

Type 2 diabetes in adults: management (medicines update)

[E2.3] Evidence reviews for initial pharmacological management of type 2 diabetes: appendix L

NICE guideline

Evidence reviews underpinning recommendations 1.9.1 to 1.9.5, 1.10.1 to 1.18.4, 1.19.1 to 1.19.3, 1.22.1 to 1.31.2 and recommendations for research in the NICE guideline

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Final

This evidence review was developed by NICE

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Appendices

Appendix L Baseline HbA1c, weight and BMI values

Table 1: Baseline characteristic HbA1c, weight and BMI values for studies included in the review

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Aggarwal 2018	Metformin slow release; 500-2000 mg daily; Oral	BMI change	kg/m ²	32.9	5.5	Not applicable	Not applicable	Not applicable	268
Aggarwal 2018	Metformin standard release; 500-2000 mg daily; Oral	BMI change	kg/m ²	32.8	5.4	Not applicable	Not applicable	Not applicable	271
Arjona Ferreira 2013A	Glipizide; 2.5-20 mg daily; Oral	BMI change	kg/m ²	27.3	5.7	Not applicable	Not applicable	Not applicable	64
Arjona Ferreira 2013A	Glipizide; 2.5-20 mg daily; Oral	HbA1c change	%	7.9	0.7	Not applicable	Not applicable	Not applicable	64
Arjona Ferreira 2013A	Sitagliptin; 25 mg daily; Oral	BMI change	kg/m ²	26.3	4.3	Not applicable	Not applicable	Not applicable	65
Arjona Ferreira 2013A	Sitagliptin; 25 mg daily; Oral	HbA1c change	%	7.8	0.7	Not applicable	Not applicable	Not applicable	65
Arjona Ferreira 2013B	Glipizide; 2.5-20 mg daily; Oral	BMI change	kg/m ²	26.5	4.8	Not applicable	Not applicable	Not applicable	211

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Arjona Ferreira 2013B	Glipizide; 2.5-20 mg daily; Oral	HbA1c change	%	7.8	0.7	Not applicable	Not applicable	Not applicable	211
Arjona Ferreira 2013B	Glipizide; 2.5-20 mg daily; Oral	Weight change	kg	68	14.8	Not applicable	Not applicable	Not applicable	211
Arjona Ferreira 2013B	Sitagliptin; 25-50 mg daily; Oral	BMI change	kg/m2	27	4.8	Not applicable	Not applicable	Not applicable	212
Arjona Ferreira 2013B	Sitagliptin; 25-50 mg daily; Oral	HbA1c change	%	7.8	0.7	Not applicable	Not applicable	Not applicable	212
Arjona Ferreira 2013B	Sitagliptin; 25-50 mg daily; Oral	Weight change	kg	70.2	15.9	Not applicable	Not applicable	Not applicable	212
Aroda 2019B	Placebo; None; Oral	BMI change	kg/m2	32.2	6.9	Not applicable	Not applicable	Not applicable	178
Aroda 2019B	Semaglutide; 14 mg daily; Oral	BMI change	kg/m2	31.7	6.6	Not applicable	Not applicable	Not applicable	175
Aroda 2019B	Semaglutide; 3 mg daily; Oral	BMI change	kg/m2	31.8	6.3	Not applicable	Not applicable	Not applicable	175
Aroda 2019B	Semaglutide; 3-14 mg daily combined; Oral	BMI change	kg/m2	31.7	6.44	Not applicable	Not applicable	Not applicable	525
Aroda 2019B	Semaglutide; 7 mg daily; Oral	BMI change	kg/m2	31.6	6.4	Not applicable	Not applicable	Not applicable	175

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Aschner 2006	Placebo; None; Oral	BMI change	kg/m2	30.3	5.3	Not applicable	Not applicable	Not applicable	488
Aschner 2006	Placebo; None; Oral	HbA1c change	%	8.1	0.9	Not applicable	Not applicable	Not applicable	488
Aschner 2006	Placebo; None; Oral	Weight change	kg	84.3	18.8	Not applicable	Not applicable	Not applicable	488
Aschner 2006	Sitagliptin; 200 mg daily; Oral	BMI change	kg/m2	30.8	5.5	Not applicable	Not applicable	Not applicable	253
Aschner 2006	Sitagliptin; 200 mg daily; Oral	HbA1c change	%	8	0.8	Not applicable	Not applicable	Not applicable	253
Aschner 2006	Sitagliptin; 200 mg daily; Oral	Weight change	kg	85	18.1	Not applicable	Not applicable	Not applicable	253
Aschner 2010	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	30.9	4.9	Not applicable	Not applicable	Not applicable	522
Aschner 2010	Sitagliptin; 100 mg daily; Oral	BMI change	kg/m2	30.7	4.7	Not applicable	Not applicable	Not applicable	528
Bailey 2012	Dapagliflozin; 1 mg daily; Oral	BMI change	kg/m2	32.53	5.68	Not applicable	Not applicable	Not applicable	72
Bailey 2012	Dapagliflozin; 1 mg daily; Oral	HbA1c change	%	7.8	0.98	Not applicable	Not applicable	Not applicable	72
Bailey 2012	Dapagliflozin; 1-5 mg daily	BMI change	kg/m2	31.55	5.65	Not applicable	Not applicable	Not applicable	214

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	combined; Oral								
Bailey 2012	Dapagliflozin; 1-5 mg daily combined; Oral	HbA1c change	%	7.93	1.02	Not applicable	Not applicable	Not applicable	214
Bailey 2012	Dapagliflozin; 2.5 mg daily; Oral	BMI change	kg/m2	31.13	5.47	Not applicable	Not applicable	Not applicable	74
Bailey 2012	Dapagliflozin; 2.5 mg daily; Oral	HbA1c change	%	8.07	1.03	Not applicable	Not applicable	Not applicable	74
Bailey 2012	Dapagliflozin; 5 mg daily; Oral	BMI change	kg/m2	30.97	5.68	Not applicable	Not applicable	Not applicable	68
Bailey 2012	Dapagliflozin; 5 mg daily; Oral	HbA1c change	%	7.92	1.04	Not applicable	Not applicable	Not applicable	68
Bailey 2012	Placebo; None; Oral	BMI change	kg/m2	32.47	4.91	Not applicable	Not applicable	Not applicable	68
Bailey 2012	Placebo; None; Oral	HbA1c change	%	7.8	1.12	Not applicable	Not applicable	Not applicable	68
Banerji 1995	Glipizide; 2.5 mg daily; Oral	BMI change	kg/m2	26.7	2.53	0.8	Not applicable	Not applicable	10
Banerji 1995	Glipizide; 2.5 mg daily; Oral	HbA1c change	%	4.6	0.57	0.18	Not applicable	Not applicable	10
Banerji 1995	Placebo; None; Oral	BMI change	kg/m2	27.5	3.16	1	Not applicable	Not applicable	10

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Banerji 1995	Placebo; None; Oral	HbA1c change	%	4.7	0.54	0.17	Not applicable	Not applicable	10
Barzilai 2011	Placebo; None; Oral	BMI change	kg/m2	30.8	5.9	Not applicable	Not applicable	Not applicable	102
Barzilai 2011	Placebo; None; Oral	HbA1c change	%	7.8	0.8	Not applicable	Not applicable	Not applicable	102
Barzilai 2011	Placebo; None; Oral	Weight change	kg	85.6	16.6	Not applicable	Not applicable	Not applicable	102
Barzilai 2011	Sitagliptin; 50-100 mg daily; Oral	BMI change	kg/m2	31.1	7.2	Not applicable	Not applicable	Not applicable	104
Barzilai 2011	Sitagliptin; 50-100 mg daily; Oral	HbA1c change	%	7.8	0.7	Not applicable	Not applicable	Not applicable	104
Barzilai 2011	Sitagliptin; 50-100 mg daily; Oral	Weight change	kg	85.8	16.5	Not applicable	Not applicable	Not applicable	104
Bi 2013	Glipizide; 15 mg daily; Oral	BMI change	kg/m2	24.6	2.68	0.3	Not applicable	Not applicable	80
Bi 2013	Glipizide; 15 mg daily; Oral	HbA1c change	%	8.1	1.79	0.2	Not applicable	Not applicable	80
Bi 2013	Metformin type unspecified; 1500 mg daily; Oral	BMI change	kg/m2	25.2	2.68	0.3	Not applicable	Not applicable	80
Bi 2013	Metformin type unspecified;	HbA1c change	%	8	1.79	0.2	Not applicable	Not applicable	80

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	1500 mg daily; Oral								
Bosi 2009	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	31.31	4.58	Not applicable	Not applicable	Not applicable	294
Bosi 2009	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	8.62	0.93	Not applicable	Not applicable	Not applicable	294
Bosi 2009	Vildagliptin + high dose metformin; 100 mg + 2000 mg daily; Oral	BMI change	kg/m2	31.37	4.75	Not applicable	Not applicable	Not applicable	295
Bosi 2009	Vildagliptin + high dose metformin; 100 mg + 2000 mg daily; Oral	HbA1c change	%	8.7	1.03	Not applicable	Not applicable	Not applicable	295
Bosi 2009	Vildagliptin + low dose metformin; 100 mg + 1000 mg daily; Oral	BMI change	kg/m2	31.06	4.9	Not applicable	Not applicable	Not applicable	290
Bosi 2009	Vildagliptin + low dose metformin;	HbA1c change	%	8.58	1.01	Not applicable	Not applicable	Not applicable	290

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	100 mg + 1000 mg daily; Oral								
Bosi 2009	Vildagliptin + Metformin; 100 mg + 1000-2000 mg daily; Oral	BMI change	kg/m2	31.22	4.83	Not applicable	Not applicable	Not applicable	585
Bosi 2009	Vildagliptin + Metformin; 100 mg + 1000-2000 mg daily; Oral	HbA1c change	%	8.64	1.02	Not applicable	Not applicable	Not applicable	585
Bosi 2009	Vildagliptin; 100 mg daily; Oral	BMI change	kg/m2	31.26	4.82	Not applicable	Not applicable	Not applicable	300
Bosi 2009	Vildagliptin; 100 mg daily; Oral	HbA1c change	%	8.68	1.02	Not applicable	Not applicable	Not applicable	300
Campbell 1994	Glipizide; 30 mg daily; Oral	BMI change	kg/m2	31.2	6.6	Not applicable	Not applicable	Not applicable	24
Campbell 1994	Glipizide; 30 mg daily; Oral	HbA1c change	%	11.8	2.11	Not applicable	Not applicable	Not applicable	24
Campbell 1994	Metformin type unspecified; 3000 mg daily; Oral	BMI change	kg/m2	29.6	5.6	Not applicable	Not applicable	Not applicable	24

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Campbell 1994	Metformin type unspecified; 3000 mg daily; Oral	HbA1c change	%	11.5	1.9	Not applicable	Not applicable	Not applicable	24
Chakraborty 2011	Metformin type unspecified; 850-2000 mg daily; Oral	BMI change	kg/m2	27	2.4	Not applicable	Not applicable	Not applicable	110
Chakraborty 2011	Metformin type unspecified; 850-2000 mg daily; Oral	HbA1c change	%	8.7	1.4	Not applicable	Not applicable	Not applicable	110
Chakraborty 2011	Placebo; None; Oral	BMI change	kg/m2	27	1.3	Not applicable	Not applicable	Not applicable	98
Chakraborty 2011	Placebo; None; Oral	HbA1c change	%	8.7	1.5	Not applicable	Not applicable	Not applicable	98
Charbonnel 2005	Gliclazide; 320 mg daily; Oral	HbA1c change	%	8.7	Not applicable	Not applicable	Not applicable	Not applicable	635
Charbonnel 2005	Pioglitazone; 45 mg daily; Oral	HbA1c change	%	8.7	Not applicable	Not applicable	Not applicable	Not applicable	635
Chen 2015	Linagliptin; 5 mg daily; Oral	BMI change	kg/m2	25.5	3.3	Not applicable	Not applicable	Not applicable	200
Chen 2015	Linagliptin; 5 mg daily; Oral	HbA1c change	%	7.95	0.89	Not applicable	Not applicable	Not applicable	200

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Chen 2015	Linagliptin; 5 mg daily; Oral	Weight change	kg	69	11.6	Not applicable	Not applicable	Not applicable	200
Chen 2015	Placebo; None; Oral	BMI change	kg/m2	25.1	3.4	Not applicable	Not applicable	Not applicable	99
Chen 2015	Placebo; None; Oral	HbA1c change	%	8.09	0.91	Not applicable	Not applicable	Not applicable	99
Chen 2015	Placebo; None; Oral	Weight change	kg	68.2	10.4	Not applicable	Not applicable	Not applicable	99
Chen 2018B	Dulaglutide; 0.75 mg weekly; Subcutaneous	BMI change	kg/m2	26.2	3.49	Not applicable	Not applicable	Not applicable	248
Chen 2018B	Dulaglutide; 0.75 mg weekly; Subcutaneous	HbA1c change	%	8	1.03	Not applicable	Not applicable	Not applicable	248
Chen 2018B	Dulaglutide; 0.75-1.5 mg weekly combined; Subcutaneous	BMI change	kg/m2	26	3.46	Not applicable	Not applicable	Not applicable	492
Chen 2018B	Dulaglutide; 0.75-1.5 mg weekly combined; Subcutaneous	HbA1c change	%	8	0.99	Not applicable	Not applicable	Not applicable	492

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Chen 2018B	Dulaglutide; 1.5 mg weekly; Subcutaneous	BMI change	kg/m2	25.8	3.43	Not applicable	Not applicable	Not applicable	244
Chen 2018B	Dulaglutide; 1.5 mg weekly; Subcutaneous	HbA1c change	%	8	0.95	Not applicable	Not applicable	Not applicable	244
Chen 2018B	Glimepiride; 1-3 mg daily; Oral	BMI change	kg/m2	25.7	3.14	Not applicable	Not applicable	Not applicable	245
Chen 2018B	Glimepiride; 1-3 mg daily; Oral	HbA1c change	%	7.9	1.01	Not applicable	Not applicable	Not applicable	245
Chen 2022	Gliclazide + Saxagliptin; 120 mg + 5 mg daily; Oral	BMI change	kg/m2	25.9	3.1	Not applicable	Not applicable	Not applicable	216
Chen 2022	Gliclazide + Saxagliptin; 120 mg + 5 mg daily; Oral	HbA1c change	%	9.2	0.7	Not applicable	Not applicable	Not applicable	216
Chen 2022	Saxagliptin + Metformin; 5 mg + 2000 mg daily; Oral	BMI change	kg/m2	26	3.2	Not applicable	Not applicable	Not applicable	216

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Chen 2022	Saxagliptin + Metformin; 5 mg + 2000 mg daily; Oral	HbA1c change	%	9.2	0.8	Not applicable	Not applicable	Not applicable	216
Chiasson 2001	Metformin type unspecified; 1500 mg daily; Oral	BMI change	kg/m2	30.7	5.1	Not applicable	Not applicable	Not applicable	83
Chiasson 2001	Metformin type unspecified; 1500 mg daily; Oral	HbA1c change	%	8.2	0.9	Not applicable	Not applicable	Not applicable	83
Chiasson 2001	Placebo; None; Oral	BMI change	kg/m2	31.1	4.4	Not applicable	Not applicable	Not applicable	83
Chiasson 2001	Placebo; None; Oral	HbA1c change	%	8.1	0.7	Not applicable	Not applicable	Not applicable	83
Chou 2012	Pioglitazone; 45 mg daily; Oral	BMI change	kg/m2	30	5.8	Not applicable	Not applicable	Not applicable	751
Chou 2012	Pioglitazone; 45 mg daily; Oral	HbA1c change	%	7.7	0.58	Not applicable	Not applicable	Not applicable	751
Chou 2012	Placebo; None; Oral	BMI change	kg/m2	30.1	5.43	Not applicable	Not applicable	Not applicable	137
Chou 2012	Placebo; None; Oral	HbA1c change	%	7.7	0.54	Not applicable	Not applicable	Not applicable	137
Chou 2012	Rivoglitazone ; 1 mg daily; Oral	BMI change	kg/m2	29.7	5.63	Not applicable	Not applicable	Not applicable	274

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Chou 2012	Rivoglitazone ; 1 mg daily; Oral	HbA1c change	%	7.7	0.53	Not applicable	Not applicable	Not applicable	274
Chou 2012	Rivoglitazone ; 1.5 mg daily; Oral	BMI change	kg/m2	29.6	5.27	Not applicable	Not applicable	Not applicable	750
Chou 2012	Rivoglitazone ; 1.5 mg daily; Oral	HbA1c change	%	7.7	0.57	Not applicable	Not applicable	Not applicable	750
Chou 2012	Rivoglitazone ; 1-1.5 mg daily combined; Oral	BMI change	kg/m2	29.63	5.37	Not applicable	Not applicable	Not applicable	1024
Chou 2012	Rivoglitazone ; 1-1.5 mg daily combined; Oral	HbA1c change	%	7.7	0.56	Not applicable	Not applicable	Not applicable	1024
DeFronzo 1995	Metformin type unspecified; 500-2500 mg daily; Oral	BMI change	kg/m2	29.9	3.59	0.3	Not applicable	Not applicable	143
DeFronzo 1995	Metformin type unspecified; 500-2500 mg daily; Oral	HbA1c change	%	8.4	1.2	0.1	Not applicable	Not applicable	143
DeFronzo 1995	Metformin type unspecified;	Weight change	kg	94.4	13.15	1.1	Not applicable	Not applicable	143

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	500-2500 mg daily; Oral								
DeFronzo 1995	Placebo; None; Oral	BMI change	kg/m2	29.2	3.62	0.3	Not applicable	Not applicable	146
DeFronzo 1995	Placebo; None; Oral	HbA1c change	%	8.2	2.42	0.2	Not applicable	Not applicable	146
DeFronzo 1995	Placebo; None; Oral	Weight change	kg	92.2	14.5	1.2	Not applicable	Not applicable	146
del Prato 2003	Metformin type unspecified; 2550 mg daily; Oral	BMI change	kg/m2	29.8	4.2	Not applicable	Not applicable	Not applicable	284
del Prato 2003	Metformin type unspecified; 2550 mg daily; Oral	HbA1c change	%	7.79	1.61	Not applicable	Not applicable	Not applicable	284
del Prato 2003	Metformin type unspecified; 2550 mg daily; Oral	Weight change	kg	82.6	14.6	Not applicable	Not applicable	Not applicable	284
del Prato 2003	Placebo; None; Oral	BMI change	kg/m2	29.9	3.9	Not applicable	Not applicable	Not applicable	144
del Prato 2003	Placebo; None; Oral	HbA1c change	%	7.43	1.48	Not applicable	Not applicable	Not applicable	144
del Prato 2003	Placebo; None; Oral	Weight change	kg	84.5	14.8	Not applicable	Not applicable	Not applicable	144
Derosa 2004	Glimepiride; 4 mg daily; Oral	BMI change	kg/m2	27.6	1.2	Not applicable	Not applicable	Not applicable	81

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Derosa 2004	Glimepiride; 4 mg daily; Oral	HbA1c change	%	8.5	1.2	Not applicable	Not applicable	Not applicable	81
Derosa 2004	Metformin type unspecified; 3000 mg daily; Oral	BMI change	kg/m2	28.1	1.5	Not applicable	Not applicable	Not applicable	83
Derosa 2004	Metformin type unspecified; 3000 mg daily; Oral	HbA1c change	%	8.4	1	Not applicable	Not applicable	Not applicable	83
Derosa 2009	Glimepiride + Metformin; 6 mg + 850 mg daily; Oral	BMI change	kg/m2	27.1	1.4	Not applicable	Not applicable	Not applicable	66
Derosa 2009	Glimepiride + Metformin; 6 mg + 850 mg daily; Oral	HbA1c change	%	9	1.1	Not applicable	Not applicable	Not applicable	66
Derosa 2009	Glimepiride + Metformin; 6 mg + 850 mg daily; Oral	Weight change	kg	77.4	5.8	Not applicable	Not applicable	Not applicable	66
Derosa 2009	Metformin type unspecified; 3000 mg daily; Oral	BMI change	kg/m2	27.2	1.5	Not applicable	Not applicable	Not applicable	67
Derosa 2009	Metformin type unspecified;	HbA1c change	%	9.1	1.2	Not applicable	Not applicable	Not applicable	67

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	3000 mg daily; Oral								
Derosa 2009	Metformin type unspecified; 3000 mg daily; Oral	Weight change	kg	77.7	5.9	Not applicable	Not applicable	Not applicable	67
Derosa 2009	Pioglitazone + Metformin; 45 mg + 2550 mg daily; Oral	BMI change	kg/m2	27.4	1.6	Not applicable	Not applicable	Not applicable	69
Derosa 2009	Pioglitazone + Metformin; 45 mg + 2550 mg daily; Oral	HbA1c change	%	9.3	1.4	Not applicable	Not applicable	Not applicable	69
Derosa 2009	Pioglitazone + Metformin; 45 mg + 2550 mg daily; Oral	Weight change	kg	76.4	5.1	Not applicable	Not applicable	Not applicable	69
Derosa 2009	Pioglitazone; 45 mg daily; Oral	BMI change	kg/m2	27.5	1.7	Not applicable	Not applicable	Not applicable	69
Derosa 2009	Pioglitazone; 45 mg daily; Oral	HbA1c change	%	9.2	1.2	Not applicable	Not applicable	Not applicable	69
Derosa 2009	Pioglitazone; 45 mg daily; Oral	Weight change	kg	75.7	5.3	Not applicable	Not applicable	Not applicable	69

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Dou 2018	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	26.5	3.6	Not applicable	Not applicable	Not applicable	210
Dou 2018	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	9.5	1	Not applicable	Not applicable	Not applicable	210
Dou 2018	Metformin type unspecified; 2000 mg daily; Oral	Weight change	kg	73.5	13.8	Not applicable	Not applicable	Not applicable	210
Dou 2018	Saxagliptin + Metformin; 5 mg + 2000 mg daily; Oral	BMI change	kg/m2	26.7	3.7	Not applicable	Not applicable	Not applicable	216
Dou 2018	Saxagliptin + Metformin; 5 mg + 2000 mg daily; Oral	HbA1c change	%	9.4	1.1	Not applicable	Not applicable	Not applicable	216
Dou 2018	Saxagliptin + Metformin; 5 mg + 2000 mg daily; Oral	Weight change	kg	73.7	13.1	Not applicable	Not applicable	Not applicable	216
Dou 2018	Saxagliptin; 5 mg daily; Oral	BMI change	kg/m2	26.5	3.2	Not applicable	Not applicable	Not applicable	214

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Dou 2018	Saxagliptin; 5 mg daily; Oral	HbA1c change	%	9.4	1	Not applicable	Not applicable	Not applicable	214
Dou 2018	Saxagliptin; 5 mg daily; Oral	Weight change	kg	74.2	13.1	Not applicable	Not applicable	Not applicable	214
Erem 2014	Gliclazide; 60 mg daily; Oral	BMI change	kg/m2	32.72	3.86	Not applicable	Not applicable	Not applicable	20
Erem 2014	Gliclazide; 60 mg daily; Oral	HbA1c change	%	8.26	1.65	Not applicable	Not applicable	Not applicable	20
Erem 2014	Gliclazide; 60 mg daily; Oral	Weight change	kg	90.06	18.13	Not applicable	Not applicable	Not applicable	20
Erem 2014	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	33.56	4.56	Not applicable	Not applicable	Not applicable	20
Erem 2014	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	7.62	1.06	Not applicable	Not applicable	Not applicable	20
Erem 2014	Metformin type unspecified; 2000 mg daily; Oral	Weight change	kg	87.47	12.93	Not applicable	Not applicable	Not applicable	20

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Erem 2014	Pioglitazone; 30 mg daily; Oral	BMI change	kg/m2	31.31	4.69	Not applicable	Not applicable	Not applicable	20
Erem 2014	Pioglitazone; 30 mg daily; Oral	HbA1c change	%	8.03	1.7	Not applicable	Not applicable	Not applicable	20
Erem 2014	Pioglitazone; 30 mg daily; Oral	Weight change	kg	81.93	13.43	Not applicable	Not applicable	Not applicable	20
Esposito 2011	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	29.1	3.3	Not applicable	Not applicable	Not applicable	55
Esposito 2011	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	8.1	1	Not applicable	Not applicable	Not applicable	55
Esposito 2011	Metformin type unspecified; 2000 mg daily; Oral	Weight change	kg	83.5	8.5	Not applicable	Not applicable	Not applicable	55
Esposito 2011	Pioglitazone; 45 mg daily; Oral	BMI change	kg/m2	28.9	3.5	Not applicable	Not applicable	Not applicable	55
Esposito 2011	Pioglitazone; 45 mg daily; Oral	HbA1c change	%	8	1	Not applicable	Not applicable	Not applicable	55

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Esposito 2011	Pioglitazone; 45 mg daily; Oral	Weight change	kg	84.5	8.6	Not applicable	Not applicable	Not applicable	55
Feng 2017	Gliclazide; 120 mg daily B; Oral	HbA1c change	%	9.07	1.3	0.23	Not applicable	Not applicable	32
Feng 2017	Gliclazide; 120 mg daily; Oral	BMI change	kg/m2	27.5	2.83	0.5	Not applicable	Not applicable	32
Feng 2017	Gliclazide; 120 mg daily; Oral	HbA1c change	%	9.03	1.3	0.23	Not applicable	Not applicable	32
Feng 2017	Gliclazide; 120 mg daily; Oral	Weight change	kg	78.13	13.75	2.43	Not applicable	Not applicable	32
Feng 2017	Liraglutide; 1.8 mg daily B; Subcutaneous	HbA1c change	%	8.91	1.75	0.32	Not applicable	Not applicable	30
Feng 2017	Liraglutide; 1.8 mg daily; Subcutaneous	BMI change	kg/m2	28.1	3.29	0.6	Not applicable	Not applicable	30
Feng 2017	Liraglutide; 1.8 mg daily; Subcutaneous	HbA1c change	%	8.91	1.75	0.32	Not applicable	Not applicable	30
Feng 2017	Liraglutide; 1.8 mg daily; Subcutaneous	Weight change	kg	81.1	12.6	2.3	Not applicable	Not applicable	30

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Feng 2017	Metformin type unspecified; 2000 mg daily B; Oral	HbA1c change	%	9.36	1.84	0.33	Not applicable	Not applicable	31
Feng 2017	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	26.8	3.9	0.7	Not applicable	Not applicable	31
Feng 2017	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	9.36	1.84	0.33	Not applicable	Not applicable	31
Feng 2017	Metformin type unspecified; 2000 mg daily; Oral	Weight change	kg	74.8	13.92	2.5	Not applicable	Not applicable	31
Ferrannini 2010	Dapagliflozin; 10 mg daily; Oral	BMI change	kg/m2	32.95	5.67	Not applicable	Not applicable	Not applicable	185
Ferrannini 2010	Dapagliflozin; 10 mg daily; Oral	HbA1c change	%	8.54	1.46	Not applicable	Not applicable	Not applicable	185
Ferrannini 2010	Dapagliflozin; 10 mg daily; Oral	Weight change	kg	91.92	21.12	Not applicable	Not applicable	Not applicable	185
Ferrannini 2010	Dapagliflozin; 2.5 mg daily; Oral	BMI change	kg/m2	32.4	5.4	Not applicable	Not applicable	Not applicable	132

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Ferrannini 2010	Dapagliflozin; 2.5 mg daily; Oral	HbA1c change	%	7.96	0.94	Not applicable	Not applicable	Not applicable	132
Ferrannini 2010	Dapagliflozin; 2.5 mg daily; Oral	Weight change	kg	89.53	21.62	Not applicable	Not applicable	Not applicable	132
Ferrannini 2010	Dapagliflozin; 2.5-10 mg daily combined; Oral	BMI change	kg/m2	32.66	5.36	Not applicable	Not applicable	Not applicable	483
Ferrannini 2010	Dapagliflozin; 2.5-10 mg daily combined; Oral	HbA1c change	%	8.35	1.38	Not applicable	Not applicable	Not applicable	484
Ferrannini 2010	Dapagliflozin; 2.5-10 mg daily combined; Oral	Weight change	kg	90.08	20.61	Not applicable	Not applicable	Not applicable	484
Ferrannini 2010	Dapagliflozin; 5 mg daily; Oral	BMI change	kg/m2	32.54	4.95	Not applicable	Not applicable	Not applicable	166
Ferrannini 2010	Dapagliflozin; 5 mg daily; Oral	HbA1c change	%	8.45	1.52	Not applicable	Not applicable	Not applicable	167
Ferrannini 2010	Dapagliflozin; 5 mg daily; Oral	Weight change	kg	88.48	19	Not applicable	Not applicable	Not applicable	167
Ferrannini 2010	Placebo; None; Oral	BMI change	kg/m2	32.3	5.5	Not applicable	Not applicable	Not applicable	75

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Ferrannini 2010	Placebo; None; Oral	HbA1c change	%	7.84	0.87	Not applicable	Not applicable	Not applicable	75
Ferrannini 2010	Placebo; None; Oral	Weight change	kg	88.8	19	Not applicable	Not applicable	Not applicable	75
Foley 2009	Gliclazide; 80-320 mg daily; Oral	BMI change	kg/m2	30.6	5	Not applicable	Not applicable	Not applicable	546
Foley 2009	Gliclazide; 80-320 mg daily; Oral	HbA1c change	%	8.6	1	Not applicable	Not applicable	Not applicable	546
Foley 2009	Gliclazide; 80-320 mg daily; Oral	Weight change	kg	84.2	16.3	Not applicable	Not applicable	Not applicable	546
Foley 2009	Vildagliptin; 100 mg daily; Oral	BMI change	kg/m2	30.8	5.5	Not applicable	Not applicable	Not applicable	546
Foley 2009	Vildagliptin; 100 mg daily; Oral	HbA1c change	%	8.7	1.1	Not applicable	Not applicable	Not applicable	546
Foley 2009	Vildagliptin; 100 mg daily; Oral	Weight change	kg	84.3	17.6	Not applicable	Not applicable	Not applicable	546
Foley 2011	Placebo; None; Oral	HbA1c change	%	6	0.7	Not applicable	Not applicable	Not applicable	30
Foley 2011	Vildagliptin; 100 mg daily; Oral	HbA1c change	%	6	0.7	Not applicable	Not applicable	Not applicable	29
Frederich 2012	Placebo; None; Oral	BMI change	kg/m2	31.1	4.54	Not applicable	Not applicable	Not applicable	74
Frederich 2012	Placebo; None; Oral	HbA1c change	%	7.8	1	Not applicable	Not applicable	Not applicable	74

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Frederich 2012	Placebo; None; Oral	Weight change	kg	85.4	14.4	Not applicable	Not applicable	Not applicable	74
Frederich 2012	Saxagliptin; 2.5 mg daily; Oral	BMI change	kg/m2	30.4	4.84	Not applicable	Not applicable	Not applicable	74
Frederich 2012	Saxagliptin; 2.5 mg daily; Oral	HbA1c change	%	8	0.8	Not applicable	Not applicable	Not applicable	74
Frederich 2012	Saxagliptin; 2.5 mg daily; Oral	Weight change	kg	83.8	16.7	Not applicable	Not applicable	Not applicable	74
Frederich 2012	Saxagliptin; 2.5-5 mg daily combined; Oral	BMI change	kg/m2	30.4	5.07	Not applicable	Not applicable	Not applicable	291
Frederich 2012	Saxagliptin; 2.5-5 mg daily combined; Oral	HbA1c change	%	7.98	0.93	Not applicable	Not applicable	Not applicable	291
Frederich 2012	Saxagliptin; 2.5-5 mg daily combined; Oral	Weight change	kg	84.75	18.56	Not applicable	Not applicable	Not applicable	291
Frederich 2012	Saxagliptin; 2.5-5 mg daily; Oral	BMI change	kg/m2	30.6	4.72	Not applicable	Not applicable	Not applicable	71
Frederich 2012	Saxagliptin; 2.5-5 mg daily; Oral	HbA1c change	%	8	1.1	Not applicable	Not applicable	Not applicable	71

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Frederich 2012	Saxagliptin; 2.5-5 mg daily; Oral	Weight change	kg	85.4	17.25	Not applicable	Not applicable	Not applicable	71
Frederich 2012	Saxagliptin; 5 mg daily B; Oral	BMI change	kg/m2	29.6	5.37	Not applicable	Not applicable	Not applicable	72
Frederich 2012	Saxagliptin; 5 mg daily B; Oral	HbA1c change	%	7.9	0.9	Not applicable	Not applicable	Not applicable	72
Frederich 2012	Saxagliptin; 5 mg daily B; Oral	Weight change	kg	83.3	19.1	Not applicable	Not applicable	Not applicable	72
Frederich 2012	Saxagliptin; 5 mg daily; Oral	BMI change	kg/m2	31	5.23	Not applicable	Not applicable	Not applicable	74
Frederich 2012	Saxagliptin; 5 mg daily; Oral	HbA1c change	%	8	0.9	Not applicable	Not applicable	Not applicable	74
Frederich 2012	Saxagliptin; 5 mg daily; Oral	Weight change	kg	86.5	20.71	Not applicable	Not applicable	Not applicable	74
Gantz 2017D	Omarigliptin; 25 mg daily; Oral	BMI change	kg/m2	25.2	3.7	Not applicable	Not applicable	Not applicable	166
Gantz 2017D	Omarigliptin; 25 mg daily; Oral	HbA1c change	%	7.9	0.7	Not applicable	Not applicable	Not applicable	166
Gantz 2017D	Omarigliptin; 25 mg daily; Oral	Weight change	kg	67	13	Not applicable	Not applicable	Not applicable	166

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Gantz 2017D	Placebo; None; Oral	BMI change	kg/m2	24.3	3.3	Not applicable	Not applicable	Not applicable	83
Gantz 2017D	Placebo; None; Oral	HbA1c change	%	8.1	0.7	Not applicable	Not applicable	Not applicable	83
Gantz 2017D	Placebo; None; Oral	Weight change	kg	64	12	Not applicable	Not applicable	Not applicable	83
Gantz 2017D	Sitagliptin; 50 mg daily; Oral	BMI change	kg/m2	25.4	4.2	Not applicable	Not applicable	Not applicable	165
Gantz 2017D	Sitagliptin; 50 mg daily; Oral	HbA1c change	%	8	0.8	Not applicable	Not applicable	Not applicable	165
Gantz 2017D	Sitagliptin; 50 mg daily; Oral	Weight change	kg	69	14	Not applicable	Not applicable	Not applicable	165
Goldstein 2007	Metformin type unspecified; 1000 mg daily; Oral	BMI change	kg/m2	32.1	6.8	Not applicable	Not applicable	Not applicable	178
Goldstein 2007	Metformin type unspecified; 1000 mg daily; Oral	HbA1c change	%	8.9	1	Not applicable	Not applicable	Not applicable	178
Goldstein 2007	Metformin type unspecified; 1000-2000 mg daily combined; Oral	BMI change	kg/m2	32.15	6.95	Not applicable	Not applicable	Not applicable	364

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Goldstein 2007	Metformin type unspecified; 1000-2000 mg daily combined; Oral	HbA1c change	%	8.79	0.96	Not applicable	Not applicable	Not applicable	364
Goldstein 2007	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	32.2	7.1	Not applicable	Not applicable	Not applicable	177
Goldstein 2007	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	8.68	0.91	Not applicable	Not applicable	Not applicable	177
Goldstein 2007	Placebo; None; Oral	BMI change	kg/m2	32.5	6.7	Not applicable	Not applicable	Not applicable	176
Goldstein 2007	Placebo; None; Oral	HbA1c change	%	8.7	1	Not applicable	Not applicable	Not applicable	176
Goldstein 2007	Sitagliptin + Metformin; 50 mg + 1000 mg daily; Oral	BMI change	kg/m2	32.1	6.7	Not applicable	Not applicable	Not applicable	183
Goldstein 2007	Sitagliptin + Metformin; 50 mg + 1000 mg daily; Oral	HbA1c change	%	8.79	1	Not applicable	Not applicable	Not applicable	183

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Goldstein 2007	Sitagliptin + Metformin; 50 mg + 1000/2000 mg daily combined; Oral	BMI change	kg/m2	32.25	6.65	Not applicable	Not applicable	Not applicable	372
Goldstein 2007	Sitagliptin + Metformin; 50 mg + 1000/2000 mg daily combined; Oral	HbA1c change	%	8.78	1	Not applicable	Not applicable	Not applicable	372
Goldstein 2007	Sitagliptin + Metformin; 50 mg + 2000 mg daily; Oral	BMI change	kg/m2	32.4	6.6	Not applicable	Not applicable	Not applicable	178
Goldstein 2007	Sitagliptin + Metformin; 50 mg + 2000 mg daily; Oral	HbA1c change	%	8.76	1	Not applicable	Not applicable	Not applicable	178
Goldstein 2007	Sitagliptin; 100 mg daily; Oral	BMI change	kg/m2	31.2	5.9	Not applicable	Not applicable	Not applicable	179
Goldstein 2007	Sitagliptin; 100 mg daily; Oral	HbA1c change	%	8.9	1	Not applicable	Not applicable	Not applicable	179
Guo 2014	Metformin type unspecified;	HbA1c change	%	7.82	0.82	Not applicable	Not applicable	Not applicable	29

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	500-2000 mg daily; Oral								
Guo 2014	Placebo; 500-2000 mg daily; Oral	HbA1c change	%	8.01	0.59	Not applicable	Not applicable	Not applicable	29
Haak 2012	Linagliptin + Metformin; 2.5 mg + 1000 mg daily; Oral	BMI change	kg/m ²	29.7	5.3	Not applicable	Not applicable	Not applicable	143
Haak 2012	Linagliptin + Metformin; 2.5 mg + 1000 mg daily; Oral	HbA1c change	%	8.7	1	Not applicable	Not applicable	Not applicable	143
Haak 2012	Linagliptin + Metformin; 2.5 mg + 1000 mg daily; Oral	Weight change	kg	80.8	19	Not applicable	Not applicable	Not applicable	143
Haak 2012	Linagliptin + Metformin; 2.5 mg + 1000-2000 mg daily combined; Oral	BMI change	kg/m ²	28.8	4.75	Not applicable	Not applicable	Not applicable	286
Haak 2012	Linagliptin + Metformin; 2.5 mg + 1000-2000 mg daily	HbA1c change	%	8.7	1	Not applicable	Not applicable	Not applicable	286

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	combined; Oral								
Haak 2012	Linagliptin + Metformin; 2.5 mg + 1000-2000 mg daily combined; Oral	Weight change	kg	78.34	17.37	Not applicable	Not applicable	Not applicable	286
Haak 2012	Linagliptin + Metformin; 2.5 mg + 2000 mg daily; Oral	BMI change	kg/m2	28.6	4.8	Not applicable	Not applicable	Not applicable	143
Haak 2012	Linagliptin + Metformin; 2.5 mg + 2000 mg daily; Oral	HbA1c change	%	8.7	1	Not applicable	Not applicable	Not applicable	143
Haak 2012	Linagliptin + Metformin; 2.5 mg + 2000 mg daily; Oral	Weight change	kg	76.7	16	Not applicable	Not applicable	Not applicable	143
Haak 2012	Linagliptin; 5 mg daily; Oral	BMI change	kg/m2	29	4.7	Not applicable	Not applicable	Not applicable	142
Haak 2012	Linagliptin; 5 mg daily; Oral	HbA1c change	%	8.7	1	Not applicable	Not applicable	Not applicable	142
Haak 2012	Linagliptin; 5 mg daily; Oral	Weight change	kg	80	18.5	Not applicable	Not applicable	Not applicable	142

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Haak 2012	Metformin type unspecified; 1000 mg daily; Oral	BMI change	kg/m2	28.9	5.3	Not applicable	Not applicable	Not applicable	144
Haak 2012	Metformin type unspecified; 1000 mg daily; Oral	HbA1c change	%	8.7	0.9	Not applicable	Not applicable	Not applicable	144
Haak 2012	Metformin type unspecified; 1000 mg daily; Oral	Weight change	kg	79.9	18.4	Not applicable	Not applicable	Not applicable	144
Haak 2012	Metformin type unspecified; 1000-2000 mg daily combined; Oral	BMI change	kg/m2	29.2	5.31	Not applicable	Not applicable	Not applicable	291
Haak 2012	Metformin type unspecified; 1000-2000 mg daily combined; Oral	HbA1c change	%	8.6	0.91	Not applicable	Not applicable	Not applicable	291
Haak 2012	Metformin type unspecified; 1000-2000	Weight change	kg	79.95	18.45	Not applicable	Not applicable	Not applicable	291

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	mg daily combined; Oral								
Haak 2012	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	29.5	5.3	Not applicable	Not applicable	Not applicable	147
Haak 2012	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	8.5	0.9	Not applicable	Not applicable	Not applicable	147
Haak 2012	Metformin type unspecified; 2000 mg daily; Oral	Weight change	kg	80	18.5	Not applicable	Not applicable	Not applicable	147
Haak 2012	Placebo; None; Oral	BMI change	kg/m2	28.6	5.2	Not applicable	Not applicable	Not applicable	72
Haak 2012	Placebo; None; Oral	HbA1c change	%	8.7	1	Not applicable	Not applicable	Not applicable	72
Haak 2012	Placebo; None; Oral	Weight change	kg	76.8	17.5	Not applicable	Not applicable	Not applicable	72
Hadjadj 2016	Empagliflozin + Metformin; 10 mg + 1000 mg daily; Oral	BMI change	kg/m2	30.1	5.3	Not applicable	Not applicable	Not applicable	161
Hadjadj 2016	Empagliflozin + Metformin; 10 mg +	HbA1c change	%	8.68	1.26	Not applicable	Not applicable	Not applicable	161

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	1000 mg daily; Oral								
Hadjadj 2016	Empagliflozin + Metformin; 10 mg + 1000 mg daily; Oral	Weight change	kg	82.3	19.2	Not applicable	Not applicable	Not applicable	161
Hadjadj 2016	Empagliflozin + Metformin; 10 mg + 2000 mg daily; Oral	BMI change	kg/m2	30.5	5	Not applicable	Not applicable	Not applicable	167
Hadjadj 2016	Empagliflozin + Metformin; 10 mg + 2000 mg daily; Oral	HbA1c change	%	8.65	1.23	Not applicable	Not applicable	Not applicable	167
Hadjadj 2016	Empagliflozin + Metformin; 10 mg + 2000 mg daily; Oral	Weight change	kg	83	19.1	Not applicable	Not applicable	Not applicable	167
Hadjadj 2016	Empagliflozin + Metformin; 10-25 mg + 1000-2000 mg daily combined; Oral	BMI change	kg/m2	30.3	5.2	Not applicable	Not applicable	Not applicable	680
Hadjadj 2016	Empagliflozin + Metformin; 10-25 mg + 1000-2000	HbA1c change	%	8.71	1.24	Not applicable	Not applicable	Not applicable	680

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	mg daily combined; Oral								
Hadjadj 2016	Empagliflozin + Metformin; 10-25 mg + 1000-2000 mg daily combined; Oral	Weight change	kg	83	19.2	Not applicable	Not applicable	Not applicable	680
Hadjadj 2016	Empagliflozin + Metformin; 25 mg + 1000 mg daily; Oral	BMI change	kg/m2	30.2	5.2	Not applicable	Not applicable	Not applicable	165
Hadjadj 2016	Empagliflozin + Metformin; 25 mg + 1000 mg daily; Oral	HbA1c change	%	8.84	1.31	Not applicable	Not applicable	Not applicable	165
Hadjadj 2016	Empagliflozin + Metformin; 25 mg + 1000 mg daily; Oral	Weight change	kg	82.9	18.7	Not applicable	Not applicable	Not applicable	165
Hadjadj 2016	Empagliflozin + Metformin; 25 mg + 2000 mg daily; Oral	BMI change	kg/m2	30.4	5.3	Not applicable	Not applicable	Not applicable	169
Hadjadj 2016	Empagliflozin + Metformin; 25 mg +	HbA1c change	%	8.66	1.14	Not applicable	Not applicable	Not applicable	169

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	2000 mg daily; Oral								
Hadjadj 2016	Empagliflozin + Metformin; 25 mg + 2000 mg daily; Oral	Weight change	kg	83.8	19.8	Not applicable	Not applicable	Not applicable	169
Hadjadj 2016	Empagliflozin ; 10 mg daily; Oral	BMI change	kg/m2	30.6	5.9	Not applicable	Not applicable	Not applicable	169
Hadjadj 2016	Empagliflozin ; 10 mg daily; Oral	HbA1c change	%	8.62	1.24	Not applicable	Not applicable	Not applicable	169
Hadjadj 2016	Empagliflozin ; 10 mg daily; Oral	Weight change	kg	83.1	20.3	Not applicable	Not applicable	Not applicable	169
Hadjadj 2016	Empagliflozin ; 10-25 mg daily combined; Oral	BMI change	kg/m2	30.45	5.57	Not applicable	Not applicable	Not applicable	339
Hadjadj 2016	Empagliflozin ; 10-25 mg daily combined; Oral	HbA1c change	%	8.74	1.27	Not applicable	Not applicable	Not applicable	339
Hadjadj 2016	Empagliflozin ; 10-25 mg daily combined; Oral	Weight change	kg	83.44	20.06	Not applicable	Not applicable	Not applicable	339

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Hadjadj 2016	Empagliflozin ; 25 mg daily; Oral	BMI change	kg/m2	30.3	5.2	Not applicable	Not applicable	Not applicable	164
Hadjadj 2016	Empagliflozin ; 25 mg daily; Oral	HbA1c change	%	8.86	1.29	Not applicable	Not applicable	Not applicable	164
Hadjadj 2016	Empagliflozin ; 25 mg daily; Oral	Weight change	kg	83.8	19.8	Not applicable	Not applicable	Not applicable	164
Hadjadj 2016	Metformin type unspecified; 1000 mg daily; Oral	BMI change	kg/m2	30.5	5.9	Not applicable	Not applicable	Not applicable	168
Hadjadj 2016	Metformin type unspecified; 1000 mg daily; Oral	HbA1c change	%	8.69	1.04	Not applicable	Not applicable	Not applicable	168
Hadjadj 2016	Metformin type unspecified; 1000 mg daily; Oral	Weight change	kg	83.7	20.1	Not applicable	Not applicable	Not applicable	168
Hadjadj 2016	Metformin type unspecified; 1000-2000 mg daily combined; Oral	BMI change	kg/m2	30.4	5.85	Not applicable	Not applicable	Not applicable	341

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Hadjadj 2016	Metformin type unspecified; 1000-2000 mg daily combined; Oral	HbA1c change	%	8.64	1.09	Not applicable	Not applicable	Not applicable	341
Hadjadj 2016	Metformin type unspecified; 1000-2000 mg daily combined; Oral	Weight change	kg	83.21	20.66	Not applicable	Not applicable	Not applicable	341
Hadjadj 2016	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	30.3	5.8	Not applicable	Not applicable	Not applicable	164
Hadjadj 2016	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	8.59	1.13	Not applicable	Not applicable	Not applicable	164
Hadjadj 2016	Metformin type unspecified; 2000 mg daily; Oral	Weight change	kg	82.7	21.2	Not applicable	Not applicable	Not applicable	164
Hällsten 2002	Metformin type unspecified; 1000-2000	HbA1c change	%	6.9	0.72	0.2	Not applicable	Not applicable	13

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	mg daily; Oral								
Hällsten 2002	Metformin type unspecified; 1000-2000 mg daily; Oral	Weight change	kg	88.8	10.82	3	Not applicable	Not applicable	13
Hällsten 2002	Placebo; None; Oral	HbA1c change	%	6.3	0.37	0.1	Not applicable	Not applicable	14
Hällsten 2002	Placebo; None; Oral	Weight change	kg	88.3	9.35	2.5	Not applicable	Not applicable	14
Hartley 2015	Glimepiride; 1-6 mg daily; Oral	HbA1c change	%	7.8	0.7	Not applicable	Not applicable	Not applicable	191
Hartley 2015	Glimepiride; 1-6 mg daily; Oral	Weight change	kg	75.3	16.3	Not applicable	Not applicable	Not applicable	191
Hartley 2015	Sitagliptin; 50-100 mg daily; Oral	HbA1c change	%	7.8	0.7	Not applicable	Not applicable	Not applicable	197
Hartley 2015	Sitagliptin; 50-100 mg daily; Oral	Weight change	kg	76.9	15.1	Not applicable	Not applicable	Not applicable	197
Henry 2012A	Dapagliflozin + Metformin; 5 mg + 500-2000 mg daily; Oral	HbA1c change	%	9.2	1.3	Not applicable	Not applicable	Not applicable	194
Henry 2012A	Dapagliflozin + Metformin; 5 mg + 500-	Weight change	kg	84.24	19.51	Not applicable	Not applicable	Not applicable	194

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	2000 mg daily; Oral								
Henry 2012A	Dapagliflozin; 5 mg daily; Oral	HbA1c change	%	9.1	1.4	Not applicable	Not applicable	Not applicable	203
Henry 2012A	Dapagliflozin; 5 mg daily; Oral	Weight change	kg	86.2	21.13	Not applicable	Not applicable	Not applicable	203
Henry 2012A	Metformin type unspecified; 500-2000 mg daily combined; Oral	HbA1c change	%	9.2	1.3	Not applicable	Not applicable	Not applicable	201
Henry 2012A	Metformin type unspecified; 500-2000 mg daily combined; Oral	Weight change	kg	85.7	19.9	Not applicable	Not applicable	Not applicable	201
Henry 2012B	Dapagliflozin + Metformin; 5 mg + 500-2000 mg daily; Oral	HbA1c change	%	9.1	1.3	Not applicable	Not applicable	Not applicable	211
Henry 2012B	Dapagliflozin + Metformin; 5 mg + 500-2000 mg daily; Oral	Weight change	kg	88.56	19.72	Not applicable	Not applicable	Not applicable	211

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Henry 2012B	Dapagliflozin; 10 mg daily; Oral	HbA1c change	%	9.1	1.3	Not applicable	Not applicable	Not applicable	219
Henry 2012B	Dapagliflozin; 10 mg daily; Oral	Weight change	kg	88.53	19.33	Not applicable	Not applicable	Not applicable	219
Henry 2012B	Metformin type unspecified; 500-2000 mg daily combined; Oral	HbA1c change	%	9.1	1.3	Not applicable	Not applicable	Not applicable	208
Henry 2012B	Metformin type unspecified; 500-2000 mg daily combined; Oral	Weight change	kg	87.2	19.4	Not applicable	Not applicable	Not applicable	208
Henry 2014	Pioglitazone + Sitagliptin; 15 mg + 100 mg daily; Oral	BMI change	kg/m2	30.7	5.4	Not applicable	Not applicable	Not applicable	193
Henry 2014	Pioglitazone + Sitagliptin; 15 mg + 100 mg daily; Oral	HbA1c change	%	8.8	1.1	Not applicable	Not applicable	Not applicable	179
Henry 2014	Pioglitazone + Sitagliptin; 15 mg + 100 mg daily; Oral	Weight change	kg	84.5	19.8	Not applicable	Not applicable	Not applicable	120

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	mg daily; Oral								
Henry 2014	Pioglitazone + Sitagliptin; 15-45 mg + 100 mg daily combined; Oral	BMI change	kg/m2	30.8	5.4	Not applicable	Not applicable	Not applicable	581
Henry 2014	Pioglitazone + Sitagliptin; 15-45 mg + 100 mg daily combined; Oral	HbA1c change	%	8.8	1.1	Not applicable	Not applicable	Not applicable	581
Henry 2014	Pioglitazone + Sitagliptin; 15-45 mg + 100 mg daily combined; Oral	Weight change	kg	86.27	20.48	Not applicable	Not applicable	Not applicable	358
Henry 2014	Pioglitazone + Sitagliptin; 30 mg + 100 mg daily; Oral	BMI change	kg/m2	31.1	5.8	Not applicable	Not applicable	Not applicable	190
Henry 2014	Pioglitazone + Sitagliptin; 30 mg + 100 mg daily; Oral	HbA1c change	%	8.7	1.1	Not applicable	Not applicable	Not applicable	173
Henry 2014	Pioglitazone + Sitagliptin; 30 mg + 100	Weight change	kg	88.1	21.9	Not applicable	Not applicable	Not applicable	115

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	mg daily; Oral								
Henry 2014	Pioglitazone + Sitagliptin; 45 mg + 100 mg daily; Oral	BMI change	kg/m2	30.5	4.9	Not applicable	Not applicable	Not applicable	198
Henry 2014	Pioglitazone + Sitagliptin; 45 mg + 100 mg daily; Oral	HbA1c change	%	8.9	1.1	Not applicable	Not applicable	Not applicable	188
Henry 2014	Pioglitazone + Sitagliptin; 45 mg + 100 mg daily; Oral	Weight change	kg	86.3	19.6	Not applicable	Not applicable	Not applicable	123
Henry 2014	Pioglitazone; 15 mg daily; Oral	BMI change	kg/m2	31.4	5.7	Not applicable	Not applicable	Not applicable	183
Henry 2014	Pioglitazone; 15 mg daily; Oral	HbA1c change	%	8.8	1	Not applicable	Not applicable	Not applicable	163
Henry 2014	Pioglitazone; 15 mg daily; Oral	Weight change	kg	90.4	20.3	Not applicable	Not applicable	Not applicable	86
Henry 2014	Pioglitazone; 15-45 mg daily combined; Oral	BMI change	kg/m2	30.9	5.3	Not applicable	Not applicable	Not applicable	565

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Henry 2014	Pioglitazone; 15-45 mg daily combined; Oral	HbA1c change	%	8.9	1.1	Not applicable	Not applicable	Not applicable	565
Henry 2014	Pioglitazone; 15-45 mg daily combined; Oral	Weight change	kg	87.19	20.06	Not applicable	Not applicable	Not applicable	308
Henry 2014	Pioglitazone; 30 mg daily; Oral	BMI change	kg/m2	30.9	5.6	Not applicable	Not applicable	Not applicable	194
Henry 2014	Pioglitazone; 30 mg daily; Oral	HbA1c change	%	8.9	1.1	Not applicable	Not applicable	Not applicable	181
Henry 2014	Pioglitazone; 30 mg daily; Oral	Weight change	kg	83.4	19.1	Not applicable	Not applicable	Not applicable	111
Henry 2014	Pioglitazone; 45 mg daily; Oral	BMI change	kg/m2	31.2	5.1	Not applicable	Not applicable	Not applicable	188
Henry 2014	Pioglitazone; 45 mg daily; Oral	HbA1c change	%	8.7	1.2	Not applicable	Not applicable	Not applicable	171
Henry 2014	Pioglitazone; 45 mg daily; Oral	Weight change	kg	88.5	20.2	Not applicable	Not applicable	Not applicable	111
Henry 2014	Sitagliptin; 100 mg daily; Oral	BMI change	kg/m2	31.4	5.7	Not applicable	Not applicable	Not applicable	186

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Henry 2014	Sitagliptin; 100 mg daily; Oral	HbA1c change	%	8.6	1.2	Not applicable	Not applicable	Not applicable	172
Henry 2014	Sitagliptin; 100 mg daily; Oral	Weight change	kg	88.1	18.8	Not applicable	Not applicable	Not applicable	101
Horton 2000	Metformin type unspecified; 1500 mg daily; Oral	BMI change	kg/m2	29.6	4.3	Not applicable	Not applicable	Not applicable	178
Horton 2000	Metformin type unspecified; 1500 mg daily; Oral	HbA1c change	%	8.4	1.2	Not applicable	Not applicable	Not applicable	178
Horton 2000	Placebo; None; Oral	BMI change	kg/m2	29.2	3.9	Not applicable	Not applicable	Not applicable	172
Horton 2000	Placebo; None; Oral	HbA1c change	%	8.3	1.1	Not applicable	Not applicable	Not applicable	172
Inagaki 2014	Canagliflozin; 100 mg daily; Oral	BMI change	kg/m2	25.59	4.2	Not applicable	Not applicable	Not applicable	90
Inagaki 2014	Canagliflozin; 100 mg daily; Oral	HbA1c change	%	7.98	0.73	Not applicable	Not applicable	Not applicable	90
Inagaki 2014	Canagliflozin; 100 mg daily; Oral	Weight change	kg	69.1	14.48	Not applicable	Not applicable	Not applicable	90
Inagaki 2014	Canagliflozin; 100-200 mg daily	BMI change	kg/m2	25.51	4.19	Not applicable	Not applicable	Not applicable	179

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	combined; Oral								
Inagaki 2014	Canagliflozin; 100-200 mg daily combined; Oral	HbA1c change	%	8.01	0.75	Not applicable	Not applicable	Not applicable	179
Inagaki 2014	Canagliflozin; 100-200 mg daily combined; Oral	Weight change	kg	69.49	14.31	Not applicable	Not applicable	Not applicable	179
Inagaki 2014	Canagliflozin; 200 mg daily; Oral	BMI change	kg/m2	25.43	4.18	Not applicable	Not applicable	Not applicable	89
Inagaki 2014	Canagliflozin; 200 mg daily; Oral	HbA1c change	%	8.04	0.77	Not applicable	Not applicable	Not applicable	89
Inagaki 2014	Canagliflozin; 200 mg daily; Oral	Weight change	kg	69.88	14.22	Not applicable	Not applicable	Not applicable	89
Inagaki 2014	Placebo; None; Oral	BMI change	kg/m2	25.85	4.39	Not applicable	Not applicable	Not applicable	93
Inagaki 2014	Placebo; None; Oral	HbA1c change	%	8.04	0.7	Not applicable	Not applicable	Not applicable	93
Inagaki 2014	Placebo; None; Oral	Weight change	kg	68.57	15.15	Not applicable	Not applicable	Not applicable	93
Inagaki 2022	Dulaglutide; 0.75 mg weekly; Subcutaneous	BMI change	kg/m2	27.8	3.7	Not applicable	Not applicable	Not applicable	159

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Inagaki 2022	Dulaglutide; 0.75 mg weekly; Subcutaneous	HbA1c change	%	8.2	0.9	Not applicable	Not applicable	Not applicable	159
Inagaki 2022	Dulaglutide; 0.75 mg weekly; Subcutaneous	Weight change	kg	76.5	13.2	Not applicable	Not applicable	Not applicable	159
Inagaki 2022	Tirzepatide; 10 mg weekly; Subcutaneous	BMI change	kg/m2	28	4.1	Not applicable	Not applicable	Not applicable	158
Inagaki 2022	Tirzepatide; 10 mg weekly; Subcutaneous	HbA1c change	%	8.2	0.9	Not applicable	Not applicable	Not applicable	158
Inagaki 2022	Tirzepatide; 10 mg weekly; Subcutaneous	Weight change	kg	78.9	13.7	Not applicable	Not applicable	Not applicable	158
Inagaki 2022	Tirzepatide; 15 mg weekly; Subcutaneous	BMI change	kg/m2	28.1	4.4	Not applicable	Not applicable	Not applicable	160
Inagaki 2022	Tirzepatide; 15 mg weekly;	HbA1c change	%	8.2	0.9	Not applicable	Not applicable	Not applicable	160

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	Subcutaneous								
Inagaki 2022	Tirzepatide; 15 mg weekly; Subcutaneous	Weight change	kg	78.9	14.3	Not applicable	Not applicable	Not applicable	160
Inagaki 2022	Tirzepatide; 5 mg weekly; Subcutaneous	BMI change	kg/m2	28.6	5.4	Not applicable	Not applicable	Not applicable	159
Inagaki 2022	Tirzepatide; 5 mg weekly; Subcutaneous	HbA1c change	%	8.2	0.9	Not applicable	Not applicable	Not applicable	159
Inagaki 2022	Tirzepatide; 5 mg weekly; Subcutaneous	Weight change	kg	78.5	16.3	Not applicable	Not applicable	Not applicable	159
Inagaki 2022	Tirzepatide; 5-15 mg weekly combined; Subcutaneous	BMI change	kg/m2	28.23	4.66	Not applicable	Not applicable	Not applicable	477
Inagaki 2022	Tirzepatide; 5-15 mg weekly combined; Subcutaneous	HbA1c change	%	8.2	0.9	Not applicable	Not applicable	Not applicable	477
Inagaki 2022	Tirzepatide; 5-15 mg	Weight change	kg	78.77	14.78	Not applicable	Not applicable	Not applicable	477

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	weekly combined; Subcutaneous								
Ji 2014	Dapagliflozin; 10 mg daily; Oral	BMI change	kg/m ²	25.93	3.64	Not applicable	Not applicable	Not applicable	132
Ji 2014	Dapagliflozin; 10 mg daily; Oral	HbA1c change	%	8.28	0.95	Not applicable	Not applicable	Not applicable	133
Ji 2014	Dapagliflozin; 10 mg daily; Oral	Weight change	kg	72.18	13.23	Not applicable	Not applicable	Not applicable	132
Ji 2014	Dapagliflozin; 5 mg daily; Oral	HbA1c change	%	8.14	0.74	Not applicable	Not applicable	Not applicable	128
Ji 2014	Dapagliflozin; 5-10 mg daily combined; Oral	BMI change	kg/m ²	25.47	3.37	Not applicable	Not applicable	Not applicable	261
Ji 2014	Dapagliflozin; 5-10 mg daily combined; Oral	HbA1c change	%	8.21	0.86	Not applicable	Not applicable	Not applicable	261
Ji 2014	Dapagliflozin; 5-10 mg daily combined; Oral	Weight change	kg	69.92	11.58	Not applicable	Not applicable	Not applicable	261
Ji 2014	Placebo; None; Oral	HbA1c change	%	8.35	0.95	Not applicable	Not applicable	Not applicable	132
Ji 2016A	Metformin type	BMI change	kg/m ²	26	3.7	Not applicable	Not applicable	Not applicable	126

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	unspecified; 1000 mg daily; Oral								
Ji 2016A	Metformin type unspecified; 1000 mg daily; Oral	HbA1c change	%	8.7	1	Not applicable	Not applicable	Not applicable	116
Ji 2016A	Metformin type unspecified; 1000 mg daily; Oral	Weight change	kg	71.1	13.7	Not applicable	Not applicable	Not applicable	126
Ji 2016A	Metformin type unspecified; 1000-1700 mg daily combined; Oral	BMI change	kg/m2	25.9	3.6	Not applicable	Not applicable	Not applicable	250
Ji 2016A	Metformin type unspecified; 1000-1700 mg daily combined; Oral	HbA1c change	%	8.7	1.05	Not applicable	Not applicable	Not applicable	233
Ji 2016A	Metformin type unspecified; 1000-1700 mg daily	Weight change	kg	71.1	12.79	Not applicable	Not applicable	Not applicable	250

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	combined; Oral								
Ji 2016A	Metformin type unspecified; 1700 mg daily; Oral	BMI change	kg/m2	25.8	3.5	Not applicable	Not applicable	Not applicable	124
Ji 2016A	Metformin type unspecified; 1700 mg daily; Oral	HbA1c change	%	8.7	1.1	Not applicable	Not applicable	Not applicable	117
Ji 2016A	Metformin type unspecified; 1700 mg daily; Oral	Weight change	kg	71.1	11.8	Not applicable	Not applicable	Not applicable	124
Ji 2016A	Placebo; None; Oral	BMI change	kg/m2	25.4	3.4	Not applicable	Not applicable	Not applicable	127
Ji 2016A	Placebo; None; Oral	HbA1c change	%	9	1.1	Not applicable	Not applicable	Not applicable	117
Ji 2016A	Placebo; None; Oral	Weight change	kg	70.8	12.5	Not applicable	Not applicable	Not applicable	127
Ji 2016A	Sitagliptin + Metformin; 100 mg + 1000 mg daily; Oral	BMI change	kg/m2	26.1	3.4	Not applicable	Not applicable	Not applicable	122
Ji 2016A	Sitagliptin + Metformin; 100 mg +	HbA1c change	%	8.5	1	Not applicable	Not applicable	Not applicable	118

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	1000 mg daily; Oral								
Ji 2016A	Sitagliptin + Metformin; 100 mg + 1000 mg daily; Oral	Weight change	kg	72.4	12.1	Not applicable	Not applicable	Not applicable	122
Ji 2016A	Sitagliptin + Metformin; 100 mg + 1000-1700 mg daily combined; Oral	BMI change	kg/m2	25.75	3.27	Not applicable	Not applicable	Not applicable	247
Ji 2016A	Sitagliptin + Metformin; 100 mg + 1000-1700 mg daily combined; Oral	HbA1c change	%	8.55	0.95	Not applicable	Not applicable	Not applicable	232
Ji 2016A	Sitagliptin + Metformin; 100 mg + 1000-1700 mg daily combined; Oral	Weight change	kg	70.88	11.56	Not applicable	Not applicable	Not applicable	247
Ji 2016A	Sitagliptin + Metformin; 100 mg + 1700 mg daily; Oral	BMI change	kg/m2	25.4	3.1	Not applicable	Not applicable	Not applicable	125

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Ji 2016A	Sitagliptin + Metformin; 100 mg + 1700 mg daily; Oral	HbA1c change	%	8.6	0.9	Not applicable	Not applicable	Not applicable	114
Ji 2016A	Sitagliptin + Metformin; 100 mg + 1700 mg daily; Oral	Weight change	kg	69.4	10.8	Not applicable	Not applicable	Not applicable	125
Ji 2016A	Sitagliptin; 100 mg daily; Oral	BMI change	kg/m2	26	3.5	Not applicable	Not applicable	Not applicable	120
Ji 2016A	Sitagliptin; 100 mg daily; Oral	HbA1c change	%	8.7	1.1	Not applicable	Not applicable	Not applicable	113
Ji 2016A	Sitagliptin; 100 mg daily; Oral	Weight change	kg	71.8	12.1	Not applicable	Not applicable	Not applicable	120
Ji 2017	Alogliptin + Metformin; 25 mg + 1000 mg daily; Oral	BMI change	kg/m2	26.56	4.22	Not applicable	Not applicable	Not applicable	159
Ji 2017	Alogliptin + Metformin; 25 mg + 1000 mg daily; Oral	HbA1c change	%	8.39	0.81	Not applicable	Not applicable	Not applicable	159
Ji 2017	Alogliptin; 25 mg daily; Oral	BMI change	kg/m2	26.3	3.57	Not applicable	Not applicable	Not applicable	163

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Ji 2017	Alogliptin; 25 mg daily; Oral	HbA1c change	%	8.48	0.71	Not applicable	Not applicable	Not applicable	163
Ji 2017	Metformin type unspecified; 1000 mg daily; Oral	BMI change	kg/m2	26.16	3.92	Not applicable	Not applicable	Not applicable	162
Ji 2017	Metformin type unspecified; 1000 mg daily; Oral	HbA1c change	%	8.4	0.78	Not applicable	Not applicable	Not applicable	162
Ji 2017	Placebo; None; Oral	BMI change	kg/m2	26.16	3.51	Not applicable	Not applicable	Not applicable	163
Ji 2017	Placebo; None; Oral	HbA1c change	%	8.21	0.77	Not applicable	Not applicable	Not applicable	163
Jiang 2021	Dapagliflozin; 10 mg daily; Oral	BMI change	kg/m2	26.6	1.32	Not applicable	Not applicable	Not applicable	19
Jiang 2021	Dapagliflozin; 10 mg daily; Oral	Weight change	kg	71.97	8.31	Not applicable	Not applicable	Not applicable	19
Jiang 2021	Placebo; None; Oral	BMI change	kg/m2	25.64	1.41	Not applicable	Not applicable	Not applicable	10
Jiang 2021	Placebo; None; Oral	Weight change	kg	66.2	1.93	Not applicable	Not applicable	Not applicable	10
Kahl 2019	Empagliflozin ; 25 mg daily; Oral	BMI change	kg/m2	32.1	4.6	Not applicable	Not applicable	Not applicable	42

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Kahl 2019	Empagliflozin ; 25 mg daily; Oral	HbA1c change	%	6.8	0.5	Not applicable	Not applicable	Not applicable	42
Kahl 2019	Empagliflozin ; 25 mg daily; Oral	Weight change	kg	94.7	15.79	2.42	90	99.5	42
Kahl 2019	Placebo; None; Oral	BMI change	kg/m2	32.4	4.2	Not applicable	Not applicable	Not applicable	42
Kahl 2019	Placebo; None; Oral	HbA1c change	%	6.7	0.7	Not applicable	Not applicable	Not applicable	42
Kahl 2019	Placebo; None; Oral	Weight change	kg	98	19.28	2.96	92.2	103.8	42
Kaku 2014	Dapagliflozin; 10 mg daily; Oral	BMI change	kg/m2	26.06	4.52	Not applicable	Not applicable	Not applicable	88
Kaku 2014	Dapagliflozin; 10 mg daily; Oral	HbA1c change	%	7.46	0.61	Not applicable	Not applicable	Not applicable	88
Kaku 2014	Dapagliflozin; 10 mg daily; Oral	Weight change	kg	69.7	13.82	Not applicable	Not applicable	Not applicable	88
Kaku 2014	Dapagliflozin; 5 mg daily; Oral	BMI change	kg/m2	24.88	3.91	Not applicable	Not applicable	Not applicable	86
Kaku 2014	Dapagliflozin; 5 mg daily; Oral	HbA1c change	%	7.5	0.72	Not applicable	Not applicable	Not applicable	86
Kaku 2014	Dapagliflozin; 5 mg daily; Oral	Weight change	kg	65.81	14.37	Not applicable	Not applicable	Not applicable	86

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Kaku 2014	Dapagliflozin; 5-10 mg daily combined; Oral	BMI change	kg/m2	24.48	4.26	Not applicable	Not applicable	Not applicable	174
Kaku 2014	Dapagliflozin; 5-10 mg daily combined; Oral	HbA1c change	%	7.48	0.67	Not applicable	Not applicable	Not applicable	174
Kaku 2014	Dapagliflozin; 5-10 mg daily combined; Oral	Weight change	kg	67.78	14.19	Not applicable	Not applicable	Not applicable	174
Kaku 2014	Placebo; None; Oral	BMI change	kg/m2	25.22	4.39	Not applicable	Not applicable	Not applicable	87
Kaku 2014	Placebo; None; Oral	HbA1c change	%	7.5	0.63	Not applicable	Not applicable	Not applicable	87
Kaku 2014	Placebo; None; Oral	Weight change	kg	65.96	12.91	Not applicable	Not applicable	Not applicable	87
Kaku 2018A	Empagliflozin + Linagliptin; 5 mg daily; Oral	BMI change	kg/m2	24.9	4	Not applicable	Not applicable	Not applicable	107
Kaku 2018A	Empagliflozin + Linagliptin; 5 mg daily; Oral	HbA1c change	%	8.34	0.54	Not applicable	Not applicable	Not applicable	107
Kaku 2018A	Empagliflozin + Linagliptin; 5 mg daily; Oral	Weight change	kg	69	13	Not applicable	Not applicable	Not applicable	107

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Kaku 2018A	Empagliflozin ; 10 mg daily; Oral	BMI change	kg/m2	25.1	3.6	Not applicable	Not applicable	Not applicable	108
Kaku 2018A	Empagliflozin ; 10 mg daily; Oral	HbA1c change	%	8.4	0.68	Not applicable	Not applicable	Not applicable	108
Kaku 2018A	Empagliflozin ; 10 mg daily; Oral	Weight change	kg	70.2	12	Not applicable	Not applicable	Not applicable	108
Kaku 2018B	Empagliflozin + Linagliptin; 5 mg daily; Oral	BMI change	kg/m2	25	4.3	Not applicable	Not applicable	Not applicable	116
Kaku 2018B	Empagliflozin + Linagliptin; 5 mg daily; Oral	HbA1c change	%	8.27	0.59	Not applicable	Not applicable	Not applicable	116
Kaku 2018B	Empagliflozin + Linagliptin; 5 mg daily; Oral	Weight change	kg	69.1	14.2	Not applicable	Not applicable	Not applicable	116
Kaku 2018B	Empagliflozin ; 25 mg daily; Oral	BMI change	kg/m2	24.7	3.7	Not applicable	Not applicable	Not applicable	116
Kaku 2018B	Empagliflozin ; 25 mg daily; Oral	HbA1c change	%	8.26	0.68	Not applicable	Not applicable	Not applicable	116
Kaku 2018B	Empagliflozin ; 25 mg daily; Oral	Weight change	kg	67.4	13.8	Not applicable	Not applicable	Not applicable	116

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Kikuchi 2012	Pioglitazone; 30 mg daily; Oral	BMI change	kg/m2	24.9	3.5	Not applicable	Not applicable	Not applicable	159
Kikuchi 2012	Pioglitazone; 30 mg daily; Oral	HbA1c change	%	8.8	1.3	Not applicable	Not applicable	Not applicable	159
Kikuchi 2012	Placebo; None; Oral	BMI change	kg/m2	25	3.6	Not applicable	Not applicable	Not applicable	54
Kikuchi 2012	Placebo; None; Oral	HbA1c change	%	9	1.4	Not applicable	Not applicable	Not applicable	54
Kim 2017	Glimepiride; 1-6 mg daily; Oral	BMI change	kg/m2	25.2	2.7	Not applicable	Not applicable	Not applicable	147
Kim 2017	Glimepiride; 1-6 mg daily; Oral	HbA1c change	%	8	0.9	Not applicable	Not applicable	Not applicable	147
Kim 2017	Glimepiride; 1-6 mg daily; Oral	Weight change	kg	67.3	8.8	Not applicable	Not applicable	Not applicable	147
Kim 2017	Sitagliptin + Metformin; 50 mg + 500-1000 mg daily; Oral	BMI change	kg/m2	25	2.8	Not applicable	Not applicable	Not applicable	145
Kim 2017	Sitagliptin + Metformin; 50 mg + 500-1000 mg daily; Oral	HbA1c change	%	8.1	0.9	Not applicable	Not applicable	Not applicable	145
Kim 2017	Sitagliptin + Metformin; 50 mg + 500-	Weight change	kg	67.7	10.4	Not applicable	Not applicable	Not applicable	145

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	1000 mg daily; Oral								
Kondo 2016	Glimepiride; 1 mg daily; Oral	BMI change	kg/m2	24.7	3.3	Not applicable	Not applicable	Not applicable	68
Kondo 2016	Glimepiride; 1 mg daily; Oral	HbA1c change	%	7.5	0.5	Not applicable	Not applicable	Not applicable	68
Kondo 2016	Sitagliptin; 100 mg daily; Oral	BMI change	kg/m2	24.1	3.8	Not applicable	Not applicable	Not applicable	65
Kondo 2016	Sitagliptin; 100 mg daily; Oral	HbA1c change	%	7.4	0.5	Not applicable	Not applicable	Not applicable	65
Kumar 2014	Placebo; None; Oral	HbA1c change	%	8.3	0.7	Not applicable	Not applicable	Not applicable	106
Kumar 2014	Saxagliptin; 5 mg daily; Oral	HbA1c change	%	8.3	0.8	Not applicable	Not applicable	Not applicable	102
Lambadiari 2018	Liraglutide; 1.8 mg daily; Subcutaneous	BMI change	kg/m2	32.9	5	Not applicable	Not applicable	Not applicable	30
Lambadiari 2018	Liraglutide; 1.8 mg daily; Subcutaneous	HbA1c change	%	8.6	2	Not applicable	Not applicable	Not applicable	30
Lambadiari 2018	Liraglutide; 1.8 mg daily; Subcutaneous	Weight change	kg	98	16	Not applicable	Not applicable	Not applicable	30

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Lambadiari 2018	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	27.7	2	Not applicable	Not applicable	Not applicable	30
Lambadiari 2018	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	8.4	1.2	Not applicable	Not applicable	Not applicable	30
Lambadiari 2018	Metformin type unspecified; 2000 mg daily; Oral	Weight change	kg	78	12	Not applicable	Not applicable	Not applicable	30
Lee 2013A	Pioglitazone; 15 mg daily; Oral	BMI change	kg/m2	24.8	4.1	Not applicable	Not applicable	Not applicable	25
Lee 2013A	Placebo; None; Oral	BMI change	kg/m2	24.1	3	Not applicable	Not applicable	Not applicable	25
Lewin 2015	Empagliflozin + Linagliptin; 10 mg + 5 mg daily; Oral	BMI change	kg/m2	31.5	5.6	Not applicable	Not applicable	Not applicable	135
Lewin 2015	Empagliflozin + Linagliptin; 10 mg + 5 mg daily; Oral	HbA1c change	%	8.04	0.96	Not applicable	Not applicable	Not applicable	135
Lewin 2015	Empagliflozin + Linagliptin; 10 mg + 5	Weight change	kg	87.3	18.4	Not applicable	Not applicable	Not applicable	135

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	mg daily; Oral								
Lewin 2015	Empagliflozin + Linagliptin; 10-25 + 5 mg daily combined; Oral	BMI change	kg/m2	31.65	5.44	Not applicable	Not applicable	Not applicable	269
Lewin 2015	Empagliflozin + Linagliptin; 10-25 + 5 mg daily combined; Oral	HbA1c change	%	8.02	0.95	Not applicable	Not applicable	Not applicable	269
Lewin 2015	Empagliflozin + Linagliptin; 10-25 + 5 mg daily combined; Oral	Weight change	kg	87.6	18.47	Not applicable	Not applicable	Not applicable	269
Lewin 2015	Empagliflozin + Linagliptin; 25 mg + 5 mg daily; Oral	BMI change	kg/m2	31.8	5.3	Not applicable	Not applicable	Not applicable	134
Lewin 2015	Empagliflozin + Linagliptin; 25 mg + 5 mg daily; Oral	HbA1c change	%	7.99	0.95	Not applicable	Not applicable	Not applicable	134
Lewin 2015	Empagliflozin + Linagliptin; 25 mg + 5 mg daily; Oral	Weight change	kg	87.9	18.6	Not applicable	Not applicable	Not applicable	134

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	mg daily; Oral								
Lewin 2015	Empagliflozin ; 10 mg daily; Oral	BMI change	kg/m2	31.5	5.7	Not applicable	Not applicable	Not applicable	132
Lewin 2015	Empagliflozin ; 10 mg daily; Oral	HbA1c change	%	8.05	1.03	Not applicable	Not applicable	Not applicable	132
Lewin 2015	Empagliflozin ; 10 mg daily; Oral	Weight change	kg	87.8	24	Not applicable	Not applicable	Not applicable	132
Lewin 2015	Empagliflozin ; 10-25 mg daily combined; Oral	BMI change	kg/m2	31.3	5.7	Not applicable	Not applicable	Not applicable	265
Lewin 2015	Empagliflozin ; 10-25 mg daily combined; Oral	HbA1c change	%	8.02	1	Not applicable	Not applicable	Not applicable	265
Lewin 2015	Empagliflozin ; 10-25 mg daily combined; Oral	Weight change	kg	87.2	22	Not applicable	Not applicable	Not applicable	265
Lewin 2015	Empagliflozin ; 25 mg daily; Oral	BMI change	kg/m2	31.2	5.7	Not applicable	Not applicable	Not applicable	133
Lewin 2015	Empagliflozin ; 25 mg daily; Oral	HbA1c change	%	7.99	0.97	Not applicable	Not applicable	Not applicable	133

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Lewin 2015	Empagliflozin ; 25 mg daily; Oral	Weight change	kg	86.7	19.7	Not applicable	Not applicable	Not applicable	133
Lewin 2015	Linagliptin; 5 mg daily; Oral	BMI change	kg/m2	31.9	5.9	Not applicable	Not applicable	Not applicable	133
Lewin 2015	Linagliptin; 5 mg daily; Oral	HbA1c change	%	8.05	0.89	Not applicable	Not applicable	Not applicable	133
Lewin 2015	Linagliptin; 5 mg daily; Oral	Weight change	kg	89.5	20.1	Not applicable	Not applicable	Not applicable	133
Li 2019A	Glimepiride; 2 mg daily; Oral	BMI change	kg/m2	27.2	4.06	Not applicable	Not applicable	Not applicable	31
Li 2019A	Glimepiride; 2 mg daily; Oral	HbA1c change	%	7.79	0.52	Not applicable	Not applicable	Not applicable	31
Li 2019A	Saxagliptin; 5 mg daily; Oral	BMI change	kg/m2	26.46	3.23	Not applicable	Not applicable	Not applicable	33
Li 2019A	Saxagliptin; 5 mg daily; Oral	HbA1c change	%	7.57	1.24	Not applicable	Not applicable	Not applicable	33
Liu 2020	Exenatide; 10-20 mcg daily; Subcutaneous	BMI change	kg/m2	28.49	3.02	Not applicable	Not applicable	Not applicable	38
Liu 2020	Exenatide; 10-20 mcg daily;	HbA1c change	%	8.32	0.94	Not applicable	Not applicable	Not applicable	38

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	Subcutaneous								
Liu 2020	Exenatide; 10-20 mcg daily; Subcutaneous	Weight change	kg	79.28	9.64	Not applicable	Not applicable	Not applicable	38
Liu 2020	Insulin glargine; 0.1-0.3 units/kg daily; Subcutaneous	BMI change	kg/m2	27.84	3.1	Not applicable	Not applicable	Not applicable	38
Liu 2020	Insulin glargine; 0.1-0.3 units/kg daily; Subcutaneous	HbA1c change	%	8.58	0.91	Not applicable	Not applicable	Not applicable	38
Liu 2020	Insulin glargine; 0.1-0.3 units/kg daily; Subcutaneous	Weight change	kg	77.63	13.7	Not applicable	Not applicable	Not applicable	38
Mari 2008	Placebo; None; Oral	BMI change	kg/m2	30	4.9	Not applicable	Not applicable	Not applicable	150
Mari 2008	Placebo; None; Oral	HbA1c change	%	6.8	0.4	Not applicable	Not applicable	Not applicable	150
Mari 2008	Placebo; None; Oral	Weight change	kg	85	14.7	1.4	Not applicable	Not applicable	150

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Mari 2008	Vildagliptin; 50 mg daily; Oral	BMI change	kg/m2	30.4	4.9	Not applicable	Not applicable	Not applicable	156
Mari 2008	Vildagliptin; 50 mg daily; Oral	HbA1c change	%	6.7	0.4	Not applicable	Not applicable	Not applicable	156
Mari 2008	Vildagliptin; 50 mg daily; Oral	Weight change	kg	86	14.99	1.2	Not applicable	Not applicable	156
Mita 2019	Linagliptin; 5 mg daily; Oral	BMI change	kg/m2	25.7	4.5	Not applicable	Not applicable	Not applicable	21
Mita 2019	Linagliptin; 5 mg daily; Oral	HbA1c change	%	7.1	0.7	Not applicable	Not applicable	Not applicable	21
Mita 2019	Metformin type unspecified; 2250 mg daily; Oral	BMI change	kg/m2	26.3	4.9	Not applicable	Not applicable	Not applicable	22
Mita 2019	Metformin type unspecified; 2250 mg daily; Oral	HbA1c change	%	7.5	1.5	Not applicable	Not applicable	Not applicable	21
Miyagawa 2015	Dulaglutide; 0.75 mg weekly; Subcutaneous	BMI change	kg/m2	25.6	3.6	Not applicable	Not applicable	Not applicable	281
Miyagawa 2015	Dulaglutide; 0.75 mg	HbA1c change	%	8.15	0.77	Not applicable	Not applicable	Not applicable	281

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	weekly; Subcutaneous								
Miyagawa 2015	Dulaglutide; 0.75 mg weekly; Subcutaneous	Weight change	kg	71.3	12.5	Not applicable	Not applicable	Not applicable	281
Miyagawa 2015	Liraglutide; 0.9 mg daily; Subcutaneous	BMI change	kg/m ²	25.5	3.5	Not applicable	Not applicable	Not applicable	141
Miyagawa 2015	Liraglutide; 0.9 mg daily; Subcutaneous	HbA1c change	%	8.08	0.89	Not applicable	Not applicable	Not applicable	141
Miyagawa 2015	Liraglutide; 0.9 mg daily; Subcutaneous	Weight change	kg	70.2	12.5	Not applicable	Not applicable	Not applicable	141
Miyagawa 2015	Placebo; None; Subcutaneous	BMI change	kg/m ²	25.2	3.2	Not applicable	Not applicable	Not applicable	79
Miyagawa 2015	Placebo; None; Subcutaneous	HbA1c change	%	8.2	0.83	Not applicable	Not applicable	Not applicable	79
Miyagawa 2015	Placebo; None; Subcutaneous	Weight change	kg	69.3	11.6	Not applicable	Not applicable	Not applicable	79

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Miyazaki 2002	Pioglitazone; 15 mg daily; Oral	BMI change	kg/m2	30.8	1.3	Not applicable	Not applicable	Not applicable	12
Miyazaki 2002	Pioglitazone; 15 mg daily; Oral	HbA1c change	%	8	0.3	Not applicable	Not applicable	Not applicable	12
Miyazaki 2002	Pioglitazone; 15 mg daily; Oral	Weight change	kg	93	5	Not applicable	Not applicable	Not applicable	12
Miyazaki 2002	Pioglitazone; 30 mg daily; Oral	BMI change	kg/m2	32.2	1.6	Not applicable	Not applicable	Not applicable	11
Miyazaki 2002	Pioglitazone; 30 mg daily; Oral	HbA1c change	%	8.5	0.5	Not applicable	Not applicable	Not applicable	11
Miyazaki 2002	Pioglitazone; 30 mg daily; Oral	Weight change	kg	97	4	Not applicable	Not applicable	Not applicable	11
Miyazaki 2002	Pioglitazone; 45 mg daily; Oral	BMI change	kg/m2	30.4	1	Not applicable	Not applicable	Not applicable	11
Miyazaki 2002	Pioglitazone; 45 mg daily; Oral	HbA1c change	%	9.1	0.3	Not applicable	Not applicable	Not applicable	11
Miyazaki 2002	Pioglitazone; 45 mg daily; Oral	Weight change	kg	86	3	Not applicable	Not applicable	Not applicable	11
Miyazaki 2002	Pioglitazone; 7.5 mg daily; Oral	BMI change	kg/m2	31.3	1.2	Not applicable	Not applicable	Not applicable	13

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Miyazaki 2002	Pioglitazone; 7.5 mg daily; Oral	HbA1c change	%	8.9	0.4	Not applicable	Not applicable	Not applicable	13
Miyazaki 2002	Pioglitazone; 7.5 mg daily; Oral	Weight change	kg	93	5	Not applicable	Not applicable	Not applicable	13
Miyazaki 2002	Pioglitazone; 7.5-45 mg daily combined; Oral	BMI change	kg/m2	31.17	1.45	Not applicable	Not applicable	Not applicable	47
Miyazaki 2002	Pioglitazone; 7.5-45 mg daily combined; Oral	HbA1c change	%	8.62	0.57	Not applicable	Not applicable	Not applicable	47
Miyazaki 2002	Pioglitazone; 7.5-45 mg daily combined; Oral	Weight change	kg	92	6	Not applicable	Not applicable	Not applicable	47
Miyazaki 2002	Placebo; None; Oral	BMI change	kg/m2	32.8	1.6	Not applicable	Not applicable	Not applicable	11
Miyazaki 2002	Placebo; None; Oral	HbA1c change	%	8.6	0.5	Not applicable	Not applicable	Not applicable	11
Miyazaki 2002	Placebo; None; Oral	Weight change	kg	90	4	Not applicable	Not applicable	Not applicable	11
Moretto 2008	Exenatide; 10 mcg daily; Subcutaneous	BMI change	kg/m2	31	5	Not applicable	Not applicable	Not applicable	78

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Moretto 2008	Exenatide; 10 mcg daily; Subcutaneous	HbA1c change	%	7.8	1	Not applicable	Not applicable	Not applicable	78
Moretto 2008	Exenatide; 10 mcg daily; Subcutaneous	Weight change	kg	86	16	Not applicable	Not applicable	Not applicable	78
Moretto 2008	Exenatide; 5 mcg daily; Subcutaneous	BMI change	kg/m2	32	5	Not applicable	Not applicable	Not applicable	77
Moretto 2008	Exenatide; 5 mcg daily; Subcutaneous	HbA1c change	%	7.9	1	Not applicable	Not applicable	Not applicable	77
Moretto 2008	Exenatide; 5 mcg daily; Subcutaneous	Weight change	kg	85	15	Not applicable	Not applicable	Not applicable	77
Moretto 2008	Exenatide; 5-10 mcg daily combined; Subcutaneous	BMI change	kg/m2	31.5	5	Not applicable	Not applicable	Not applicable	155
Moretto 2008	Exenatide; 5-10 mcg daily combined; Subcutaneous	HbA1c change	%	7.85	1	Not applicable	Not applicable	Not applicable	155
Moretto 2008	Exenatide; 5-10 mcg daily combined;	Weight change	kg	85.5	15.47	Not applicable	Not applicable	Not applicable	155

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	Subcutaneous								
Moretto 2008	Placebo; None; Subcutaneous	BMI change	kg/m2	32	5	Not applicable	Not applicable	Not applicable	78
Moretto 2008	Placebo; None; Subcutaneous	HbA1c change	%	7.8	0.9	Not applicable	Not applicable	Not applicable	78
Moretto 2008	Placebo; None; Subcutaneous	Weight change	kg	86	16	Not applicable	Not applicable	Not applicable	78
Mu 2017	Linagliptin + Metformin; 2.5 mg + 1000 mg daily; Oral	BMI change	kg/m2	26	3.6	Not applicable	Not applicable	Not applicable	147
Mu 2017	Linagliptin + Metformin; 2.5 mg + 1000 mg daily; Oral	HbA1c change	%	8.7	0.9	Not applicable	Not applicable	Not applicable	147
Mu 2017	Linagliptin + Metformin; 2.5 mg + 1000 mg daily; Oral	Weight change	kg	70.8	12	Not applicable	Not applicable	Not applicable	147
Mu 2017	Linagliptin + Metformin; 2.5 mg +	BMI change	kg/m2	26	3.7	Not applicable	Not applicable	Not applicable	147

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	2000 mg daily; Oral								
Mu 2017	Linagliptin + Metformin; 2.5 mg + 2000 mg daily; Oral	HbA1c change	%	8.7	1	Not applicable	Not applicable	Not applicable	147
Mu 2017	Linagliptin + Metformin; 2.5 mg + 2000 mg daily; Oral	Weight change	kg	70.5	12	Not applicable	Not applicable	Not applicable	147
Mu 2017	Linagliptin + Metformin; 5 mg + 1000-2000 mg daily combined; Oral	BMI change	kg/m2	26	3.65	Not applicable	Not applicable	Not applicable	294
Mu 2017	Linagliptin + Metformin; 5 mg + 1000-2000 mg daily combined; Oral	HbA1c change	%	8.7	0.95	Not applicable	Not applicable	Not applicable	294
Mu 2017	Linagliptin + Metformin; 5 mg + 1000-2000 mg daily combined; Oral	Weight change	kg	70.65	12	Not applicable	Not applicable	Not applicable	294

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Mu 2017	Linagliptin; 5 mg daily; Oral	BMI change	kg/m2	26.2	3.9	Not applicable	Not applicable	Not applicable	147
Mu 2017	Linagliptin; 5 mg daily; Oral	HbA1c change	%	8.7	0.9	Not applicable	Not applicable	Not applicable	147
Mu 2017	Linagliptin; 5 mg daily; Oral	Weight change	kg	70.2	13.5	Not applicable	Not applicable	Not applicable	147
Mu 2017	Metformin type unspecified; 1000 mg daily; Oral	BMI change	kg/m2	25.8	3.3	Not applicable	Not applicable	Not applicable	145
Mu 2017	Metformin type unspecified; 1000 mg daily; Oral	HbA1c change	%	8.7	1.1	Not applicable	Not applicable	Not applicable	145
Mu 2017	Metformin type unspecified; 1000 mg daily; Oral	Weight change	kg	69.1	10.7	Not applicable	Not applicable	Not applicable	145
Mu 2017	Metformin type unspecified; 1000-2000 mg daily combined; Oral	BMI change	kg/m2	25.95	3.3	Not applicable	Not applicable	Not applicable	289

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Mu 2017	Metformin type unspecified; 1000-2000 mg daily combined; Oral	HbA1c change	%	8.65	1.05	Not applicable	Not applicable	Not applicable	289
Mu 2017	Metformin type unspecified; 1000-2000 mg daily combined; Oral	Weight change	kg	70.05	11.51	Not applicable	Not applicable	Not applicable	289
Mu 2017	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	26.1	3.3	Not applicable	Not applicable	Not applicable	144
Mu 2017	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	8.6	1	Not applicable	Not applicable	Not applicable	144
Mu 2017	Metformin type unspecified; 2000 mg daily; Oral	Weight change	kg	71	12.2	Not applicable	Not applicable	Not applicable	144
Nauck 2016	Linagliptin; 5 mg daily; Oral	BMI change	kg/m2	32.7	5.3	Not applicable	Not applicable	Not applicable	135

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Nauck 2016	Linagliptin; 5 mg daily; Oral	HbA1c change	%	8	0.9	Not applicable	Not applicable	Not applicable	130
Nauck 2016	Linagliptin; 5 mg daily; Oral	Weight change	kg	94.7	19.3	Not applicable	Not applicable	Not applicable	135
Nauck 2016	Pioglitazone + Linagliptin; 15 mg + 5 mg daily; Oral	BMI change	kg/m2	32.4	5.5	Not applicable	Not applicable	Not applicable	126
Nauck 2016	Pioglitazone + Linagliptin; 15 mg + 5 mg daily; Oral	HbA1c change	%	8.1	0.9	Not applicable	Not applicable	Not applicable	120
Nauck 2016	Pioglitazone + Linagliptin; 15 mg + 5 mg daily; Oral	Weight change	kg	93.6	19	Not applicable	Not applicable	Not applicable	126
Nauck 2016	Pioglitazone + Linagliptin; 15-45 mg + 5 mg daily combined; Oral	BMI change	kg/m2	32.47	5.52	Not applicable	Not applicable	Not applicable	392
Nauck 2016	Pioglitazone + Linagliptin; 15-45 mg + 5 mg daily combined; Oral	HbA1c change	%	8.1	0.94	Not applicable	Not applicable	Not applicable	371

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Nauck 2016	Pioglitazone + Linagliptin; 15-45 mg + 5 mg daily combined; Oral	Weight change	kg	92.38	18.91	Not applicable	Not applicable	Not applicable	392
Nauck 2016	Pioglitazone + Linagliptin; 30 mg + 5 mg daily; Oral	BMI change	kg/m2	32.6	5.7	Not applicable	Not applicable	Not applicable	133
Nauck 2016	Pioglitazone + Linagliptin; 30 mg + 5 mg daily; Oral	HbA1c change	%	8.2	1.1	Not applicable	Not applicable	Not applicable	125
Nauck 2016	Pioglitazone + Linagliptin; 30 mg + 5 mg daily; Oral	Weight change	kg	91.8	19.3	Not applicable	Not applicable	Not applicable	133
Nauck 2016	Pioglitazone + Linagliptin; 45 mg + 5 mg daily; Oral	BMI change	kg/m2	32.4	5.4	Not applicable	Not applicable	Not applicable	133
Nauck 2016	Pioglitazone + Linagliptin; 45 mg + 5 mg daily; Oral	HbA1c change	%	8	0.8	Not applicable	Not applicable	Not applicable	126
Nauck 2016	Pioglitazone + Linagliptin;	Weight change	kg	91.8	18.5	Not applicable	Not applicable	Not applicable	133

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	45 mg + 5 mg daily; Oral								
Nauck 2016	Pioglitazone; 15 mg daily; Oral	BMI change	kg/m2	32.3	5.6	Not applicable	Not applicable	Not applicable	131
Nauck 2016	Pioglitazone; 15 mg daily; Oral	HbA1c change	%	8.3	0.9	Not applicable	Not applicable	Not applicable	124
Nauck 2016	Pioglitazone; 15 mg daily; Oral	Weight change	kg	91.5	20.7	Not applicable	Not applicable	Not applicable	131
Nauck 2016	Pioglitazone; 15-45 mg daily combined; Oral	BMI change	kg/m2	32.84	5.5	Not applicable	Not applicable	Not applicable	409
Nauck 2016	Pioglitazone; 15-45 mg daily combined; Oral	HbA1c change	%	8.13	0.91	Not applicable	Not applicable	Not applicable	392
Nauck 2016	Pioglitazone; 15-45 mg daily combined; Oral	Weight change	kg	93.32	19.98	Not applicable	Not applicable	Not applicable	409
Nauck 2016	Pioglitazone; 30 mg daily; Oral	BMI change	kg/m2	32.3	5.3	Not applicable	Not applicable	Not applicable	140

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Nauck 2016	Pioglitazone; 30 mg daily; Oral	HbA1c change	%	8	0.9	Not applicable	Not applicable	Not applicable	134
Nauck 2016	Pioglitazone; 30 mg daily; Oral	Weight change	kg	91.5	19.9	Not applicable	Not applicable	Not applicable	140
Nauck 2016	Pioglitazone; 45 mg daily; Oral	BMI change	kg/m2	33.9	5.5	Not applicable	Not applicable	Not applicable	138
Nauck 2016	Pioglitazone; 45 mg daily; Oral	HbA1c change	%	8.1	0.9	Not applicable	Not applicable	Not applicable	134
Nauck 2016	Pioglitazone; 45 mg daily; Oral	Weight change	kg	96.9	19	Not applicable	Not applicable	Not applicable	138
Pan 2012A	Placebo; None; Oral	BMI change	kg/m2	25.9	3.7	Not applicable	Not applicable	Not applicable	284
Pan 2012A	Placebo; None; Oral	HbA1c change	%	8.2	0.8	Not applicable	Not applicable	Not applicable	284
Pan 2012A	Placebo; None; Oral	Weight change	kg	69.2	12.4	Not applicable	Not applicable	Not applicable	284
Pan 2012A	Saxagliptin; 5 mg daily; Oral	BMI change	kg/m2	25.9	3.4	Not applicable	Not applicable	Not applicable	284
Pan 2012A	Saxagliptin; 5 mg daily; Oral	HbA1c change	%	8.1	0.8	Not applicable	Not applicable	Not applicable	284
Pan 2012A	Saxagliptin; 5 mg daily; Oral	Weight change	kg	69.2	11.4	Not applicable	Not applicable	Not applicable	284

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Pavo 2003	Metformin type unspecified; 850-2550 mg daily; Oral	HbA1c change	%	8.6	Not applicable	Not applicable	Not applicable	Not applicable	100
Pavo 2003	Metformin type unspecified; 850-2550 mg daily; Oral	Weight change	kg	88.8	Not applicable	Not applicable	Not applicable	Not applicable	100
Pavo 2003	Pioglitazone; 30-45 mg daily; Oral	HbA1c change	%	8.6	Not applicable	Not applicable	Not applicable	Not applicable	105
Pavo 2003	Pioglitazone; 30-45 mg daily; Oral	Weight change	kg	86.1	Not applicable	Not applicable	Not applicable	Not applicable	105
Perez 2009	Pioglitazone + Metformin; 30 mg + 1500 mg daily; Oral	BMI change	kg/m2	30.8	5.7	Not applicable	Not applicable	Not applicable	210
Perez 2009	Pioglitazone + Metformin; 30 mg + 1500 mg daily; Oral	HbA1c change	%	8.65	1.01	0.07	Not applicable	Not applicable	210
Perez 2009	Pioglitazone; 30 mg daily; Oral	BMI change	kg/m2	31.2	5.5	Not applicable	Not applicable	Not applicable	189
Perez 2009	Pioglitazone; 30 mg daily; Oral	HbA1c change	%	8.69	0.96	0.07	Not applicable	Not applicable	189

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Perez 2009	Standard care; None; Oral	BMI change	kg/m2	30.8	5.7	Not applicable	Not applicable	Not applicable	201
Perez 2009	Standard care; None; Oral	HbA1c change	%	8.89	0.99	0.07	Not applicable	Not applicable	201
Pfützner 2011A	Metformin type unspecified; 500-2000 mg daily; Oral	BMI change	kg/m2	30.2	4.9	Not applicable	Not applicable	Not applicable	328
Pfützner 2011A	Metformin type unspecified; 500-2000 mg daily; Oral	HbA1c change	%	9.4	1.3	Not applicable	Not applicable	Not applicable	328
Pfützner 2011A	Saxagliptin + Metformin; 10 mg + 500-2000 mg daily; Oral	BMI change	kg/m2	30.2	4.7	Not applicable	Not applicable	Not applicable	643
Pfützner 2011A	Saxagliptin + Metformin; 5-10 mg + 500-2000 mg daily combined; Oral	HbA1c change	%	9.5	1.2	Not applicable	Not applicable	Not applicable	643
Pfützner 2011A	Saxagliptin; 10 mg daily; Oral	BMI change	kg/m2	30.2	4.9	Not applicable	Not applicable	Not applicable	335

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Pfützner 2011A	Saxagliptin; 10 mg daily; Oral	HbA1c change	%	9.6	1.3	Not applicable	Not applicable	Not applicable	335
Pistrosch 2013	Insulin glargine; Titrated; Subcutaneous	BMI change	kg/m2	29.2	4.6	Not applicable	Not applicable	Not applicable	39
Pistrosch 2013	Insulin glargine; Titrated; Subcutaneous	HbA1c change	%	6.36	0.4	Not applicable	Not applicable	Not applicable	39
Pistrosch 2013	Insulin glargine; Titrated; Subcutaneous	Weight change	kg	87.6	15.1	Not applicable	Not applicable	Not applicable	39
Pistrosch 2013	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	29.9	5.3	Not applicable	Not applicable	Not applicable	36
Pistrosch 2013	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	6.9	0.4	Not applicable	Not applicable	Not applicable	36
Pistrosch 2013	Metformin type unspecified; 2000 mg daily; Oral	Weight change	kg	87.6	17.9	Not applicable	Not applicable	Not applicable	36

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Pi-Sunyer 2007	Placebo; None; Oral	BMI change	kg/m2	32.7	6.4	Not applicable	Not applicable	Not applicable	92
Pi-Sunyer 2007	Placebo; None; Oral	HbA1c change	%	8.5	0.8	Not applicable	Not applicable	Not applicable	92
Pi-Sunyer 2007	Placebo; None; Oral	Weight change	kg	93	23.2	Not applicable	Not applicable	Not applicable	92
Pi-Sunyer 2007	Vildagliptin; 100 mg daily B; Oral	BMI change	kg/m2	32.2	6	Not applicable	Not applicable	Not applicable	83
Pi-Sunyer 2007	Vildagliptin; 100 mg daily B; Oral	HbA1c change	%	8.4	0.9	Not applicable	Not applicable	Not applicable	83
Pi-Sunyer 2007	Vildagliptin; 100 mg daily B; Oral	Weight change	kg	89.9	18.5	Not applicable	Not applicable	Not applicable	83
Pi-Sunyer 2007	Vildagliptin; 100 mg daily; Oral	BMI change	kg/m2	31.9	5	Not applicable	Not applicable	Not applicable	91
Pi-Sunyer 2007	Vildagliptin; 100 mg daily; Oral	HbA1c change	%	8.3	0.8	Not applicable	Not applicable	Not applicable	91
Pi-Sunyer 2007	Vildagliptin; 100 mg daily; Oral	Weight change	kg	90.8	19.9	Not applicable	Not applicable	Not applicable	91
Pi-Sunyer 2007	Vildagliptin; 50 mg daily; Oral	BMI change	kg/m2	31.9	5.4	Not applicable	Not applicable	Not applicable	88
Pi-Sunyer 2007	Vildagliptin; 50 mg daily; Oral	HbA1c change	%	8.4	0.9	Not applicable	Not applicable	Not applicable	88

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Pi-Sunyer 2007	Vildagliptin; 50 mg daily; Oral	Weight change	kg	90.5	22.3	Not applicable	Not applicable	Not applicable	88
Pi-Sunyer 2007	Vildagliptin; 50-100 mg daily combined; Oral	BMI change	kg/m2	32	5.45	Not applicable	Not applicable	Not applicable	262
Pi-Sunyer 2007	Vildagliptin; 50-100 mg daily combined; Oral	HbA1c change	%	8.37	0.86	Not applicable	Not applicable	Not applicable	262
Pi-Sunyer 2007	Vildagliptin; 50-100 mg daily combined; Oral	Weight change	kg	90.41	20.25	Not applicable	Not applicable	Not applicable	262
Pratley 2014	Alogliptin + Metformin; 25 mg + 2000 mg daily; Oral	BMI change	kg/m2	31.2	5.3	Not applicable	Not applicable	Not applicable	109
Pratley 2014	Alogliptin; 25 mg daily B; Oral	BMI change	kg/m2	31	5.4	Not applicable	Not applicable	Not applicable	225
Pratley 2014	Alogliptin; 25 mg daily; Oral	BMI change	kg/m2	30.6	5.2	Not applicable	Not applicable	Not applicable	225
Pratley 2014	Alogliptin; 25 mg once daily or 12.5 mg twice	BMI change	kg/m2	30.4	4.9	Not applicable	Not applicable	Not applicable	225

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	daily combined; Oral								
Roden 2005 1.1	Metformin type unspecified; 850-2550 mg daily; Oral	BMI change	kg/m2	31.4	5.2	Not applicable	Not applicable	Not applicable	597
Roden 2005 1.1	Metformin type unspecified; 850-2550 mg daily; Oral	HbA1c change	%	8.7	1	Not applicable	Not applicable	Not applicable	597
Roden 2005 1.1	Metformin type unspecified; 850-2550 mg daily; Oral	Weight change	kg	89.7	16.6	Not applicable	Not applicable	Not applicable	597
Roden 2005 1.1	Pioglitazone; 30-45 mg daily; Oral	BMI change	kg/m2	31.2	4.9	Not applicable	Not applicable	Not applicable	597
Roden 2005 1.1	Pioglitazone; 30-45 mg daily; Oral	HbA1c change	%	8.7	1	Not applicable	Not applicable	Not applicable	597
Roden 2005 1.1	Pioglitazone; 30-45 mg daily; Oral	Weight change	kg	88.2	15.5	Not applicable	Not applicable	Not applicable	597
Roden 2015	Empagliflozin ; 10 mg daily; Oral	BMI change	kg/m2	28.3	5.5	Not applicable	Not applicable	Not applicable	224

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Roden 2015	Empagliflozin ; 10 mg daily; Oral	HbA1c change	%	7.87	0.88	Not applicable	Not applicable	Not applicable	224
Roden 2015	Empagliflozin ; 10 mg daily; Oral	Weight change	kg	78.4	18.7	Not applicable	Not applicable	Not applicable	224
Roden 2015	Empagliflozin ; 10-25 mg daily combined; Oral	BMI change	kg/m2	28.25	5.49	Not applicable	Not applicable	Not applicable	448
Roden 2015	Empagliflozin ; 10-25 mg daily combined; Oral	HbA1c change	%	7.87	0.86	Not applicable	Not applicable	Not applicable	448
Roden 2015	Empagliflozin ; 10-25 mg daily combined; Oral	Weight change	kg	78.1	18.34	Not applicable	Not applicable	Not applicable	448
Roden 2015	Empagliflozin ; 25 mg daily; Oral	BMI change	kg/m2	28.2	5.5	Not applicable	Not applicable	Not applicable	224
Roden 2015	Empagliflozin ; 25 mg daily; Oral	HbA1c change	%	7.86	0.85	Not applicable	Not applicable	Not applicable	224
Roden 2015	Empagliflozin ; 25 mg daily; Oral	Weight change	kg	77.8	18	Not applicable	Not applicable	Not applicable	224
Roden 2015	Placebo; None; Oral	BMI change	kg/m2	28.7	6.2	Not applicable	Not applicable	Not applicable	228

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Roden 2015	Placebo; None; Oral	HbA1c change	%	7.91	0.78	Not applicable	Not applicable	Not applicable	228
Roden 2015	Placebo; None; Oral	Weight change	kg	78.2	19.9	Not applicable	Not applicable	Not applicable	228
Roden 2015	Sitagliptin; 100 mg daily; Oral	BMI change	kg/m2	28.2	5.2	Not applicable	Not applicable	Not applicable	223
Roden 2015	Sitagliptin; 100 mg daily; Oral	HbA1c change	%	7.85	0.79	Not applicable	Not applicable	Not applicable	223
Roden 2015	Sitagliptin; 100 mg daily; Oral	Weight change	kg	79.3	20.4	Not applicable	Not applicable	Not applicable	223
Rosenstock 2007A	Pioglitazone + Vildagliptin; 15 mg + 50 mg daily; Oral	BMI change	kg/m2	29	5.4	Not applicable	Not applicable	Not applicable	144
Rosenstock 2007A	Pioglitazone + Vildagliptin; 15 mg + 50 mg daily; Oral	HbA1c change	%	8.8	0.9	Not applicable	Not applicable	Not applicable	144
Rosenstock 2007A	Pioglitazone + Vildagliptin; 15-30 mg + 50-100 mg daily combined; Oral	BMI change	kg/m2	29.3	5.6	Not applicable	Not applicable	Not applicable	292
Rosenstock 2007A	Pioglitazone + Vildagliptin;	HbA1c change	%	8.8	1	Not applicable	Not applicable	Not applicable	292

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	15-30 mg + 50-100 mg daily combined; Oral								
Rosenstock 2007A	Pioglitazone + Vildagliptin; 30 mg + 100 mg daily; Oral	BMI change	kg/m2	29.6	5.8	Not applicable	Not applicable	Not applicable	148
Rosenstock 2007A	Pioglitazone + Vildagliptin; 30 mg + 100 mg daily; Oral	HbA1c change	%	8.8	1.1	Not applicable	Not applicable	Not applicable	148
Rosenstock 2007A	Pioglitazone; 30 mg daily; Oral	BMI change	kg/m2	28.9	5.5	Not applicable	Not applicable	Not applicable	161
Rosenstock 2007A	Pioglitazone; 30 mg daily; Oral	HbA1c change	%	8.7	1	Not applicable	Not applicable	Not applicable	161
Rosenstock 2007A	Vildagliptin; 100 mg daily; Oral	BMI change	kg/m2	29.4	5.8	Not applicable	Not applicable	Not applicable	154
Rosenstock 2007A	Vildagliptin; 100 mg daily; Oral	HbA1c change	%	8.6	1	Not applicable	Not applicable	Not applicable	154
Rosenstock 2009A	Placebo; None; Oral	BMI change	kg/m2	30.93	4.26	Not applicable	Not applicable	Not applicable	95
Rosenstock 2009A	Placebo; None; Oral	HbA1c change	%	7.9	0.9	Not applicable	Not applicable	Not applicable	95

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Rosenstock 2009A	Placebo; None; Oral	Weight change	kg	86.56	16.9	Not applicable	Not applicable	Not applicable	95
Rosenstock 2009A	Saxagliptin; 10 mg daily; Oral	BMI change	kg/m2	31.71	4.71	Not applicable	Not applicable	Not applicable	98
Rosenstock 2009A	Saxagliptin; 10 mg daily; Oral	HbA1c change	%	7.8	0.9	Not applicable	Not applicable	Not applicable	98
Rosenstock 2009A	Saxagliptin; 10 mg daily; Oral	Weight change	kg	89.3	17.67	Not applicable	Not applicable	Not applicable	98
Rosenstock 2009A	Saxagliptin; 2.5 mg daily; Oral	BMI change	kg/m2	31.9	4.82	Not applicable	Not applicable	Not applicable	102
Rosenstock 2009A	Saxagliptin; 2.5 mg daily; Oral	HbA1c change	%	7.9	0.9	Not applicable	Not applicable	Not applicable	102
Rosenstock 2009A	Saxagliptin; 2.5 mg daily; Oral	Weight change	kg	92.1	18.39	Not applicable	Not applicable	Not applicable	102
Rosenstock 2009A	Saxagliptin; 2.5-10 mg daily combined; Oral	BMI change	kg/m2	31.96	4.68	Not applicable	Not applicable	Not applicable	306
Rosenstock 2009A	Saxagliptin; 2.5-10 mg daily combined; Oral	HbA1c change	%	7.9	0.98	Not applicable	Not applicable	Not applicable	306
Rosenstock 2009A	Saxagliptin; 2.5-10 mg	Weight change	kg	90.78	18.11	Not applicable	Not applicable	Not applicable	306

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	daily combined; Oral								
Rosenstock 2009A	Saxagliptin; 5 mg daily; Oral	BMI change	kg/m2	32.24	4.5	Not applicable	Not applicable	Not applicable	106
Rosenstock 2009A	Saxagliptin; 5 mg daily; Oral	HbA1c change	%	8	1.1	Not applicable	Not applicable	Not applicable	106
Rosenstock 2009A	Saxagliptin; 5 mg daily; Oral	Weight change	kg	90.87	18.15	Not applicable	Not applicable	Not applicable	106
Rosenstock 2010	Alogliptin; 25 mg daily; Oral	HbA1c change	%	8.8	0.99	Not applicable	Not applicable	Not applicable	164
Rosenstock 2010	Pioglitazone + Alogliptin 12.5 mg; 30 mg + 12.5 mg daily; Oral	HbA1c change	%	8.85	1.04	Not applicable	Not applicable	Not applicable	163
Rosenstock 2010	Pioglitazone + Alogliptin 25 mg; 30 mg + 25 mg daily; Oral	HbA1c change	%	8.8	0.97	Not applicable	Not applicable	Not applicable	164
Rosenstock 2010	Pioglitazone + Alogliptin; 30 mg + 12.5/25mg combined; Oral	HbA1c change	%	8.83	1	Not applicable	Not applicable	Not applicable	327

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Rosenstock 2010	Pioglitazone; 30 mg daily; Oral	HbA1c change	%	8.76	1.01	Not applicable	Not applicable	Not applicable	163
Rosenstock 2016	Canagliflozin + Metformin; 100 mg + 500-2000 mg daily; Oral	BMI change	kg/m2	31.9	5.3	Not applicable	Not applicable	Not applicable	237
Rosenstock 2016	Canagliflozin + Metformin; 100 mg + 500-2000 mg daily; Oral	HbA1c change	%	8.8	1.1	Not applicable	Not applicable	Not applicable	237
Rosenstock 2016	Canagliflozin + Metformin; 100 mg + 500-2000 mg daily; Oral	Weight change	kg	88.3	17.6	Not applicable	Not applicable	Not applicable	237
Rosenstock 2016	Canagliflozin + Metformin; 100-300 mg + 500-2000 mg daily; Oral	BMI change	kg/m2	32.4	6	Not applicable	Not applicable	Not applicable	474
Rosenstock 2016	Canagliflozin + Metformin; 100-300 mg + 500-2000 mg daily; Oral	HbA1c change	%	8.9	1.2	Not applicable	Not applicable	Not applicable	474
Rosenstock 2016	Canagliflozin + Metformin; 100-300 mg	Weight change	kg	89.9	19.7	Not applicable	Not applicable	Not applicable	474

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	+ 500-2000 mg daily; Oral								
Rosenstock 2016	Canagliflozin + Metformin; 300 mg + 500-2000 mg daily; Oral	BMI change	kg/m2	32.8	6.5	Not applicable	Not applicable	Not applicable	237
Rosenstock 2016	Canagliflozin + Metformin; 300 mg + 500-2000 mg daily; Oral	HbA1c change	%	8.9	1.2	Not applicable	Not applicable	Not applicable	237
Rosenstock 2016	Canagliflozin + Metformin; 300 mg + 500-2000 mg daily; Oral	Weight change	kg	91.4	21.4	Not applicable	Not applicable	Not applicable	237
Rosenstock 2016	Canagliflozin; 100 mg daily; Oral	BMI change	kg/m2	32.4	5.4	Not applicable	Not applicable	Not applicable	237
Rosenstock 2016	Canagliflozin; 100 mg daily; Oral	HbA1c change	%	8.8	1.2	Not applicable	Not applicable	Not applicable	237
Rosenstock 2016	Canagliflozin; 100 mg daily; Oral	Weight change	kg	92.1	20.1	Not applicable	Not applicable	Not applicable	237
Rosenstock 2016	Canagliflozin; 100-300 mg daily combined; Oral	BMI change	kg/m2	32.5	5.6	Not applicable	Not applicable	Not applicable	475

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Rosenstock 2016	Canagliflozin; 100-300 mg daily combined; Oral	HbA1c change	%	8.8	1.2	Not applicable	Not applicable	Not applicable	475
Rosenstock 2016	Canagliflozin; 100-300 mg daily combined; Oral	Weight change	kg	92.5	20	Not applicable	Not applicable	Not applicable	475
Rosenstock 2016	Canagliflozin; 300 mg daily; Oral	BMI change	kg/m2	32.6	5.8	Not applicable	Not applicable	Not applicable	238
Rosenstock 2016	Canagliflozin; 300 mg daily; Oral	HbA1c change	%	8.8	1.2	Not applicable	Not applicable	Not applicable	238
Rosenstock 2016	Canagliflozin; 300 mg daily; Oral	Weight change	kg	93	19.9	Not applicable	Not applicable	Not applicable	238
Rosenstock 2016	Metformin type unspecified; 500-2000 mg daily; Oral	BMI change	kg/m2	33	6	Not applicable	Not applicable	Not applicable	237
Rosenstock 2016	Metformin type unspecified; 500-2000 mg daily; Oral	HbA1c change	%	8.8	1.2	Not applicable	Not applicable	Not applicable	237
Rosenstock 2016	Metformin type unspecified;	Weight change	kg	92.1	20.1	Not applicable	Not applicable	Not applicable	237

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	500-2000 mg daily; Oral								
Ross 2015	Linagliptin + Metformin; 1500-2000 mg daily; Oral	BMI change	kg/m2	29.84	5.82	Not applicable	Not applicable	Not applicable	159
Ross 2015	Linagliptin + Metformin; 1500-2000 mg daily; Oral	HbA1c change	%	9.79	1.19	Not applicable	Not applicable	Not applicable	159
Ross 2015	Linagliptin; 5 mg daily; Oral	BMI change	kg/m2	29.63	5.43	Not applicable	Not applicable	Not applicable	157
Ross 2015	Linagliptin; 5 mg daily; Oral	HbA1c change	%	9.88	1.1	Not applicable	Not applicable	Not applicable	157
Russell-Jones 2012	Exenatide; 2 mg weekly; Subcutaneous	BMI change	kg/m2	31.4	5.3	Not applicable	Not applicable	Not applicable	248
Russell-Jones 2012	Exenatide; 2 mg weekly; Subcutaneous	HbA1c change	%	8.5	1.2	Not applicable	Not applicable	Not applicable	248
Russell-Jones 2012	Exenatide; 2 mg weekly; Subcutaneous	Weight change	kg	87.5	18.9	Not applicable	Not applicable	Not applicable	248
Russell-Jones 2012	Metformin type	BMI change	kg/m2	30.7	5.5	Not applicable	Not applicable	Not applicable	246

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	unspecified; 2000 mg daily; Oral								
Russell-Jones 2012	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	8.6	1.2	Not applicable	Not applicable	Not applicable	246
Russell-Jones 2012	Metformin type unspecified; 2000 mg daily; Oral	Weight change	kg	85.9	19.6	Not applicable	Not applicable	Not applicable	246
Russell-Jones 2012	Pioglitazone; 45 mg daily; Oral	BMI change	kg/m2	31.1	5.3	Not applicable	Not applicable	Not applicable	163
Russell-Jones 2012	Pioglitazone; 45 mg daily; Oral	HbA1c change	%	8.5	1.2	Not applicable	Not applicable	Not applicable	163
Russell-Jones 2012	Pioglitazone; 45 mg daily; Oral	Weight change	kg	86.1	17.8	Not applicable	Not applicable	Not applicable	163
Russell-Jones 2012	Sitagliptin; 100 mg daily; Oral	BMI change	kg/m2	31.8	5.4	Not applicable	Not applicable	Not applicable	163
Russell-Jones 2012	Sitagliptin; 100 mg daily; Oral	HbA1c change	%	8.5	1.3	Not applicable	Not applicable	Not applicable	163
Russell-Jones 2012	Sitagliptin; 100 mg daily; Oral	Weight change	kg	88.7	18.7	Not applicable	Not applicable	Not applicable	163

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Scherbaum 2002	Pioglitazone; 15 mg daily; Oral	HbA1c change	%	9.14	1.17	Not applicable	Not applicable	Not applicable	83
Scherbaum 2002	Pioglitazone; 15-30 mg daily combined; Oral	HbA1c change	%	9.1	1.15	Not applicable	Not applicable	Not applicable	159
Scherbaum 2002	Pioglitazone; 30 mg daily; Oral	HbA1c change	%	9.06	1.12	Not applicable	Not applicable	Not applicable	76
Scherbaum 2002	Placebo; None; Oral	HbA1c change	%	8.73	1.12	Not applicable	Not applicable	Not applicable	76
Schernthaler 2004	Metformin type unspecified; 2550 mg daily; Oral	BMI change	kg/m2	31.4	5.2	Not applicable	Not applicable	Not applicable	597
Schernthaler 2004	Metformin type unspecified; 2550 mg daily; Oral	HbA1c change	%	8.7	1	Not applicable	Not applicable	Not applicable	597
Schernthaler 2004	Metformin type unspecified; 2550 mg daily; Oral	Weight change	kg	89.7	16.6	Not applicable	Not applicable	Not applicable	597
Schernthaler 2004	Pioglitazone; 45 mg daily; Oral	BMI change	kg/m2	31.2	4.9	Not applicable	Not applicable	Not applicable	597

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Schernthaner 2004	Pioglitazone; 45 mg daily; Oral	HbA1c change	%	8.7	1	Not applicable	Not applicable	Not applicable	597
Schernthaner 2004	Pioglitazone; 45 mg daily; Oral	Weight change	kg	88.2	15.5	Not applicable	Not applicable	Not applicable	597
Schwartz 2006	Metformin slow release; 1500 mg daily (in 2 doses); Oral	HbA1c change	%	8.5	3.24	0.24	Not applicable	Not applicable	182
Schwartz 2006	Metformin slow release; 1500 mg daily; Oral	HbA1c change	%	8.22	3.34	0.25	Not applicable	Not applicable	178
Schwartz 2006	Metformin slow release; 1500-2000 mg daily combined; Oral	HbA1c change	%	8.33	3.24	Not applicable	Not applicable	Not applicable	532
Schwartz 2006	Metformin slow release; 2000 mg daily; Oral	HbA1c change	%	8.26	3.15	0.24	Not applicable	Not applicable	172
Schwartz 2006	Metformin standard release; 1500 mg daily (in 2 doses); Oral	HbA1c change	%	8.7	3.3	0.25	Not applicable	Not applicable	174

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Schweizer 2007	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	32.5	5.7	Not applicable	Not applicable	Not applicable	254
Schweizer 2007	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	8.7	1.1	Not applicable	Not applicable	Not applicable	254
Schweizer 2007	Vildagliptin; 100 mg daily; Oral	BMI change	kg/m2	32.4	5.7	Not applicable	Not applicable	Not applicable	526
Schweizer 2007	Vildagliptin; 100 mg daily; Oral	HbA1c change	%	8.7	1.1	Not applicable	Not applicable	Not applicable	526
Schweizer 2009	Metformin type unspecified; 500-1500 mg daily; Oral	BMI change	kg/m2	29.4	4.6	Not applicable	Not applicable	Not applicable	166
Schweizer 2009	Metformin type unspecified; 500-1500 mg daily; Oral	HbA1c change	%	7.7	0.6	Not applicable	Not applicable	Not applicable	166
Schweizer 2009	Vildagliptin; 100 mg daily; Oral	BMI change	kg/m2	29.8	4.4	Not applicable	Not applicable	Not applicable	169
Schweizer 2009	Vildagliptin; 100 mg daily; Oral	HbA1c change	%	7.8	0.6	Not applicable	Not applicable	Not applicable	169

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Seino 2018	Semaglutide; 0.5 mg weekly; Subcutaneous	BMI change	kg/m2	8.2	1	Not applicable	Not applicable	Not applicable	103
Seino 2018	Semaglutide; 0.5 mg weekly; Subcutaneous	HbA1c change	%	67.8	11.7	Not applicable	Not applicable	Not applicable	103
Seino 2018	Semaglutide; 0.5 mg weekly; Subcutaneous	Weight change	kg	25.1	3.8	Not applicable	Not applicable	Not applicable	103
Seino 2018	Semaglutide; 1.0 mg weekly; Subcutaneous	BMI change	kg/m2	8	0.9	Not applicable	Not applicable	Not applicable	102
Seino 2018	Semaglutide; 1.0 mg weekly; Subcutaneous	HbA1c change	%	70.8	16.4	Not applicable	Not applicable	Not applicable	102
Seino 2018	Semaglutide; 1.0 mg weekly; Subcutaneous	Weight change	kg	26.1	5.2	Not applicable	Not applicable	Not applicable	102
Seino 2018	Sitagliptin; 100 mg daily; Oral	BMI change	kg/m2	8.2	0.9	Not applicable	Not applicable	Not applicable	103

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Seino 2018	Sitagliptin; 100 mg daily; Oral	HbA1c change	%	69.4	12.9	Not applicable	Not applicable	Not applicable	103
Seino 2018	Sitagliptin; 100 mg daily; Oral	Weight change	kg	25.1	3.6	Not applicable	Not applicable	Not applicable	103
Seino 2018	Semaglutide; 0.5 mg and 1.0 mg weekly combined; Subcutaneous	BMI change	kg/m ²	8.1	0.95	Not applicable	Not applicable	Not applicable	205
Seino 2018	Semaglutide; 0.5 mg and 1.0 mg weekly combined; Subcutaneous	HbA1c change	%	69.3	14.1	Not applicable	Not applicable	Not applicable	205
Seino 2018	Semaglutide; 0.5 mg and 1.0 mg weekly combined; Subcutaneous	Weight change	kg	25.6	4.5	Not applicable	Not applicable	Not applicable	205
Shihara 2011	Glimepiride; 0.5-6 mg daily; Oral	BMI change	kg/m ²	24.6	3.8	Not applicable	Not applicable	Not applicable	93
Shihara 2011	Glimepiride; 0.5-6 mg daily; Oral	HbA1c change	%	7.8	0.9	Not applicable	Not applicable	Not applicable	95

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Shihara 2011	Glimepiride; 0.5-6 mg daily; Oral	Weight change	kg	65.6	12.5	Not applicable	Not applicable	Not applicable	93
Shihara 2011	Pioglitazone; 15-45 mg daily; Oral	BMI change	kg/m2	24.5	4.3	Not applicable	Not applicable	Not applicable	92
Shihara 2011	Pioglitazone; 15-45 mg daily; Oral	HbA1c change	%	7.8	0.9	Not applicable	Not applicable	Not applicable	95
Shihara 2011	Pioglitazone; 15-45 mg daily; Oral	Weight change	kg	65.5	14.6	Not applicable	Not applicable	Not applicable	92
Sorli 2017	Placebo; None; Subcutaneous	BMI change	kg/m2	32.4	6.86	Not applicable	Not applicable	Not applicable	129
Sorli 2017	Placebo; None; Subcutaneous	HbA1c change	%	7.95	0.85	Not applicable	Not applicable	Not applicable	129
Sorli 2017	Placebo; None; Subcutaneous	Weight change	kg	89.05	22.16	Not applicable	Not applicable	Not applicable	129
Sorli 2017	Semaglutide; 0.5 mg weekly; Subcutaneous	BMI change	kg/m2	32.46	7.62	Not applicable	Not applicable	Not applicable	128
Sorli 2017	Semaglutide; 0.5 mg weekly;	HbA1c change	%	8.09	0.89	Not applicable	Not applicable	Not applicable	128

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	Subcutaneous								
Sorli 2017	Semaglutide; 0.5 mg weekly; Subcutaneous	Weight change	kg	89.81	22.96	Not applicable	Not applicable	Not applicable	128
Sorli 2017	Semaglutide; 0.5-1 mg weekly combined; Subcutaneous	BMI change	kg/m2	33.2	8.06	Not applicable	Not applicable	Not applicable	258
Sorli 2017	Semaglutide; 0.5-1 mg weekly combined; Subcutaneous	HbA1c change	%	8.11	0.85	Not applicable	Not applicable	Not applicable	258
Sorli 2017	Semaglutide; 0.5-1 mg weekly combined; Subcutaneous	Weight change	kg	93.37	24.53	Not applicable	Not applicable	Not applicable	258
Sorli 2017	Semaglutide; 1 mg weekly; Subcutaneous	BMI change	kg/m2	33.92	8.43	Not applicable	Not applicable	Not applicable	130
Sorli 2017	Semaglutide; 1 mg weekly; Subcutaneous	HbA1c change	%	8.12	0.81	Not applicable	Not applicable	Not applicable	130

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Sorli 2017	Semaglutide; 1 mg weekly; Subcutaneous	Weight change	kg	96.87	25.59	Not applicable	Not applicable	Not applicable	130
Stenlöf 2013	Canagliflozin; 100 mg daily; Oral	BMI change	kg/m2	31.3	6.6	Not applicable	Not applicable	Not applicable	195
Stenlöf 2013	Canagliflozin; 100 mg daily; Oral	HbA1c change	%	8.1	1	Not applicable	Not applicable	Not applicable	195
Stenlöf 2013	Canagliflozin; 100 mg daily; Oral	Weight change	kg	85.8	21.4	Not applicable	Not applicable	Not applicable	195
Stenlöf 2013	Canagliflozin; 100-300 mg daily combined; Oral	BMI change	kg/m2	31.5	6.3	Not applicable	Not applicable	Not applicable	392
Stenlöf 2013	Canagliflozin; 100-300 mg daily combined; Oral	HbA1c change	%	8.05	1	Not applicable	Not applicable	Not applicable	392
Stenlöf 2013	Canagliflozin; 100-300 mg daily combined; Oral	Weight change	kg	86.4	21	Not applicable	Not applicable	Not applicable	392
Stenlöf 2013	Canagliflozin; 300 mg daily; Oral	BMI change	kg/m2	31.7	6	Not applicable	Not applicable	Not applicable	197

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Stenlöf 2013	Canagliflozin; 300 mg daily; Oral	HbA1c change	%	8	1	Not applicable	Not applicable	Not applicable	197
Stenlöf 2013	Canagliflozin; 300 mg daily; Oral	Weight change	kg	86.9	20.5	Not applicable	Not applicable	Not applicable	197
Stenlöf 2013	Placebo; None; Oral	BMI change	kg/m2	31.8	6.2	Not applicable	Not applicable	Not applicable	192
Stenlöf 2013	Placebo; None; Oral	HbA1c change	%	8	1	Not applicable	Not applicable	Not applicable	192
Stenlöf 2013	Placebo; None; Oral	Weight change	kg	87.6	19.5	Not applicable	Not applicable	Not applicable	192
Suzuki 2014	Liraglutide; 0.9 mg daily; Subcutaneous	HbA1c change	%	9.8	2.2	Not applicable	Not applicable	Not applicable	24
Suzuki 2014	Liraglutide; 0.9 mg daily; Subcutaneous	Weight change	kg	82.3	19	Not applicable	Not applicable	Not applicable	24
Suzuki 2014	Sitagliptin; 50 mg daily; Oral	HbA1c change	%	9.1	1.6	Not applicable	Not applicable	Not applicable	16
Suzuki 2014	Sitagliptin; 50 mg daily; Oral	Weight change	kg	81.7	25.4	Not applicable	Not applicable	Not applicable	16
Tan 2005	Gliclazide; 320 mg daily; Oral	BMI change	kg/m2	31	5.6	Not applicable	Not applicable	Not applicable	297

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Tan 2005	Gliclazide; 320 mg daily; Oral	Weight change	kg	89.2	18.2	Not applicable	Not applicable	Not applicable	297
Tan 2005	Pioglitazone; 45 mg daily; Oral	BMI change	kg/m2	32	6.4	Not applicable	Not applicable	Not applicable	270
Tan 2005	Pioglitazone; 45 mg daily; Oral	Weight change	kg	91.7	19.9	Not applicable	Not applicable	Not applicable	270
Tao 2018	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	26.4	4.55	0.77	25	28	25
Tao 2018	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	7.3	0.2	Not applicable	Not applicable	Not applicable	25
Tao 2018	Metformin type unspecified; 2000 mg daily; Oral	Weight change	kg	67.9	11.03	2.19	63.6	72.2	25
Tao 2018	Saxagliptin + Metformin; 5 mg + 2000 mg daily; Oral	BMI change	kg/m2	26.38	4.41	0.77	25	28	25
Tao 2018	Saxagliptin + Metformin; 5 mg + 2000	HbA1c change	%	7.4	0.3	Not applicable	Not applicable	Not applicable	25

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	mg daily; Oral								
Tao 2018	Saxagliptin + Metformin; 5 mg + 2000 mg daily; Oral	Weight change	kg	69.3	12.18	2.42	64.6	74.1	25
Tao 2018	Saxagliptin; 5 mg daily; Oral	BMI change	kg/m2	27.2	5.79	1.02	25	29	25
Tao 2018	Saxagliptin; 5 mg daily; Oral	HbA1c change	%	7.4	0.3	Not applicable	Not applicable	Not applicable	25
Tao 2018	Saxagliptin; 5 mg daily; Oral	Weight change	kg	70.4	17.18	3.42	63.7	77.1	25
Terauchi 2017	Glimepiride; 0.5-6 mg daily; Oral	BMI change	kg/m2	24.2	3.6	Not applicable	Not applicable	Not applicable	129
Terauchi 2017	Glimepiride; 0.5-6 mg daily; Oral	HbA1c change	%	7.5	0.7	Not applicable	Not applicable	Not applicable	129
Terauchi 2017	Glimepiride; 0.5-6 mg daily; Oral	Weight change	kg	60.9	9.7	Not applicable	Not applicable	Not applicable	129
Terauchi 2017	Sitagliptin; 25-100 mg daily; Oral	BMI change	kg/m2	24.1	3.3	Not applicable	Not applicable	Not applicable	143
Terauchi 2017	Sitagliptin; 25-100 mg daily; Oral	HbA1c change	%	7.5	0.7	Not applicable	Not applicable	Not applicable	143

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Terauchi 2017	Sitagliptin; 25-100 mg daily; Oral	Weight change	kg	60.9	9.7	Not applicable	Not applicable	Not applicable	143
Umpierrez 2014	Dulaglutide; 0.75 mg weekly; Subcutaneous	BMI change	kg/m2	33	6	Not applicable	Not applicable	Not applicable	270
Umpierrez 2014	Dulaglutide; 0.75 mg weekly; Subcutaneous	HbA1c change	%	7.6	0.9	Not applicable	Not applicable	Not applicable	270
Umpierrez 2014	Dulaglutide; 0.75 mg weekly; Subcutaneous	Weight change	kg	92	19	Not applicable	Not applicable	Not applicable	270
Umpierrez 2014	Dulaglutide; 0.75-1.5 mg weekly combined; Subcutaneous	BMI change	kg/m2	33.5	6.02	Not applicable	Not applicable	Not applicable	539
Umpierrez 2014	Dulaglutide; 0.75-1.5 mg weekly combined; Subcutaneous	HbA1c change	%	7.6	0.9	Not applicable	Not applicable	Not applicable	539
Umpierrez 2014	Dulaglutide; 0.75-1.5 mg weekly	Weight change	kg	92.5	18.99	Not applicable	Not applicable	Not applicable	539

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	combined; Subcutaneous								
Umpierrez 2014	Dulaglutide; 1.5 mg weekly; Subcutaneous	BMI change	kg/m2	34	6	Not applicable	Not applicable	Not applicable	269
Umpierrez 2014	Dulaglutide; 1.5 mg weekly; Subcutaneous	HbA1c change	%	7.6	0.9	Not applicable	Not applicable	Not applicable	269
Umpierrez 2014	Dulaglutide; 1.5 mg weekly; Subcutaneous	Weight change	kg	93	19	Not applicable	Not applicable	Not applicable	269
Umpierrez 2014	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	33	5	Not applicable	Not applicable	Not applicable	268
Umpierrez 2014	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	7.6	0.8	Not applicable	Not applicable	Not applicable	268
Umpierrez 2014	Metformin type unspecified; 2000 mg daily; Oral	Weight change	kg	92	19	Not applicable	Not applicable	Not applicable	268

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Wainstein 2012	Pioglitazone; 45 mg daily; Oral	BMI change	kg/m2	29.6	5.5	Not applicable	Not applicable	Not applicable	256
Wainstein 2012	Pioglitazone; 45 mg daily; Oral	HbA1c change	%	8.9	1.3	Not applicable	Not applicable	Not applicable	256
Wainstein 2012	Pioglitazone; 45 mg daily; Oral	Weight change	kg	81.4	19.9	Not applicable	Not applicable	Not applicable	256
Wainstein 2012	Sitagliptin + Metformin; 100 mg + 2000 mg daily; Oral	BMI change	kg/m2	30	6.1	Not applicable	Not applicable	Not applicable	261
Wainstein 2012	Sitagliptin + Metformin; 100 mg + 2000 mg daily; Oral	HbA1c change	%	9	1.3	Not applicable	Not applicable	Not applicable	261
Wainstein 2012	Sitagliptin + Metformin; 100 mg + 2000 mg daily; Oral	Weight change	kg	82.8	21.1	Not applicable	Not applicable	Not applicable	261
Wang 2013	Gliclazide; 120 mg daily; Oral	HbA1c change	%	8.4	0.93	Not applicable	Not applicable	Not applicable	30
Wang 2013	Gliclazide; 120 mg daily; Oral	Weight change	kg	70.4	11.7	Not applicable	Not applicable	Not applicable	30
Wang 2013	Metformin type	HbA1c change	%	8.07	0.77	Not applicable	Not applicable	Not applicable	30

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	unspecified; 1700 mg daily; Oral								
Wang 2013	Metformin type unspecified; 1700 mg daily; Oral	Weight change	kg	71.6	12.7	Not applicable	Not applicable	Not applicable	30
Wang 2016A	Dapagliflozin; 5-10 mg daily; Oral	HbA1c change	mmol/mol	67	5	Not applicable	Not applicable	Not applicable	18
Wang 2016A	Dapagliflozin; 5-10 mg daily; Oral	Weight change	kg	66.4	10.1	Not applicable	Not applicable	Not applicable	18
Wang 2016A	Placebo; None; Oral	HbA1c change	mmol/mol	68	7	Not applicable	Not applicable	Not applicable	10
Wang 2016A	Placebo; None; Oral	Weight change	kg	64.7	7.1	Not applicable	Not applicable	Not applicable	10
Wang 2022A	Metformin type unspecified; 1500 mg daily; Oral	BMI change	kg/m ²	25.41	3.45	Not applicable	Not applicable	Not applicable	17
Wang 2022A	Metformin type unspecified; 1500 mg daily; Oral	HbA1c change	%	8.6	1.17	Not applicable	Not applicable	Not applicable	17
Wang 2022A	Sitagliptin + Metformin; 100 mg +	HbA1c change	%	7.83	0.58	Not applicable	Not applicable	Not applicable	20

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	1500 mg daily; Oral								
Wang 2022A	Sitagliptin; 100 mg daily; Oral	BMI change	kg/m2	26.07	3.24	Not applicable	Not applicable	Not applicable	20
Wang 2022A	Sitagliptin; 100 mg daily; Oral	HbA1c change	%	7.93	0.91	Not applicable	Not applicable	Not applicable	17
Wang 2022A	Standard care; None; Oral	BMI change	kg/m2	26.46	2.86	Not applicable	Not applicable	Not applicable	17
Wolever 2000	Metformin type unspecified; 1500 mg daily; Oral	BMI change	kg/m2	30.5	4.72	0.6	Not applicable	Not applicable	62
Wolever 2000	Metformin type unspecified; 1500 mg daily; Oral	HbA1c change	%	8.2	0.79	0.1	Not applicable	Not applicable	62
Wolever 2000	Placebo; None; Oral	BMI change	kg/m2	30.8	4.02	0.6	Not applicable	Not applicable	45
Wolever 2000	Placebo; None; Oral	HbA1c change	%	7.8	0.67	0.1	Not applicable	Not applicable	45
Wu 2015	Linagliptin; 5 mg daily; Oral	BMI change	kg/m2	24.37	2.09	Not applicable	Not applicable	Not applicable	34
Wu 2015	Linagliptin; 5 mg daily; Oral	HbA1c change	%	7.97	0.68	Not applicable	Not applicable	Not applicable	34

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Wu 2015	Linagliptin; 5 mg daily; Oral	Weight change	kg	67.05	8.12	Not applicable	Not applicable	Not applicable	34
Wu 2015	Placebo; None; Oral	BMI change	kg/m2	24.11	2.28	Not applicable	Not applicable	Not applicable	23
Wu 2015	Placebo; None; Oral	HbA1c change	%	8	0.69	Not applicable	Not applicable	Not applicable	23
Wu 2015	Placebo; None; Oral	Weight change	kg	65.24	8.45	Not applicable	Not applicable	Not applicable	23
Xu 2015	Exenatide; 10-20 mcg daily; Subcutaneous	BMI change	kg/m2	25.9	3.15	0.3	Not applicable	Not applicable	110
Xu 2015	Exenatide; 10-20 mcg daily; Subcutaneous	HbA1c change	%	8	1.05	0.1	Not applicable	Not applicable	110
Xu 2015	Exenatide; 10-20 mcg daily; Subcutaneous	Weight change	kg	71.7	11.54	1.1	Not applicable	Not applicable	110
Xu 2015	Insulin glargine; Titrated; Subcutaneous	BMI change	kg/m2	25.4	3.2	0.3	Not applicable	Not applicable	114
Xu 2015	Insulin glargine; Titrated;	HbA1c change	%	8.2	1.07	0.1	Not applicable	Not applicable	114

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	Subcutaneous								
Xu 2015	Insulin glargine; Titrated; Subcutaneous	Weight change	kg	69.8	10.68	1	Not applicable	Not applicable	114
Xu 2015	Pioglitazone; 30-45 mg daily; Oral	BMI change	kg/m2	25.9	3.26	0.3	Not applicable	Not applicable	118
Xu 2015	Pioglitazone; 30-45 mg daily; Oral	HbA1c change	%	8	1.09	0.1	Not applicable	Not applicable	118
Xu 2015	Pioglitazone; 30-45 mg daily; Oral	Weight change	kg	70.6	11.95	1.1	Not applicable	Not applicable	118
Yamada 2020	Liraglutide + Metformin; 0.9 mg daily; Subcutaneous	BMI change	kg/m2	26.9	4.8	Not applicable	Not applicable	Not applicable	48
Yamada 2020	Liraglutide + Metformin; 0.9 mg daily; Subcutaneous	HbA1c change	%	8.3	0.8	Not applicable	Not applicable	Not applicable	48
Yamada 2020	Liraglutide + Metformin; 0.9 mg daily; Subcutaneous	Weight change	kg	74.7	15.4	Not applicable	Not applicable	Not applicable	48

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Yamada 2020	Placebo; None; Subcutaneous	BMI change	kg/m2	25.1	3.9	Not applicable	Not applicable	Not applicable	49
Yamada 2020	Placebo; None; Subcutaneous	HbA1c change	%	8.3	1.1	Not applicable	Not applicable	Not applicable	49
Yamada 2020	Placebo; None; Subcutaneous	Weight change	kg	70.3	12.4	Not applicable	Not applicable	Not applicable	49
Yamada 2020	Semaglutide; 14 mg daily; Oral	BMI change	kg/m2	24.7	4.1	Not applicable	Not applicable	Not applicable	48
Yamada 2020	Semaglutide; 14 mg daily; Oral	HbA1c change	%	8	0.9	Not applicable	Not applicable	Not applicable	48
Yamada 2020	Semaglutide; 14 mg daily; Oral	Weight change	kg	68	13	Not applicable	Not applicable	Not applicable	48
Yamada 2020	Semaglutide; 3 mg daily; Oral	BMI change	kg/m2	26.5	4.6	Not applicable	Not applicable	Not applicable	49
Yamada 2020	Semaglutide; 3 mg daily; Oral	HbA1c change	%	8.1	0.8	Not applicable	Not applicable	Not applicable	49
Yamada 2020	Semaglutide; 3 mg daily; Oral	Weight change	kg	71.4	14.3	Not applicable	Not applicable	Not applicable	49
Yamada 2020	Semaglutide; 3-14 mg daily	BMI change	kg/m2	25.84	4.14	Not applicable	Not applicable	Not applicable	146

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	combined; Oral								
Yamada 2020	Semaglutide; 3-14 mg daily combined; Oral	HbA1c change	%	8.13	0.91	Not applicable	Not applicable	Not applicable	146
Yamada 2020	Semaglutide; 3-14 mg daily combined; Oral	Weight change	kg	70.25	12.79	Not applicable	Not applicable	Not applicable	146
Yamada 2020	Semaglutide; 7 mg daily; Oral	BMI change	kg/m2	26.3	3.5	Not applicable	Not applicable	Not applicable	49
Yamada 2020	Semaglutide; 7 mg daily; Oral	HbA1c change	%	8.3	1	Not applicable	Not applicable	Not applicable	49
Yamada 2020	Semaglutide; 7 mg daily; Oral	Weight change	kg	71.3	10.8	Not applicable	Not applicable	Not applicable	49
Yamanouchi 2005	Glimepiride; 1-2 mg daily; Oral	BMI change	kg/m2	25.6	3.5	Not applicable	Not applicable	Not applicable	37
Yamanouchi 2005	Glimepiride; 1-2 mg daily; Oral	HbA1c change	%	9.8	0.7	Not applicable	Not applicable	Not applicable	37
Yamanouchi 2005	Metformin type unspecified; 750 mg daily; Oral	BMI change	kg/m2	26.2	3.8	Not applicable	Not applicable	Not applicable	39
Yamanouchi 2005	Metformin type	HbA1c change	%	9.9	0.7	Not applicable	Not applicable	Not applicable	39

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	unspecified; 750 mg daily; Oral								
Yamanouchi 2005	Pioglitazone; 30-45 mg daily combined; Oral	BMI change	kg/m2	25.8	4.2	Not applicable	Not applicable	Not applicable	38
Yamanouchi 2005	Pioglitazone; 30-45 mg daily combined; Oral	HbA1c change	%	10.2	0.8	Not applicable	Not applicable	Not applicable	38
Yoon 2011A	Glimepiride; 8 mg daily; Oral	BMI change	kg/m2	25.5	3.1	Not applicable	Not applicable	Not applicable	118
Yoon 2011A	Glimepiride; 8 mg daily; Oral	HbA1c change	%	7.8	0.8	Not applicable	Not applicable	Not applicable	118
Yoon 2011A	Glimepiride; 8 mg daily; Oral	Weight change	kg	67.9	10.9	Not applicable	Not applicable	Not applicable	118
Yoon 2011A	Metformin type unspecified; 2000 mg daily; Oral	BMI change	kg/m2	25.7	3.2	Not applicable	Not applicable	Not applicable	114
Yoon 2011A	Metformin type unspecified; 2000 mg daily; Oral	HbA1c change	%	7.9	0.8	Not applicable	Not applicable	Not applicable	114

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Yoon 2011A	Metformin type unspecified; 2000 mg daily; Oral	Weight change	kg	68.9	11.1	Not applicable	Not applicable	Not applicable	114
Yoon 2012	Pioglitazone + Sitagliptin; 100 mg + 30-45 mg daily; Oral	BMI change	kg/m2	29.7	4.8	Not applicable	Not applicable	Not applicable	164
Yoon 2012	Pioglitazone + Sitagliptin; 100 mg + 30-45 mg daily; Oral	HbA1c change	%	9.4	1.1	Not applicable	Not applicable	Not applicable	164
Yoon 2012	Pioglitazone + Sitagliptin; 100 mg + 30-45 mg daily; Oral	Weight change	kg	81.6	17.4	Not applicable	Not applicable	Not applicable	164
Yoon 2012	Pioglitazone; 30-45 mg daily; Oral	BMI change	kg/m2	29.9	5.3	Not applicable	Not applicable	Not applicable	153
Yoon 2012	Pioglitazone; 30-45 mg daily; Oral	HbA1c change	%	9.4	1.4	Not applicable	Not applicable	Not applicable	153
Yoon 2012	Pioglitazone; 30-45 mg daily; Oral	Weight change	kg	81.9	18.4	Not applicable	Not applicable	Not applicable	153
Yuan 2012	Exenatide; 20 mcg daily;	BMI change	kg/m2	30.6	2.8	Not applicable	Not applicable	Not applicable	33

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	Subcutaneous								
Yuan 2012	Exenatide; 20 mcg daily; Subcutaneous	HbA1c change	%	8.27	1.58	Not applicable	Not applicable	Not applicable	33
Yuan 2012	Exenatide; 20 mcg daily; Subcutaneous	Weight change	kg	82.2	12.8	Not applicable	Not applicable	Not applicable	33
Yuan 2012	Metformin type unspecified; 1500 mg daily; Oral	BMI change	kg/m2	29.3	2.6	Not applicable	Not applicable	Not applicable	26
Yuan 2012	Metformin type unspecified; 1500 mg daily; Oral	HbA1c change	%	8.11	1.92	Not applicable	Not applicable	Not applicable	26
Yuan 2012	Metformin type unspecified; 1500 mg daily; Oral	Weight change	kg	83.7	10.7	Not applicable	Not applicable	Not applicable	26
Zhang 2020A	Liraglutide; 0.6-1.2 mg daily; Subcutaneous	BMI change	kg/m2	27.6	5.2	Not applicable	Not applicable	Not applicable	30
Zhang 2020A	Liraglutide; 0.6-1.2 mg daily;	HbA1c change	%	8.1	2	Not applicable	Not applicable	Not applicable	30

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	Subcutaneous								
Zhang 2020A	Liraglutide; 0.6-1.2 mg daily; Subcutaneous	Weight change	kg	79.3	8.8	Not applicable	Not applicable	Not applicable	30
Zhang 2020A	Pioglitazone; 15-30 mg daily; Oral	BMI change	kg/m2	27.1	3.8	Not applicable	Not applicable	Not applicable	30
Zhang 2020A	Pioglitazone; 15-30 mg daily; Oral	HbA1c change	%	8.1	1.7	Not applicable	Not applicable	Not applicable	30
Zhang 2020A	Pioglitazone; 15-30 mg daily; Oral	Weight change	kg	78	9.2	Not applicable	Not applicable	Not applicable	30
Zhou 2021	Canagliflozin + Metformin; 100 mg + 500-2000 mg daily; Oral	BMI change	kg/m2	27.3	5.36	Not applicable	Not applicable	Not applicable	12
Zhou 2021	Canagliflozin + Metformin; 100 mg + 500-2000 mg daily; Oral	HbA1c change	%	8.1	0.8	Not applicable	Not applicable	Not applicable	12
Zhou 2021	Canagliflozin + Metformin; 100 mg + 500-2000 mg daily; Oral	Weight change	kg	79.95	16.82	Not applicable	Not applicable	Not applicable	12

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
Zhou 2021	Glimepiride + Metformin; 1-4 mg + 500-2000 mg daily; Oral	BMI change	kg/m2	26.3	3.3	Not applicable	Not applicable	Not applicable	13
Zhou 2021	Glimepiride + Metformin; 1-4 mg + 500-2000 mg daily; Oral	HbA1c change	%	8.1	0.69	Not applicable	Not applicable	Not applicable	13
Zhou 2021	Glimepiride + Metformin; 1-4 mg + 500-2000 mg daily; Oral	Weight change	kg	76.5	16.37	Not applicable	Not applicable	Not applicable	13
Zhou 2022	Dapagliflozin + Metformin; 10 mg + 500 mg daily; Oral	BMI change	kg/m2	27.69	1.45	Not applicable	Not applicable	Not applicable	75
Zhou 2022	Metformin type unspecified; 500 mg daily; Oral	BMI change	kg/m2	27.61	1.49	Not applicable	Not applicable	Not applicable	75
Zougrafou 2015	Metformin type unspecified; 1700 mg daily; Oral	BMI change	kg/m2	32.2	5.9	Not applicable	Not applicable	Not applicable	32
Zougrafou 2015	Metformin type unspecified;	HbA1c change	%	8	0.8	Not applicable	Not applicable	Not applicable	32

Study name	Drug details	Outcome	Units	Mean	SD	SE	2.5% Confidence interval	97.5% Confidence interval	n
	1700 mg daily; Oral								
Zougrafou 2015	Metformin type unspecified; 1700 mg daily; Oral	Weight change	kg	93.9	20.7	Not applicable	Not applicable	Not applicable	32
Zougrafou 2015	Vildagliptin + Metformin; 100 mg + 1700 mg daily; Oral	BMI change	kg/m2	31.6	4.6	Not applicable	Not applicable	Not applicable	32
Zougrafou 2015	Vildagliptin + Metformin; 100 mg + 1700 mg daily; Oral	HbA1c change	%	8.1	0.8	Not applicable	Not applicable	Not applicable	32
Zougrafou 2015	Vildagliptin + Metformin; 100 mg + 1700 mg daily; Oral	Weight change	kg	90.1	14.3	Not applicable	Not applicable	Not applicable	32