabetes & its Complications 1999;13:307-13.	in Cochrane systematic review, neuropathy
30	Bagg W, Plank LD, Gamble G, Drury PL, Sharpe N, Braatvedt GD. The effects of intensive glycaemic control	in Cochrane systematic

Number	Reference	Reason for exclusion
	on body composition in patients with type 2 diabetes. Diabetes, Obesity & Metabolism 2001;3(6):410-16.	review
31	Bagg W, Whalley GA, Gamble G, Drury PL, Sharpe N, Braatvedt GD. Effects of improved glycaemic control on endothelial function in patients with type 2 diabetes. Intern Med J 2001;31(6):322-28.	outcomes not in protocol; study included in Cochrane systematic review
32	Balkau B & Simon D. Survival in people with type 2 diabetes as a function of HbA1c. The Lancet 2010;375(9713):438-40.	commentary
33	BARI 2D Study Group. A randomized trial of therapies for type 2 diabetes and coronary artery disease. NEJM 2009;360:2503-15.	no blood glucose optimal exploration (review question 3); multifactorial intervention; proportion of patients assumed to be taking rosiglitazone (from associated publication of same trial)
34	Barnett AH. A review of basal insulins. Diabetic Med 2003;20(11):873-85.	letter
35	Beulens JWJ, Patel A, Vingerling JR, Cruickshank JK, Hughes AD, Stanton A, et al. Effects of blood pressure lowering and intensive glucose control on the incidence and progression of retinopathy in patients with type 2 diabetes mellitus: A randomised controlled trial. Diabetologia 2009;52(10):2027-36.	in Cochrane systematic review; does not provide optimal blood glucose targets for revieq question 3; ADVANCE excluded from review question 4 because of concomitant administration of blood pressure lowering drugs that is participants were also randomised to placebo or preterax (a combination of perindopril and indapamide) for cardiovascular disaese risk
36	Black JA, Sharp SJ, Wareham NJ, Sandbaek A, Rutten GEHM, Lauritzen T, Khunti K, Davies MJ, Borch-Johnsen K, Griffin SJ, Simmons RK.Does early intensive multifactorial therapy reduce modelled cardiovascular risk in individuals with screen-detected diabtes? Results from the ADDITION-Europe cluster randomized trial. Diabetic Medicine 2014;31:647-656.	no relevant outcomes
37	Bonds DE, Kurashige EM, Bergenstal R, Brillon D, Domanski M, Felicetta JV, et al. Severe hypoglycemia monitoring and risk management procedures in the Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial. Am J Cardiol 2007;99(12A):80i-9i.	ACCORD; in Cochrane systematic review; design and methods; all participants had to be eligible for either the blood pressure trial or the lipid trial
38	Bonds DE, Miller ME, Bergenstal RM, Buse JB, Byington RP, Cutler JA, et al. The association between symptomatic, severe hypoglycaemia and mortality in type 2 diabetes: retrospective epidemiological analysis of the ACCORD study. BMJ 2010;340:b4909.	ACCORD; in Cochrane systematic review; all participants had to be eligible for either the blood pressure trial or the lipid trial; retrospective analysis considering the link between hypoglycaemia and mortality in the

Number	Reference	Reason for exclusion
		ACCORD trial
39	Botija Yague MP, Lizan TL, Gosalbes S, Bonet PA, Fornos GA. How does intensive therapy to control cardiovascular risk factors affect health-related quality of life in diabetic patients? ?Como influye el tratamiento intensivo de los factores de riesgo cardiovascular en la calidad de vida relacionada con la salud de los pacientes diabeticos? Atencion Primaria 2007;39(5):227-34.	not in English
40	Boussageon R, Bejan-Angoulvant T, Saadatian-Elahi M, Lafont S, Bergeonneau C, Kassai B, et al. Effect of intensive glucose lowering treatment on all cause mortality, cardiovascular death, and microvascular events in type 2 diabetes: meta-analysis of randomised controlled trials (Structured abstract). BMJ 2011;343:d4169(3).	studies in Cochrane systematic review or excluded
41	Boussageon R, Supper I, Erpeldinger S, Cucherat M, Bejan-Angoulvant T, Kassai B, Cornu C, Gueyffier F.Are concomitant treatments confounding factors in randomized controlled trials on intensive blood-glucose control in type 2 diabetes? A systematic review. 2013. BMC Medical Research Methodology 13:107.	no relevant outcomes; discussion
42	Brinchmann-Hansen O, Dahl-Jørgensen K, Sandvik L, Hanssen KF. Blood glucose concentrations and progression of diabetic retinopathy: the seven year results of the Oslo study. BMJ (Clinical research ed) 1992;304(6818):19-22.	Type 1 diabetes
43	Brito JP & Montori VM. Intensive BP control and/or glucose control did not reduce microvascular events in hypertensive type 2 diabetes. Ann Intern Med 2012;157(8):JC4-C7.	commentary
44	Brocco E, Velussi M, Cernigoi AM, Abaterusso C, Bruseghin M, Carraro A, et al. Evidence of a threshold value of glycated hemoglobin to improve the course of renal function in type 2 diabetes with typical diabetic glomerulopathy. J Nephrol 2001;14(6):461-71.	blood pressure and glycaemia control; excluded from Cochrane systematic review
45	Brooks MM, Chaitman BR, Nesto RW, Hardison RM, Feit F, Gersh BJ, Krone RJ, Sako EY, Rogers WJ, Garber AJ, King III SB, Davidson CJ, Ikeno F, Frye RL for the BARI-2D Study groupClinical and angiographic risk stratification and differential impact on treatment outcomes in the bypass angioplasty revascularization investigation 2 diabetes (BARI 2D) trial. Circulation 2012;126:2115-24.	no blood glucose optimal exploration (review question 3); multifactorial intervention; proportion of patients assumed to be taking rosiglitazone (from associated publication of same trial)
46	Brown A, Reynolds LR, Bruemmer D. Intensive glycemic control and cardiovascular disease: an update. [Review]. Nature Reviews Cardiology 2010;7(7):369-75.	narrative review
47	Brown SH & Abdelhafiz AH. Trials review: cardiovascular outcome with intensive glycemic control and implications for patients with type 2 diabetes (Structured abstract). Postgrad Med 2009;121(5):31-41.	review; included studies are in Cochrane systematic review
48	Callaghan BC, Little AA, Feldman EL, Hughes RA. Enhanced glucose control for preventing and treating diabetic neuropathy. [Review]. Cochrane Database of Systematic Reviews 2012;6:CD007543.	superceded by neuropathy data from Buehler et al 2013 Cardiovascular therapeutics 31(3):147-60
49	Calles-Escandon J, Lovato LC, Simons-Morton DG, Kendall DM, Pop-Busui R, Cohen RM, et al. Effect of intensive compared with standard glycemia treatment strategies on mortality by baseline subgroup	ACCORD; in Cochrane systematic review; all participants had to be eligible for either the blood

Number	Reference	Reason for exclusion
	characteristics: the Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial. Diabetes Care 2010;33(4):721-27.	pressure trial or the lipid trial
50	Castagno D, Baird-Gunning J, Jhund PS, Biondi-Zoccai G, MacDonald MR, Petrie MC, et al. Intensive glycemic control has no impact on the risk of heart failure in type 2 diabetic patients: evidence from a 37,229 patient meta-analysis. Am Heart J 2011;162(5):938-48.	studies in Cochrane systematic review or excluded
51	Cavalot F, Petrelli A, Traversa M, Bonomo K, Fiora E, Conti M, et al. Postprandial blood glucose is a stronger predictor of cardiovascular events than fasting blood glucose in type 2 diabetes mellitus, particularly in women: lessons from the San Luigi Gonzaga Diabetes Study. Journal of Clinical Endocrinology & Metabolism 2006;91(3):813-19.	case series
52	Cederholm J, Zethelius B, Nilsson PM, Eeg-Olofsson K, Eliasson B, Gudbjornsdottir S, Swedish National DR. Effect of tight control of HbA1c and blood pressure on cardiovascular diseases in type 2 diabetes: an observational study from the Swedish National Diabetes Register (NDR). Diabetes Research & Clinical Practice 2009;86(1):74-81.	tight blood pressure and HbA1c control together
53	Chalmers J, Kengne AP, Joshi R, Perkovic V, Patel A. New insights from ADVANCE. Journal of Hypertension - Supplement 2007;25(1):S23-30.	study review and discussion of the study; commentary
54	Chalmers J, Perkovic V, Joshi R, Patel A. ADVANCE: breaking new ground in type 2 diabetes. Journal of Hypertension - Supplement 2006;24(5):S22-28.	review/update paper; commentary
55	Chalmers J. [ADVANCE study: objectives, design and current status]. Drugs 2003;63 Spec No 1:39-44.	Not in English
56	Chalmers J. [ADVANCE study: objectives, design and current status]. Drugs 2003;63 Spec No 1:39-44.	recruitment and patient characteristics
57	Charles M, Ejskjaer N, Witte DR, Borch-Johnsen K, Lauritzen T, Sandbaek A.Prevalence of neuropathy and peripheral arterial disease and the impact of treatment in people with screen-detected type 2 diabetes. Diabetes Care 2011;34:2244-9.	sub-arms of ADDITION-Europe study
58	Charles M, Ejskjaer N, Witte DR, Sandbaek A. Neuropathy in a population with screen-detected type 2 diabetes. J Peripher Nerv Syst 2009;14(3):254-55.	abstract
59	Charles M, Fleischer J, Witte DR, Ejskjaer N, Borch-Johnsen K, Lauritzen T, Sandbaek A.Impact of early detection and treatment of diabetes on the 6-year prevalence of cardiac autonomic neuropathy in people with screen-detected diabetes: ADDITION-Denmark, a cluster-randomised study. Diabetologia 2013;56:101-8.	sub-arms of ADDITION-Europe study
60	Chatterjee S, Sharma A, Lichstein E, Mukherjee D. Intensive glucose control in diabetics with an acute myocardial infarction does not improve mortality and increases risk of hypoglycemia - a meta-regression analysis. Current Vascular Pharmacology 2013; 11:100-104.	already included in Cochrane systematic review
61	Chatterjee S. Review: DPP-4 inhibitors are less effective than metformin for reducing HbA1c in type 2 diabetes. Ann Intern Med 2012;157(2):JC2-13.	commentary
62	Chaturvedi N, Bilous R, Sjolie AK, Klein R, DIRECT	letter

Number	Reference	Reason for exclusion
	Programme Steering Committee. Rationale and design of the AdRem study: evaluating the effects of blood pressure lowering and intensive glucose control on vascular retinal disorders in patients with type 2 diabetes mellitus. Contemporary Clinical Trials 2007;28(6):780.	
63	Chen J, Alemao E, Yin D, Cook J. Development of a diabetes treatment simulation model: with application to assessing alternative treatment intensification strategies on survival and diabetes-related complications. Diabetes, Obesity & Metabolism 2008;10:Suppl-42.	Economic outcomes
64	Chew EY, Ambrosius WT, Howard LT, Greven CM, Johnson S, Danis RP, et al. Rationale, Design, and Methods of the Action to Control Cardiovascular Risk in Diabetes Eye Study (ACCORD-EYE). American Journal of Cardiology 2007;99(12 SUPPL):S103-11.	design and methods
65	Clark NG. Postprandial blood glucose, cardiovascular events, and all-cause mortality: How do we use postprandial glucose in clinical practice? Clin Diabetes 2012;30(2):67-69.	commentary
66	Coca SG, Ismail-Beigi F, Haq N, Krumholz HM, Parikh CR. Role of intensive glucose control in development of renal end points in type 2 diabetes mellitus: Systematic review and meta-analysis. Archives of Internal Medicine 2012;172(10):761-69.	all studies included in Cochrane systematic review
67	Colagiuri S, Cull CA, Holman RR, UKPDS Group. Are lower fasting plasma glucose levels at diagnosis of type 2 diabetes associated with improved outcomes?: U.K. prospective diabetes study 61. Diabetes Care 2002;25(8):1410-17.	outcomes not reported; in Cochrane systematic review
68	Colayco DC, Niu F, McCombs JS, Cheetham TC. A1C and cardiovascular outcomes in type 2 diabetes: a nested case-control study. Diabetes Care 2011;34(1):77-83.	case control
69	Colwell JA. Intensive insulin therapy in type II diabetes: rationale and collaborative clinical trial results. Diabetes 1996;45:Suppl-90.	review of results; in Cochrane systematic review
70	Corbett EC. Review: Intensive glucose control reduces surrogate, but not clinical, renal outcomes in type 2 diabetes. Annals of Internal Medicine 2012;157(10):JC5-C6.	commentary
71	Cummings DM, Larsen LC, Doherty L, Lea CS, Holbert D. Glycemic control patterns and kidney disease progression among primary care patients with diabetes mellitus. Journal of the American Board of Family Medicine: JABFM 2011;24(4):391-98.	retrospective cohort
72	Currie CJ, Peters JR, Tynan A, Evans M, Heine RJ, Bracco OL, et al. Survival as a function of HbA(1c) in people with type 2 diabetes: a retrospective cohort study. Lancet 2010;375(9713):481-89.	retrospective cohort
73	Cushman WC, Evans GW, Byington RP, Goff DC Jr, Grimm RH Jr, Cutler JA, et al. Effects of intensive blood-pressure control in type 2 diabetes mellitus. The New England Journal of Medicine 2010;362(17):1575-85.	ACCORD; in Cochrane systematic review; all participants had to be eligible for either the blood pressure trial or the lipid trial
74	Dailey G. Fine-tuning therapy with basal insulin for optimal glycemic control in type 2 diabetes: a review.	narrative review

Number	Reference	Reason for exclusion
	Current Medical Research & Opinion 2004;20(12):2007-14.	
75	Davila EP, Florez H, Trepka MJ, Fleming LE, Niyonsenga T, Lee DJ, Parkash J. Strict glycemic control and mortality risk among US adults with type 2 diabetes. Journal of Diabetes & its Complications 2011;25(5):289-91.	survey data
76	DeFronzo RA, Stonehouse AH, Han J, Wintle ME. Relationship of baseline HbA1c and efficacy of current glucose-lowering therapies: a meta-analysis of randomized clinical trials. Diabetic Med 2010;27(3):309-17.	outcomes not of interest
77	Di LD, Catalano C, Lambertini D, Bordin V, Fabbian F, Naso A, Romagnoli GF. The effect of metabolic control on development and progression of diabetic nephropathy. Nephrol Dial Transplant 1998;13:Suppl-43.	narrative review
78	Du JL, Liu JF, Men LL, Yao JJ, Sun LP, Sun GH, Song GR, Yang Y, Bai R, Xing Q, Li CC, Sun CK.Effects of five-year intensive multifactorial intervention on the serum amyloid A and macroangiopathy in patients with short-duration type 2 diabetes mellitus. Chin Med J 2009;122(21):2560-6	outcomes not relevant; multifactorial intevention
79	Duckworth W, Abraira C, Moritz T, Reda D, Emanuele N, Reaven PD, et al. Glucose control and vascular complications in veterans with type 2 diabetes. New Engl J Med 2009;360(2):129-39.	VADT; in Cochrane systematic review; multifactorial intervention with confounding medications to decrease cardiovascular risk; HbA1c target in conventional group was set at 8% and 9%
80	Duckworth WC, Abraira C, Moritz TE, Davis SN, Emanuele N, Goldman S, et al. The duration of diabetes affects the response to intensive glucose control in type 2 subjects: the VA Diabetes Trial. Journal of Diabetes & its Complications 2011;25(6):355-61.	VADT; in Cochrane systematic review; multifactorial intervention with confounding medications to decrease cardiovascular risk; HbA1c target in conventional group was set at 8% and 9%
81	Duckworth WC, McCarren M, Abraira C, Investigators VADT. Control of cardiovascular risk factors in the Veterans Affairs Diabetes Trial in advanced type 2 diabetes. Endocrine Practice 2006;12:Suppl-8.	VADT; in Cochrane systematic review; multifactorial intervention with confounding medications to decrease cardiovascular risk; HbA1c target in conventional group was set at 8% and 9%
82	Echouffo-Tcheugui JB, Simmons RK, Williams KM, Barling RS, Prevost AT, Kinmonth AL, et al. The ADDITION-Cambridge trial protocol: a cluster – randomised controlled trial of screening for type 2 diabetes and intensive treatment for screen-detected patients. BMC Public Health 2009;9:136.	study protocol
83	Elley CR, Kenealy T, Robinson E, Drury PL. Glycated haemoglobin and cardiovascular outcomes in people with Type 2 diabetes: a large prospective cohort study. Diabetic Med 2008;25(11):1295-3001.	retrospective cohort
84	Elley CR, Kenealy T.Intensive primary care treatment	commentary

Number	Reference	Reason for exclusion
	reduced cardiovascular risk factors in screen-detected type 2 diabetes. EBM 2009;14(4):108.	
85	Emanuele N, Azad N, Abraira C, Henderson W, Colwell J, Levin S, et al. Effect of intensive glycemic control on fibrinogen, lipids, and lipoproteins: Veterans Affairs Cooperative Study in Type II Diabetes Mellitus. Arch Intern Med 1998;158(22):2485-90.	within arm analysis of changes from baseline; in Cochrane systematic review
86	Emanuele N, Klein R, Abraira C, Colwell J, Comstock J, Henderson WG, et al. Evaluations of retinopathy in the VA Cooperative Study on Glycemic Control and Complications in Type II Diabetes (VA CSDM). A feasibility study. Diabetes Care 1996;19(12):1375-81.	feasibility study; in Cochrane systematic review
87	Emanuele N, Klein R, Moritz T, Davis MD, Glander K, Anderson R, et al. Comparison of dilated fundus examinations with seven-field stereo fundus photographs in the Veterans Affairs Diabetes Trial. Journal of Diabetes & its Complications 2009;23(5):323-29.	VADT; in Cochrane systematic review; multifactorial intervention with confounding medications to decrease cardiovascular risk; HbA1c target in conventional group was set at 8% and 9%
88	Esposito K, Maiorino MI, Bellastella G, Chiodini P, Giugliano D. Insulin analogs and glycosylated hemoglobin target of less than 7% in type 2 diabetes: a systematic review of randomized trials. [Review]. Metabolic Syndrome & Related Disorders 2011;9(3):167-76.	not intensive vs standard; no relevant outcomes
89	Esposito K, Mosca C, Brancario C, Chiodini P, Ceriello A, Giugliano D. GLP-1 receptor agonists and HBA1c target of <7% in type 2 diabetes: meta-analysis of randomized controlled trials. Current Medical Research & Opinion 2011;27(8):1519-28.	not intensive vs standard; no relevant outcomes
90	Fenske WK, Pournaras DJ, Aasheim ET, Miras AD, Scopinaro N, Scholtz S, le Roux CW. Can a protocol for glycaemic control improve type 2 diabetes outcomes after gastric bypass? Obes Surg 2012;22(1):90-96.	patients after gastric bypass
91	Fernando ME, Seneviratne RM, Cunningham M, Lazzarini PA, Sangla KS, Tan YM, Buttner PG, Golledge J. Intensive versus conventional glycaemic control for treating diabetic foot ulcers (Protocol). Cochrane Database of Systematic Reviews 2013.	systematic review protocol
92	Gaede O, Lund-Andersen H, Parving HH, Pedersen O.Effect of a multifactorial intervention on mortality in type 2 diabetes. NEJM 2008;358:580-9	confounded by differences between groups on treatments to reduce cardiovascular risk
93	Gaede P, Beck M, Vedel P, Pedersen O.Limited impact of lifestyle education in patients with type 2 diabetes mellitus and microalbuminuria: results from a randomized intervention study. Diabetes Medicine 2001;18:104-108.	confounded by differences between groups on treatments to reduce cardiovascular risk
94	Gaede P, Vedel P, Larsen N, Jensen GV, Parving HH, Pedersen O. Multifactorial intervention and cardiovascular disease in patients with type 2 diabetes. New Engl J Med 2003;348(5):383-93.	in Cochrane systematic review; confounded by differences between groups on treatments to reduce cardiovascular risk
95	Gaede P, Vedel P, Parving HH, Pedersen O.Intensified multifactorial intervention in patients with type 2 diabetes mellitus and microalbuminuria: the Steno type 2	in Cochrane systematic review; confounded by differences between groups on treatments to reduce

Number	Reference	Reason for exclusion
	randomised study. Lancet 1999;353:617-22.	cardiovascular risk that is intensive control group received cardiovascular disease targeted interventions but conventional control group did not
96	Gale EAM.The myth of the metabolic syndrome. Diabetologia 2005;48:1679-83.	editorial
97	Gasior M, Pres D, Stasik-Pres G, Lech P, Gierlotka M, Lekston A, et al. Does glucose level at hospital discharge predict one-year mortality in patients with diabetes mellitus treated with percutaneous coronary intervention for ST-segment elevation myocardial infarction? Kardiologia Polska 2008;66(1):1-8.	outcomes not in protocol
98	Gerstein HC, Pogue J, Mann JFE, Lonn E, Dagenais GR, McQueen M, Yusuf S, HOPE investigatorsThe relationship between dysglycaemia and cardiovascular and renal risk in diabetic and non-diabetic participants in the HOPE study: a prospective epidemiological analysis. Diabetologia 2005;48:1749-55.	population unclear whether type 1 or 2 diabetes
99	Gerstein HC, Riddle MC, Kendall DM, Cohen RM, Goland R, Feinglos MN, et al. Glycemia treatment strategies in the Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial. Am J Cardiol 2007;99(12A):34i-43i.	ACCORD; in Cochrane systematic review; design and methods; all participants had to be eligible for either the blood pressure trial or the lipid trial
100	Getaneh A, Light LS, Brillon DJ, Escandon JC, Felicetta J, Evans GW, et al. Diabetes control among hispanics in the action to control cardiovascular risk in diabetes trial. J Gen Intern Med 2012;27(11):1499-5005.	differences between ethnic groups in achieving glycaemic control
101	Gilbert RE, Tsalamandris C, Bach LA, Panagiotopoulos S, O'Brien RC, Allen TJ, et al. Long-term glycemic control and the rate of progression of early diabetic kidney disease. Kidney Int 1993;44(4):855-59.	case control, both type 1 and 2 diabetes (type 2 diabetes n=9)
102	Gitt AK, Bramlage P, Binz C, Krekler M, Plate T, Deeg E, et al. Hypoglycaemia is more frequent in type 2 diabetic patients with co-morbid vascular disease: an analysis of the DiaRegis registry. European Journal of Preventive Cardiology 2012;19(4):765-72.	registry analysis; no relevant data
103	Giugliano D, Maiorino M, Bellastella G, Chiodini P, Esposito K. Relationship of baseline HbA1c, HbA1c change and HbA1c target of < 7% with insulin analogues in type 2 diabetes: a meta-analysis of randomised controlled trials. [Review]. Int J Clin Pract 2011;65(5):602-12.	efficacy question
104	Giugliano D, Maiorino MI, Bellastella G, Chiodini P, Esposito K. Multiple HbA1c targets and insulin analogues in type 2 diabetes: a systematic review. [Review]. Journal of Diabetes & its Complications 2011;25(4):275-81.	not intensive vs standard; no relevant outcomes
105	Gornik I, Gornik O, Gasparovic V. HbA1c is outcome predictor in diabetic patients with sepsis. Diabetes Research & Clinical Practice 2007;77(1):120-25.	HbA1c and outcomes due to sepsis
106	Greenfield S, Billimek J, Pellegrini F, Franciosi M, De BG, Nicolucci A, Kaplan SH. Comorbidity affects the relationship between glycemic control and cardiovascular	considering those with self-reported co-morbidities

Number	Reference	Reason for exclusion
	outcomes in diabetes: a cohort study.[Summary for patients in Ann Intern Med. 2009 Dec 15;151(12):I54; PMID: 20008745]. Ann Intern Med 2009;151(12):854-60.	
107	Griffin SJ, Borch-Johnsen K, Davies MJ, Khunti K, Rutten GE, Sandbaek A, et al. Effect of early intensive multifactorial therapy on 5-year cardiovascular outcomes in individuals with type 2 diabetes detected by screening (ADDITION-Europe): A cluster-randomised trial. The Lancet 2011;378(9786):156-67.	in Cochrane systematic review; intensive treatment of multiple risk factors; not all participant had to have diabetes
108	Groeneveld Y, Petri H, Hermans J, Springer MP. Relationship between blood glucose level and mortality in type 2 diabetes mellitus: a systematic review. Diabetic Med 1999;16(1):2-13.	all studies excluded or outside of scope search dates
109	Grubina R & Smith SA. Intensive glucose control increased mortality and did not prevent CV events compared with standard glucose control in type 2 diabetes. Annals of Internal Medicine 2011;154(10):JC5-2.	commentary
110	Guillausseau PJ, Massin P, Charles MA, Allaguy H, Guvenli Z, Virally M, et al. Glycaemic control and development of retinopathy in type 2 diabetes mellitus: a longitudinal study. Diabetic Med 1998;15(2):151-55.	retrospective
111	Guo LX, Pan Q, Wang XX, Li H, Zhang LN, Chi JM, et al. Effect of short term intensive multitherapy on carotid intima-media thickness in patients with newly diagnosed type 2 diabetes mellitus. Chinese Medical Journal 2008;121(8):687-90.	In Cochrane systematic review; outcomes not relevant; multifactorial intervention; intensive control group received cardiovascular disease targeted interventions but conventional control group received usual cardiovascular disease care
112	Hadden DR, Patterson CC, Atkinson AB, Kennedy L, Bell PM, McCance DR, Weaver JA. Macrovascular disease and hyperglycaemia: 10-year survival analysis in type 2 diabetes mellitus: The belfast diet study. Diabetic Med 1997;14(8):663-72.	prognostic value of baseline measurements
113	Hajos TR, Pouwer F, de GR, Holleman F, Twisk JW, Diamant M, Snoek FJ. The longitudinal association between glycaemic control and health-related quality of life following insulin therapy optimisation in type 2 diabetes patients. A prospective observational study in secondary care. Qual Life Res 2012;21(8):1359-65.	quality of life outcomes
114	Harrison LB, Adams-Huet B, Raskin P, Lingvay I. -cell function preservation after 3.5 years of intensive diabetes therapy. Diabetes Care 2012;35(7):1406-12.	outcomes not in protocol
115	Hellman R, Hellman J, Rosen H. Intensive therapy program for diabetes management: Effect on cardiac-specific mortality. Cardiology Review 1998;15(4):30-33.	population include type 1 and 2 diabetes
116	Hemmingsen B, Lund SS, Gluud C, Vaag A, Almdal T, Hemmingsen C, Wetterslev J. Intensive glycaemic control for patients with type 2 diabetes: systematic review with meta-analysis and trial sequential analysis of randomised clinical trials. [Review]. BMJ 2011;343:d6898.	duplicate publication; full cochrane review included
117	Hemmingsen B, Lund SS, Gluud C, Vaag A, Almdal T, Hemmingsen C, Wetterslev J. Intensive glycaemic control	old Cochrane systematic review that has been

Number	Reference	Reason for exclusion
	for patients with type 2 diabetes: systematic review with meta-analysis and trial sequential analysis of randomised clinical trials. [Review]. BMJ 2011;343:d6898.	updated and included
118	Henricsson M, Nilsson A, Janzon L, Groop L. The effect of glycaemic control and the introduction of insulin therapy on retinopathy in non-insulin-dependent diabetes mellitus. Diabetic Med 1997;14(2):123-31.	predictive value of baseline HbA1c on retinopathy
119	Henry RR, Gumbiner B, Ditzler T, Wallace P, Lyon R, Glauber HS. Intensive conventional insulin therapy for type II diabetes. Metabolic effects during a 6-mo outpatient trial. Diabetes Care 1993;16(1):21-31.	intensive therapy only, no comparator (14 patients)
120	Hockaday TDR, Pandher KS, Bron A. Progression of established retinopathy is unrelated to glycosylated hemoglobin in non-insulin-dependent diabetes. Transplant Proc 1986;18(6):1574-75.	retrospective
121	Holman RR, Paul SK, Bethel MA, Matthews DR, Neil HA. 10-year follow-up of intensive glucose control in type 2 diabetes. New Engl J Med 2008;359(15):1577-89.	in Cochrane systematic review
122	Hotta N, Kawamori R, Sano T, Kakuta H, Kamada T, Sakamoto N. Diabetic neuropathy: effects of intensified glycaemic control with multiple insulin injections. Diabetic medicine : a journal of the British Diabetic Association 1993;10 Suppl 2:91S-4S.	mixed population of type 1 and 2 diabetes
123	Hsieh M, Hsieh Y, Cho T, Chen J, Lin S, Chen H, Tu S. Remission of diabetic nephropathy in type 2 diabetic Asian population: Role of tight glucose and blood pressure control. Eur J Clin Invest 2011;41(8):870-78.	multifactorial therapy
124	Huang C, Gao J, Wang X, Li R, Yang A, Zheng M, Xue F. Risk analysis of coronary artery disease in type 2 diabetes. Chin J Clin Rehab 2005;9(7):251-53.	outcomes not in protocol
125	Huang ES, Meigs JB, Singer DE. The effect of interventions to prevent cardiovascular disease in patients with type 2 diabetes mellitus. American Journal of Medicine 2001;111(8):633-42.	meta-analysis of cholesterol, blood pressure and glucose decreasing (all relevant glucose trials included in Cochrane systematic review)
126	Huang ES, Zhang Q, Gandra N, Chin MH, Meltzer DO. The effect of comorbid illness and functional status on the expected benefits of intensive glucose control in older patients with type 2 diabetes: a decision analysis. Ann Intern Med 2008;149(1):11-19.	economic outcomes
127	Huang IC, Wang PW, Liu RT, Tung SC, Chen JF, Kuo MC, Hsieh CJ. The influence of self-monitoring blood glucose frequency on the oscillation of hemoglobin A1c and chronic complications. Chang Gung Med J 2012;35(1):46-53.	self-monitoring and fluctuations of HbA1c
128	Iribarren C, Karter AJ, Go AS, Ferrara A, Liu JY, Sidney S, Selby JV.Glycemic control and heart failure among adult patients with diabetes. Circulation 2001;103:2668-73	Population included type 1 and 2 diabetes or unknown diabetes type
129	Ismail-Beigi F, Craven T, Banerji MA, Basile J, Calles J, Cohen RM, et al. Effect of intensive treatment of hyperglycaemia on microvascular outcomes in type 2 diabetes: an analysis of the ACCORD randomised trial. Lancet 2010;376(9739):419-30.	ACCORD; in Cochrane systematic review; all participants had to be eligible for either the blood pressure trial or the lipid trial
130	Ismail-Beigi F, Craven TE, O'Connor PJ, Karl D, Calles-	ACCORD; in Cochrane

Number	Reference	Reason for exclusion
	Escandon J, Hramiak I, et al. Combined intensive blood pressure and glycemic control does not produce an additive benefit on microvascular outcomes in type 2 diabetic patients. Kidney Int 2012;81(6):586-94.	systematic review; all participants had to be eligible for either the blood pressure trial or the lipid trial
131	Janssen PG, Gorter KJ, Stolk RP, Rutten GE. Randomised controlled trial of intensive multifactorial treatment for cardiovascular risk in patients with screen-detected type 2 diabetes: 1-year data from the ADDITION Netherlands study. Br J Gen Pract 2009;59(558):43-48.	quality of life outcomes
132	Johansen SB, Charles M, Vistisen D, Rasmussen SS, Wiinberg N, Borch-Johnsen K, Lauritzen T, Sandbaek A, Witte DR.Effect of intensive mutlifactorial treatment compared with routine care on aortic stiffness and central blood pressure among individuals with screen-detected type 2 diabetes. The ADDITION-Denmark study. Diabetes Care 2012;35:2207-2214.	sub-arm of ADDITION-Europe study
133	Johnson JA & Bowker SL. Intensive glycaemic control and cancer risk in type 2 diabetes: a meta-analysis of major trials. Diabetologia 2011;54(1):25-31.	cancer outcomes, not in review protocol
134	Joshi R, de Galan BE, Chalmers J, Perkovic V, Patel A. Routine blood pressure lowering and intensive glucose control in patiens with type 2 diabetes: The ADVANCE trial. Expert Rev Endocrinol Metab 2009;4(2):111-18.	trial report; does not provide optimal blood glucose targets for review question 3. ADVANCE excluded from review question 4 because of concomitant administration of blood pressure lowering drugs
135	Joss N, Ferguson C, Brown C, Deighan CJ, Paterson KR, Boulton-Jones JM.Intensified treatment of patients with type 2 diabetes mellitus and overt nephropathy. Q J Med 2004;97(4):219-27.	multifactorial intervention
136	Kalesnykiene V, Sorri I, Voutilainen R, Uusitupa M, Niskanen L, Uusitalo H. The effect of glycaemic control on the quantitative characteristics of retinopathy lesions in patients with type 2 diabetes mellitus: 10-year follow-up study. Graefes Archive for Clinical & Experimental Ophthalmology 2009;247(3):335-41.	predictive value of HbA1c and plasma glucose
137	Katakura M, Naka M, Kondo T, Komatsu M, Yamauchi K, Hashizume K, Aizawa T. Development, worsening, and improvement of diabetic microangiopathy in older people: six-year prospective study of patients under intensive diabetes control. J Am Geriatr Soc 2007;55(4):541-47.	multifactorial intervention
138	Kawazu S, Tomono S, Shimizu M, Kato N, Ohno T, Ishii C, et al. The relationship between early diabetic nephropathy and control of plasma glucose in non-insulin-dependent diabetes mellitus. The effect of glycemic control on the development and progression of diabetic nephropathy in an 8-year follow-up study. Journal of Diabetes & its Complications 1994;8(1):13-17.	retrospective
139	Kelly TN, Bazzano LA, Fonseca VA, Thethi TK, Reynolds K, He J. Systematic review: glucose control and cardiovascular disease in type 2 diabetes. Annals of Internal Medicine 2009;151(6):394-403.	studies in Cochrane systematic review
140	Kharma S & Maayah J. Diabetic retinopathy in type 2 diabetes mellites at Prince Rashid hospital. J Bahrain Med	article not available

Number	Reference	Reason for exclusion
	Soc 2004;16(2):58-61.	
141	Kirkman MS, McCarren M, Shah J, Duckworth W, Abraira C, VADT Study Group. The association between metabolic control and prevalent macrovascular disease in Type 2 diabetes: the VA Cooperative Study in diabetes. Journal of Diabetes & its Complications 2006;20(2):75-80.	VADT; in Cochrane systematic review
142	Kleefstra N, Ubink-Veltmaat LJ, Houweling ST, Groenier KH, Meyboom-de JB, Bilo HJ. Cross-sectional relationship between glycaemic control, hyperglycaemic symptoms and quality of life in type 2 diabetes (ZODIAC-2). Neth J Med 2005;63(6):215-21.	quality of life outcomes
143	Klein BE, Moss SE, Klein R. Longitudinal measure of glycemic control and diabetic retinopathy. Diabetes Care 1987;10(3):273-77.	chart review
144	Klein R, Klein BE, Moss SE, Cruickshanks KJ. Relationship of hyperglycemia to the long-term incidence and progression of diabetic retinopathy. Arch Intern Med 1994;154(19):2169-78.	unclear population, whether type 1 or 2 diabetes
145	Klein R, Klein BE, Moss SE, Shrago ES, Spennetta TL. Glycosylated hemoglobin in a population-based study of diabetes. Am J Epidemiol 1987;126(3):415-28.	unclear population, whether type 1 or 2 diabetes
146	Klein R, Klein BE, Moss SE. Relation of glycemic control to diabetic microvascular complications in diabetes mellitus. Ann Intern Med 1996;124(1:Pt 2):6.	unclear population, whether type 1 or 2 diabetes
147	Laakso M. Glycemic control and the risk for coronary heart disease in patients with non-insulin-dependent diabetes mellitus. The Finnish studies. Ann Intern Med 1996;124(1:Pt 2):30.	narrative review
148	Lapina I, Filatov DN, Mareev VI, Narusov OI, Bolotina MG, Shestakova MV, et al. [Effect of strict glycemic control on clinical state and course of the disease in patients with chronic heart failure and type II diabetes mellitus. Results of the REMBO 'rational effective multicomponent therapy in the struggle against diabetes mellitus in patients with congestive heart failure' study]. Kardiologiia 2008;48(9):17-27.	Article not available
149	Launer LJ, Miller ME, Williamson JD, Lazar RM, Gerstein HC, Murray AM, et al. Effects of intensive glucose lowering on brain structure and function in people with type 2 diabetes (ACCORD MIND): a randomised open-label substudy. Lancet Neurology 2011;10(11):969-77.	outcomes not in protocol
150	Lauritzen T, Griffin S, Borch-Johnsen K, Wareham NJ, Wolffenbuttel BH, Rutten G. The ADDITION study: proposed trial of the cost-effectiveness of an intensive multifactorial intervention on morbidity and mortality among people with Type 2 diabetes detected by screening. International journal of obesity and related metabolic disorders : journal of the International Association for the Study of Obesity 2000;24 Suppl 3:S6-11.	cost effectiveness; multifactorial intervention
151	Le Floch JP, Doucet J, Bauduceau B, Verny C, and the SFD/SFGG IntergroupRetinopathy, nephropathy, peripheral neuropathy and geriatric scale scores in elderly people with type 2 diabetes. Diabetic Medicine 2014;31:107-111.	no extractable data, that is excluded because "no further information about association provided" as in protocol
152	Levin SR, Coburn JW, Abraira C, Henderson WG, Colwell	in Coca meta-analysis and

Number	Reference	Reason for exclusion
	JA, Emanuele NV, et al. Effect of intensive glycemic control on microalbuminuria in type 2 diabetes. Veterans Affairs Cooperative Study on Glycemic Control and Complications in Type 2 Diabetes Feasibility Trial Investigators. Diabetes Care 2000;23(10):1478-85.	Cochrane systematic review
153	Lin CC, Chen CC, Chen FN, Li CI, Liu CS, Lin WY, Yang SY, Lee CC, Li TC.Risks of diabetic nephropathy with variation in hemoglobin A1c and fasting plasma glucose. Am J Med 2013;126:1017.e1-e10.	wrong focus (HbA1c-CV, FBG-CV)
154	Lin CC, Li CI, Yang SY, Liu CS, Chen CC, Fuh MM, et al. Variation of fasting plasma glucose: a predictor of mortality in patients with type 2 diabetes. Am J Med 2012;125(4):416-18.	retrospective cohort
155	Lingegowda V. ACP Journal Club. Review: Intensive glucose lowering does not reduce mortality in type 2 diabetes. Annals of Internal Medicine 2011;155(12):JC6-4.	commentary
156	Lipscombe LL. ACP Journal Club. Review: Intensive glucose control reduced some CV events but did not change mortality in type 2 diabetes. Annals of Internal Medicine 2009;151(6):JC3-C6.	commentary
157	Liu QZ, Pettitt DJ, Hanson RL, Charles MA, Klein R, Bennett PH, Knowler WC. Glycated haemoglobin, plasma glucose and diabetic retinopathy: cross-sectional and prospective analyses. Diabetologia 1993;36(5):428-32.	wong population
158	Lo C, Zoungas S.Intensive glucose control in patients with type 2 diabetes is associated with a reduction in albuminuria and may be associated with reduced end-stage renal disease. Evid Based Med 2013;18:105-106.	commentary
159	Lu W, Shi B, Zhang X, Wei D, Liu W, Duan P. Significance of intensive glycemic control on early diabetic nephropathy patients with microalbuminuria. Academic Journal of Xi'an Jiaotong University 2010;22(2):135-38.	in Cochrane systematic review
160	Ma J, Yang W, Fang N, Zhu W, Wei M. The association between intensive glycemic control and vascular complications in type 2 diabetes mellitus: a meta-analysis. Nutrition Metabolism & Cardiovascular Diseases 2009;19(9):596-603.	studies in Cochrane systematic review or excluded by it
161	Macisaac RJ & Jerums G. Intensive glucose control and cardiovascular outcomes in type 2 diabetes. [Review]. Heart, Lung & Circulation 2011;20(10):647-54.	narrative review
162	MacMahon S. ADVANCE - A factorial randomized trial of blood pressure lowering and intensive glucose control for the prevention of vascular disease among high risk individuals with type 2 diabetes: results of the blood pressure intervention. Clinical Research in Cardiology 2007;96(11):781-82.	brief report; abstract
163	Malmberg K, Ryden L, Wedel H, Birkeland K, Bootsma A, Dickstein K, et al. Intense metabolic control by means of insulin in patients with diabetes mellitus and acute myocardial infarction (DIGAMI 2): effects on mortality and morbidity. Eur Heart J 2005;26(7):650-61.	those with acute MI, treatment in coronary care unit initially; included in Cochrane systematic review
164	Maneschi F, Cassar J, Lowy C, Kohner EM. Development of diabetic microangiopathy and diabetic control. A study in non-insulin-dependent diabetics. Diabetes Metabol 1981;7(3):181-87.	inappropriate analysis (t-test)

Number	Reference	Reason for exclusion
165	Manley S. Haemoglobin A1c--a marker for complications of type 2 diabetes: the experience from the UK Prospective Diabetes Study (UKPDS). Clinical Chemistry & Laboratory Medicine 2003;41(9):1182-90.	review paper; in Cochrane systematic review
166	Mannucci E, Monami M, Lamanna C, Gori F, Marchionni N. Prevention of cardiovascular disease through glycemic control in type 2 diabetes: a meta-analysis of randomized clinical trials. Nutrition Metabolism & Cardiovascular Diseases 2009;19(9):604-12.	studies in Cochrane systematic review or excluded by it
167	Manske CL. Hyperglycemia and intensive glycemic control in diabetic patients with chronic renal disease. American Journal of Kidney Diseases 1998;32(5:Suppl 3):Suppl-71.	narrative review
168	Maple-Brown LJ, Ye C, Retnakaran R.Area-under-the-HbA1c-curve above the normal range and the prediction of microvascular outcomes: an analysis of data from the Diabetes Control and Complications Trial. Diabetic Medicine 2013;30:95-99.	Type 1 diabetes
169	Marso SP, Kennedy KF, House JA, McGuire DK. The effect of intensive glucose control on all-cause and cardiovascular mortality, myocardial infarction and stroke in persons with type 2 diabetes mellitus: a systematic review and meta-analysis. Diabetes & Vascular Disease Research 2010;7(2):119-30.	studies in Cochrane systematic review
170	Mattila TK & de BA. Influence of intensive versus conventional glucose control on microvascular and macrovascular complications in type 1 and 2 diabetes mellitus. Drugs 2010;70(17):2229-45.	overview
171	Mayor S. Intensive glucose lowering arm of diabetes trial is stopped after excess deaths. BMJ 2008;336(7641):407.	news article
172	Mehta Z, Cull C, Stratton I, Yudkin J, Jenkinson C, Fletcher A, et al. Quality of life in type 2 diabetic patients is affected by complications but not by intensive policies to improve blood glucose or blood pressure control (UKPDS 37). Diabetes Care 1999;22(7):1125-36.	quality of life outcomes; in Cochrane systematic review
173	Meigs JB, Singer DE, Sullivan LM, Dukes KA, D'Agostino RB, Nathan DM, et al. Metabolic control and prevalent cardiovascular disease in non-insulin-dependent diabetes mellitus (NIDDM): The NIDDM Patient Outcome Research Team. Am J Med 1997;102(1):38-47.	cardiovascular disease found by self-report; did not explore optimal blood glucose levels
174	Menard J, Payette H, Baillargeon JP, Maheux P, Lepage S, Tessier D, Ardilouze JL. Efficacy of intensive multitherapy for patients with type 2 diabetes mellitus: a randomized controlled trial. Canadian Medical Association Journal 2005;173(12):1457-66.	multifactorial therapy
175	Menard J, Payette H, Dubuc N, Baillargeon JP, Maheux P, Ardilouze JL. Quality of life in type 2 diabetes patients under intensive multitherapy. Diabetes Metab 2007;33(1):54-60.	QoL; multifactorial therapy
176	Miller ME, Bonds DE, Gerstein HC, Seaquist ER, Bergenstal RM, Calles-Escandon J, et al. The effects of baseline characteristics, glycaemia treatment approach, and glycated haemoglobin concentration on the risk of severe hypoglycaemia: post hoc epidemiological analysis of the ACCORD study. BMJ 2010;340:b5444.	ACCORD; in Cochrane systematic review; all participants had to be eligible for either the blood pressure trial or the lipid trial
177	Monami M, Adalsteinsson JE, Desideri CM, Ragghianti B,	shows association without

Number	Reference	Reason for exclusion
	Dicembrini I, Mannucci E.Fasting and post-prandial glucose and diabetic complication. A meta-analysis. Nutrition, Metabolism & Cardiovascular diseases 2013;23:591-8.	providing an explanation
178	Monami M, Vitale V, Lamanna C, Bartoli N, Martelli D, Zannoni S, Antenore A, Toffanello G, Marchionni N, Mannucci E.HbA1c levels and all-cause mortality in type 2 diabetic patients: epidemiological evidence of the need for personalised therapeutic targets. Nutrition, Metabolism & Cardiovascular diseases 2013;23:300-306.	wrong study design (case-control study nested in a cohort study)
179	Muggeo M & Bonora E. Predicting cardiovascular mortality in elderly diabetics. Cardiology Review 1999;16(6):34-37.	retrospective data
180	Muggeo M, Verlato G, Bonora E, Ciani F, Moghetti P, Eastman R, et al. Long-term instability of fasting plasma glucose predicts mortality in elderly NIDDM patients: the Verona Diabetes Study. Diabetologia 1995;38(6):672-79.	retrospective data
181	Nalysnyk L, Hernandez-Medina M, Krishnarajah G. Glycaemic variability and complications in patients with diabetes mellitus: evidence from a systematic review of the literature. [Review]. Diabetes, Obesity & Metabolism 2010;12(4):288-98.	poster
182	Nicholas J, Charlton J, Dregan A, Gulliford MC.Recent HbA1c values and mortality risk in type 2 diabetes. Population-based case-control study. PLoS ONE 2013;8(7):e608008.	wrong study design (case-control study nested in a cohort study)
183	Nichols GA, Joshua-Gotlib S, Parasuraman S.Glycemic control and risk of cardiovascular disease hospitalization and all-cause mortality. J Am Coll Cardiol 2013;62:121-7.	wrong study design (retrospective cohort)
184	Nichols GA, Joshua-Gotlib S, Parasuraman S.Independent contribution of A1c, systolic blood pressure, and LDL cholesterol control to risk of cardiovascular disease hospitalizations in type 2 diabetes: an observational cohort study. J Gen Intern Med 2013;28(5):691-7.	wrong study design (retrospective cohort)
185	Ohkubo Y, Kishikawa H, Araki E, Miyata T, Isami S, Motoyoshi S, et al. Intensive insulin therapy prevents the progression of diabetic microvascular complications in Japanese patients with non-insulin-dependent diabetes mellitus: a randomized prospective 6-year study. Diabetes Research & Clinical Practice 1995;28(2):103-17.	in Cochrane systematic review and Coca meta-analysis
186	Okawa M, Kunimoto F, Kanamoto M, Narahara H, Hinohara H, Tobe M, Yanagisawa A, Saito S.Effect of different blood glucose target levels on the incidence of hypoglycemia during insulin therapy in the intensive care unit. Journal of Diabetes 2013;5:51-56	unclear population
187	Oke JL, Stevens RJ, Gaitskell K, Farmer AJ. Establishing an evidence base for frequency of monitoring glycated haemoglobin levels in patients with Type 2 diabetes: projections of effectiveness from a regression model. Diabetic Med 2012;29(2):266-71.	HbA1c testing frequency
188	Ostgren CJ, Sundstrom J, Svennblad B, Lohm L, Nilsson PM, Johansson G.Associations of HbA1c and educational level with risk of cardiovascular events in 32871 drug-treated patients with type 2 diabetes: a cohort study in primary care. Diabetic Medicine 2013;30:e170-7.	wrong study design (retrospective cohort)

Number	Reference	Reason for exclusion
189	Ozmen B & Boyvada S. Can self-monitoring blood glucose control decrease glycated hemoglobin levels in diabetes mellitus. Endocrinologist 2002;12(4):349-56.	effect of self-monitoring
190	Patel A, MacMahon S, Chalmers J, Neal B, Billot L, Woodward M, et al. Intensive blood glucose control and vascular outcomes in patients with type 2 diabetes. The New England journal of medicine 2008;358(24):2560-72.	does not provide optimal blood glucose targets for review question 3; ADVANCE excluded from review question 4 because of concomitant administration of blood pressure lowering drugs
191	Pedersen O & Gaede P. Intensified multifactorial intervention and cardiovascular outcome in type 2 diabetes: The Steno-2 study. Metab Clin Exp 2003;52(8 SUPPL. 1):19-23.	multi-factorial intervention
192	Penno G, Solini A, Bonora E, Fondelli C, Orsi E, Zerbini G, Morano S, Cavalot F, Lamacchia O, Laviola L, Nicolucci A, Pugliese G for the Renal Insufficiency and Cardiovascular Events (RIACE) Study groupHbA1c variability as an independent correlate of nephropathy, but not retinopathy, in patients with type 2 diabetes. Diabetes Care 2013;36:2301-10.	wrong study design (cross-sectional)
193	Penno G, Solini A, Zoppini G, Orsi E, Fondelli C, Zerbini G, Morano S, Cavalot F, Lamacchia O, Trevisan R, Vedovato M, Pugliese G for the Renal Insufficiency and Cardiovascular Events (RIACE) Study groupHbA1c variability as an independent correlate of cardiovascular disease in patients with type 2 diabetes: a cross-sectional analysis of the Renal Insufficiency and Cardiovascular Events (RIACE) Italian Multicenter study. Cardiovascular Diabetology 2013;12:98.	wrong study design (cross-sectional)
194	Perkovic V, Heerspink HL, Chalmers J, Woodward M, Jun M, Li Q, MacMahon S, Cooper ME, Hamet P, Marre M, Mogensen CE, Pulter N, Mancia G, Cass A, Patel A, Zoungas S for the ADVANCE Collaboration GroupIntensive glucose control improves kidney outcomes in patients with type 2 diabetes. Kidney International 2013;83:517-24.	already included in Cochrane systematic review
195	Pissarek D, Panzram G, Lundershausen R, Adolph W, Senf L. [Intensified therapy of newly detected maturity onset diabetes]. Endokrinologie 1980;75(1):105-15.	Not in English
196	Pitale S, Kernan-Schroeder D, Emanuele N, Sawin C, Sacks J, Abraira C. Health-related quality of life in the VA Feasibility Study on glycemic control and complications in type 2 diabetes mellitus. Journal of diabetes and its complications 2005;19(4):207-11.	quality of life outcomes; in Cochrane systematic review
197	Pitale SU, Abraira C, Emanuele NV, McCarren M, Henderson WG, Pacold I, et al. Two years of intensive glycemic control and left ventricular function in the Veterans Affairs Cooperative Study in Type 2 Diabetes Mellitus (VA CSDM). Diabetes Care 2000;23(9):1316-20.	L ventricular function outcomes, not in protocol; in Cochrane systematic review
198	Pontiroli AE, Miele L, Morabito A. Increase of body weight during the first year of intensive insulin treatment in type 2 diabetes: systematic review and meta-analysis. [Review]. Diabetes, Obesity & Metabolism 2011;13(11):1008-19.	compared insulin treatments; no relevant outcomes
199	Pop-Busui R, Evans GW, Gerstein HC, Fonseca V, Fleg JL, Hoogwerf BJ, et al. Effects of cardiac autonomic	ACCORD; in Cochrane systematic review; all

Number	Reference	Reason for exclusion
	dysfunction on mortality risk in the Action to Control Cardiovascular Risk in Diabetes (ACCORD) trial. Diabetes Care 2010;33(7):1578-84.	participants had to be eligible for either the blood pressure trial or the lipid trial
200	Poulter NR. Blood pressure and glucose control in subjects with diabetes: new analyses from ADVANCE. Journal of Hypertension - Supplement 2009;27(1):S3-S8.	does not provide optimal blood glucose targets for review question 3; ADVANCE excluded from review question 4 because of concomitant administration of blood pressure lowering drugs
201	Preiss D & Ray KK. Intensive glucose lowering treatment in type 2 diabetes. BMJ 2011;343:d4243.	editorial
202	Raccah D. Importance of blood glucose management in the multifactorial approach of absolute cardiovascular risk in type 2 diabetes: The lessons from the Steno 2 Study. Diabetes Metab 2006;32(HS2):2S48-51.	narrative review
203	Ray KK, Seshasai SR, Wijesuriya S, Sivakumaran R, Nethercott S, Preiss D, et al. Effect of intensive control of glucose on cardiovascular outcomes and death in patients with diabetes mellitus: a meta-analysis of randomised controlled trials. Lancet 2009;373(9677):1765-72.	studies in Cochrane systematic review or excluded by it
204	Reaven PD, Moritz TE, Schwenke DC, Anderson RJ, Criqui M, Detrano R, et al. Intensive glucose-lowering therapy reduces cardiovascular disease events in veterans affairs diabetes trial participants with lower calcified coronary atherosclerosis. Diabetes 2009;58(11):2642-48.	VADT; multifactorial intervention with confounding medications to decrease cardiovascular risk
205	Reichard P, Britz A, Carlsson P, Cars I, Lindblad L, Nilsson BY, Rosenqvist U. Metabolic control and complications over 3 years in patients with insulin dependent diabetes (IDDM): the Stockholm Diabetes Intervention Study (SDIS). J Intern Med 1990;228(5):511-17.	type 1 diabetes
206	Reichard P, Britz A, Cars I, Nilsson BY, Sobocinsky-Olsson B, Rosenqvist U. The Stockholm Diabetes Intervention Study (SDIS): 18 months' results. Acta Med Scand 1988;224(2):115-22.	type 1 diabetes
207	Riddle MC, Ambrosius WT, Brillon DJ, Buse JB, Byington RP, Cohen RM, et al. Epidemiologic relationships between A1C and all-cause mortality during a median 3.4-year follow-up of glycemic treatment in the ACCORD trial. Diabetes Care 2010;33(5):983-90.	ACCORD; in Cochrane systematic review; all participants had to be eligible for either the blood pressure trial or the lipid trial
208	Riddle MC. The underuse of insulin therapy in North America. Diabetes/Metabolism Research Reviews 2002;18:Suppl-9.	commentary
209	Rodriguez-Segade S, Rodriguez J, Cabezas-Agricola JM, Casanueva FF, Camina F. Progression of nephropathy in type 2 diabetes: the glycation gap is a significant predictor after adjustment for glycohemoglobin (Hb A1c). Clin Chem 2011;57(2):264-71.	outcomes not in protocol
210	Rodriguez-Segade,S.; Rodriguez,J.; Garcia Lopez JM, Casanueva FF; Camina,F.Intrapersonal HbA1c variability and the risk of progression of nephropathy in patients with	wrong focus (HbA1c variability)

Number	Reference	Reason for exclusion
	type 2 diabetes. Diabetic Medicine 2012; 29:1562-6.	
211	Sandbaek A, Griffin SJ, Rutten G, Davies M, Stolk R, Khunti K, Borch-Johnsen K, Wareham NJ, Lauritzen T.Stepwise screening for diabetes identifies people with high by modifiable coronary heart disease risk. The ADDITION study. Diabetologia 2008;51:1127-34.	multifactorial intervention
212	Saremi A, Moritz TE, Anderson RJ, Abraira C, Duckworth WC, Reaven PD, Veterans Affairs Diabetes Trial (VADT). Rates and determinants of coronary and abdominal aortic artery calcium progression in the Veterans Affairs Diabetes Trial (VADT). Diabetes Care 2010;33(12):2642-47.	VADT; multifactorial intervention with confounding medications to decrease cardiovascular risk
213	Schauer PR, Kashyap SR, Wolski K, Brethauer SA, Kirwan JP, Pothier CE, Thomas S, Abood B, Nissen SE, Bhatt DL.Bariatric surgery versus intensive medical therapy in obese patients with diabetes. NEJM 2012;366(17):1567-76.	outcomes not relevant
214	Schwartz AV, Margolis KL, Sellmeyer DE, Vittinghoff E, Ambrosius WT, Bonds DE, et al. Intensive glycemic control is not associated with fractures or falls in the ACCORD randomized trial. Diabetes Care 2012;35(7):1525-31.	outcomes not in protocol (fractures or falls)
215	Selvin E, Marinopoulos S, Berkenblit G, Rami T, Brancati FL, Powe NR, Golden SH. Meta-analysis: glycosylated hemoglobin and cardiovascular disease in diabetes mellitus. Ann Intern Med 2004;141(6):421-31.	papers included in Cochrane systematic review
216	Service FJ, Daube JR, O'Brien PC, Zimmerman BR, Swanson CJ, Brennan MD, Dyck PJ. Effect of blood glucose control on peripheral nerve function in diabetic patients. Mayo Clin Proc 1983;58(5):283-89.	population includes type 1 and 2 diabetes
217	Shichiri M, Kishikawa H, Ohkubo Y, Wake N. Long-term results of the Kumamoto Study on optimal diabetes control in type 2 diabetic patients. Diabetes Care 2000;23:Suppl-9.	in Cochrane systematic review
218	Shikata K, Haneda M, Koya D, Suzuki Y, Tomino Y, Yamada K, et al. Diabetic Nephropathy Remission and Regression Team Trial in Japan (DNETT-Japan): Rationale and study design. Diabetes Research & Clinical Practice 2010;87(2):228-32.	study design; protocol
219	Shima K, Komatsu M, Kawahara K, Minaguchi J, Kawashima S. Stringent glycaemic control prolongs survival in diabetic patients with end-stage renal disease on haemodialysis. Nephrology 2010;15(6):632-38.	population includes analysis of type 1 and 2 diabetes
220	Shiraiwa T, Kaneto H, Miyatsuka T, Kato K, Yamamoto K, Kawashima A, et al. Postprandial hyperglycemia is a better predictor of the progression of diabetic retinopathy than HbA1c in Japanese type 2 diabetic patients. Diabetes Care 2005;28(11):2806-07.	brief report; postprandial blood glucose used as predictive of retinopathy
221	Shogbon AO & Levy SB. Intensive glucose control in the management of diabetes mellitus and inpatient hyperglycemia. Am J Health-Syst Pharm 2010;67(10):798-805.	narrative review
222	Shurraw S, Tonelli M.Intensive glycemic control in type 2 diabetics at high cardiovascular risk: do the benefits justify the risks?. Kidney International 2013;83:346-48.	commentary
223	Simmons RK, Sharp SJ, Sandbaek A, Borch-Johnsen K,	multifactorial intervention

Number	Reference	Reason for exclusion
	Davies MJ, Khunti K, Lauritzen T, Rutten GEHM, van den Donk M, Wareham NJ, Griffin SJ.Does early intensive multifactorial treatment reduce total cardiovascular burden in individuals with screen-detected diabtes? Findings from the ADDITION-Europe cluster-randomized trial. Diabetic Medicine 2012;29:e409-16.	
224	Singh A, Donnino R, Weintraub H, Schwartzbard A.Effect of strict glycemic control in patients with diabetes mellitus on frequency on macrovascular events. American Journal of Cardiology 2013;112:1033-8.	not a systematic review
225	Skriver MV, Stovring H, Kristensen JK, Charles M, Sandbaek A. Short-term impact of HbA1c on morbidity and all-cause mortality in people with type 2 diabetes: a Danish population-based observational study. Diabetologia 2012;55(9):2361-70.	retrospective data
226	Skyler JS, Bergenstal R, Bonow RO, Buse J, Deedwania P, Gale EA, et al. Intensive glycemic control and the prevention of cardiovascular events: implications of the ACCORD, ADVANCE, and VA Diabetes Trials: a position statement of the American Diabetes Association and a Scientific Statement of the American College of Cardiology Foundation and the American Heart Association. Journal of the American College of Cardiology 2009;53(3):298-304.	position statement
227	Stefansdottir G, Zoungas S, Chalmers J, Kengne AP, Knol MJ, Leufkens HG, et al. Intensive glucose control and risk of cancer in patients with type 2 diabetes. Diabetologia 2011;54(7):1608-14.	cancer outcomes, not in review protocol; does not provide optimal blood glucose targets for review question 3; ADVANCE excluded from review question 4 because of concomitant administration of blood pressure lowering drugs
228	Stettler C, Allemann S, Juni P, Cull CA, Holman RR, Egger M, et al. Glycemic control and macrovascular disease in types 1 and 2 diabetes mellitus: meta-analysis of randomized trials (Structured abstract). Am Heart J 2006;152(1):27-38.	grouped macrovascular events, did do some separate analysis for type 2 diabetes
229	Stevens RJ, Stratton IM, Holman RR. UKPDS58 - Modeling glucose exposure as a risk factor for photocoagulation in type 2 diabetes. J Diabetes Complications 2002;16(6):371-76.	mathematical modelling; in Cochrane systematic review
230	Stolk RP, Vingerling JR, Cruickshank JK, Hughes AD, Stanton A, Juming L, et al. Rationale and design of the AdRem study: evaluating the effects of blood pressure lowering and intensive glucose control on vascular retinal disorders in patients with type 2 diabetes mellitus. Contemporary Clinical Trials 2007;28(1):6-17.	design and methods
231	Stratton IM, Cull CA, Adler AI, Matthews DR, Neil HA, Holman RR. Additive effects of glycaemia and blood pressure exposure on risk of complications in type 2 diabetes: a prospective observational study (UKPDS 75). Diabetologia 2006;49(8):1761-69.	in Cochrane systematic review
232	Sturm G, Lamina C, Zitt E, Lhotta K, Haider F, Neyer U, Kronenberg F. Association of hba1c values with mortality and cardiovascular events in diabetic dialysis patients. the	5/78 had type 1 diabetes (no separate analysis provided)

Number	Reference	Reason for exclusion
	invor study and review of the literature. PloS one 2011;6(5).	
233	Tandon N, Ali MK, Narayan KMV.Pharmacologic prevention of microvascular and macrovascular complications in diabetes mellitus. Implications of the results of recent clinical trials in type 2 diabetes. Am J Cardiovasc Drugs 2012;12(1):7-22.	narrative review
234	The Diabetes Control and Complications Trial Research GroupEffect of intensive therapy on the development and progression of diabetic nephropathy in Diabetes Control and Complications Trial. Kidney International 1995;47:1703-20.	type 1 diabetes
235	Thomas MC, Tsalamandris C, Macisaac RJ, Jerums G. The epidemiology of hemoglobin levels in patients with type 2 diabetes. Am J Kidney Dis 2006;48(4):537-45.	anaemia, haemoglobin levels
236	Thoolen BJ, de Ridder DT, Bensing JM, Gorter KJ, Rutten GE.Psychological outcomes of patients with screen-detected type 2 diabetes. Diabetes Care 2006;29:2257-62.	sub-arms of ADDITION-Europe study
237	Tkac I. Effect of intensive glycemic control on cardiovascular outcomes and all-cause mortality in type 2 diabetes: Overview and metaanalysis of five trials. Diabetes Res Clin Pract 2009;86(SUPLL.1):S57-62.	studies in Cochrane or had been excluded by it
238	Tovi J, Svanborg E, Nilsson BY, Engfeldt P.Diabetic neuropathy in elderly type 2 diabetic patients: effects of insulin treatment. Acta Neurol Scand 1998;98:346-53.	no relevant association exploration/outcomes
239	Tsujimoto Y, Ishimura E, Tahara H, Kakiya R, Koyama H, Emoto M, et al. Poor glycemic control is a significant predictor of cardiovascular events in chronic hemodialysis patients with diabetes. Therapeutic Apheresis & Dialysis: Official Peer-Reviewed Journal of the International Society for Apheresis, the Japanese Society for Apheresis, the Japanese Society for Dialysis Therapy 2009;13(4):358-65.	7/134 had type 1 diabetes (no separate analysis provided)
240	Tu S, Chang S, Chen J, Tien K, Hsiao J, Chen H, Hsieh M. Prevention of diabetic nephropathy by tight target control in an Asian population with type 2 diabetes mellitus: A 4-year prospective analysis. Arch Intern Med 2010;170(2):155-61.	multifactorial intervention programme to meet HbA1c, blood pressure and lipid goals
241	Turnbull FM, Abraira C, Anderson RJ, Byington RP, Chalmers JP, Duckworth WC, et al. Intensive glucose control and macrovascular outcomes in type 2 diabetes. Diabetologia 2009;52(11):2288-98.	all included studies in Cochrane systematic review
242	Turner R, Cull C, Holman R. United Kingdom Prospective Diabetes Study 17: a 9-year update of a randomized, controlled trial on the effect of improved metabolic control on complications in non-insulin-dependent diabetes mellitus. Ann Intern Med 1996;124(1:Pt 2):45.	in Cochrane systematic review
243	Turner R. United Kingdom prospective diabetes study. Transplantation Proceedings 1986;18(6):1681-83.	in Cochrane systematic review
244	Ueda H, Mitsusada N, Harimoto K, Miyawaki M, Yasuga Y, Hiraoka H. Glycosylated hemoglobin is a predictor of major adverse cardiac events after drug-eluting stent implantation in patients with diabetes mellitus. Cardiology 2010;116(1):51-57.	retrospective
245	UK Prospective Diabetes Study GroupUK Prospective Diabetes Study (UKPDS) VIII. Study design, progress and	included in Cochrane systematic review

Number	Reference	Reason for exclusion
	performance. Diabetologia 1991;34:877-90.	
246	Vaag AA. Glycemic control and prevention of microvascular and macrovascular disease in the Steno 2 study. Endocrine Practice 2006;12:Suppl-92.	macrovascular composite; commentary
247	van den Donk M, Griffin SJ, Stellato RK, Simmons RK, Sandbaek A, Lauritzen T, Khunti K, Davies MJ, Borch-Johnsen K, Wareham NJ, Rutten GEHM.Effect of early intensive multifactorial therapy compared with routine care on self-reported health status, general well-being, diabetes-specific quality of life and treatment satisfiaction in screen-detected type 2 diabetes patients (ADDITION-Europe): a cluster-randomised trial. Diabetologia 2013;56:2367-77.	no relevant outcomes
248	van der Does FE, de Neeling JN, Snoek FJ, Grootenhuis PA, Kostense PJ, Bouter LM, Heine RJ. Randomized study of two different target levels of glycemic control within the acceptable range in type 2 diabetes. Effects on well-being at 1 year. Diabetes Care 1998;21(12):2085-93.	quality of life outcomes; study included in Cochrane systematic review
249	van DS, Czernichow S, Chalmers J, Kengne AP, de Galan BE, Poulter N, et al. Weight changes and their predictors amongst 11 140 patients with type 2 diabetes in the ADVANCE trial. Diabetes, Obesity & Metabolism 2012;14(5):464-69.	does not provide optimal blood glucose targets for review question 3 (general exploration of predictor of weight gain); ADVANCE excluded from review question 4 because of concomitant administration of blood pressure lowering drugs
250	Wang Q & Han P. Intensive glucose control compared with standard therapy in type 2 diabetes: a systematic review (Provisional abstract). Chinese Journal of Evidence-Based Medicine 2009;9(7):774-82.	not in English
251	Webb DR, Khunti K, Gray LJ, Srinivasan BT, Farooqi A, Wareham N, et al. Intensive multifactorial intervention improves modelled coronary heart disease risk in screen-detected Type2 diabetes mellitus: A cluster randomized controlled trial. Diabetic Med 2012;29(4):531-40.	screening to detect type 2 diabetes, multifactorial intervention, modelled heart disease risk
252	Wei M, Gaskill SP, Haffner SM, Stern MP. Effects of diabetes and level of glycemia on all-cause and cardiovascular mortality. The San Antonio Heart Study. Diabetes Care 1998;21(7):1167-72.	comparison between those with diabetes and those without
253	Weinberger M, Kirkman MS, Samsa GP, Cowper PA, Shortliffe EA, Simel DL, Feussner JR. The relationship between glycemic control and health-related quality of life in patients with non-insulin-dependent diabetes mellitus. Med Care 1994;32(12):1173-81.	quality of life outcomes
254	Williams ME, Lacson E Jr, Wang W, Lazarus JM, Hakim R. Glycemic control and extended hemodialysis survival in patients with diabetes mellitus: comparative results of traditional and time-dependent Cox model analyses. Clinical Journal of The American Society of Nephrology: CJASN 2010;5(9):1595-6001.	population included type 1 and 2 diabetes
255	Williamson JD, Miller ME, Bryan RN, Lazar RM, Coker LH, Johnson J, et al. The Action to Control Cardiovascular Risk in Diabetes Memory in Diabetes Study (ACCORD-MIND): rationale, design, and methods. American Journal of Cardiology 2007;99(12A):112i-222i.	outcomes not in protocol; protocol

Number	Reference	Reason for exclusion
256	Wiuff MB, Jacobsen CB, Sorensen TH, Nielsen ML. Intensive polypharmacological treatment of type 2-diabetes in daily clinical practice - a health technology assessment (Structured abstract). Health Technology Assessment Database 2007;(3).	abstract; HTA not in English
257	Wong ND, Patao C, Malik S, Iloeje U.Preventable coronary heart disease events from control of cardiovascular risk factors in US adults with diabetes (projections from utilizing the UKPDS risk engine). Am J Cardiol 2014;113:1356-61.	wrong study design (retrospective registry)
258	Woodward M, Patel A, Zoungas S, Liu L, Pan C, Poulter N, et al. Does glycemic control offer similar benefits among patients with diabetes in different regions of the world? Results from the ADVANCE trial. Diabetes Care 2011;34(12):2491-95.	comparison across geographical regions; does not provide optimal blood glucose targets for review question 3; ADVANCE excluded from review question 4 because of concomitant administration of blood pressure lowering drugs
259	Wright AD, Cull CA, Macleod KM, Holman RR, for the UKPDS Group. Hypoglycemia in Type 2 diabetic patients randomized to and maintained on monotherapy with diet, sulfonylurea, metformin, or insulin for 6 years from diagnosis: UKPDS73. Journal of Diabetes & its Complications 2006;20(6):395-401.	outcomes not reported; in Cochrane systematic review
260	Wu H, Xu MJ, Zou DJ, Han QJ, Hu X. Intensive glycemic control and macrovascular events in type 2 diabetes mellitus: a meta-analysis of randomized controlled trials (Structured abstract). Chin Med J 2010;123(20):2908-13.	grouped macrovascular events; all studies included in Cochrane systematic review
261	Wu MS, Yu CC, Wu CH, Haung JY, Leu ML, Huang CC. Pre-dialysis glycemic control is an independent predictor of mortality in type II diabetic patients on continuous ambulatory peritoneal dialysis. Peritoneal Dialysis International 1999;19:Suppl-83.	retrospective analysis
262	Xu L, Chan WM, Hui YF, Lam TH. Association between HbA1c and cardiovascular disease mortality in older Hong Kong Chinese with diabetes. Diabetic Med 2012;29(3):393-98.	does not specify type 2 diabetes only
263	Yaffe K, Falvey C, Hamilton N, Schwartz AV, Simonsick EM, Satterfield S, Cauley JA, Rosano C, Launer LJ, Strotmeyer ES, Harris TB.Diabetes, glucose control, and 9-year cognitive decline among older adults without dementia. Arch Neurol 2012;69(9):1170-5.	wrong outcomes (cognitive function) and no explanation of association
264	Yang JM, Guo XH, Yu X. Long-term intensive glycemic and lipid control ameliorates the carotid intima medial thickness in type 2 diabetes mellitus. Beijing da xue xue bao. Yi xue ban (Journal of Peking University. Health Sciences) 2007;39(6):649-52.	included in Cochrane systematic review; intensive control groups received different treatment for cardiovascular disease risk than conventional control group
265	Yoo DE, Park JT, Oh HJ, Kim SJ, Lee MJ, Shin DH, et al. Good glycemic control is associated with better survival in diabetic patients on peritoneal dialysis: a prospective observational study. PLoS ONE [Electronic Resource] 2012;7(1):e30072.	unclear if population includes type 1 or 2 diabetes
266	Younis N, Soran H, Hassanein M. Cardiovascular	commentary

Number	Reference	Reason for exclusion
	disease and intensive glucose lowering in type 2 diabetes. QJM 2009;102(4):293-96.	
267	Zhang C, Sun A, Zhang S, Wu C, Fu M, Xia G, et al. Effects of intensive glucose control on incidence of cardiovascular events in patients with type 2 diabetes: A meta-analysis. Ann Med 2010;42(4):305-15.	included studies in Cochrane systematic review
268	Zhang Q, Zhang N, Hu HL, He Y, Chen MW, Wang XY, et al. Effect of intensive blood glucose control on quality of life in elderly patients with type 2 diabetes in Anhui Province. Chin Med J 2011;124(11):1616-22.	quality of life outcomes
269	Zhang Y, Hu G, Yuan Z, Chen L. Glycosylated hemoglobin in relationship to cardiovascular outcomes and death in patients with type 2 diabetes: a systematic review and meta-analysis. PLoS ONE [Electronic Resource] 2012;7(8):e42551.	studies included in Cochrane systematic review
270	Zhao XH, Xu ZR, Zhang Q, Gu HF, Yang YM. Effect of intensive multifactorial treatment on the intima-media thickness of large arteries in patients with new-onset type 2 diabetes mellitus. Journal of Zhejiang University Science B 2012;13(5):378-85.	compared wihtin groups rather than between intensive and conventional; multifactorial treatment
271	Zhao Y, Campbell CR, Fonseca V, Shi L. Impact of hypoglycemia associated with antihyperglycemic medications on vascular risks in veterans with type 2 diabetes. Diabetes Care 2012;35(5):1126-32.	retrospective
272	Zhu CH, Zhang SS, Kong Y, Bi YF, Wang L, Zhang Q.Effects of intensive control of blood glucose and blood pressure on microvascular complications in patients with type 2 diabetes mellitus. Int J Ophthalmol 2013;6(2):141-5.	no target set
273	Zoppini G, Verlato G, Targher G, Bonora E, Trombetta M, Muggeo M. Variability of body weight, pulse pressure and glycaemia strongly predict total mortality in elderly type 2 diabetic patients. The Verona Diabetes Study. Diabetes/Metabolism Research Reviews 2008;24(8):624-28.	combined glycaemia, pulse pressure and body weight; retrospective data
274	Zoppini G, Verlato G, Targher G, Casati S, Gusson E, Biasi V, et al. Is fasting glucose variability a risk factor for retinopathy in people with type 2 diabetes? Nutrition Metabolism & Cardiovascular Diseases 2009;19(5):334-39.	predictive value of HbA1c and plasma glucose
275	Zoungas S, Chalmers J, Kengne AP, Pillai A, Billot L, de GB, et al. The efficacy of lowering glycated haemoglobin with a gliclazide modified release-based intensive glucose lowering regimen in the ADVANCE trial. Diabetes Research & Clinical Practice 2010;89(2):126-33.	efficacy of gliciazide; does not provide optimal blood glucose targets for review question 3; ADVANCE excluded from review question 4 because of concomitant administration of blood pressure lowering drugs
276	Zoungas S, de Galan BE, Ninomiya T, Grobbee D, Hamet P, Heller S, et al. Combined effects of routine blood pressure lowering and intensive glucose control on macrovascular and microvascular outcomes in patients with type 2 diabetes: New results from the ADVANCE trial. Diabetes Care 2009;32(11):2068-74.	in Cochrane systematic review; does not provide optimal blood glucose targets for review question 3; ADVANCE excluded from review question 4 because of concomitant administration of blood

Number	Reference	Reason for exclusion
		pressure lowering drugs
277	Zoungas S, Patel A, Chalmers J, de Galan BE, Li Q, Billot L, et al. Severe hypoglycemia and risks of vascular events and death. New England Journal of Medicine 2010;363(15):1410-18.	outcomes not in protocol; does not provide optimal blood glucose targets for review question3; ADVANCE excluded from review question 4 because of concomitant administration of blood pressure lowering drugs

L.5 Review Question 5: Should self-monitoring be used to manage blood glucose levels in people with type 2 diabetes?

Table 4: Excluded studies of full text papers

Number	Reference	Reason for exclusion
1	Allemann,S., Houriet,C., Diem,P., Stettler,C. Self-monitoring of blood glucose in non-insulin treated patients with type 2 diabetes: a systematic review and meta-analysis. Current Medical Research & Opinion 2009;25(12):2903-13.	systematic review
2	Balk,E., Teplinsky,E., Trikalinos,T., Chew,P., Chung,M., Lau,J., Pittas,A. Applicability of the evidence regarding intensive glycemic control and self-monitored blood glucose to Medicare patients with Type 2 diabetes (Structured abstract). Health Technology Report. Agency for Healthcare Research and Quality (US); 2007 Sep 10.	not full paper or insufficient data to extract
3	Bennion,N., Christensen,N.K., McGarraugh,G. Alternate site glucose testing: a crossover design. Diabetes Technology & Therapeutics 2002;4(1):25-33.	focus on correlation between different blood glucose measures
4	Bergenstal,R.M., Anderson,R.L., Bina,D.M., Johnson,M.L., Davidson,J.L., Solarz-Johnson,B., Kendall,D.M. Impact of modem-transferred blood glucose data on clinician work efficiency and patient glycemic control. Diabetes Technol Ther 2005;7(2):241-7.	mixed population of type 1 and type 2 diabetes
5	Biermann,E., Dietrich,W., Standl,E. Telecare of diabetic patients with intensified insulin therapy. A randomized clinical trial. Studies in health technology and informatics 2000;77:327-32.	mixed population of type 1 and type 2 diabetes
6	Bujnowska-Fedak,M.M., Puchala,E., Steciwko,A. The impact of telehome care on health status and quality of life among patients with diabetes in a primary care setting in Poland. Telemedicine Journal & E-Health 2011;17(3):153-63.	mixed population of type 1 and type 2 diabetes
7	Chidum,E., Agbai,D., Fidelis,O., Teppany,S., Martina,R., Rian,E., et al. Self-monitoring of blood glucose improved glycaemic control and 10-year coronary heart disease risk profile of type 2 diabetic patients. Chinese Medical Journal 2011;124(2):16.	control group stopped follow up after 3 months
8	Cho,J.H., Kwon,H.S., Kim,H.S., Oh,J.A., Yoon,K.H. Effects on diabetes management of a health-care provider mediated, remote coaching system via a PDA-type glucometer and the Internet. Journal of Telemedicine & Telecare 2011;17(7):365-70.	not self-monitoring that is, testing not carried out by patient
9	Clar,C., Barnard,K., Cummins,E., Royle,P., Waugh,N., Aberdeen Health Technology Assessment Group. Self-monitoring of blood glucose in type 2 diabetes: systematic review. Health Technology Assessment (Winchester, England) 2010;14(12):1-40.	systematic review
10	Cosson,E., Hamo-Tchatchouang,E., Dufaitre-Patouraux,L., Attali,J.R., Paries,J., Schaepelynck-Belicar,P. Multicentre, randomised, controlled study of the impact of continuous sub-cutaneous glucose monitoring (GlucoDay) on glycaemic control in type 1 and type 2 diabetes patients. Diabetes Metab. 2009;35(4):312-8.	not focused on self-monitoring of blood glucose

Number	Reference	Reason for exclusion
11	Coster,S., Gulliford,M.C., Seed,P.T., Powrie,J.K., Swaminathan,R. Monitoring blood glucose control in diabetes mellitus: a systematic review (Structured abstract). Health Technology Assessment 2000;4(12):1-93.	systematic review
12	Dallosso,H.M., Eborall,H.C., Daly,H., Martin-Stacey,L., Speight,J., Realf,K., et al. Does self monitoring of blood glucose as opposed to urinalysis provide additional benefit in patients newly diagnosed with type 2 diabetes receiving structured education? The DESMOND SMBG randomised controlled trial protocol. BMC Fam Pract 2012;13:18.	protocol only
13	Davidson,M.B. Evaluation of self monitoring of blood glucose in non-insulin-treated diabetic patients by randomized controlled trials: little bang for the buck. [Review]. Reviews on Recent Clinical Trials 2010;5(3):138-42.	systematic review
14	Duran,A., Martin,P., Runkle,I., Perez,N., Abad,R., Fernandez,M., et al. Benefits of self-monitoring blood glucose in the management of new-onset Type 2 diabetes mellitus: the St Carlos Study, a prospective randomized clinic-based interventional study with parallel groups. Journal of Diabetes 2010;2:203–211.	not full paper or insufficient data to extract
15	Edelman,S.V., Bell,J.M., Serrano,R.B., Kelemen,D. Home testing of fructosamine improves glycemic control in patients with diabetes. Endocr Pract 2001;7(6):454-8.	testing of fructosamine
16	Ehrhardt,N.M., Chellappa,M., Walker,M.S., Fonda,S.J., Vigersky,R.A. The effect of real-time continuous glucose monitoring on glycemic control in patients with type 2 diabetes mellitus. Journal of Diabetes Science & Technology 2011;5(3):668-75.	parent paper included and data extracted
17	Farmer,A., Wade,A., French,D.P., Goyder,E., Kinmonth,A.L., Neil,A. The DiGEM trial protocol - A randomised controlled trial to determine the effect on glycaemic control of different strategies of blood glucose self-monitoring in people with type 2 diabetes [ISRCTN47464659]. BMC Fam Pract 2005;6:25.	protocol only
18	Farmer,A. Meta-analysis: Self-monitoring in non-insulin-treated type 2 diabetes improved HbA1c by 0.25%. Annals of Internal Medicine 2012;156(12):e486.	systematic review
19	Farmer,A.J., Heneghan,C., Barnett,A.H., Davidson,M.B., Guerci,B., O'Kane,M., et al. Individual patient data meta-analysis of trials of self-monitoring of blood glucose in non-insulin treated type 2 diabetes: protocol for a systematic review. Primary Care Diabetes 2009;3(2): 117–121.	systematic review
20	Farmer,A.J., Perera,R., Ward,A., Heneghan,C., Oke,J., Barnett,A.H., et al. Meta-analysis of individual patient data in randomised trials of self monitoring of blood glucose in people with non-insulin treated type 2 diabetes. BMJ 2012;344:e486.	systematic review
21	Farmer,A.J., Wade,A.N., French,D.P., Simon,J., Yudkin,P., Gray,A., et al. Blood glucose self-monitoring in type 2 diabetes: a randomised controlled trial. Health Technology Assessment (Winchester, England) 2009;13(15):iii-iv.	systematic review
22	Fisher,L., Polonsky,W., Parkin,C.G., Jelsovsky,Z., Amstutz,L., Wagner,R.S. The impact of blood glucose	parent paper included and data extracted

Number	Reference	Reason for exclusion
	monitoring on depression and distress in insulin-naive patients with type 2 diabetes. Current Medical Research & Opinion 2011;27:Suppl-46.	
23	Fisher,L., Polonsky,W.H., Parkin,C.G., Jelsovsky,Z., Petersen,B., Wagner,R.S. The impact of structured blood glucose testing on attitudes toward self-management among poorly controlled, insulin-naive patients with type 2 diabetes. Diabetes Res Clin Pract 2012;96(2):149-55.	parent paper included and data extracted
24	French,D.P., Wade,A.N., Yudkin,P., Neil,H.A., Kinmonth,A.L., Farmer,A.J. Self-monitoring of blood glucose changed non-insulin-treated Type 2 diabetes patients' beliefs about diabetes and self-monitoring in a randomized trial. Diabet Med 2008;25(10):1218-28.	parent paper included and data extracted
25	Gallichan,M.J. Self-monitoring by patients receiving oral hypoglycaemic agents: A survey and a comparative trial. Pract Diabetes 1994;11(1):28-30.	testing of fructosamine
26	Gandhi,G.Y., Kovalaske,M., Kudva,Y., Walsh,K., Elamin,M.B., Beers,M., et al. Efficacy of continuous glucose monitoring in improving glycemic control and reducing hypoglycemia: a systematic review and meta-analysis of randomized trials. [Review]. J Diabetes Sci Technol 2011;5(4):952-65.	systematic review
27	Gerrald,K.R., Malone,R.M., Shilliday,B.B. Clinical benefit of self-monitoring of blood glucose is uncertain for non-insulin-treated patients with type 2 diabetes. Clinical Diabetes 2010;28(3):121-23.	systematic review
28	Goyder,E. Should we stop patients with non-insulin treated diabetes using self monitoring of blood glucose? The implications of the Diabetes Glycaemic Education and Monitoring (DiGEM) trial. Primary care diabetes 2008;2(2):91-93.	systematic review
29	Graziano,J.A. & Gross,C.R. A randomized controlled trial of an automated telephone intervention to improve glycemic control in type 2 diabetes. Advances in Nursing Science 2009;32(3):E42-57.	systematic review
30	Haupt,A., Berg,B., Paschen,P., Dreyer,M., H„ring,H.U., Smedegaard,J., et al. InDuo, a novel combined insulin injection and blood glucose monitoring device - effective and save as other devices, and patient preference. Exp Clin Endocrinol Diabetes 2005;113(9):541-4.	mixed population of type 1 and type 2 diabetes
31	Hoskins,P.L., Alford,J.B., Handelsman,D.J., Yue,D.K., Turtle,J.R. Comparison of different models of diabetes care on compliance with self-monitoring of blood glucose by memory glucometer. Diabetes Care 1988;11(9):719-24.	mixed population of type 1 and type 2 diabetes
32	IQWiG. Urine and blood glucose self-measurement in diabetes mellitus type 2 (Structured abstract). Health Technology Assessment Database 2009;(3).	systematic review
33	Istepanian,R.S., Zitouni,K., Harry,D., Moutosammy,N., Sungoor,A., Tang,B., Earle,K.A. Evaluation of a mobile phone telemonitoring system for glycaemic control in patients with diabetes. Journal of Telemedicine & Telecare 2009;15(3):125-28.	not full paper or insufficient data to extract
34	Ito,T., Kamoi,K., Minagawa,S., Kimura,K., Kobayashi,A. Patient perceptions of different lancing sites for self-monitoring of blood glucose: a comparison of fingertip site	mixed population of type 1 and type 2 diabetes

Number	Reference	Reason for exclusion
	with palm site using the OneTouch Ultra Blood Glucose Monitoring System. J Diabetes Sci Technol. 2010 Jul 1;4(4):906-10.	
35	Jansen,J.P. Self-monitoring of glucose in type 2 diabetes mellitus: a Bayesian meta-analysis of direct and indirect comparisons (Structured abstract). Current medical research and opinion 2006;22(4):671-81.	not full paper or insufficient data to extract
36	John,A., Davis,W.A., Price,C.P., Davis,T.M. The value of self-monitoring of blood glucose: a review of recent evidence (Structured abstract). Journal of diabetes and its complications 2010;24(2):129-41.	not full paper or insufficient data to extract
37	Johnson,J.A., Majumdar,S.R., Bowker,S.L., Toth,E.L., Edwards,A. Self-monitoring in Type 2 diabetes: a randomized trial of reimbursement policy. Diabetic Medicine 2006;23(11):1247-51.	focus on availability/cost of self-monitoring of blood glucose
38	Jones,H., Edwards,L., Vallis,T.M., Ruggiero,L., Rossi,S.R., Rossi,J.S., et al. Changes in diabetes self-care behaviors make a difference in glycemic control: the Diabetes Stages of Change (DiSC) study. Diabetes Care 2003;26(3):732-37.	not focused on self-monitoring of blood glucose
39	Kempe,K.C., Budd,D., Stern,M., Ellison,J.M., Saari,L.A., Adiletto,C.A., et al. Palm glucose readings compared with fingertip readings under steady and dynamic glycemic conditions, using the OneTouch Ultra Blood Glucose Monitoring System. Diabetes Technol Ther 2005;7(6):916-26.	mixed population of type 1 and type 2 diabetes
40	Kibriya,M.G., Ali,L., Banik,N.G., Azad Khan,A.K. Home monitoring of blood glucose (HMBG) in Type-2 Diabetes mellitus in a developing country. Diabetes Research & Clinical Practice 1999;46(3):253-57.	Focus on availability/cost of self-monitoring of blood glucose
41	Kleefstra,N., Hortensius,J., van Hateren,K.J., Logtenberg,S.J., Houweling,S.T., Gans,R.O., Bilo,H.J. Self-monitoring of blood glucose in noninsulin-treated type 2 diabetes: an overview. Diabetes Metab Syndr Obes 2009; 2:155–163.	systematic review
42	Li,X., Zhou,Q., Zou,F., Wu,L., Chen,H., Liu,Z. Effectiveness of systematic self-management education on blood sugar level of patients in the community with type 2 diabetes. [Chinese]. Journal of Central South University (Medical Sciences) 2012;37.	not in English
43	Liang,X., Wang,Q., Yang,X., Cao,J., Chen,J., Mo,X., et al. Effect of mobile phone intervention for diabetes on glycaemic control: a meta-analysis. Diabetic Medicine 2011;28(4):455-63.	systematic review
44	Lock,J.P., Szuts,E.Z., Malomo,K.J., Anagnostopoulos,A. Whole-blood glucose testing at alternate sites: glucose values and hematocrit of capillary blood drawn from fingertip and forearm. Diabetes Care 2002;25(2):337-41.	mixed population of type 1 and type 2 diabetes
45	Malanda,U.L., Bot,S.D., French,D.P., Kostense,P.J., Wade,A.N., Dekker,J.M., et al. Experience of hypoglycaemia is associated with changes in beliefs about diabetes in patients with type 2 diabetes. Diabetic Medicine 2011;28(11):1395-4000.	prospective cohort analysis of DIGEM trial but data not analysed by randomised treatment group
46	Malanda,U.L., Bot,S.D., Kostense,P.J., Snoek,F.J., Dekker,J.M., Nijpels,G. Effects of self-monitoring of glucose in non-insulin treated patients with type 2	protocol only

Number	Reference	Reason for exclusion
	diabetes: design of the IN CONTROL-trial. BMC Family Practice 2009;10:26.	
47	Malanda,U.L., Welschen,L.M., Riphagen,I.I., Dekker,J.M., Nijpels,G., Bot,S.D. Self-monitoring of blood glucose in patients with type 2 diabetes mellitus who are not using insulin. [Review][Update of Cochrane Database Syst Rev. 2005;(2):CD005060.	systematic review
48	McAndrew,L., Schneider,S.H., Burns,E., Leventhal,H. Does patient blood glucose monitoring improve diabetes control? A systematic review of the literature. Diabetes Educator 2012;33(6):991-1011.	systematic review
49	McIntosh,B., Yu,C., Lal,A., Chelak,K., Cameron,C., Singh,S.R., Dahl,M. Efficacy of self-monitoring of blood glucose in patients with type 2 diabetes mellitus managed without insulin: a systematic review and meta-analysis. Open Med 2010;4(2):e102-13.	systematic review
50	Miller,C.K., Gutschall,M.D., Holloman,C. Self-monitoring predicts change in fiber intake and weight loss in adults with diabetes following an intervention regarding the glycemic index. Patient Education & Counseling 2009;76(2):213-19.	not focused on self-monitoring of blood glucose
51	Mohan,V., Ravikumar,R., Poongothai,S., Amutha,A., Sowmya,S., Karkhuzali,K., Parkin,C.G. A single-center, open, comparative study of the effect of using self-monitoring of blood glucose to guide therapy on preclinical atherosclerotic markers in type 2 diabetic subjects. J Diabetes Sci Technol 2010;4(4):942-8.	not focused on self-monitoring of blood glucose
52	Moreland,E.C., Volkening,L.K., Lawlor,M.T., Chalmers,K.A., Anderson,B.J., Laffel,L.M.B. Use of a blood glucose monitoring manual to enhance monitoring adherence in adults with diabetes: A randomized controlled trial. Arch Intern Med 2006;166(6):689-95.	mixed population of type 1 and type 2 diabetes
53	Nicolucci,A., Del,Prato S., Vespasiani,G., ELEONOR Study Group. Optimizing insulin glargine plus one injection of insulin glulisine in type 2 diabetes in the ELEONOR study: similar effects of telecare and conventional self-monitoring of blood glucose on patient functional health status and treatment satisfaction. Diabetes Care 2011;34(12):2524-6.	parent paper included and data extracted
54	Oh,J.A., Kim,H.S., Yoon,K.H., Choi,E.S. A telephone-delivered intervention to improve glycemic control in type 2 diabetic patients. Yonsei medical journal 2003;44(1):1-8.	unclear intervention in control group
55	Oria-Pino,A., Montero-P,rez,F.J., Luna-Morales,S., Campo-V zquez,P., S nchez-Guijo,P. [Effectiveness and efficacy of self-measurement of capillary blood glucose in patients with type 2 diabetes mellitus]. Medicina clinica 2006;126(19):728-35.	not in English
56	Petitti,D.B., Contreras,R., Dudl,J. Randomized trial of fructosamine home monitoring in patients with diabetes. Effective clinical practice : ECP 2001;4(1):18-23.	testing of fructosamine
57	Pignone,M. Value of self-monitoring of blood glucose in non-insulin-using patients with type 2 diabetes. Clinical Diabetes 2009;27(1):17-18.	not full paper or insufficient data to extract
58	Polonsky,W., Fisher,L., Schikman,C., Hinnen,D., Parkin,C., Jelsovsky,Z., et al. The value of episodic, intensive blood glucose monitoring in non-insulin treated	protocol only

Number	Reference	Reason for exclusion
	persons with Type 2 Diabetes: design of the Structured Testing Program (STeP) study, a cluster-randomised, clinical trial [NCT00674986]. BMC Fam Pract 2010;11:37.	
59	Polonsky,W.H., Fisher,L., Schikman,C.H., Hinnen,D.A., Parkin,C.G., Jelsovsky,Z., et al. Structured self-monitoring of blood glucose significantly reduces A1C levels in poorly controlled, noninsulin-treated type 2 diabetes: results from the Structured Testing Program study. Diabetes Care 2011;34(2):262-7.	parent paper included and data extracted
60	Poolsup,N., Suksomboon,N., Jiamsathit,W. Systematic review of the benefits of self-monitoring of blood glucose on glycemic control in type 2 diabetes patients. Diabetes Technology and Therapeutics 2008;10(SUPPL.1):S51-S66.	systematic review
61	Poolsup,N., Suksomboon,N., Rattanasookchit,S. Meta-analysis of the benefits of self-monitoring of blood glucose on glycemic control in type 2 diabetes patients: an update. Diabetes Technology & Therapeutics 2009;11(12):775-84.	systematic review
62	Quinn,C.C., Clough,S.S., Minor,J.M., Lender,D., Okafor,M.C., Gruber-Baldini,A. WellDoc mobile diabetes management randomized controlled trial: Change in clinical and behavioral outcomes and patient and physician satisfaction. Diabetes Technol Ther 2008;10(3):160-8.	pilot study using WellDoc-full cluster randomised controlled trial results available
63	Quinn,C.C., Gruber-Baldini,A.L., Shardell,M., Weed,K., Clough,S.S., Peeples,M., et al. Mobile diabetes intervention study: Testing a personalized treatment/behavioral communication intervention for blood glucose control. Contemp Clin Trials 2009;30(4):334-46.	protocol only
64	Russell-Minda,E., Jutai,J., Speechley,M., Bradley,K., Chudyk,A., Petrella,R. Health technologies for monitoring and managing diabetes: a systematic review. Journal of Diabetes Science & Technology 2009;3(6):1460-71.	systematic review
65	Sarol,J.N., Nicodemus,N.A., Tan,K.M., Grava,M.B. Self-monitoring of blood glucose as part of a multi-component therapy among non-insulin requiring type 2 diabetes patients: a meta-analysis (1966 - 2004) (Structured abstract). Curr Med Res Opin 2005;21(2):173-84.	systematic review
66	Sarwat,S., Ilag,L.L., Carey,M.A., Shrom,D.S., Heine,R.J. The relationship between self-monitored blood glucose values and glycated haemoglobin in insulin-treated patients with Type 2 diabetes. Diabetic Medicine 2010;27(5):589-92.	focus on correlation between different blood glucose measures
67	Sevick,M.A., Korytkowski,M., Stone,R.A., Piraino,B., Ren,D., Sereika,S., et al. Biophysiologic outcomes of the Enhancing Adherence in Type 2 Diabetes (ENHANCE) trial. Journal of the Academy of Nutrition & Dietetics 2012;112(8):1147-57.	head to head comparison of self-monitoring of blood glucose but focus on behavioural intervention
68	Shiraiwa,T., Takahara,M., Kaneto,H., Miyatsuka,T., Yamamoto,K., Yoshiuchi,K., et al. Efficacy of occasional self-monitoring of postprandial blood glucose levels in type 2 diabetic patients without insulin therapy. Diabetes Res Clin Pract 2010;90(3):e91-2.	not full paper or insufficient data to extract
69	Siebolds,M., Gaedeke,O., Schwedes,U. Self-monitoring of blood glucose--psychological aspects relevant to changes in HbA1c in type 2 diabetic patients treated with diet or diet plus oral antidiabetic medication. Patient	parent paper included and data extracted

Number	Reference	Reason for exclusion
	education and counseling 2006;6.	
70	St,John A., Davis,W.A., Price,C.P., Davis,T.M. The value of self-monitoring of blood glucose: a review of recent evidence. Journal of Diabetes & its Complications 2010;24(2):129-41.	systematic review
71	Thielen,V., Scheen,A., Bringer,J., Renard,E. Attempt to improve glucose control in type 2 diabetic patients by education about real-time glucose monitoring. Diabetes & Metabolism 2010;36(3):240-43.	not full paper or insufficient data to extract
72	Towfigh,A., Romanova,M., Weinreb,J.E., Munjas,B., Suttorp,M.J., Zhou,A., Shekelle,P.G. Self-monitoring of blood glucose levels in patients with type 2 diabetes mellitus not taking insulin: a meta-analysis. American Journal of Managed Care 2008;14.	systematic review
73	Ward,A.M., Heneghan,C., Perera,R., Lasserson,D., Nunan,D., Mant,D., Glasziou,P. What are the basic self-monitoring components for cardiovascular risk management? BMC Medical Research Methodology 2010;10:105.	systematic review
74	Welschen,L.M., Bloemendal,E., Nijpels,G., Dekker,J.M., Heine,R.J., Stalman,W.A., Bouter,L.M. Self-monitoring of blood glucose in patients with type 2 diabetes who are not using insulin: a systematic review (Brief record). Diabetes Care 2005;28(6).	not full paper or insufficient data to extract
75	Willett,L.R. ACP Journal Club. Meta-analysis: self-monitoring in non-insulin-treated type 2 diabetes improved HbA1c by 0.25%. Annals of Internal Medicine 2012;156(12):JC6-12.	systematic review
76	Yeh,H.-C., Brown,T.T., Maruthur,N., Ranasinghe,P., Berger,Z., Suh,Y.D., et al. Comparative effectiveness and safety of methods of insulin delivery and glucose monitoring for diabetes mellitus: A systematic review and meta-analysis. Ann Intern Med 2012;157(5):336-47.	mixed population of type 1 and type 2 diabetes
77	Yoo,H.J., Park,M.S., Kim,T.N., Yang,S.J., Cho,G.J., Hwang,T.G., et al. A Ubiquitous Chronic Disease Care system using cellular phones and the internet. Diabetic Medicine 2009;26(6):628-35.	not focused on self-monitoring of blood glucose
78	Zhang,D.A., Katznelson,L., Li,M. Postprandial glucose monitoring further improved glycemia, lipids, and weight in persons with type 2 diabetes mellitus who had already reached hemoglobin A1c goal. Journal of Diabetes Science & Technology 2012;6(2):28.	not available from the British Library

L.6 Review Question 6: Should aspirin and/ or clopidogrel be used for primary prevention of cardiovascular disease in people with type 2 diabetes?

Table 5: Excluded studies of full text papers

Number	Reference	Reason for exclusion
1	Angiolillo,D.J., Capranzano,P., Desai,B., Shoemaker,S.B., Charlton,R., Zenni,M.M., et al. Impact of P2Y(12) inhibitory effects induced by clopidogrel on platelet procoagulant activity in type 2 diabetes mellitus patients. Thrombosis Research 2009;1.	secondary prevention of cardiovascular disease (some or all patients with cardiovascular disease or unclear cardiovascular disease status)
2	Anon. Low-dose aspirin for primary prevention of atherosclerotic events in patients with type 2 diabetes: A randomized controlled trial. JAMA - Journal of the American Medical Association 2008;300(18):2134-2141.	parent paper included and data extracted
3	Azcona,L., Lopez Farr,,A.J., Jimenez Mateos-Ceres,P., Segura,A., Rodriguez,P., Modrego,J., et al. Impact of clopidogrel and aspirin treatment on the expression of proteins in platelets from type-2 diabetic patients with stable coronary ischemia. J Pharm Sci 2012;101(8):2821-32.	no relevant outcomes reported
4	Belch,J., MacCuish,A., Campbell,I., Cobbe,S., Taylor,R., Prescott,R., et al. The prevention of progression of arterial disease and diabetes (POPADAD) trial: Factorial randomised placebo controlled trial of aspirin and antioxidants in patients with diabetes and asymptomatic peripheral arterial disease. BMJ 2008;337:a1840.	mixed population of type 1 and type 2 diabetes (no subgroup analysis)
5	Camargo,E.G., Pedrini,R.O., Gross,J.L., Camargo,J.L., Silveiro,S.P. Lack of interference of aspirin in HbA1c measured by ion-exchange HPLC in type 2 diabetic patients: a randomized, double-blind, placebo-controlled study. Clin Chim Acta 2008;391(1-2):120-2.	not full text paper
6	Camargo,E.G., Weinert,L.S., Lavinsky,J., Gross,J.L., Silveiro,S.P. The effect of aspirin on the antiproteinuric properties of enalapril in microalbuminuric type 2 diabetic patients: a randomized, double-blind, placebo-controlled study. Diabetes Care 2007;30(7):e66.	not full text paper
7	Dash,A., Maiti,R., Bandakkanavar,T.K., Bhaskar,A., Prakash,J., Pandey,B.L. Prophylactic Add-on Antiplatelet Therapy in Chronic Kidney Disease With Type 2 Diabetes Mellitus: Comparison Between Clopidogrel and Low-dose Aspirin. Int J Prev Med 2013;4(8):902-10.	no relevant outcomes reported
8	de,Berardis G., Sacco,M., Evangelista,V., Filippi,A., Giorda,C.B., Tognoni,G., et al. Aspirin and Simvastatin Combination for Cardiovascular Events Prevention Trial in Diabetes (ACCEPT-D): Design of a randomized study of the efficacy of low-dose aspirin in the prevention of cardiovascular events in subjects with diabetes mellitus treated with statins. Trials. 2007; 8: 21.	not full text paper; comparison with pharmacological intervention other than cloidogrel/aspirin/placebo

Number	Reference	Reason for exclusion
9	de,Berardis G., Sacco,M., Strippoli,G.F.M., Pellegrini,F., Graziano,G., Tognoni,G., Nicolucci,A. Aspirin for primary prevention of cardiovascular events in people with diabetes: meta-analysis of randomised controlled trials (Structured abstract). BMJ 2009;339:b4531.	review
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11		
12	Ferguson,A.D., Dokainish,H., Lakkis,N. Aspirin and clopidogrel response variability: review of the published literature. Texas Heart Institute Journal 2008;35(3):313-20.	review
13	Ferreiro,J.L., Ueno,M., Desai,B., Capranzano,P., Capodanno,D., Angiolillo,D.J. Impact of adjunctive cilostazol therapy versus high maintenance dose of clopidogrel in suboptimal responders with diabetes mellitus. Rev Esp Cardiol 2012;65(1):105-6.	comparison with pharmacological intervention other than cloidogrel/aspirin/placebo
14	Goldfine,A.B., Fonseca,V., Jablonski,K.A., Pyle,L., Staten,M.A., Shoelson,S.E. The effects of salsalate on glycemic control in patients with type 2 diabetes: A randomized trial. Annals of Internal Medicine 2010;152(6):346-357.	comparison with pharmacological intervention other than cloidogrel/aspirin/placebo
15	Gresele,P., Marzotti,S., Guglielmini,G., Momi,S., Giannini,S., Minuz,P., et al. Hyperglycemia-induced platelet activation in type 2 diabetes is resistant to aspirin but not to a nitric oxide-donating agent. Diabetes Care 2010;33(6):1262-68.	secondary prevention of cardiovascular disease (some or all patients with cardiovascular disease or unclear cardiovascular disease status)
16	Hovens,M.M., Snoep,J.D., Groeneveld,Y., Frolich,M., Tamsma,J.T., Huisman,M.V. Effects of aspirin on serum C-reactive protein and interleukin-6 levels in patients with type 2 diabetes without cardiovascular disease: a randomized placebo-controlled crossover trial. Diabetes Obes Metab 2008;10(8):668-74.	no relevant outcomes reported
17	Kappagoda,C.T. & Amsterdam,E.A. Trials of primary prevention of cardiovascular events using aspirin. American Journal of Cardiology 2011;108(8):1198.	non-randomised
18	Katakami,N., Kim,Y.S., Kawamori,R., Yamasaki,Y. The phosphodiesterase inhibitor cilostazol induces regression of carotid atherosclerosis in subjects with type 2 diabetes mellitus: principal results of the Diabetic Atherosclerosis Prevention by Cilostazol (DAPC) study: a randomized trial. Circulation 2010;121(23):2584-91.	secondary prevention of cardiovascular disease (some or all patients with cardiovascular disease or unclear cardiovascular disease status)
19	Konstantinopoulos,P.A., Karamouzis,M.V., Papavassiliou,A.G. Effect of aspirin use on thiazolidinediones and cardiovascular events. JAMA - Journal of the American Medical Association 2008;299(13):1539.	non-randomised
20	Macchia,A., Laffaye,N., Comignani,P.D., Cornejo,Pucci E., Igarzabal,C., Scazziota,A.S., et al. Statins but not aspirin reduce thrombotic risk assessed by thrombin generation in diabetic patients without cardiovascular events: the RATIONAL trial.	no relevant outcomes reported

Number	Reference	Reason for exclusion
	PLoS One 2012;7(3):e32894.	
21	Ogawa,H. [Series, clinical study from Japan and its reflections; Japanese Primary Prevention of Atherosclerosis with Aspirin for Diabetes (JPAD) Trial]. Nihon Naika Gakkai zasshi.The Journal of the Japanese Society of Internal Medicine 2011;100(1):218.	not in English
22	Ogawa,S., Mori,T., Nako,K., Ishizuka,T., Ito,S. Reduced albuminuria with sarpogrelate is accompanied by a decrease in monocyte chemoattractant protein-1 levels in type 2 diabetes. Clinical Journal of The American Society of Nephrology: CJASN 2008;3.	secondary prevention of cardiovascular disease (some or all patients with cardiovascular disease or unclear cardiovascular disease status)
23	Okada,S., Morimoto,T., Ogawa,H., Kanauchi,M., Nakayama,M., Uemura,S., et al. Differential effect of low-dose aspirin for primary prevention of atherosclerotic events in diabetes management: a subanalysis of the JPAD trial. Diabetes Care 2011;34(6).	parent paper included and data extracted
24	Okada,S., Morimoto,T., Ogawa,H., Sakuma,M., Soejima,H., Nakayama,M., et al. Effect of low-dose aspirin on primary prevention of cardiovascular events in Japanese diabetic patients at high risk. Circulation journal 2014;77(12):3023-28.	parent paper included and data extracted
25	Pignone,M., Alberts,M.J., Colwell,J.A., Cushman,M., Inzucchi,S.E., Mukherjee,D., et al. Aspirin for primary prevention of cardiovascular events in people with diabetes. Journal of the American College of Cardiology 2010;55(25):2878-86.	review
26	Raghavan,R.P., Laight,D.W., Cummings,M.H. Aspirin in type 2 diabetes, a randomised controlled study: Effect of different doses on inflammation, oxidative stress, insulin resistance and endothelial function. Int J Clin Pract 2014;68(2):271-7.	no relevant outcomes reported
27	Rosiak,M., Postula,M., Kaplon-Cieslicka,A., Trzepla,E., Filipiak,K.J., Czlonkowski,A., Opolski,G. The effect of doubling the dose of acetylsalicylic acid (ASA) on platelet function parameters in patients with type 2 diabetes and platelet hyperreactivity during treatment with 75 mg of ASA: a subanalysis of the AVOCADO study. Kardiol Pol 2013;71(6):552-7.	no relevant outcomes reported
28	Rumore,M.M. & Kim,K.S. Potential role of salicylates in type 2 diabetes. Annals of Pharmacotherapy 2010;44(7-8):1207-21.	review
29	Saito,Y., Morimoto,T., Ogawa,H., Nakayama,M., Uemura,S., Doi,N., et al. Low-dose aspirin therapy in patients with type 2 diabetes and reduced glomerular filtration rate: subanalysis from the JPAD trial. Diabetes Care 2011;34(2):280-85.	parent paper included and data extracted
30	Simpson,S.H., Gamble,J.-M., Mereu,L., Chambers,T. Effect of aspirin dose on mortality and cardiovascular events in people with diabetes: A meta-analysis. Journal of General Internal Medicine 2011;26(11):1336-1344.	review
31	Soejima,H. & Ogawa,H. [Investigation of the effects of low dose aspirin therapy on primary and	not in English

Number	Reference	Reason for exclusion
	secondary prevention of cardiovascular disease]. Nihon rinsho.Japanese journal of clinical medicine 2010;68(5):882-86.	
32	Soejima,H., Ogawa,H., Morimoto,T., Nakayama,M., Okada,S., Uemura,S., et al. Aspirin reduces cerebrovascular events in type 2 diabetic patients with poorly controlled blood pressure. Subanalysis from the JPAD trial. Circulation Journal 2012;76(6):15.	parent paper included and data extracted
33	Spectre,G., Arnetz,L., Ostenson,C.G., Brismar,K., Li,N., Hjemdahl,P. Twice daily dosing of aspirin improves platelet inhibition in whole blood in patients with type 2 diabetes mellitus and micro- or macrovascular complications. Thromb Haemost 2011;106(3):491-9.	secondary prevention of cardiovascular disease (some or all patients with cardiovascular disease or unclear cardiovascular disease status)
34	Stulman,J., McGinn,T., Korenstein,D. Clopidogrel for preventing cardiovascular events. Mount Sinai Journal of Medicine 2009;76(2):194-197.	review
35	Taher,M.A. & Nassir,E.S. Beneficial effects of clopidogrel on glycemic indices and oxidative stress in patients with type 2 diabetes. Saudi Pharmaceutical Journal 2011;19(2):107-13.	no relevant outcomes reported
36	Udell,J.A., Scirica,B.M., Braunwald,E., Raz,I., Steg,P.G., Davidson,J., et al. Statin and aspirin therapy for the prevention of cardiovascular events in patients with type 2 diabetes mellitus. [Review]. Clinical Cardiology 2012;35(12):722-29.	review
37	Wittmann,I., Molnar,G.A., Wagner,L., Koszegi,T., Wagner,Z., Laczy,B., et al. Single dose of acetylsalicylic acid in patients with Type 2 diabetes mellitus and/or chronic renal failure ameliorates anaemia by decreasing the rate of neocytolysis. Acta Physiol Hung 2007;94(1-2):159-66.	non-randomised
38	Younis,N., Williams,S., Ammori,B., Soran,H. Role of aspirin in the primary prevention of cardiovascular disease in diabetes mellitus: a meta-analysis. Expert Opinion on Pharmacotherapy 2010;11(9):1459-66.	review
39	Zhang,C., Sun,A., Zhang,P., Wu,C., Zhang,S., Fu,M., et al. Aspirin for primary prevention of cardiovascular events in patients with diabetes: A meta-analysis. Diabetes Research & Clinical Practice 2010;87(2):211-18.	review

L.7 Review Question 7: What pharmacological treatment should be used to manage erectile dysfunction in men with type 2 diabetes?

Table 6: Excluded studies of full text papers

Number	Reference	Reason for exclusion
1	Corona,G., Monami,M., Rastrelli,G., Aversa,A., Sforza,A., Lenzi,A., et al. Type 2 diabetes mellitus and testosterone: a meta-analysis study. International Journal of Andrology 2011;34(6:Pt 1):40.	systematic review
2	Donatucci,C.F., Wong,D.G., Giuliano,F., Glina,S., Dowsett,S.A., Watts,S., Sorsaburu,S. Efficacy and safety of tadalafil once daily: Considerations for the practical application of a daily dosing option. Curr Med Res Opin 2008;24(12):3383-92.	systematic review
3	Hatzimouratidis,K. & Hatzichristou,D. Erectile dysfunction and diabetes mellitus. Insulin 2009;4(2):114-22.	not a randomised controlled trial
4	Lepore,G. & Nosari,I. Efficacy of oral sildenafil in the treatment of erectile dysfunction in diabetic men with positive response to intracavernosal injection of alprostadil. Diabetes Care 2001;24(2):409-11.	not a randomised controlled trial
5	Segal,R. & Burnett,A.L. Avanafil for the treatment of erectile dysfunction. Drugs of Today 2012;48(1):7-15.	not available
6	Vardi,Moshe & Nini,Asaph. Phosphodiesterase inhibitors for erectile dysfunction in patients with diabetes mellitus. Cochrane Database of Systematic Reviews 2007.	systematic review