Clinical trials of SGLT2 inhibitors for diabetes type 2 in all type of patients

TrialResults-center www.trialresultscenter.org

1 add-on standard treatment

Trial	Treatments	Patients	Trials design and methods
empagliflozin vs placebo (add-on standard treatment)			
Araki , 2015 [NCT01368081] n=NA follow-up: 52 w	BI 10773 low dose (BI 10773 low dose tablet once daily) 2/ BI 10773 high dose (BI 10773 high dose tablet once daily) versus Metformin (Metformin tablets 500-2250 mg a day (twice or three times per day))	Japanese patients with type 2 diabetes mellitus	Japan
dapagliflozin vs placebo (on top standard treatment)			
Leiter , 2016 [NCT01042977] n=NA follow-up:	Dapagliflozin 10 mg tablet, oral, once daily, 24- week treatment versus placebo	Patients With T2DM and Cardiovascular Disease, Who Exhibit Inadequate Glycaemic Control on Usual Care	
MB102035 [NCT00976495] n=NA follow-up:	Dapagliflozin Tablets, Oral, 10 mg, once daily, 12 weeks versus placebo	-	
Cefalu , 2015 [NCT01031680] n=NA follow-up:	Dapagliflozin 10 mg tablet, oral, once daily, 24- week versus placebo	-	
MB102073 [NCT01137474] n=NA follow-up:	Dapagliflozin Tablets, Oral, 10 mg, once daily, up to 12 weeks versus placebo	patients with type 2 diabetes with uncontrolled hypertension who are on an Angiotensin-converting enzyme (ACE) inhibitor or an Angiotensin Receptor Blocker (ARB).	
Weber [NCT01195662] n=NA follow-up:	Dapagliflozin Tablets, Oral, 10 mg, once daily, Up to 12 weeks versus placebo	Subjects With Type 2 Diabetes With Inadequately Controlled Hypertension on an Angiotensin-Converting Enzyme (ACE) Inhibitor or Angiotensin Receptor Blocker (ARB) and an Additional Antihypertensive Medication	

References

Araki, 2015:

Araki E, Tanizawa Y, Tanaka Y, Taniguchi A, Koiwai K, Kim G, Salsali A, Woerle HJ, Broedl UC Long-term treatment with empagliflozin as add-on to oral antidiabetes therapy in Japanese patients with type 2 diabetes mellitus. Diabetes Obes Metab 2015;17:665-74 [25772548]

Leiter, 2016:

Leiter LA, Cefalu WT, de Bruin TW, Xu J, Parikh S, Johnsson E, Gause-Nilsson I Long-term maintenance of efficacy of dapagliflozin in patients with type 2 diabetes mellitus and cardiovascular disease. Diabetes Obes Metab 2016;: [27009868]

MB102035, :

Cefalu, 2015:

Leiter LA, Cefalu WT, de Bruin TW, Xu J, Parikh S, Johnsson E, Gause-Nilsson I Long-term maintenance of efficacy of dapagliflozin in patients with type 2 diabetes mellitus and cardiovascular disease. Diabetes Obes Metab 2016;: [27009868]

Cefalu WT, Leiter LA, de Bruin TW, Gause-Nilsson I, Sugg J, Parikh SJ Dapagliflozin's Effects on Glycemia and Cardiovascular Risk Factors in High-Risk Patients With Type 2 Diabetes: A 24-Week, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study With a 28-Week Extension. Diabetes Care 2015;38:1218-27 [25852208]

MB102073, :

Weber, :

Weber MA, Mansfield TA, Cain VA, Iqbal N, Parikh S, Ptaszynska A Blood pressure and glycaemic effects of dapagliflozin versus placebo in patients with type 2 diabetes on combination antihypertensive therapy: a randomised, double-blind, placebo-controlled, phase 3 study. Lancet Diabetes Endocrinol 2016;4:211-20 [26620248]

2 bi-tri-therapy with INS

Trial	Treatments	Patients	Trials design and methods
dapagliflozin vs placebo (add on INS)			
MB102-137 *ongoing* [NCT02096705] n=NA follow-up: 24 w	-	-	Chnia
dapagliflozin vs placebo (add on insulin)			
Wilding , 2012 [NCT00673231] n=NA follow-up:	Dapagliflozin versus placebo on top of insulin	Type 2 Diabetes With Inadequate Glycaemic Control on Insulin	
Wilding (MB102009) , 2009 [NCT00357370] n=NA follow-up: 12 weeks	10 mg dapagliflozin, or 20 mg dapagliflozin, plus OAD(s) and 50% of their daily insulin dose versus placebo	patients with type 2 diabetes that is poorly controlled with high insulin doses plus oral antidiabetic agents	double-blind US, Canada
empagliflozin vs Placebo (add-on INS)			
Rosenstock DOUBLON ??? , 2013 n=NA follow-up:	-	-	
EASE-2 *ongoing* [NCT02414958] n=NA follow-up:	-	-	
empagliflozin vs placebo (add-on INS+/-MET)			

continued...

Trial	Treatments	Patients	Trials design and methods
Rosenstock (1245.49) , 2014 [NCT01306214] n=NA follow-up: 18 weeks	once-daily empagliflozin 10 mg (n = 186), empagliflozin 25 mg (n = 189), versus placebo	Patients inadequately controlled on MDI insulin metformin	USA

References

MB102-137, 0:

Wilding, 2012:

Wilding JP, Woo V, Soler NG, Pahor A, Sugg J, Rohwedder K, Parikh S Long-term efficacy of dapagliflozin in patients with type 2 diabetes mellitus receiving high doses of insulin: a randomized trial. Ann Intern Med 2012;156:405-15 [22431673] 10.1059/0003-4819-156-6-201203200-00003

Kohan DE, Fioretto P, Johnsson K, Parikh S, Ptaszynska A, Ying L The effect of dapagliflozin on renal function in patients with type 2 diabetes. J Nephrol 2016;: [26894924]

van Haalen HG, Pompen M, Bergenheim K, McEwan P, Townsend R, Roudaut M Cost effectiveness of adding dapagliflozin to insulin for the treatment of type2 diabetes mellitus in the Netherlands. Clin Drug Investig 2014;34:135-46 [24243529]

Wilding JP, Woo V, Rohwedder K, Sugg J, Parikh S Dapagliflozin in patients with type 2 diabetes receiving high doses of insulin: efficacy and safety over 2 years. Diabetes Obes Metab 2014;16:124-36 [23911013]

Wilding JP, Woo V, Soler NG, Pahor A, Sugg J, Rohwedder K, Parikh S [Long-term efficacy of dapagliflozin in patients with type 2 diabetes mellitus receiving high doses of insulin]. Dtsch Med Wochenschr 2013;138 Suppl 1:S27-38 [23529568]

Wilding (MB102009), 2009:

Wilding JP, Norwood P, T'joen C, Bastien A, List JF, Fiedorek FT, A study of dapagliflozin in patients with type 2 diabetes receiving high doses of insulin plus insulin sensitizers: applicability of a novel insulin-independent treatment. Diabetes Care 2009;32:1656-62. [19528367] 10.2337/dc09-0517

Kohan DE, Fioretto P, Johnsson K, Parikh S, Ptaszynska A, Ying L The effect of dapagliflozin on renal function in patients with type 2 diabetes. J Nephrol 2016;: [26894924]

Rosenstock DOUBLON ???, 2013:

Rosenstock J, Jelaska A, Wang F et al. Empagliflozin as add on to basal insulin for 78 weeks improves glycemic control with weight loss in insulin-treated type 2 diabetes (T2DM) Can J Diabetes 2013; 37: S32.

EASE-2, 0:

Rosenstock (1245.49), 2014:

Rosenstock J, Jelaska A, Frappin G, Salsali A, Kim G, Woerle HJ, Broedl UC Improved glucose control with weight loss, lower insulin doses, and no increased hypoglycemia with empagliflozin added to titrated multiple daily injections of insulin in obese inadequately controlled type 2 diabetes. Diabetes Care 2014;37:1815-23 [24929430]

3 bi-tri-therapy with MET+/-PIO

Trial	Treatments	Patients	Trials design and methods
empagliflozin vs placebo (add on MET+/-PIO)			
EMPA-REG PIO (Kovacs) , 2013 [NCT01210001] n=NA follow-up:	once daily empagliflozin 108201;mg (n8201;=8201;165), empagliflozin 258201;mg versus add-on to pioglitazone8201;8201;metformin	-	

continued...

Trial	Treatments	Patients	Trials design and methods
empagliflozin vs placebo (add on MET+/-SU)			
99050 *ongoing* [NCT01257334] n=NA follow-up:	BI 10773 10 mg, 25 mg administered once daily versus Placebo	Patients With Type 2 Diabetes Mellitus With Insufficient Glycaemic Control Despite Treatment With Metformin Alone or Metformin in Combination With a Sulfonylurea	Taiwan

References

EMPA-REG PIO (Kovacs), 2013:

Kovacs CS, Seshiah V, Swallow R, Jones R, Rattunde H, Woerle HJ, Broedl UC Empagliflozin improves glycaemic and weight control as add-on therapy to pioglitazone or pioglitazone plus metformin in patients with type 2 diabetes: a 24-week, randomized, placebo-controlled trial. Diabetes Obes Metab 2014;16:147-58 [23906415] 10.1111/dom.12188

99050, 0:

4 bitherapy with DDP-4

Trial	Treatments	Patients	Trials design and methods
dapagliflozin vs placebo add on DPP-4			
MB102061 [NCT00984867] n=NA follow-up:	Dapagliflozin 10 mg tablet, oral, once daily, 48 weeks versus placebo	Patients With Type 2 Diabetes Who Have Inadequate Glycemic Control on a DPP-4 Inhibitor Sitagliptin+/-Metformin	
empagliflozin vs placebo add-on linagliptin			
1275.19 *ongoing* [NCT02453555] n=NA follow-up: 24 w	-	-	Japan

References

MB102061, :

1275.19, 0:

5 bitherapy with MET

Trial	Treatments	Patients	Trials design and methods
dapagliflozin vs			

continued...

Trial	Treatments	Patients	Trials design and methods
Yang , 2015 [NCT01095666] n=NA follow-up:	-	-	Chnina
dapagliflozin vs dlipizide add on metformin			
Nauck , 2011 [NCT00660907] n=NA follow-up:	Dapagliflozin in Combination With Metformin versus Sulphonylurea in Combination With Metformin	Adult Patients With Type 2 Diabetes Who Have Inadequate Glycaemic Control on Metformin Therapy Alone	
empagliflozin vs Glimepiride + MET			
Ridderstrale , 2014 [NCT01167881] n=NA follow-up: 104 w	BI 10773 dose plus metformin versus Glimepiride 1-4 mg plus metformin	-	USA
empagliflozin vs linagliptin (add-on MET)			
DeFronzo , 2015 [NCT01422876] n=NA follow-up:	-	subjects with type 2 diabetes inadequately controlled on metformin	
empagliflozin + MET vs MET			
1276.1 (bitherapy MET) *ongoing* [NCT01719003] n=NA follow-up:	-	Treatment Naive Patients With Type 2 Diabetes	
dapagliflozin vs placebo (add on MET)			
Bailey (MB102014) , 2010 [NCT00528879] n=NA follow-up: 24 weeks	dapagliflozin (25 mg, n=137; 5 mg, n=137; or 10 mg, n=135) versus placebo	adults with type 2 diabetes who were receiving daily metformin (1500 mg per day) and had inadequate glycaemic control	Parallel groups double-blind
Bolinder , 2012 [NCT00855166] n=NA follow-up:	dapagliflozin versus placebo or Sitagliptin (on top MET)	-	
Schumm-Draeger , 2015 [NCT01217892] n=NA follow-up:	Dapagliflozin 2.5 mg BID, 5 mg BID and 10 mg QD versus placebo	Patients With Type 2 Diabetes Who Are Inadequately Controlled on Metformin-IR Monotherapy	
canagliflozin vs placebo (add-on MET)			
CANTATA-D *ongoing* [NCT01106677] n=NA follow-up: 26 weeks	-	-	

continued...

Trial	Treatments	Patients	Trials design and methods
3009: Add-on to MET *ongoing* n=NA follow-up: 52 weeks	-	-	
3008: Add-on to insulin *ongoing* n=NA follow-up: 18 weeks	-	-	
dapagliflozin vs placebo (add-on MET)			
MB102-054 *ongoing* [NCT01095653] n=NA follow-up:	-	-	China
empagliflozin vs placebo (add-on MET)			
Rosenstock , 2013 [NCT00749190] n=NA follow-up:	-	-	
Ross , 2015 [e2012-000905-53] n=NA follow-up:	empagliflozin 12.58201;mg twice daily (n8201;=8201;219), 258201;mg once daily (n8201;=8201;218), 58201;mg twice daily (n8201;=8201;219) or 108201;mg once daily (n8201;=8201;220), versus placebo	patients with type 2 diabetes inadequately controlled on metformin	
EMPA-REG MET (Haring) , 2014 [NCT01159600] n=NA follow-up:	empagliflozin 10 mg (n = 217), empagliflozin 25 mg (n = 213), versus placebo	Patients with HbA1c levels of 7% to 10% (53 to 86 mmol/mol) while receiving metformin (1,500 mg/day)	
dapagliflozin vs saxa (add on MET)			
CV181-363 *ongoing* [NCT02284893] n=NA follow-up: 26 w	-	-	USA
dapagliflozin vs Saxagliptin (add on MET)			
Rosenstock , 2015 [NCT01606007] n=NA follow-up: 24 w	-	-	USA
CV181-365 *ongoing* [NCT02419612] n=NA follow-up: 52 w	-	-	USA
dapagliflozin vs Sitagliptin (add on mET)			

continued...

Trial	Treatments	Patients	Trials design and methods
0431-838 *ongoing* [NCT02532855] n=NA follow-up: 24 w	-	Participants With Type 2 Diabetes Mellitus (T2DM) and Mild Renal Impairment Who Have Inadequate Glycemic Control on Metformin	USA
dapagliflozin + merformin vs dapagliflozin			
Kohan [NCT00643851] n=NA follow-up:	Dapagliflozin in Combination With Metformin versus Dapagliflozin Monotherapy	Subjects With Type 2 Diabetes Who Have Inadequate Glycemic Control	
dapagliflozin + merformin vs metformin or dapa			
MB102034 , 2016 [NCT00859898] n=NA follow-up:	Dapagliflozin 10 mg in Combination With Metformin versus Dapagliflozin 10 mg Monotherapy or Metformin Monotherapy	Subjects With Type 2 Diabetes Who Have Inadequate Glycemic Control	

References

Yang, 2015:

Yang W, Han P, Min KW, Wang B, Mansfield T, T'Joen C, Iqbal N, Johnsson E, Ptaszynska A Efficacy and safety of dapagliflozin in Asian patients with type 2 diabetes after metformin failure: A randomized controlled trial. J Diabetes 2015;: [26589253]

Nauck, 2011:

Nauck MA, Del Prato S, Meier JJ, Durn-Garca S, Rohwedder K, Elze M, Parikh SJ Dapagliflozin versus glipizide as add-on therapy in patients with type 2 diabetes who have inadequate glycemic control with metformin: a randomized, 52-week, double-blind, active-controlled noninferiority trial. Diabetes Care 2011 Sep;34:2015-22 [21816980]

Nauck M, del Prato S, Meier JJ, Durn-Garca S, Rohwedder K, Elze M, Parikh SJ [Dapagliflozin versus glipizide as add-on therapy in patients with type 2 diabetes who have inadequate glycemic control with metformin]. Dtsch Med Wochenschr 2013;138 Suppl 1:S6-15 [23529570]

Ridderstrale, 2014:

Ridderstrle M, Svaerd R, Zeller C, Kim G, Woerle HJ, Broedl UC Rationale, design and baseline characteristics of a 4-year (208-week) phase III trial of empagliflozin, an SGLT2 inhibitor, versus glimepiride as add-on to metformin in patients with type 2 diabetes mellitus with insufficient glycemic control. Cardiovasc Diabetol 2013;12:129 [24007456]

Ridderstrle M, Andersen KR, Zeller C, Kim G, Woerle HJ, Broedl UC Comparison of empagliflozin and glimepiride as add-on to metformin in patients with type 2 diabetes: a 104-week randomised, active-controlled, double-blind, phase 3 trial. Lancet Diabetes Endocrinol 2014;2:691-700 [24948511]

DeFronzo, 2015:

Lewin A, DeFronzo RA, Patel S, Liu D, Kaste R, Woerle HJ, Broedl UC Initial combination of empagliflozin and linagliptin in subjects with type 2 diabetes. Diabetes Care 2015;38:394-402 [25633662]

DeFronzo RA, Lewin A, Patel S, Liu D, Kaste R, Woerle HJ, Broedl UC Combination of empagliflozin and linagliptin as second-line therapy in subjects with type 2 diabetes inadequately controlled on metformin. Diabetes Care 2015;38:384-93 [25583754]

1276.1 (bitherapy MET), 0:

Bailey (MB102014), 2010:

Bailey CJ, Gross JL, Pieters A, Bastien A, List JF Effect of dapagliflozin in patients with type 2 diabetes who have inadequate glycaemic control with metformin: a randomised, double-blind, placebo-controlled trial. Lancet 2010 Jun 26;375:2223-2233 [20609968] 10.1016/S0140-6736(10)60407-2

Bailey CJ, Gross JL, Pieters A, Bastien A, List JF, Effect of dapagliflozin in patients with type 2 diabetes who have inadequate glycaemic control with metformin: a randomised, double-blind, placebo-controlled trial. Lancet 2010;375:2223-33. [20609968] 10.1016/S0140-6736(10)60407-2

Kohan DE, Fioretto P, Johnsson K, Parikh S, Ptaszynska A, Ying L The effect of dapagliflozin on renal function in patients with type 2 diabetes. J Nephrol 2016;: [26894924]

Bailey CJ, Gross JL, Hennicken D, Iqbal N, Mansfield TA, List JF Dapagliflozin add-on to metformin in type 2 diabetes inadequately controlled with metformin: a randomized, double-blind, placebo-controlled 102-week trial. BMC Med 2013;11:43 [23425012]

Bolinder, 2012:

Bolinder J, Ljunggren , Kullberg J, Johansson L, Wilding J, Langkilde AM, Sugg J, Parikh S Effects of dapagliflozin on body weight, total fat mass, and regional adipose tissue distribution in patients with type 2 diabetes mellitus with inadequate glycemic control on metformin. J Clin Endocrinol Metab 2012 Mar;97:1020-31 [22238392]

Kohan DE, Fioretto P, Johnsson K, Parikh S, Ptaszynska A, Ying L The effect of dapagliflozin on renal function in patients with type 2 diabetes. J Nephrol 2016;: [26894924]

Bolinder J, Ljunggren , Johansson L, Wilding J, Langkilde AM, Sjstrm CD, Sugg J, Parikh S Dapagliflozin maintains glycaemic control while reducing weight and body fat mass over 2 years in patients with type 2 diabetes mellitus inadequately controlled on metformin. Diabetes Obes Metab 2014;16:159-69 [23906445]

Ljunggren , Bolinder J, Johansson L, Wilding J, Langkilde AM, Sjstrm CD, Sugg J, Parikh S Dapagliflozin has no effect on markers of bone formation and resorption or bone mineral density in patients with inadequately controlled type 2 diabetes mellitus on metformin. Diabetes Obes Metab 2012;14:990-9 [22651373]

Schumm-Draeger , 2015:

Schumm-Draeger PM, Burgess L, Kornyi L, Hruba V, Hamer-Maansson JE, de Bruin TW Twice-daily dapagliflozin co-administered with metformin in type 2 diabetes: a 16-week randomized, placebo-controlled clinical trial. Diabetes Obes Metab 2015;17:42-51 [25200570]

CANTATA-D, 0:

3009: Add-on to MET, 0:

3008: Add-on to insulin, 0:

MB102-054, 0:

Rosenstock, 2013:

Rosenstock J, Seman LJ, Jelaska A, Hantel S, Pinnetti S, Hach T, Woerle HJ Efficacy and safety of empagliflozin, a sodium glucose cotransporter 2 (SGLT2) inhibitor, as add-on to metformin in type 2 diabetes with mild hyperglycaemia. Diabetes Obes Metab 2013;15:1154-60 [23906374] 10.1111/dom.12185

Ross, 2015:

Ross S, Thamer C, Cescutti J, Meinicke T, Woerle HJ, Broedl UC Efficacy and safety of empagliflozin twice daily versus once daily in patients with type 2 diabetes inadequately controlled on metformin: a 16-week, randomized, placebo-controlled trial. Diabetes Obes Metab 2015;17:699-702 [25827441]

EMPA-REG MET (Haring), 2014:

Hring HU, Merker L, Seewaldt-Becker E, Weimer M, Meinicke T, Broedl UC, Woerle HJ Empagliflozin as add-on to metformin in patients with type 2 diabetes: a 24-week, randomized, double-blind, placebo-controlled trial. Diabetes Care 2014;37:1650-9 [24722494]

CV181-363, 0:

Rosenstock, 2015:

Rosenstock J, Hansen L, Zee P, Li Y, Cook W, Hirshberg B, Iqbal N Dual add-on therapy in type 2 diabetes poorly controlled with metformin monotherapy: a randomized double-blind trial of saxagliptin plus dapagliflozin addition versus single addition of saxagliptin or dapagliflozin to metformin. Diabetes Care 2015;38:376-83 [25352655]

CV181-365, 0:

0431-838, 0:

Kohan, 0:

Kohan DE, Fioretto P, Johnsson K, Parikh S, Ptaszynska A, Ying L The effect of dapagliflozin on renal function in patients with type 2 diabetes. J Nephrol 2016;: [26894924]

MB102034, 2016:

Kohan DE, Fioretto P, Johnsson K, Parikh S, Ptaszynska A, Ying L The effect of dapagliflozin on renal function in patients with type 2 diabetes. J Nephrol 2016;: [26894924]

6 bitherapy with SU

Trial	Treatments	Patients	Trials design and methods
canagliflozin vs placebo (add-on SU)			
3008: Add-on to SU *ongoing* n=NA follow-up: 18 weeks	-	-	
dapagliflozin + Glimepiride vs glimepiride			
Strojek , 2011 [NCT00680745] n=NA follow-up:	Dapagliflozin in Comb.With Glimepiride versus glimepiride alone	Type2 Diab.Who Have Inadeq. Glycaemic Control on Glimepiride Therapy Alone	

References

3008: Add-on to SU, 0:

Strojek, 2011:

Strojek K, Yoon KH, Hruba V, Elze M, Langkilde AM, Parikh S Effect of dapagliflozin in patients with type 2 diabetes who have inadequate glycaemic control with glimepiride: a randomized, 24-week, double-blind, placebo-controlled trial. Diabetes Obes Metab 2011;13:928-38 [21672123] 10.1111/j.1463-1326.2011.01434.x

Kohan DE, Fioretto P, Johnsson K, Parikh S, Ptaszynska A, Ying L The effect of dapagliflozin on renal function in patients with type 2 diabetes. J Nephrol 2016;: [26894924]

Strojek K, Yoon KH, Hruba V, Elze M, Langkilde AM, Parikh S [Effect of dapagliflozin in patients with type 2 diabetes who have inadequate glycaemic control with glimepiride]. Dtsch Med Wochenschr 2013;138 Suppl 1:S16-26 [23529567]

7 bitherapy with TZD

Trial	Treatments	Patients	Trials design and methods
dapagliflozin vs placebo (add on TZD)			
Rosenstock , 2012 [NCT00683878] n=NA follow-up:	Dapagliflozin in Combination With Thiazolidinedione versus Thiazolidinedione	Subjects With Type 2 Diabetes Who Have Inadequate Glycemic Control on Thiazolidinedione Therapy Alone	

References

Rosenstock, 2012:

Kohan DE, Fioretto P, Johnsson K, Parikh S, Ptaszynska A, Ying L The effect of dapagliflozin on renal function in patients with type 2 diabetes. J Nephrol 2016;: [26894924]

Rosenstock J, Vico M, Wei L, Salsali A, List JF Effects of dapagliflozin, an SGLT2 inhibitor, on HbA(1c), body weight, and hypoglycemia risk in patients with type 2 diabetes inadequately controlled on pioglitazone monotherapy. Diabetes Care 2012;35:1473-8 [22446170]

8 CV safety trial

Trial	Treatments	Patients	Trials design and methods
empagliflozin vs placebo			
EMPA-REG OUTCOME [NCT01131676] n=NA follow-up:	-	-	
Ferrannini , 2013 [NCT00789035] n=NA follow-up:	empagliflozin 5, 10 or 258201;mg once daily versus placebo	-	
EMPA-REG MONO (Roden) vs placebo , 2013 [NCT01177813] n=NA follow-up:	-	-	
Kadowaki , 2015 [NCT01193218] n=NA follow-up:	empagliflozin (5, 10, 25, or 50 mg) versus placebo	Japanese patients with type 2 diabetes	
Barnett , 2014 [NCT01164501] n=NA follow-up:	/ BI 10773 low dose (BI 10773 tablets once daily) 2/ BI 10773 high dose (BI 10773 tablets once daily) versus Placebo	Patients With Mild or Moderate Renal Impairment	
1245.29 *ongoing* [NCT02182830] n=NA follow-up:	Empagliflozin (starting dose 10mg; forced titration after 4 weeks 25mg dose) versus Placebo	Hypertensive Black/African American Patients With Type 2 Diabetes Mellitus and Hypertension	USA

References

EMPA-REG OUTCOME, 0:

Ferrannini, 2013:

Ferrannini E, Seman L, Seewaldt-Becker E, Hantel S, Pinnetti S, Woerle HJ A Phase IIb, randomized, placebo-controlled study of the SGLT2 inhibitor empagliflozin in patients with type 2 diabetes. Diabetes Obes Metab 2013;15:721-8 [23398530] 10.1111/dom.12081

EMPA-REG MONO (Roden) vs placebo, 2013:

Roden M, Weng J, Eilbracht J, Delafont B, Kim G, Woerle HJ, Broedl UC Empagliflozin monotherapy with sitagliptin as an active comparator in patients with type 2 diabetes: a randomised, double-blind, placebo-controlled, phase 3 trial. Lancet Diabetes Endocrinol 2013;1:208-19 [24622369] 10.1016/S2213-8587(13)70084-6

Kadowaki, 2015:

Kadowaki T, Haneda M, Inagaki N, Terauchi Y, Taniguchi A, Koiwai K, Rattunde H, Woerle HJ, Broedl UC Efficacy and safety of empagliflozin monotherapy for 52 weeks in Japanese patients with type 2 diabetes: a randomized, double-blind, parallel-group study. Adv Ther 2015;32:306-18 [25845768]

Barnett, 2014:

Barnett AH, Mithal A, Manassie J, Jones R, Rattunde H, Woerle HJ, Broedl UC Efficacy and safety of empagliflozin added to existing antidiabetes treatment in patients with type 2 diabetes and chronic kidney disease: a randomised, double-blind, placebo-controlled trial. Lancet Diabetes Endocrinol 2014;2:369-84 [24795251]

1245.29, 0:

9 monotherapy

Trial	Treatments	Patients	Trials design and methods
empagliflozin vs			
Kadowaki , 2013 n=NA follow-up:	-	Japanese patients with type 2 diabetes	
Kadowaki , 2014 n=NA	-	-	
empagliflozin vs linagliptin (monotherapy)			
Lewin , 2015 [NCT01422876] n=NA follow-up:	empagliflozin 25 mg/linagliptin 5 mg (n = 137), empagliflozin 10 mg/linagliptin 5 mg (n = 136), empagliflozin 25 mg (n = 135), empagliflozin 10 mg (n = 134) versus linagliptin 5 mg (n = 135) for 52 weeks		
canagliflozin vs placebo			
3005: monotherapy *ongoing* n=NA follow-up: 26 weeks	-	-	
dapagliflozin vs placebo			
Kohan [NCT00972244] n=NA follow-up:	Dapagliflozin as Monotherapy versus placebo	Japanese Subjects With Type 2 Diabetes Mellitus Who Have Inadequate Glycemic Control	
Kaku , 2014 [NCT01294423] n=NA follow-up: 24 w	-	-	Japan
Ferrannini (MB102013) , 2010 [NCT00528372] n=NA follow-up: 24 weeks	a morning dose of 5 or 10 mg/day dapagliflozin versus placebo	treatment-naive patients with type 2 diabetes	double-blind
Komoroski (MB102007) , 2009 [NCT00162305] n=NA follow-up: 14 days	daily oral doses of 5-, 25-, or 100-mg doses of dapagliflozin versus placebo	patients with type 2 diabetes mellitus	
List (MB102008) , 2009 [NCT00263276] n=NA follow-up: 12 weeks	one of five dapagliflozin doses versus placebo	type 2 diabetic patients	

continued...

Trial	Treatments	Patients	Trials design and methods
Kohan [NCT00663260] n=NA follow-up:	Dapagliflozin versus placebo	Subjects With Type 2 Diabetes Mellitus and Moderate Renal Impairment Who Have Inadequate Glycemic Contro	
KOhan [NCT00736879] n=NA follow-up:	Dapagliflozin monotherapy versus placebo	-	
DERIVE *ongoing* [NCT02413398] n=NA follow-up: 24 w	Dapagliflozin (10 mg Tablets, Oral, Once daily, 24 weeks) versus Placebo	patients with Type 2 diabetes and moderate renal impairment	USA
MB102-210 *ongoing* [NCT02383238] n=NA follow-up:	-	-	
DECLARE-TIMI 58 *ongoing* [NCT01730534] n=NA follow-up:	Dapagliflozin + standard of care therapy for Type 2 Diabetes and for co-morbidities and cardiovascular risk factors versus Placebo + standard of care therapy for Type 2 Diabetes and for co-morbidities and cardiovascular risk factors	-	
D1693C00002 *ongoing* [NCT01257412] n=NA follow-up:	-	-	India
D1690C00023 *ongoing* [NCT02547935] n=NA follow-up:	-	-	USA
empagliflozin vs placebo			
EMPA-REG OUTCOME [NCT01131676] n=NA follow-up:	-	-	
Ferrannini , 2013 [NCT00789035] n=NA follow-up:	empagliflozin 5, 10 or 258201;mg once daily versus placebo	-	
EMPA-REG MONO (Roden) vs placebo , 2013 [NCT01177813] n=NA follow-up:	-	-	

continued...

Trial	Treatments	Patients	Trials design and methods
Kadowaki , 2015 [NCT01193218] n=NA follow-up:	empagliflozin (5, 10, 25, or 50 mg) versus placebo	Japanese patients with type 2 diabetes	
Barnett , 2014 [NCT01164501] n=NA follow-up:	/ BI 10773 low dose (BI 10773 tablets once daily) 2/ BI 10773 high dose (BI 10773 tablets once daily) versus Placebo	Patients With Mild or Moderate Renal Impairment	
1245.29 *ongoing* [NCT02182830] n=NA follow-up:	Empagliflozin (starting dose 10mg; forced titration after 4 weeks 25mg dose) versus Placebo	Hypertensive Black/African American Patients With Type 2 Diabetes Mellitus and Hypertension	USA

References

Kadowaki, 2013:

Kadowaki T, Haneda M, Inagaki N et al. Empagliflozin monotherapy for 12 weeks improves glycemic control in Japanese patients with type 2 diabetes (T2DM) Diabetes 2013; 62: A297298.

Kadowaki , 2014:

Kadowaki T, Haneda M, Inagaki N, Terauchi Y, Taniguchi A, Koiwai K, Rattunde H, Woerle HJ, Broedl UC Empagliflozin monotherapy in Japanese patients with type 2 diabetes mellitus: a randomized, 12-week, double-blind, placebo-controlled, phase II trial. Adv Ther 2014;31:621-38 [24958326]

Lewin, 2015:

Lewin A, DeFronzo RA, Patel S, Liu D, Kaste R, Woerle HJ, Broedl UC Initial combination of empagliflozin and linagliptin in subjects with type 2 diabetes. Diabetes Care 2015;38:394-402 [25633662]

3005: monotherapy, 0:

Kohan, :

Kohan DE, Fioretto P, Johnsson K, Parikh S, Ptaszynska A, Ying L The effect of dapagliflozin on renal function in patients with type 2 diabetes. J Nephrol 2016;: [26894924]

Kaku, 2014:

Kaku K, Kiyosue A, Inoue S, Ueda N, Tokudome T, Yang J, Langkilde AM Efficacy and safety of dapagliflozin monotherapy in Japanese patients with type 2 diabetes inadequately controlled by diet and exercise. Diabetes Obes Metab 2014;16:1102-10 [24909293]

Ferrannini (MB102013), 2010:

Ferrannini E, Ramos SJ, Salsali A, Tang W, List JF, Dapagliflozin monotherapy in type 2 diabetic patients with inadequate glycemic control by diet and exercise: a randomized, double-blind, placebo-controlled, phase 3 trial. Diabetes Care 2010;33:2217-24. [20566676] 10.2337/dc10-0612

Kohan DE, Fioretto P, Johnsson K, Parikh S, Ptaszynska A, Ying L The effect of dapagliflozin on renal function in patients with type 2 diabetes. J Nephrol 2016;: [26894924]

Komoroski (MB102007), 2009:

Komoroski B, Vachharajani N, Feng Y, Li L, Kornhauser D, Pfister M, Dapagliflozin, a novel, selective SGLT2 inhibitor, improved glycemic control over 2 weeks in patients with type 2 diabetes mellitus. Clin Pharmacol Ther 2009;85:513-9. [19129749] 10.1038/clpt.2008.250

List (MB102008), 2009:

List JF, Woo V, Morales E, Tang W, Fiedorek FT, Sodium-glucose cotransport inhibition with dapagliflozin in type 2 diabetes. Diabetes Care 2009;32:650-7. [19114612] 10.2337/dc08-1863

Kohan DE, Fioretto P, Johnsson K, Parikh S, Ptaszynska A, Ying L The effect of dapagliflozin on renal function in patients with type 2 diabetes. J Nephrol 2016;: [26894924]

Kohan, 0:

Kohan DE, Fioretto P, Tang W, List JF Long-term study of patients with type 2 diabetes and moderate renal impairment shows that dapagliflozin reduces weight and blood pressure but does not improve glycemic control. Kidney Int 2014;85:962-71 [24067431]

KOhan, 0:

Kohan DE, Fioretto P, Johnsson K, Parikh S, Ptaszynska A, Ying L The effect of dapagliflozin on renal function in patients with type 2 diabetes. J Nephrol 2016;: [26894924]

DERIVE, 0:

MB102-210, 0:

DECLARE-TIMI 58, 0:

D1693C00002, 0:

D1690C00023, 0:

EMPA-REG OUTCOME, 0:

Ferrannini, 2013:

Ferrannini E, Seman L, Seewaldt-Becker E, Hantel S, Pinnetti S, Woerle HJ A Phase IIb, randomized, placebo-controlled study of the SGLT2 inhibitor empagliflozin in patients with type 2 diabetes. Diabetes Obes Metab 2013;15:721-8 [23398530] 10.1111/dom.12081

EMPA-REG MONO (Roden) vs placebo, 2013:

Roden M, Weng J, Eilbracht J, Delafont B, Kim G, Woerle HJ, Broedl UC Empagliflozin monotherapy with sitagliptin as an active comparator in patients with type 2 diabetes: a randomised, double-blind, placebo-controlled, phase 3 trial. Lancet Diabetes Endocrinol 2013;1:208-19 [24622369] 10.1016/S2213-8587(13)70084-6

Kadowaki, 2015:

Kadowaki T, Haneda M, Inagaki N, Terauchi Y, Taniguchi A, Koiwai K, Rattunde H, Woerle HJ, Broedl UC Efficacy and safety of empagliflozin monotherapy for 52 weeks in Japanese patients with type 2 diabetes: a randomized, double-blind, parallel-group study. Adv Ther 2015;32:306-18 [25845768]

Barnett, 2014:

Barnett AH, Mithal A, Manassie J, Jones R, Rattunde H, Woerle HJ, Broedl UC Efficacy and safety of empagliflozin added to existing antidiabetes treatment in patients with type 2 diabetes and chronic kidney disease: a randomised, double-blind, placebo-controlled trial. Lancet Diabetes Endocrinol 2014;2:369-84 [24795251]

1245.29, 0:

10 tritherapy with DDP-4+MET

Trial	Treatments	Patients	Trials design and methods
empagliflozin vs add-on linagliptin + MET			
1275.9 *ongoing* [NCT01734785] n=NA follow-up:	-	-	

References

1275.9, 0:

11 tritherapy with MET+SU

Trial	Treatments	Patients	Trials design and methods
dapagliflozin vs placebo (add on MET + SAXA)			
Mathieu , 2015 [NCT01646320] n=NA follow-up: 24 w	-	-	USA
dapagliflozin vs placebo (add on MET+SU)			
Matthaei , 2015 [NCT01392677] n=NA follow-up:	-	-	Canada
dapagliflozin vs placebo (add on SAXA + MET)			
D1683C00005 *ongoing* [NCT02681094] n=NA follow-up: 24 w	Saxagliptin+Dapagliflozin+Metformin (5 mg Tablets, Oral, Once daily, 24 weeks for Saxagliptin and Dapagliflozin) versus Saxagliptin+Dapagliflozin placebo+metformin (5 mg Tablets, Oral, Once daily, 24 weeks for Saxagliptin and Dapagliflozin placebo)	patients who are inadequately controlled on 1500mg/day of metformin monotherapy	USA
canagliflozin vs placebo (add-on MET+SU)			
3015: Add-on to MET + SU *ongoing* n=NA follow-up: 52 weeks	-	-	
3002: Add-on to MET + SU *ongoing* n=NA follow-up: 26 weeks	-	-	

References

Mathieu, 2015:

Mathieu C, Ranetti AE, Li D, Ekholm E, Cook W, Hirshberg B, Chen H, Hansen L, Iqbal N Randomized, Double-Blind, Phase 3 Trial of Triple Therapy With Dapagliflozin Add-on to Saxagliptin Plus Metformin in Type 2 Diabetes. Diabetes Care 2015;38:2009-17 [26246458]

Matthaei, 2015:

Matthaei S, Bowering K, Rohwedder K, Grohl A, Parikh S Dapagliflozin improves glycemic control and reduces body weight as add-on therapy to metformin plus sulfonylurea: a 24-week randomized, double-blind clinical trial. Diabetes Care 2015;38:365-72 [25592197]

D1683C00005, 0:

3015: Add-on to MET + SU, 0:

3002: Add-on to MET + SU, 0:

12 tritherapy with MET+TZD

Trial	Treatments	Patients	Trials design and methods
canagliflozin vs placebo (add-on MET+TZD)			
3012: Add-on to MET +TZD *ongoing* n=NA follow-up: 26 weeks	-	-	

References

3012: Add-on to MET +TZD, 0:

Entry terms: Lovenox, Clexane, Sectral, Monitan, Rhotral, Neptal, Veroshpiron, Verospirone, Spiractin, Spirobeta, Spirogamma, Spirolang, Spirono-Isis, Spirono Isis, Spironone, Spirospare, Verospiron, Aldactone, Aldactone A, Aquareduct, duraspiron, Espironolactona Alter, Espironolactona Mundogen, Flumach, Frumikal, Jenaspiron, Novo-Spiroton, Novo Spiroton, NovoSpiroton, Practon, Spiro L.U.T., spiro von ct, , Amiobeta, Cordarone, Cordarex, Amiodarex, Kordaron, Trangorex, Amiodarona, Amiohexal, Braxan, Corbionax, Ortacrone, Rytmarone, Tachydaron, Aratac, BMS 562247, BMS562247, BMS-562247, Eliquis, , TRK 100, TRK-100, beraprost sodium, , Befibrat, Beza-Lande, Beza Lande, BezaLande, Beza-Puren, Beza Puren, BezaPuren, Bezabeta, Bezacur, Bezafibrat PB, Bezafisal, Bezalip, Eulitop, Bezamerck, durabezur, BM-15.075, BM 15.075, BM15.075, Cedur, Difaterol, Bfizal, Lipox, Reducterol, Regadrin B, Sklerofibrat, Solibay, Azufibrat, , fluorescent bezafibrate, DNS-X, , Bisoprolol Hydrochloride, Bisoprolol Methanesulfonate Salt, EMD-33512, EMD 33512, EMD33512, CL-297939, CL 297939, CL297939, Concor, Bisoprolol Fumarate, , Hirulog-1 Hirulog Angiomax, bucindolol, bucindolol hydrochloride, MJ 13105, , candesartan cilexetil, TCV 116, TCV-116, Atacand, Blopress, Kenzen, Amias, Parapres, candesartan, CV 11974, CV11974, CV-11974, , carvedilol, Querto, Coreg, Dilatrend, Kredex, Coropres, Eucardic, BM 14190, BM-14190, Baycol, Lipobay, Cholestyramine Resin, Colestyramin, Colestyramins, Colestyramine, Colestyramines, Cholestyramine, Cholestyramines, Questran, Questrans, Quantalan, Quantalans, Cuemid, Cuemids, MK-135, MK 135, MK135, , Plavix, Iscover, Colestipol, Colestipol Hydrochloride, Colestipol HCl, Colestid, , Pradaxa, Pradax, Hydralazine, Hydrallazin, Hydrazinophthalazine, Apressin, Nepresol, Hydralazine mono-Hydrochloride, Hydralazine mono Hydrochloride, Apressoline, Apresoline, Hydralazine Hydrochloride, , idraparinux, , Aprovel, Avapro, Karvea, ivabradine, Corlanor, Procorolan, S 16257-2, S-16257-2, S-16260-2, S 16260-2, S 16257, S-16257, , SUN 9216, SUN9216, SUN-9216, lanoteplase, , Lisinopril, Lysinopril, Zestril, Prinivil, MK-521, , Losartan, Cozaar, MK-954, MK 954, MK954, DuP-753, DuP 753, DuP753, Losartan Potassium, Losartan Monopotassium Salt, , Lovastatin, Mevinolin, Monacolin K, 6-Methylcompactin, 6 Methylcompactin, MK-803, MK 803, MK803, Mevacor, , Metoprolol, Beloc-Duriles, Beloc Duriles, BelocDuriles, Betalok, Spesicor, Spesikor, H 93-26, H 93 26, H 9326, Lopressor, Metoprolol Tartrate, Seloken, Betaloc, Betaloc-Astra, Betaloc Astra, BetalocAstra, CGP-2175, CGP 2175, CGP2175, , nebivolol, nebivolol hydrochloride, Silostar, Nebilet, Lobivon, R 67555, R-67555, , Niacin, Nicotinic Acid, 3-Pyridinecarboxylic Acid, 3 Pyridinecarboxylic Acid, Induracin, Nicamin, Nico-400, Nico 400, Nico400, Nicobid, Nicocap, Nicolar, Nicotinate, Wampocap, Enduracin, Lithium Nicotinate, SQ-14534, SQ 14534, SQ14534, SQ-14225, SQ 14225, SQ14225, Capoten, Lopirin, , dipyridamole monoacetate, dipyridamol monoacetate, , Digoxin, Digacin, Digitek, Digoregen, Lanoxin, Lanoxin-PG, Lanoxin PG, Lenoxin, Digoxine Nativelle, Hemigoxine Nativelle, Dilanacin, Lanacordin, Lanicor, Lanoxicaps, Mapluxin, Digoxina Boehringer, , Dicumarol, Dicoumarol, Bishydroxycoumarin, Dicoumarin, , CYPHER, TAXUS, Promus, Xience, Biomatrix, Nobori, Endeavor, Drug-Eluting Stents, Drug Eluting Stents, Drug-Eluting Stent, Drug-Coated Stents, Drug Coated Stents, Drug-Coated Stent, , Multaq, Zetia, Ezetrol, Felodipine, Felo Biochemie, Felo-Puren, Felo Puren, Felobeta, Felocor, Felodipin 1A Pharma, Felodipin AbZ, Felodipin AL, Felodipin AZU, Felodipin dura, Felodur, Felogamma, Fensel, H 154-82, H 154 82, H 15482, Plendil, Flodil, Modip, Renedil, Munobal, Felodipin Heumann, Felodipin Stada, felodipin von ct, Felodipin-ratiopharm, Felodipin ratiopharm, Perfudal, Agon, , Procetofen, Flecainide, Flecatab, Flecainide Acetate, Flecainide Monoacetate, R818, Tambocor, Apocard, Flcane, Flecadura, Flecainid-Isis, Flecainid Isis, , Fish Oils, Fish Liver Oils, , fluvastatin, fluindostatin, Lescol, XU 62-320, XU-62320, XU 62320, fluvastatin sodium, fluvastatin sodium salt, , Quixidar, Arixtra, Fosinopril, Fosenopril, Monopril, Staril, Fosinorm, Newace, Hiperlex, Fozitec, Fosinil, Fositens, Dynacil, Tenso Stop, Tensocardil, Fosinopril Sodium, SQ-28555, SQ 28555, SQ28555, , Nadroparin, Nadroparine, Nadroparin Calcium, Fraxiparin, Fraxiparine, CY 216, CY-216, CY216, LMF CY-216, LMF CY 216, LMF CY216, , Furosemide, Frusemide, Fursemide, Frusemid, Furanthril, Furantral, Salix (brand of furosemide), Furosemide

Monosodium Salt, Fusid, Lasix, Errolon, Furosemide Monohydrochloride, , Gemfibrozil, Gemfibrosil, Bolutol, CI-719, CI 719, CI719, DBL Gemfibrozil, Trialmin, Decrelip, Gemfi 1A Pharma, Gemfibrozilo Ur, Gemhexal, Gen-Gemfibrozil, Gen Gemfibrozil, GenGemfibrozil, GenRX Gemfibrozil, Healthsense Gemfibrozil, Jezil, Lipazil, Lipox Gemfi, Litarek, Lopid, Lopid R, Lipur, Pilder, SBPA Gemfibrozil, Apo-Gemfibrozil, Apo Gemfibrozil, ApoGemfibrozil, Ausgem, , Heparin, Unfractionated Heparin, Heparinic Acid, Liquaemin, Sodium Heparin, Heparin Sodium, alpha-Heparin, alpha Heparin, , Labetalol, Labetolol, Albetol, Apo-Labetalol, Apo Labetalol, ApoLabetalol, Dilevalol, Normodyne, Presolol, SCH-19927, SCH 19927, SCH19927, Trandate, AH-5158, AH 5158, AH5158, Labetalol Hydrochloride, , Nadroparine, Fraxiparin, Fraxiparine, CY 216, CY-216, CY216, LMF CY-216, LMF CY 216, LMF CY216, , Nicardipine, Cardene SR, Dagan, Flusemide, Lecibral, Lincil, Loxen, Lucenfal, Nicardipine Hydrochloride, Nicardipine LA, Nicardipino Ratiopharm, Nicardipino Seid, Perdipine, Ridene, Y-93, Y 93, Y93, Cardene I.V., Cardene, Vasonase, Antagonil, , Nicorandil, 2-Nicotinamidoethyl Nitrate, 2 Nicotinamidoethyl Nitrate, 2-Nicotinamidethyl Nitrate, 2 Nicotinamidethyl Nitrate, SG-75, SG 75, SG75, Ikorel, Adancor, Dancor, , Nifedipine, Adalat, Bay-1040, Bay 1040, Bay1040, BAY-a-1040, BAY a 1040, BAYa1040, Procardia XL, Nifedipine-GTIS, Nifedipine GTIS, Corinfar, Korinfar, Fenigidin, Nifangin, Nifedipine Monohydrochloride, Procardia, Vascard, Cordipin, Cordipine, , Nitroglycerin, Glyceryl Trinitrate, Nitrolan, Nitrostat, Perlinganit, Susadrin, Sustac, Sustak, Sustonit, Transderm Nitro, Tridil, Trinitrin, Trinitrolong, Anginine, Dynamite, Gilustenon, Nitrangin, Nitro-Bid, Nitro Bid, NitroBid, Nitro-Dur, Nitro Dur, NitroDur, Nitrocard, Nitroderm, Nitroderm TTS, Nitroglyn, Nitrol, Nitrong, Nitrospan, , omapatrilat, Vanlev, BMS 186716, BMS-186716, , Omacor, Lovaza, omega-3 ethyl ester 90, P-OM3 adjunct, , Logiparin, LHN-1, , orlistat, tetrahydrolipstatin, THLP, Alli, Xenical, , Pentoxifylline, Oxpentifylline, BL-191, BL 191, BL191, Trental, Torental, Agapurin, Pentoxil, , Perindopril, Pirindopril, Perstarium, S-9490, S 9490, S9490, S 9490-3, S 9490 3, S 94903, Perindopril Erbumine, , Actos, Practolol, ICI-50172, ICI 50172, ICI50172, Dalzic, Eralzdin Practolol, , Pravastatin, Eptastatin, Liplat, RMS-431, RMS 431, RMS431, SQ-31000, SQ 31000, SQ31000, Vasten, Bristacol, CS-514, CS 514, CS514, Lipemol, Prareduct, Mevalotin, Pravachol, Elisor, Selektine, Pravacol, Pravasin, Lipostat, , prasugrel, CS 747, CS-747, LY 640315, LY640315, LY-640315, Effient, Efient, Probucol, DH-581, DH 581, DH581, Lorelco, Lurselle, Superlipid, Biphenabid, Panavir, , Propranolol, Propanolol, Avlocardyl, AY-20694, AY 20694, AY20694, Betadren, Dexpropranolol, Inderal, Obsidan, Obzidan, Propranolol Hydrochloride, Rexigen, Anaprilin, Anapriline, Dociton, , Triatec, Altace, Delix, Ramace, Vesdil, Carasel, Acovil, Tritace, Zabien, renolazine, RS 43285-193, Ranexa, RS 43285, RS-43285, , rimonabant, SR141716, SR 141716, Acomplia, Zimulti, SR 141716A, SR141716A, SR-141716A, , Xarelto, BAY 59-7939, , Avandia, Crestor, Tissue Plasminogen Activator, Tissue Activator D-44, Tissue Activator D 44, Tisokinase, Tissue-Type Plasminogen Activator, Tissue Type Plasminogen Activator, TTPA, T-Plasminogen Activator, T Plasminogen Activator, Alteplase, Activase, Actilyse, Lysatec rt-PA, Lysatec rt PA, Lysatec rtPA, , saruplase, prourokinase (enzyme-activating), recombinant unglycosylated single-chain urokinase-type plasminogen activator, pro-urokinase, Rescupase, A-74187, , Zocor, Darob, MJ-1999, MJ 1999, MJ1999, , telmisartan, Micardis, BIBR 277, BIBR-277, Pritor, , tenecteplase, Metalyse, TNKase, Ticlopidine, Ticlopidine Hydrochloride, Ticlodix, Ticlodone, 53-32C, 53 32C, 5332C, Ticlid, , Timolol, Timoptic, Timoptol, Timolol Hemihydrate, Timacar, Timolol Maleate, MK-950, MK 950, MK950, Optimol, Blocadren, , tinzaparin, tinzaparin sodium, Innohep, tirofiban, tirofiban hydrochloride monohydrate, MK 383, MK-383, tirofiban hydrochloride, Aggrastat, Cahill May Roberts brand of tirofiban hydrochloride monohydrate, MSD brand of tirofiban hydrochloride monohydrate, Merck Frosst brand of tirofiban hydrochloride monohydrate, Merck Sharp and Dohme brand of tirofiban hydrochloride monohydrate, Agrastat, Merck brand of tirofiban hydrochloride monohydrate, L 700462, L-700462, , tolvaptan, OPC 41061, OPC-41061, Samsca, , topiramate, Topamax, Epitomax, McN 4853, McN-4853, , trandolapril, Odrik, Udrik, RU 44570, RU44570, RU-44570, Mavik, Gopten, triflusal, Disgren, Centrophne, Vastarel, Idaptan, Trimtazidine Irex, Vasartel, Trimetazidine Dihydrochloride, , Urokinase-Type Plasminogen Activator, Urokinase Type Plasminogen Activator, U-Plasminogen Activator, U Plasminogen Activator, U-PA, Urinary Plasminogen Activator, Urokinase, Renokinase, Abbokinase, Kidney Plasminogen Activator, Single-Chain Urokinase-Type Plasminogen Activator, Single Chain Urokinase Type Plasminogen Activator, , valsartan, Diovan, Tareg, KalpressMiten, Provas, Vals, walsartan, CGP 48933, Nisis, Aventis brand of valsartan, , Verapamil, Iproveratril, Cordilox, Dexverapamil, Falicard, Izoptin, Isoptine, Isoptin, Lekoptin, Verapamil Hydrochloride, Calan, Finoptin, , vesnarinone, OPC 8212, OPC-8212, , Xamoterol, Corwin, ICI-118587, ICI 118587, ICI118587, Xamoterol Fumarate, Xamoterol Hemifumarate, Xamoterol Monohydrobromide, Xamoterol Monohydrochloride, Xamtol, Carwin, Xamoterol Maleate (2:1), , ximelagatran, xi-melagatran, Exanta, H 376 95, H 376-95, , Glucotrol, Warfarin, Coumadine, Apo-Warfarin, Gen-Warfarin, Warfant, Coumadin, Marevan, Warfarin Potassium, Warfarin Sodium, Aldocumar, Tedicumar, , reviparin, reviparine, reviparin-sodium, reviparin sodium, LU 47311, LU-47311, Clivarin, Abbott brand of reviparin-sodium, Clivarine, ICN brand of reviparin-sodium, , Propafenone, Propamerck, Rythmol, Arythmol, Rytmonorm, Norfenon, Pintoform, Propafenon Minden, Rytmo-Puren, Rytmogenat, Baxarytmon, Cuxafenon, Fenoprain, Jutanorm, Nistaken, Prolecofen, ,, nateglinide,

nate-glinide, senaglinide, IPCCPA, AY 4166, AY-4166, DJN 608, Starsis, Starlix, Novartis brand of nateglinide, A 4166, A-4166, Fastic, , Bay K 5552, , Metformin, Dimethylguanylguanidine, Dimethylbiguanidine, Glucophage, , Glyburide, Glybenclamide, Glibenclamide, Diabeta, Euglucon 5, Neogluconin, HB-419, HB 419, HB419, HB-420, HB 420, HB420, Maninil, Micronase, Daonil, Euglucon N, , 4-transhydroxy glyburide, , Glucovance, Glyburide-metformin, , Integrilin, Integrelin, reteplase, Retavase, Rapilysin, Betaxolol, SL-75212, SL 75212, SL75212, Betoptic, Betoptima, Betaxolol, Oxodal, ALO-1401-02, ALO 1401 02, ALO140102, Betaxolol, Lipitor, torcetrapib, CP 529414, CP529414, CP-529414, , CYPHER, , XIENCE V, Guidant XIENCE V, Abbott XIENCE V, XIENCE 5, Endeavour, Medtronic Endeavour, albiglutide, , liraglutide, victoza, exenatide, exendin 4, exendin-4, Ex4 peptide, Byetta, AC 2993, AC 2993 LAR, , sitagliptin, sitagliptin phosphate, Januvia, MK 0431, MK0431, MK-0431, , Acenocoumarol, Nicoumalone, Acenocoumarin, Sinthrome, Synthrom, Syncoumar, Syncumar, Sinkumar, Sintrom, Mini-Sintrom, Mini Sintrom, MiniSintrom, , Tissue Plasminogen Activator, Tissue Activator D-44, Tissue Activator D 44, Tisokinase, Tissue-Type Plasminogen Activator, Tissue Type Plasminogen Activator, TTPA, T-Plasminogen Activator, T Plasminogen Activator, Alteplase, Activase, Actilyse, Lysatec rt-PA, Lysatec rt PA, Lysatec rtPA, ,, Bepridil Monohydrochloride, Vascor, Bedapin, CERM-1978, CERM 1978, CERM1978, 1978-CERM, 1978 CERM, 1978CERM, Cordium, Unicordium, Bepadin, , Ethyl Chlorophenoxyisobutyrate, Atromid, Atromid S, Miscleron, Miskleron, Athromidin, , elinogrel, PRT 060128, PRT060128, PRT-060128, , Brain Natriuretic Peptide, BNP-32, BNP 32, Nesiritide, B-Type Natriuretic Peptide, BNP Gene Product, Type-B Natriuretic Peptide, Type B Natriuretic Peptide, Natriuretic Peptide Type-B, Natriuretic Peptide Type B, Natriuretic Factor-32, Natriuretic Factor 32, Brain Natriuretic Peptide-32, Brain Natriuretic Peptide 32, Natrecor, , Phenindione, Phenylindanedione, Phenyline, Pindione, Fenilin, Dindevan, , repa-glinide, AG-EE 388 ZW, NovoNorm, GlucoNorm, Prandin, AG-EE 388, AG-EE 623 ZW, , Brilique, Brilinta, AZD 6140, AZD6140, AZD-6140, zofenopril, Zofenil, Zofil, SQ 26900, SQ-26900, SQ 26991, SQ-26991, , SQ 26703, zofenopril-SH, zofenopril-SH cpd with arginine, , MK 0859, MK0859, MK-0859, , PRT054021, , blufomedil, bufomedil, Buflo AbZ, AbZ brand of buflomedil hydrochloride, Buflo-POS, Ursapharm brand of buflomedil hydrochloride, Buflo-Puren, Alpharma brand of buflomedil hydrochloride, Buflohexal, Hexal brand of buflomedil hydrochloride, Buflomedil Heumann, Heumann brand of buflomedil hydrochloride, buflomedil hydrochloride, Buflomedil Lindo, Lindopharm brand of buflomedil hydrochloride, buflomedil pyridoxal phosphate, Buflomedil Stada, Stadapharm brand of buflomedil hydrochloride, buflomedil von ct, ct-Arzneimittel brand of buflomedil hydrochloride, Buflomedil-ratiopharm, ratiopharm brand of buflomedil hydrochloride, Fonzylane, Lafon brand of buflomedil hydrochloride, LL 1656, Loftyl, Bufedil, Lofton, Abbott brand of buflomedil hydrochloride, Sinoxis, Hosbon brand of buflomedil hydrochloride, Buflo 1A Pharma, 1A brand of buflomedil hydrochloride, , Folic Acid, Vitamin M, Pteroylglutamic Acid, Folate, Folvite, Folacin, , Hydrochlorothiazide, HCTZ, Dichlothiazide, Dihydrochlorothiazide, HydroDIURIL, Oretic, Sectrazide, Esidrix, Esidrex, Hypothiazide, , inogatran, N-(2-(2-(((3-((aminoiminomethyl)amino)propyl)amino)carbonyl)-1-piperidinyl)-1-(cyclohexylmethyl)-2-oxo-ethyl)glycine, H 314-27, H314-27, H-314-27, , voglibose, Basen, , Trapidil, Trapymin, Rocornal, , desdiethyltrapidil, N-dediethyltrapidil, desdiethyl-trapidil, , certoparin, certoparin sodium, Mono-Embolex, Novartis brand of certoparin sodium, Alphaparin, Grifols brand of certoparin sodium, , glimepiride, glymepiride, HOE 490, HOE-490, Roname, Amaryl, Amarel, hydroxyglimepiride, hydroxy-glimepiride, , Linagliptin, Tradjenta, BI 1356, BI1356, BI-1356, , taspoglutide, , miti-glinide, KAD 1229, KAD-1229, , transcatheter aortic valve implantation, , sibutramine, Meridia, mono-desmethylsibutramine, BTS 54 524, BTS-54524, BTS 54524, Reductil, di-desmethylsibutramine, didesmethylsibutramine, (R)-DDMS, sibutramine hydrochloride, , saxagliptin, Onglyza, BMS 477118, BMS477118, BMS-477118, , eplerenon, Inspra, CGP 060536B, CGP060536B, CGP-060536B, Tekturna, SPP100, , SYR 322, SYR322, SYR-322, , benfluramate, benfluorex maleate, SE 780, 780 SE, JP 992, Mediator trade name of benfluorex hydrochloride, Biopharma brand of benfluorex hydrochloride, Modulator trade name of benfluorex hydrochloride, Servier brand of benfluorex hydrochloride, S 780, benfluorex hydrochloride, 1-(2-trifluoromethylphenyl)-2-(benzoyloxyethyl)aminopropane HCl, , Coronary Artery Bypass, Coronary Artery Bypasses, Coronary Artery Bypass Surgery, Aortocoronary Bypass, Aortocoronary Bypasses, Coronary Artery Bypass Grafting, CABG, AR C69931MX, AR-C69931MX, , Carotid Endarterectomy, Carotid Endarterectomies, , Chlortalidone, Phthalamudine, Chlorphthalidolone, Oxodoline, Thalitone, Hygroton, , dofetilide, 1-(4-methanesulfonamidophenoxy)-2-(N-(4-methanesulfonamidophenethyl)-N-methylamine)ethane, 1-MSPMPE, Tikosyn, UK 68798, , docetaxol, Taxoltere metro, Taxotere, NSC 628503, RP 56976, RP-56976, ebselen, PZ 51, PZ-51, RP 60931, DR 3305, DR-3305, , Fenoximone, Perfan, MDL 19438, MDL-17043, MDL 17043, MDL17043, , enoximone sulfoxide, MDL 17043 sulfoxide, , Exercise Therapy, Exercise Therapies, , Gene Therapy, DNA Therapy, Somatic Gene Therapy, , Ginkgo biloba, Ginkgo bilobas, Ginko, Ginkos, Ginkgo, Ginkgos, Gingko, Gingkos, Maidenhair Tree, Maidenhair Trees, Gingko biloba, Gingko bilobas, Ginkgophyta, Ginkgophytas, , Lacipil, Lacimen, Caldine, Motens, GR 43659X, GR-43659X, , olmesartan medoxomil, CS 866, CS-866, Votum, Benicar, Olmetec, , h5G1.1-scFv, pexelizumab, , Dalteparin, Tedelparin, Kabi-2165, Kabi 2165, Kabi2165, Fragmin, Fragmine, Dalteparin Sodium,

FR-860, FR 860, FR860, , efegatran, Me-Phe-Pro-Arg-H, D-methyl-phenylalanyl-prolyl-arginal, GYKI 14766, GYKI-14766, LY 294468, LY-294468, efegatran sulfate, , etofibrate, Lipo-Merz, Merz brand of etofibrate, Tricerol, Armstrong brand of etofibrate, etofibrate hydrochloride, , simendan, OR-1855, Simadax, dextrosimendan, OR 1259, OR-1259, , ZP10A peptide, AVE 0010, AVE0010, AVE-0010, Lixisenatide, AQVE-10010, , primary ballon angioplasty, primary PTCA, vildagliptin, (2S)-(((3-hydroxyadamantan-1-yl)amino)acetyl)pyrrolidine-2-carbonitrile, NVP-LAF237, Galvus, , Gliclazide, Glyclazide, Gliklazid, Diamicron, S-1702, S 1702, S1702, S-852, S 852, S852, Diaglyk, Gen-Gliclazide, Gen Gliclazide, Glyade, Novo-Gliclazide, Novo Gliclazide, Diaikron, Diabrezide, , Qnexa, Zontivity, SCH 530348, SCH530348, SCH-530348, , MDX-1106, ONO-4538, BMS-936558, Opdivo, lambrolizumab, Keytruda, MK-3475, , MDX-CTLA-4, Yervoy, DX 010, MDX010, MDX-010, , Iressa, ZD1839, ZD 1839, , Anzatax, NSC-125973, NSC 125973, NSC125973, Taxol, Taxol A, Bris Taxol, Paxene, Praxel, 7-epi-Taxol, 7 epi Taxol, Onxol, SDZ RAD, SDZ-RAD, 40-O-(2-hydroxyethyl)-rapamycin, RAD 001, RAD001, Afinitor, Certican, , pertuzumab, Perjeta, Omnitarg, ado-trastuzumab emtansine, trastuzumab-DM1, trastuzumab-DM1 conjugate, T-DM1 cpd, trastuzumab emtansine, huN901-DM1, Kadcyla, Avastin, , gemcitabine, dFdCyd, 2'-deoxy-2'-difluorocytidine, gemcitabine hydrochloride, LY 188011, LY-188011, Gemzar, , Toremifene, Toremifene Citrate, Toremifene Citrate (1:1), Fareston, FC-1157a, FC 1157a, FC1157a, , Xeloda, , Cisplatin, cis-Diamminedichloroplatinum(II), Platinum Diamminodichloride, cis-Platinum, cis Platinum, Dichlorodiammineplatinum, cis-Diamminedichloroplatinum, cis Diamminedichloroplatinum, cis-Dichlorodiammineplatinum(II), NSC-119875, Platino, Platinol, Biocisplatinum, Platidiam, , ICI 182780, ICI-182780, ZM 182780, ZM-182780, Faslodex, , palbociclib, Ibrance, PD 0332991, PD0332991, PD-0332991, anastrozole, anastrazole, ICI D1033, ZD-1033, Zeneca ZD 1033, ZD1033, Arimidex, letrozole, Femara, Fmara, CGS 20267, CGS-20267, Aminoglutethimide, Cytadren, Orimeten, formestane, 4-hydroxyandrostenedione, 4-OHA, Lentaron, CGP-32349, CGP 32 349, CGP 32349, , exemestane, FCE 24304, FCE-24304, Aromasil, Aromasin, Aromasine, , Fadrozole, CGS-16949A, CGS 16949A, CGS16949A, Fadrozole Hydrochloride, Fadrozole Monohydrochloride, CGS 020286A, CGS020286A, CGS-020286A, FAD 286, FAD286, FAD-286, , Tamoxifen, ICI-47699, ICI 47699, ICI47699, Nolvadex, Novaldex, Tamoxifen Citrate, Tomaxithen, Zitazonium, ICI-46474, ICI 46474, ICI46474, Soltamox, ixabepilone, BMS247550, BMS-247550, BMS 247550, Herceptin, Torisel, CCI 779, CCI-779, , alirocumab, REGN727 monoclonal antibody, monoclonal antibody REGN727, SAR236553, Praluent, , AMG 145, evolocumab, AMG-145, Repatha, Medroxyprogesterone Acetate, Medroxyprogesterone 17-Acetate, Medroxyprogesterone 17 Acetate, Depo-Medroxyprogesterone Acetate, Depo Medroxyprogesterone Acetate, 6-alpha-Methyl-17alpha-hydroxyprogesterone Acetate, 6 alpha Methyl 17alpha hydroxyprogesterone Acetate, Curretab, Cycrin, Depo-Provera, Depo Provera, DepoProvera, Farlutal, Perlutex, Provera, Veramix, Clinovir, Gestapuran, sorafenib, sorafenib N-oxide, 4-(4-(3-(4-chloro-3-trifluoromethylphenyl)ureido)phenoxy)pyridine-2-carboxyllic acid methyamide-4-methylbenzenesulfonate, BAY 545-9085, BAY-545-9085, sorafenib tosylate, BAY 43-9006, Nexavar, , entinostat, SNDX-275, MS 27-275, MS-275, MS 275, MS-27-275, B 1939, B-1939, E 7389, E-7389, Halaven, NSC 707389, NSC707389, NSC-707389, B 1793, B-1793, ER-086526, ER086526, ER 086526, ER-86526, , Abraxane, vinorelbine, 5'-nor-anhydrovinblastine, Navelbine, vinorelbine tartrate, KW 2307, KW-2307, , intensive treatment, tighter control of blood pressure, low target blood pressure, strict blood pressure control, intensified blood-pressure control, IMC C225, IMC-C225, MAb C225, C225, Erbitux, , Tarceva, CP 358774, CP-358774, OSI-774, Inlyta, AG 013736, AG013736, AG-013736, , TKI 258, TKI258, TKI-258, dovitinib, CHIR 258, CHIR258, CHIR-258, , GW 786034B, GW786034B, GW-786034B, GW 780604, GW780604, GW-780604, Votrient, , Sutent, SU 11248, SU11248, SU-11248, SU011248, SU 011248, SU-011248, , D2E7 Antibody, Humira, Cimzia, Cimzias, CDP870, CDP870s, CDP 870, CDP 870s, , TNF Receptor Type II-IgG Fusion Protein, TNF Receptor Type II IgG Fusion Protein, Enbrel, Recombinant Human Dimeric TNF Receptor Type II-IgG Fusion Protein, Recombinant Human Dimeric TNF Receptor Type II IgG Fusion Protein, TNFR-Fc Fusion Protein, TNFR Fc Fusion Protein, TNR-001, TNR001, TNR 001, TNT Receptor Fusion Protein, TNTR-Fc, , Simponi, , MAb cA2, Monoclonal Antibody cA2, Remicade, , Interleukin 1 Receptor Antagonist Protein, Urine-Derived IL1 Inhibitor, Urine Derived IL1 Inhibitor, IL1 Febrile Inhibitor, Urine IL-1 Inhibitor, IL-1Ra, Antril, Kineret, Anakinra, , tocilizumab, atlizumab, Actemra, , Rituxan, MabThera, Zytux, Rituximab, Rituximab CD20 Antibody, Mabthera, IDEC-C2B8 Antibody, IDEC C2B8 Antibody, IDECC2B8 Antibody, IDEC-C2B8, IDEC C2B8, IDECC2B8, GP2013, Rituxan, , tasocitinib, tofacitinib citrate, Xeljanz, CP690550, CP-690550, CP 690550, , durvalumab, Imfinzi, MPDL3280A, Tecentriq, RG7446, RG-7446, , MTA, Pemetrexed Disodium, LY 231514, LY231514, LY-231514, Alimta, , rolofylline, KW 3902, KW-3902, MK 7418, MK7418, MK-7418, , BG 9928, BG-9928, BG9928, BIO 4683, BIO4683, BIO-4683, BIO 5770, BIO5770, BIO-5770, BIO 8170, BIO8170, BIO-8170, BIO 9002, BIO9002, BIO-9002, tonapofylline, BIO 7505, BIO7505, BIO-7505, , Invokana, , BI 10773, BI10773, BI-10773, Jardiance, , dapagliflozin, forxiga, BMS 512148, BMS512148, BMS-512148, , avelumab, MSB0010718C, , Xalkori, PF-02341066, PF02341066, PF 02341066, , BAY 94-8862, finerenone, , AZD 2281, AZD2281, AZD-2281, AZD221, Lynparza, , 2-(4-(piperidin-3-yl)phenyl)-2H-indazole-7-carboxamide, niraparib hydrochloride, MK 4827, MK4827, MK-4827, , BMN 673,

, 2-((R)-2-methylpyrrolidin-2-yl)-1H-benzimidazole-4-carboxamide, 2-(2-methylpyrrolidin-2-yl)-1H-benzimidazole-4-carboxamide, ABT 888, ABT888, ABT-888, , bococizumab, , CH5424802, alectinib, RO5424802, , ceritinib, Zykadia, LDK378, , AP26113, brigatinib, , caprelsa, ZD 6474, ZD6474, ZD-6474, vandetanib, Zactima, , imetelstat, motesanib, motesanib diphosphate, AMG 706, AMG706, AMG-706, , aflibercept, VEGF Trap-Eye, VEGF Trap - regeneron, VEGF-Trap, AVE 005, AVE005, AVE-005, Zaltrap, ZIV-aflibercept, AVE 0005, AVE0005, AVE-0005, eylea, , osimertinib, Tagrisso, , rucaparib, AG 014699, AG014699, AG-014699, PF-01367338, , cabozantinib, Cometriq, XL 184, XL184 cpd, XL-184, BMS 907351, BMS907351, BMS-907351, , abemaciclib, LY2835210, LY2385219, Verzenio, ribociclib, LEE011, , vemurafenib, Zelboraf, R05185426, RG7204, RG-7204, PLX4032, PLX 4032, , ticilimumab, CP 675, P675 cpd, CP-675, CP-675,206, CP-675206, CP675206, CP 675206,

13 About TrialResults-center.org

TrialResults-center is an innovative knowledge database that collects the results of RCTs and provides dynamic interactive systematic reviews and meta-analysis in the field of all major heart and vessels diseases.

The TrialResults-center database provides a unique view of the treatment efficacy based on all data provided directly from clinical trial results, offering a valuable alternative to personal bibliographic search, published meta-analysis, etc. Furthermore, it would allow comparing easily the various concurrent therapeutic for the same clinical condition.

Rigorous meta-analysis method is used to populate TrialResults-center: widespread search of published and non published trials, study selection using pre-specified criteria, data extraction using standard form.

TrialResults-center is continually updated on a weekly basis. We continually search all new results (whatever their publication channel) and these news results are immediately added to the database with a maximum of 1 week.

TrialResults-center is non-profit and self-funded.