

Appendix 3 Characteristics of the 84 studies included in the network meta-analysis

Study ID	NCT number	Incretin-based regimens	Control treatments	Size	Background Medicine	Trial duration (w)	*Outcome	Baseline information		
								Age (yrs)	HbA1c (%)	Years of T2DM
Bajaj M 2014 ^[1]	NCT00996658	DPP4	Placebo	272	MET+PIG	24	C	53.8	8.42	NA
Barnett AH 2012 ^[2]	NCT00740051	DPP4	Placebo	227	NO	18	C	56.5	8.09	NA
Barzilai N 2011 ^[3]	NCT00305604	DPP4	Placebo	206	OAD	24	C	71.9	7.8	7.1
Bosi E 2011 ^[4]	NCT00432276	DPP4	Placebo	803	MET+PIG	52	CR	55.1	8.2	7.16
Chan JCN 2008 ^[5]	NCT00095056	DPP4	SU	91	NO	54	CP	67.9	7.66	13.49
ENDURE, NCT00856284, 2013 ^[6]	NCT00856284	DPP4	SU	2620	MET	104	CR	55.4	7.6	5.5
EXAMINE, White WB 2013 ^[7]	NCT00968708	DPP4	Placebo	5380	OAD	76	CGHR	61	8	7.2
GENERATION, Schernthaner G 2015 ^[8]	NCT01006603	DPP4	SU	718	MET	52	CHP	72.6	7.6	7.6
Gallwitz B 2012 ^[9]	NCT00622284	DPP4	SU	1551	MET	104	CGPR	59.8	7.7	NA
Göke B 2013 ^[10]	NCT00575588	DPP4	SU	858	MET	104	C	57.6	7.65	5.45
Haak T 2013 ^[11]	NCT00915772	DPP4	Placebo	566	MET	54	C	55.8	7.5	NA
Hartley P 2015 ^[12]	NCT01189890	DPP4	SU	477	NO	30	C	70.7	7.78	8.69
Laakso M 2015 ^[13]	NCT01087502	DPP4	SU	235	NO	52	C	66.6	8.05	NA
NCT00295633 2014	NCT00295633	DPP4	Placebo	565	TZD	24	C	54	8.3	5.2
NCT00374907 2008	NCT00374907	DPP4	Met	36	MET	116	C	55.5	NA	NA
NCT00813995 2014	NCT00813995	DPP4	Placebo	395	MET	24	C	54.6	8.5	6.85
NCT01183013 2014	NCT01183013	DPP4	Placebo	801	TZD	54	CR	57.3	8.12	NA
Nauck M 2007 ^[14]	NCT00094770	DPP4	SU	1172	MET	104	CGHR	56.7	7.7	6.35
Olansky L 2011 ^[15]	NCT00482729	DPP4	Placebo	1246	MET	44	C	49.7	9.87	3.35
Pratley RE 2009 ^[16]	NCT00286494	DPP4	Placebo	494	MET+TZD/SU+TZD	26	C	55.4	8	7.6
Raz I 2008 ^[17]	NCT00337610	DPP4	Placebo	190	MET	18	CP	54.8	9.2	7.9
Roden M 2013 ^[18]	NCT01177813	DPP4	Placebo SGLT2	899	NO	24	C	55	7.88	NA
Rosenstock J 2009 ^[19]	NCT00121641	DPP4	Placebo	401	MET	24	C	53.5	7.9	2.56
Rosenstock J 2010 ^[20]	NCT00395512	DPP4	TZD	409	MET	26	C	52.8	8.81	3.2
SAVOR-TIMI 53 Raz I 2014 ^[21]	NCT01107886	DPP4	Placebo	16492	Insulin/MET/SU	109	CGHPR	65	8	10.3
Shankar RR 2017 ^[22]	NCT01755156	DPP4	SU	402	MET	104	CH	57.2	8.05	7.8
Sheu W 2015 ^[23]	NCT00954447	DPP4	Placebo	1261	Insulin	52	CGH	60	8.3	NA
Wainstein J 2012 ^[24]	NCT00532935	DPP4	TZD	517	MET/NO	32	C	52.3	8.9	3.24
Araki E, 2015 ^[25]	NCT01584232	GLP1RA	Insulin	361	OAD	26	CH	56.8	8	8.86
Davies MJ, 2016 ^[26]	NCT01620489	GLP1RA	Placebo	277	Met SU/TZD	26	C	67.2	8.04	15.06
EUREXA, Gallwitz, B, 2012 ^[27]	NCT00359762	GLP1RA	SU	1019	MET	156	CR	56.4	7.4	5.65
GetGoal-DUO-1, Riddle MC, 2013 ^[28]	NCT00975286	GLP1RA	Placebo	446	Insulin+MET	24	C	56.2	7.58	9.17
GetGoal-Mono, Fonseca VA, 2012 ^[29]	NCT00688701	GLP1RA	Placebo	361	NO	12	C	53.7	8.04	1.1
HARMONY-2, Nauck, MA, 2016 ^[30]	NCT00849017	GLP1RA	Placebo	301	NO	156	C	52.9	8.07	3.97
HARMONY-6, Rosenstock J, 2014 ^[31]	NCT00976391	GLP1RA	Insulin	566	Insulin	60	C	55.6	8.45	11
LEAD-2, Nauck M, 2009 ^[32]	NCT00318461	GLP1RA	Placebo SU	1087	MET	104	CHR	56.7	8.4	7.4
LEAD-3, Garber A, 2011 ^[33]	NCT00294723	GLP1RA	SU	745	Met/SU /Met+TZD	104	C	53	8.3	5.4
LEADER, Marre M, 2015 ^[34]	NCT01179048	GLP1RA	Placebo	9340	Met/SU /Met+TZD	262	CGHPR	64.3	8.7	12.7

Miyagawa J, 2015 ^[35]	NCT01558271	GLP1RA	Placebo	487	NO	26	CP	57.5	8.14	6.59
Pfeffer MA, 2015 ^[36]	NCT01147250	GLP1RA	Placebo	6063	NO	108	CGHPR	60.3	7.68	9.29
Umpierrez GE, 2011 ^[37]	NCT00630825	GLP1RA	Placebo	262	OAD	16	C	56.7	8.24	8.3
CANTATA-D Trial, Lavalley-Gonzalez FJ 2013 ^[38]	NCT01106677	DPP4	Placebo SGLT2	1284	MET	26	G	55.4	7.9	6.9
Kadowaki T, 2013 ^[39]	NCT01026194	DPP4	TZD	204	TZD	12	G	58.2	7.8	6.2
MARLINA-T2D study Groop P 2015 ^[40]	NCT01792518	DPP4	Placebo	360	NO	24	G	60.6	7.84	NA
NCT00121667 2014	NCT00121667	DPP4	Placebo	743	MET+PIG	206	G	54.6	8.1	6.53
NCT00998881 2014	NCT00998881	DPP4	Placebo	203	NO	12	G	58.9	NA	NA
NCT01215097 2013	NCT01215097	DPP4	Placebo	305	MET	24	G	55.5	7.99	NA
DURATION-4, Russell-Jones D, 2012 ^[41]	NCT00676338	DPP4	Met GLP1RA	820	NO	26	GH	53.7	8.5	2.67
GetGoal-S, Rosenstock J, 2014 ^[42]	NCT00713830	GLP1RA	Placebo	859	Met/SU	24	GHR	57.2	8.25	9.33
HARMONY-3, Ahren B, 2014 ^[43]	NCT00838903	DPP4	Placebo GLP1RA	1012	MET	156	R	54.5	8.11	6.01
Kadowaki T, 2011 ^[44]	NCT00577824	GLP1RA	Placebo	179	SU/TZD	24	G	58.4	8.6	11.95
Kaku K, 2016 ^[45]	NCT01512108	GLP1RA	Placebo	360	OAD	52	G	59.5	8.1	8.02
Seino Y, 2010 ^[46]	NCT00393718	GLP1RA	SU	400	Diet+exercise	52	GR	58.3	8.28	8.25
Arechavaleta R 2009 ^[47]	NCT00701090	DPP4	SU	1034	MET	30	P	56.3	7.5	6.75
Arjona Ferreira JC 2013 ^[48]	NCT00509262	DPP4	SU	422	NO	54	P	59.5	7.85	17.5
Barnett AH, 2013 ^[49]	NCT00757588	DPP4	Placebo	455	Insulin/Insulin+MET	52	P	57.2	8.67	11.93
Charbonnel B 2006 ^[50]	NCT00086515	DPP4	SU	701	MET+TZD	104	HP	54.5	8	6.2
Frederich R 2012 ^[51]	NCT00316082	DPP4	Placebo	365	NO	24	P	55.2	7.93	1.65
Goldstein BJ 2007-pc1 ^[52]	NCT00103857	DPP4	Met	355	NO	104	P	53.5	8.8	4.5
Goldstein BJ 2007-pc2 ^[52]	NCT00103857	DPP4	Placebo	372	MET	104	P	53.5	8.8	4.5
Goldstein BJ 2007-pc3 ^[52]	NCT00103857	DPP4	Placebo	364	MET	104	P	53.5	8.8	4.5
Jadzinsky M 2009 ^[53]	NCT00327015	DPP4	Met	499	MET	24	P	52.0	9.5	1.7
NCT01183013 2014	NCT01183013	DPP4	Placebo	801	TZD	54	C+P	57.3	8.12	NA
NCT01519674 2014	NCT01519674	DPP4	Placebo	575	Insulin+MET	24	P	55.6	8.4	NA
TECOS Green JB 2015 ^[54]	NCT00790205	DPP4	Placebo	14540	OAD	156	CGHPR	65.5	7.2	11.6
Violante R 2012 ^[55]	NCT00870194	DPP4	Placebo	255	Exenatide, MET	20	P	56	7.89	8
AWARD-1, Wysham C, 2014 ^[56]	NCT01064687	GLP1RA	Placebo	978	Met+Pig	26	P	55.7	8.07	8.76
DUAL-I, Holst JJ, 2016 ^[57]	NCT01336023	GLP1RA	Insulin	824	Met+Pig	26	P	55	8.3	7.1
Diamant M, 2014, 30w ^[58]	NCT00960661	GLP1RA	Insulin	627	Insulin+MET	30	PR	59.5	8.24	12
EAGLE D'Alessio D, 2015 ^[59]	NCT01117350	GLP1RA	Insulin	965	Met/SU/Met+SU	24	P	57.3	9.07	8.5
GetGoal-FI, Bolli G, 2013 ^[60]	NCT00763451	GLP1RA	Placebo	482	MET	24	P	56.1	8.04	6
GetGoal-L, Riddle MC, 2013 ^[61]	NCT00715624	GLP1RA	Placebo	495	Met/SU/TZD	24	P	57.2	8.4	12.5
GetGoal-M, Ahren B, 2013 ^[62]	NCT00712673	GLP1RA	Placebo	680	MET	24	PR	54.7	8.06	6.11
HARMONY-5, Home PD, 2015 ^[63]	NCT00839527	GLP1RA	Placebo TZD	663	Met+Glimepride	156	PR	55.2	8.24	8.9
LixiLan-O, Davies, MJ, 2017 ^[64]	NCT02058147	GLP1RA	Insulin	700	MET	30	P	58.4	8.09	9.8
SUSTAIN-6, Marso SP, 2016 ^[65]	NCT01720446	GLP1RA	Placebo	3297	NO	104	CGHPR	64.6	8.7	13.9
Terauchi Y, 2014 ^[66]	NCT01001104	GLP1RA	Placebo	145	MET	12	P	52.2	8	4.6
Matthaei S 2016 ^[67]	NCT01619059	DPP4	Placebo	315	dapagliflozin, MET	24	H	54.6	7.91	7.7

AWARD-9, Pozzilli P, 2017 ^[68]	NCT02152371	GLP1RA	Placebo	300	Insulin	28	H	60.4	8.35	13.15
SCALE, Davies MJ, 2015 ^[69]	NCT01272232	GLP1RA	Placebo	844	NO	68	HR	54.9	7.9	7.3
L-STEP study Fujitani Y 2016 ^[70]	UMIN000008591	DPP4	AGIs	378	NO	12	R	61.0	6.95	NA
Vilsboll T 2010 ^[71]	NCT00395343	DPP4	Placebo	641	Insulin	24	R	57.8	8.7	12.5
AWARD-4, Blonde L, 2015 ^[72]	NCT01191268	GLP1RA	Insulin	884	Insulin	52	R	59.4	8.46	12.73
GetGoal-L-Asia, Seino Y, 2012 ^[73]	NCT00866658	GLP1RA	Placebo	311	Insulin/SU	24	R	58.4	8.53	13.92

*Abbreviation: C:colon; G: gastric; H:hepatic; P:pancreatic; R:rectal

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