

Clinical trials of insulin secretagogues for diabetes type 2 in all type of patients

TrialResults-center www.trialresultscenter.org

1 DPP-4 inhibitors

| Trial | Treatments | Patients | Trials design and methods |
|--|--|---|---------------------------|
| alogliptin vs | | | |
| Bosi , 2011 [NCT00432276] n=NA | - | - | |
| DeFronzo , 2008 [NCT00286455] n=NA | - | - | |
| Kaku , 2011 n=NA follow-up: | - | - | Japan |
| Pratley , 2009 [NCT00286468] n=NA follow-up: | - | - | |
| Pratley , 2009 [NCT00286494] n=NA follow-up: | - | - | |
| Rosenstock , 2009 [NCT00286429] n=NA follow-up: | - | - | |
| Rosenstock , 2010 [NCT00395512] n=NA follow-up: | - | - | |
| Seino , 2011 [NCT01263509] n=NA follow-up: | - | - | |
| Seino , 2011 n=NA follow-up: | - | - | Japan |
| linagliptin vs | | | |
| Forst , 2010 [NCT00309608] n=NA follow-up: 12 weeks | Linagliptin (1, 5, or 10 mg taken once daily) versus placebo (on top Metformin) | patients with type 2 diabetes mellitus who are not at goal with their HbA1c levels | double-blind France |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|--|------------|--|---------------------------|
| saxagliptin vs | | | |
| Fonseca , 2012 [NCT00960076] n=NA follow-up: | - | - | |
| Forst , 2011 n=NA | - | - | |
| Gke , 2010 n=NA follow-up: | - | - | |
| Kawamori , 2012 [NCT00654381] n=NA follow-up: | - | - | |
| Nowicki , 2011 [NCT00614939] n=NA follow-up: | - | - | |
| Nowicki , 2011 [NCT00614939] n=NA follow-up: | - | - | |
| Scheen , 2010 n=NA | - | - | |
| Stenlf , 2010 n=NA | - | - | |
| Yang , 2011 [NCT00661362] n=NA follow-up: | - | - | |
| sitagliptin vs | | | |
| Stafford , 2011 [NCT00451113] n=NA follow-up: | - | older adults with type 2 diabetes mellitus | |
| vildagliptin vs | | | |
| NCT00101673 [NCT00101673] n=NA follow-up: | - | - | |
| vildagliptin monotherapy vs acarbose | | | |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|--|--|---|----------------------------------|
| Pan , 2008 [NCT00110240] n=441/220 follow-up: 24 weeks | vildagliptin (100 mg daily, given as 50 mg twice daily) versus acarbose (up to 300 mg daily, given as three equally divided doses) | drug-naive patients with Type 2 diabetes | double-blind |
| vildagliptin monotherapy vs gliclazide | | | |
| Foley , 2009 [NCT00102388] n=NA follow-up: 2 years | monotherapy with vildagliptin 50 mg bid versus gliclazide up to 320 mg/day | drug-naive patients with type 2 diabetes | double-blind |
| vildagliptin vs gliclazide (add on MET) | | | |
| Filozof , 2009 [NCT00102466] n=513/494 follow-up: 52 weeks | vildagliptin (50 mg twice daily) versus gliclazide (up to 320 mg/day) | patients with Type 2 diabetes inadequately controlled with metformin | double-blind |
| linagliptin vs glimepiride | | | |
| CAROLINA , 2012 [NCT01243424] n=776/775 follow-up: 2 years | linagliptin versus glimepiride 1-4 mg QD | patients with type 2 diabetes at elevated cardiovascular risk receiving usual care | double-blind USA |
| vildagliptin vs glimepiride (add on MET) | | | |
| Matthews , 2010 n=NA follow-up: 2 years | vildagliptin versus glimepiride | patients with type 2 diabetes mellitus inadequately controlled (HbA1c 6.5-8.5%) by metformin monotherapy | Parallel groups double-blind |
| linagliptin low dose vs linagliptin | | | |
| linagliptin 1218.62 ongoing [NCT01012037] n=NA follow-up: 12 weeks | linagliptin low dose 2.5 mg twice daily versus linagliptin medium dose 5 mg once daily | patients with type 2 diabetes mellitus with insufficient glycaemic control with metformin | double-blind Belgium |
| vildagliptin + MET vs MET | | | |
| CLAF237A 23104 [NCT00396357] n=NA follow-up: | - | - | - |
| sitagliptin+pio vs metformin+pio | | | |
| Derosa , 2010 n=NA follow-up: | pioglitazone 30 mg plus sitagliptin 100 mg once a day versus pioglitazone 15 mg plus metformin 850 mg twice a day | poorly controlled type 2 diabetes mellitus patients | |
| alogliptin vs placebo | | | |
| EXAMINE , 2011 [NCT00968708] n=NA follow-up: | - | - | - |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|---|--|---|---------------------------|
| linagliptin vs placebo | | | |
| Del Prato [NCT00621140] n=NA follow-up: 24 weeks | Linagliptin monotherapy versus placebo | Type 2 Diabetic Patients With Insufficient Glycemic Control | double-blind Croatia |
| linagliptin 1218.46 <i>ongoing</i> [NCT00798161] n=NA follow-up: 24 weeks | - | drug naive or previously treated type 2 diabetic patients with insufficient glycaemic control | Canada |
| linagliptin1218.5 <i>ongoing</i> [NCT00328172] n=NA follow-up: 12 weeks | linagliptin (0.5, 2.5 and 5 mg daily) versus placebo | patients with Type 2 diabetes and insufficient glycemic control | |
| linagliptine 1218.50 <i>ongoing</i> [NCT00740051] n=NA follow-up: 18 weeks | Linagliptin versus Placebo | patients for whom metformin therapy is inappropriate (intolerability, contraindication) | double-blind USA |
| saxagliptin vs placebo | | | |
| SAVOR-TIMI 53 , 2013 [NCT01107886] n=16500 follow-up: | Saxagliptin 5 mg or 2.5 mg once daily versus Placebo | Patients With Type 2 Diabetes | Parallel groups USA |
| sitagliptin vs placebo | | | |
| Goldstein , 2007 [NCT00103857] n=NA follow-up: | sitagliptin 100 mg daily versus placebo | - | |
| Hanefeld , 2007 n=NA follow-up: | sitagliptin 25 mg or 50 mg or 100 mg daily versus placebo | - | |
| sitagliptin 50mg bid monotherapy vs placebo | | | |
| Scott* (sit vs pbo) , 2007 n=NA follow-up: | sitagliptin 50 mg b.i.d versus placebo | - | |
| vildagliptin vs placebo | | | |
| Mimori , 2006 n=NA follow-up: | vildagliptin 20 mg or 50 mg or 100 mg daily versus placebo | - | |
| NCT00351832 [NCT00351832] n=NA follow-up: 12 weeks | vildagliptin 50mg qd, 50mg bid or 100mg qd versus placebo | Patients With Type 2 Diabetes | Parallel groups Japan |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|---|---|---|----------------------------------|
| Rosenstock , 2008 [NCT00237250] n=NA follow-up: 12 weeks | vildagliptin (50 mg q.d.) versus placebo | subjects with impaired glucose tolerance | double-blind |
| Scherbaum [2] , 2008 [NCT00101712] n=156/150 follow-up: 52 weeks | vildagliptin 50 mg qd versus placebo | drug-naive patients with type 2 diabetes and mild hyperglycaemia | Parallel groups double-blind |
| vildagliptin monotherapy vs placebo | | | |
| Ahren , 2009 [NCT00390520] n=NA follow-up: | vildagliptin (100 mg/d) versus placebo | drug-naive patients with type 2 diabetes | Cross over |
| Dejager [1] , 2007 [NCT00099905] n=NA follow-up: 24 weeks | vildagliptin 50 mg or 100 mg daily versus placebo | drug-naive patients with type 2 diabetes | double-blind |
| Foley , 2011 <i>unpublished</i> [NCT00260156] n=29/30 follow-up: | vildagliptin 100 mg versus placebo | drug-naive patients with type 2 diabetes and mild hyperglycaemia | |
| Kikuchi , 2009 n=NA follow-up: | vildagliptin 50mg bid versus placebo | Japanese patients with type 2 diabetes mellitus | Japan |
| Pi-Sunyer , 2007 [NCT00120536] n=NA follow-up: 24 weeks | vildagliptin 50 mg or 100 mg daily, imag versus placebo | drug-naive patients with type 2 diabetes | double-blind |
| Pratley , 2006 n=70/28 follow-up: | vildagliptin 25mg bid versus placebo | - | double-blind |
| Ristic , 2005 n=NA follow-up: | vildagliptin 25mg or 50mg or 100mg daily versus placebo | - | |
| vildagliptin vs placebo (add on current therapy) | | | |
| Lukashevich , 2011 [NA] n=NA follow-up: 24 weeks | vildagliptin (50 mg qd) versus placebo | patients with type 2 diabetes mellitus (T2DM) and moderate or severe renal impairment | |
| vildagliptin vs placebo (add on insulin) | | | |
| Fonseca , 2007 [NCT00099931] n=144/152 follow-up: 24 weeks | vildagliptin 100 mg daily (add-on to insulin therapy)y) versus placebo (add-on to insulin therapy)y)mag | type 2 diabetes that was inadequately controlled by insulin | double-blind |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|---|--|--|---------------------------------|
| Fonseca , 2008 n=NA follow-up: | - | - | |
| vildagliptin vs placebo (add on MET) | | | |
| Ahren , 2004 n=56/51 follow-up: 12 weeks | vildagliptin 50 mg daily (add-on to metformin therapy)j versus placebo (add-on to metformin therapy)m | patients with type 2 diabetes | double-blind |
| Bosi , 2007 [NCT00099892] n=185/182 follow-up: | vildagliptin (50 or) 100 mg daily (add-on to metformin therapy)m versus placebo (add-on to metformin therapy)m | patients with type 2 diabetes inadequately controlled with metformin | double-blind |
| Bosi , 2009 [NCT00382096] n=1179 follow-up: 24 weeks | vildagliptin plus high-dose metformin combination therapy (50 mg + 1000 mg twice daily), versus high-dose metformin monotherapy (1000 mg twice daily). | treatment-naive patients with type 2 diabetes mellitus | |
| Goodman , 2009 n=125/122 follow-up: 24 weeks | ildagliptin 100 mg given in the morning, vildagliptin 100 mg given in the evening versus placebo | patients inadequately controlled with metformin | Parallel groups double-blind |
| NCT00396071 [NCT00396071] n=NA follow-up: | vildagliptin versus placebo | Patients With Type 2 Diabetes Treated With Metformin | Cross over |
| NCT00494884 (Wollmer) [NCT00494884] n=NA follow-up: | Vildagliptin 100 mg o.d. versus placebo | Patients With Type 2 Diabetes Inadequately Controlled With Metformin | |
| NCT00728351 [NCT00728351] n=NA follow-up: | Vildagliptin and Metformin (25/1000 mg Bid) versus Metformin Monotherapy (1000 mg Bid) | Patients With Type 2 Diabetes Inadequately Controlled With Metformin Monotherapy | |
| NCT00822211 [NCT00822211] n=NA follow-up: 24 weeks | Vildagliptin 50 mg Bid or qd versus placebo | Chinese Type 2 Diabetes Inadequately Controlled With Metformin Monotherapy | Parallel groups |
| linagliptin vs placebo (add on pioglitazone) | | | |
| Gomis , 2011 [NCT00641043] n=NA follow-up: 24 weeks | initial combination of 30 mg pioglitazone plus 5 mg linagliptin versus pioglitazone plus placebo | patients with inadequately controlled type 2 diabetes | |
| vildagliptin vs placebo (add on SU) | | | |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|--|--|--|----------------------------------|
| Garber , 2008 [NCT00099944] n=515 follow-up: 24 weeks | vildagliptin (50 mg given once or twice daily) versus placebo | patients with type 2 diabetes inadequately controlled with a sulphonylurea | double-blind |
| sitagliptin vs placebo (on-top glimepiride+/- metformine) | | | |
| Hermansen , 2007 n=NA follow-up: | sitagliptin 100 mg daily (add-on to ongoing stable doses of glimepiride, alone or in combination with metformin) ocumen versus placebo (add-on to ongoing stable doses of glimepiride, alone or in combination with metformin); | - | |
| vildagliptin vs voglibose | | | |
| Iwamoto , 2010 [NA] n=188/192 follow-up: 12 weeks | vildagliptin (50 mg bid, versus voglibose (0.2 mg tid | Japanese patients with T2D who were inadequately controlled with diet and exercise | double-blind Japan |
| NCT00368134 [NCT00368134] n=NA follow-up: 12 weeks | Vildagliptin 50 mg Bid versus Voglibose 0.2 mg Tid | patients with type 2 diabetes | Japan |
| saxagliptin vs glipizide | | | |
| saxagliptin n=NA follow-up: 52 weeks | saxagliptin versus titrated glipizide plus metformin | adult patients with type 2 diabetes and inadequate glycemic control | Parallel groups double-blind |
| sitagliptin 50mg bid monotherapy vs glipizide | | | |
| Scott* (sit vs glipi) , 2007 n=NA follow-up: 12 weeks | sitagliptin 50mg bid versus glipizide 5mg to 20 mg daily | patients with type 2 diabetes who have inadequate glycaemic control on diet and exercise | double-blind |
| sitagliptin vs metformin | | | |
| Goldstein (sit vs met) , 2007 n=NA follow-up: | sitagliptin 100 dailyly versus metformin 1000 mg or 2000 mg daily; | - | |
| Goldstein (sit+met vs met) , 2007 n=NA follow-up: | sitagliptin 50 mg daily plus metformin 1000 or 2000 mg daily <i>versus</i> <i>metformin1000or2000mgdaily</i> | - | |
| vildagliptin vs metformin | | | |
| Goke , 2008 n=NA follow-up: | vildagliptin (100 mg daily) versus metformin (2 000 mg daily). | drug-naive patients with type 2 diabetes | |
| Schweizer , 2007 [NCT00099866] n=526/254 follow-up: 52 weeks | vildagliptin 100mg versus metformin up to 2000 mg daily | drug-naive patients with Type 2 diabetes | |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|--|---|--|---------------------------|
| Schweizer , 2009 [NCT00246619] n=169/166 follow-up: | vildagliptin (100 mg daily versus metformin (titrated to 1500 mg daily | drug-naive patients with type 2 diabetes aged ≥65 years | |
| linagliptin + pioglitazone vs pioglitazone | | | |
| linagliptin 1264.3 ongoing [NCT01183013] n=NA follow-up: 30 weeks | linagliptin/pioglitazone (5/15, 5/30 and 5/45 mg) linagliptine versus pioglitazone | - | |
| sitagliptin vs pioglitazone | | | |
| Prez-Monteverde , 2011 [NCT00541450] n=NA follow-up: 12 weeks | sitagliptin 100 mg qd versus pioglitazone 15 mg qd, up-titrated to 30 mg after 6 weeks | drug-naive patients with type 2 diabetes | double-blind |
| vildagliptin monotherapy vs pioglitazone | | | |
| Rosenstock** (vilda vs pio) , 2007 [NCT00101803] n=NA follow-up: | vildagliptin 100 mg daily daily versus pioglitazone 30 mg daily | drug-naive patients with type 2 diabetes | double-blind |
| vildagliptin vs rosiglitazone | | | |
| Rosenstock , 2009 [NCT00138619] n=396/202 follow-up: | vildagliptin (50 mg b.i.d versus rosiglitazone (8 mg q.d., | drug-naive type 2 diabetes mellitus patients | double-blind |
| Rosenstock* (vilda vs rosi) , 2007 [NCT00099918] n=519/267 follow-up: 24 weeks | vildagliptin 100 mg daily daily versus rosiglitazone 8 mg once daily | drug-naive patients with type 2 diabetes | double-blind |

References

Bosi , 2011:

Bosi E, Ellis GC, Wilson CA, Fleck PR Alogliptin as a third oral antidiabetic drug in patients with type 2 diabetes and inadequate glycaemic control on metformin and pioglitazone: a 52-week, randomized, double-blind, active-controlled, parallel-group study. *Diabetes Obes Metab* 2011;13:1088-96 [21733058] [10.1111/j.1463-1326.2011.01463.x](https://doi.org/10.1111/j.1463-1326.2011.01463.x)

DeFronzo , 2008:

DeFronzo RA, Fleck PR, Wilson CA, Mekki Q Efficacy and safety of the dipeptidyl peptidase-4 inhibitor alogliptin in patients with type 2 diabetes and inadequate glycaemic control: a randomized, double-blind, placebo-controlled study. *Diabetes Care* 2008;31:2315-7 [18809631] [10.2337/dc08-1035](https://doi.org/10.2337/dc08-1035)

Kaku, 2011:

Kaku K, Itayasu T, Hiroi S, Hirayama M, Seino Y Efficacy and safety of alogliptin added to pioglitazone in Japanese patients with type 2 diabetes: a randomized, double-blind, placebo-controlled trial with an open-label long-term extension study. *Diabetes Obes Metab* 2011;13:1028-35 [21682833] [10.1111/j.1463-1326.2011.01460.x](https://doi.org/10.1111/j.1463-1326.2011.01460.x)

Pratley, 2009:

Pratley RE, Kipnes MS, Fleck PR, Wilson C, Mekki Q Efficacy and safety of the dipeptidyl peptidase-4 inhibitor alogliptin in patients with type 2 diabetes inadequately controlled by glyburide monotherapy. *Diabetes Obes Metab* 2009;11:167-76 [19125778] [10.1111/j.1463-1326.2008.01016.x](https://doi.org/10.1111/j.1463-1326.2008.01016.x)

Pratley, 2009:

Pratley RE, Reusch JE, Fleck PR, Wilson CA, Mekki Q Efficacy and safety of the dipeptidyl peptidase-4 inhibitor alogliptin added to pioglitazone in patients with type 2 diabetes: a randomized, double-blind, placebo-controlled study. *Curr Med Res Opin* 2009;25:2361-71 [19650752] [10.1185/03007990903156111](https://doi.org/10.1185/03007990903156111)

Rosenstock, 2009:

Rosenstock J, Rendell MS, Gross JL, Fleck PR, Wilson CA, Mekki Q Alogliptin added to insulin therapy in patients with type 2 diabetes reduces HbA(1C) without causing weight gain or increased hypoglycaemia. *Diabetes Obes Metab* 2009;11:1145-52 [19758359] [10.1111/j.1463-1326.2009.01124.x](https://doi.org/10.1111/j.1463-1326.2009.01124.x)

Rosenstock, 2010:

Rosenstock J, Inzucchi SE, Seufert J, Fleck PR, Wilson CA, Mekki Q Initial combination therapy with alogliptin and pioglitazone in drug-naïve patients with type 2 diabetes. *Diabetes Care* 2010;33:2406-8 [20724648] [10.2337/dc10-0159](https://doi.org/10.2337/dc10-0159)

Seino, 2011:

Seino Y, Fujita T, Hiroi S, Hirayama M, Kaku K Alogliptin plus voglibose in Japanese patients with type 2 diabetes: a randomized, double-blind, placebo-controlled trial with an open-label, long-term extension. *Curr Med Res Opin* 2011;27 Suppl 3:21-9 [22106975] [10.1185/03007995.2011.614936](https://doi.org/10.1185/03007995.2011.614936)

Seino, 2011:

Seino Y, Fujita T, Hiroi S, Hirayama M, Kaku K Efficacy and safety of alogliptin in Japanese patients with type 2 diabetes mellitus: a randomized, double-blind, dose-ranging comparison with placebo, followed by a long-term extension study. *Curr Med Res Opin* 2011;27:1781-92 [21806314] [10.1185/03007995.2011.599371](https://doi.org/10.1185/03007995.2011.599371)

Forst, 2010:

Forst T, Uhlig-Laske B, Ring A, Graefe-Mody U, Friedrich C, Herbach K, Woerle HJ, Dugi KA Linagliptin (BI 1356), a potent and selective DPP-4 inhibitor, is safe and efficacious in combination with metformin in patients with inadequately controlled Type 2 diabetes. *Diabet Med* 2010;27:1409-19 [21059094] [10.1111/j.1464-5491.2010.03131.x](https://doi.org/10.1111/j.1464-5491.2010.03131.x)

Fonseca, 2012:

Fonseca V, Zhu T, Karyekar C, Hirshberg B Adding saxagliptin to extended-release metformin vs. uptitrating metformin dosage. *Diabetes Obes Metab* 2012;14:365-71 [22192246] [10.1111/j.1463-1326.2011.01553.x](https://doi.org/10.1111/j.1463-1326.2011.01553.x)

Forst, 2011:**Gke, 2010:**

Gke B, Gallwitz B, Eriksson J, Hellqvist A, Gause-Nilsson I Saxagliptin is non-inferior to glipizide in patients with type 2 diabetes mellitus inadequately controlled on metformin alone: a 52-week randomised controlled trial. *Int J Clin Pract* 2010;64:1619-31 [20846286] [10.1111/j.1742-1241.2010.02510.x](https://doi.org/10.1111/j.1742-1241.2010.02510.x)

Kawamori, 2012:

Kawamori R, Inagaki N, Araki E, Watada H, Hayashi N, Horie Y, Sarashina A, Gong Y, von Eynatten M, Woerle HJ, Dugi KA Linagliptin monotherapy provides superior glycaemic control versus placebo or voglibose with comparable safety in Japanese patients with type 2 diabetes: a randomized, placebo and active comparator-controlled, double-blind study. *Diabetes Obes Metab* 2012;14:348-57 [22145698] [10.1111/j.1463-1326.2011.01545.x](https://doi.org/10.1111/j.1463-1326.2011.01545.x)

Horie Y, Hayashi N, Dugi K, Takeuchi M Design, statistical analysis and sample size calculation of a phase IIb/III study of linagliptin versus voglibose and placebo. *Trials* 2009;10:82 [19732457] [10.1186/1745-6215-10-82](https://doi.org/10.1186/1745-6215-10-82)

Nowicki, 2011:

Nowicki M, Rychlik I, Haller H, Warren M, Suchower L, Gause-Nilsson I, Shtzer KM Long-term treatment with the dipeptidyl peptidase-4 inhibitor saxagliptin in patients with type 2 diabetes mellitus and renal impairment: a randomised controlled 52-week efficacy and safety study. *Int J Clin Pract* 2011;65:1230-9 [21977965] [10.1111/j.1742-1241.2011.02812.x](https://doi.org/10.1111/j.1742-1241.2011.02812.x)

Nowicki, 2011:

Nowicki M, Rychlik I, Haller H, Warren ML, Suchower L, Gause-Nilsson I Saxagliptin improves glycaemic control and is well tolerated in patients with type 2 diabetes mellitus and renal impairment. *Diabetes Obes Metab* 2011;13:523-32 [21332627] [10.1111/j.1463-1326.2011.01382.x](https://doi.org/10.1111/j.1463-1326.2011.01382.x)

Scheen , 2010:

Scheen AJ, Charpentier G, Ostgren CJ, Hellqvist A, Gause-Nilsson I Efficacy and safety of saxagliptin in combination with metformin compared with sitagliptin in combination with metformin in adult patients with type 2 diabetes mellitus. *Diabetes Metab Res Rev* 2010;26:540-9 [20824678] [10.1002/dmrr.1114](https://doi.org/10.1002/dmrr.1114)

Stenlf , 2010:

Stenlf K, Raz I, Neutel J, Ravichandran S, Berglind N, Chen R Saxagliptin and metformin XR combination therapy provides glycemic control over 24 hours in patients with T2DM inadequately controlled with metformin. *Curr Med Res Opin* 2010;26:2355-63 [20804445] 10.1185/03007995.2010.511090

Yang, 2011:

Yang W, Pan CY, Tou C, Zhao J, Gause-Nilsson I Efficacy and safety of saxagliptin added to metformin in Asian people with type 2 diabetes mellitus: a randomized controlled trial. *Diabetes Res Clin Pract* 2011;94:217-24 [21871686] 10.1016/j.diabres.2011.07.035

Stafford , 2011:

Stafford S, Elahi D, Meneilly GS Effect of the dipeptidyl peptidase-4 inhibitor sitagliptin in older adults with type 2 diabetes mellitus. *J Am Geriatr Soc* 2011;59:1148-9 [21668924] 10.1111/j.1532-5415.2011.03438.x

NCT00101673, :

Pratley RE, Schweizer A, Rosenstock J, Foley JE, Banerji MA, Pi-Sunyer FX, Mills D, Dejager S Robust improvements in fasting and prandial measures of beta-cell function with vildagliptin in drug-naive patients: analysis of pooled vildagliptin monotherapy database. *Diabetes Obes Metab* 2008;10:931-8 [18093207] 10.1111/j.1463-1326.2007.00835.x

Pan, 2008:

Pan C, Yang W, Barona JP, Wang Y, Niggli M, Mohideen P, Wang Y, Foley JE Comparison of vildagliptin and acarbose monotherapy in patients with Type 2 diabetes: a 24-week, double-blind, randomized trial. *Diabet Med* 2008;25:435-41 [18341596] 10.1111/j.1464-5491.2008.02391.x

Foley, 2009:

Foley JE, Sreenan S Efficacy and safety comparison between the DPP-4 inhibitor vildagliptin and the sulfonylurea gliclazide after two years of monotherapy in drug-naive patients with type 2 diabetes. *Horm Metab Res* 2009;41:905-9 [19705345] 10.1055/s-0029-1234042

Filozof, 2009:

Filozof C, Gautier JF A comparison of efficacy and safety of vildagliptin and gliclazide in combination with metformin in patients with Type 2 diabetes inadequately controlled with metformin alone: a 52-week, randomized study. *Diabet Med* 2010 Mar;27:318-26 [20536495] 10.1111/j.1464-5491.2010.02938.x

CAROLINA, 2012:

Gallwitz B, Rosenstock J, Rauch T, Bhattacharya S, Patel S, von Eynatten M, Dugi KA, Woerle HJ 2-year efficacy and safety of linagliptin compared with glimepiride in patients with type 2 diabetes inadequately controlled on metformin: a randomised, double-blind, non-inferiority trial. *Lancet* 2012 Aug 4;380:475-83 [22748821] 10.1016/S0140-6736(12)60691-6

Matthews , 2010:

Matthews DR, Dejager S, Ahren B, Fonseca V, Ferrannini E, Couturier A, Foley JE, Zinman B Vildagliptin add-on to metformin produces similar efficacy and reduced hypoglycaemic risk compared with glimepiride, with no weight gain: results from a 2-year study. *Diabetes Obes Metab* 2010;12:780-9 [20649630] 10.1111/j.1463-1326.2010.01233.x

linagliptin 1218.62, 0:

CLAF237A 23104, :

Derosa , 2010:

Derosa G, Maffioli P, Salvadeo SA, Ferrari I, Ragonesi PD, Querci F, Franzetti IG, Gadaleta G, Ciccirelli L, Piccinni MN, D'Angelo A, Cicero AF Effects of sitagliptin or metformin added to pioglitazone monotherapy in poorly controlled type 2 diabetes mellitus patients. *Metabolism* 2010;59:887-95 [20015525] 10.1016/j.metabol.2009.10.007

EXAMINE, 2011:

White WB, Bakris GL, Bergenstal RM, Cannon CP, Cushman WC, Fleck P, Heller S, Mehta C, Nissen SE, Perez A, Wilson C, Zannad F EXamination of cardiovascular outcomes with alogliptin versus standard of care in patients with type 2 diabetes mellitus and acute coronary syndrome (EXAMINE): a cardiovascular safety study of the dipeptidyl peptidase 4 inhibitor alogliptin in patients with type 2 diabetes with acute coronary syndrome. *Am Heart J* 2011;162:620-626.e1 [21982652] 10.1016/j.ahj.2011.08.004

White WB, Cannon CP, Heller SR, Nissen SE, Bergenstal RM, Bakris GL, Perez AT, Fleck PR, Mehta CR, Kupfer S, Wilson C, Cushman WC, Zannad F Alogliptin after Acute Coronary Syndrome in Patients with Type 2 Diabetes. *N Engl J Med* 2013 Sep 2; [23992602] 10.1056/NEJMoa1305889

Del Prato, 0:

Del Prato S, Barnett A, Huisman H, et al. Linagliptin monotherapy improves glycaemic control and measures of beta-cell function in Type 2 diabetes. Poster no 695-P, 70th American Diabetes Association Scientific Sessions, June 2010, Orlando, Florida, U.S.A

Del Prato S, Barnett AH, Huisman H, Neubacher D, Woerle HJ, Dugi KA Effect of linagliptin monotherapy on glycaemic control and markers of β -cell function in patients with inadequately controlled type 2 diabetes: a randomized controlled trial. *Diabetes Obes Metab* 2011;13:258-67 [21205122] 10.1111/j.1463-1326.2010.01350.x

linagliptin 1218.46, 0:

linagliptin1218.5, 0:

linagliptine 1218.50, 0:

SAVOR-TIMI 53, 2013:

Scirica BM, Bhatt DL, Braunwald E, Steg PG, Davidson J, Hirshberg B, Ohman P, Price DL, Chen R, Udell J, Raz I The design and rationale of the saxagliptin assessment of vascular outcomes recorded in patients with diabetes mellitus-thrombolysis in myocardial infarction (SAVOR-TIMI) 53 study. *Am Heart J* 2011;162:818-825.e6 [22093196] 10.1016/j.ahj.2011.08.006

Scirica BM, Bhatt DL, Braunwald E, Steg PG, Davidson J, Hirshberg B, Ohman P, Frederich R, Wiviott SD, Hoffman EB, Cavender MA, Udell JA, Desai NR, Mozenon O, McGuire DK, Ray KK, Leiter LA, Raz I Saxagliptin and Cardiovascular Outcomes in Patients with Type 2 Diabetes Mellitus. *N Engl J Med* 2013 Sep 2;: [23992601] 10.1056/NEJMoa1307684 **Goldstein, 2007:**

Goldstein BJ, Feinglos MN, Lunceford JK, Johnson J, Williams-Herman DE Effect of initial combination therapy with sitagliptin, a dipeptidyl peptidase-4 inhibitor, and metformin on glycemic control in patients with type 2 diabetes. *Diabetes Care* 2007;30:1979-87 [17485570] 10.2337/dc07-0627

Hanefeld, 2007:

Hanefeld M, Herman GA, Wu M, Mickel C, Sanchez M, Stein PP Once-daily sitagliptin, a dipeptidyl peptidase-4 inhibitor, for the treatment of patients with type 2 diabetes. *Curr Med Res Opin* 2007;23:1329-39 [17559733] 10.1185/030079907X188152

Scott* (sit vs pbo), 2007:

Scott R, Wu M, Sanchez M, Stein P Efficacy and tolerability of the dipeptidyl peptidase-4 inhibitor sitagliptin as monotherapy over 12 weeks in patients with type 2 diabetes. *Int J Clin Pract* 2007;61:171-80 [17156104] 10.1111/j.1742-1241.2006.01246.x

Mimori, 2006:

NCT00351832, :

Rosenstock, 2008:

Scherbaum [2], 2008:

Ahren, 2009:

Dejager [1], 2007:

Foley, 2011:

Kikuchi, 2009:

Pi-Sunyer, 2007:

Pratley, 2006:

Ristic, 2005:

Lukashevich , 2011:

Fonseca, 2007:

Fonseca , 2008:

Ahren, 2004:

Bosi, 2007:

Bosi, 2009:

Goodman, 2009:

NCT00396071, :

NCT00494884 (Wollmer), :

NCT00728351, :

NCT00822211, :
 Gomis, 2011:
 Garber, 2008:
 Hermansen, 2007:
 Iwamoto, 2010:
 NCT00368134, :
 saxagliptin, :
 Scott* (sit vs glipi), 2007:
 Goldstein (sit vs met), 2007:
 Goldstein (sit+met vs met), 2007:
 Goke, 2008:
 Schweizer, 2007:
 Schweizer, 2009:
 linagliptin 1264.3, 0:
 Prez-Monteverde, 2011:
 Rosenstock** (vilda vs pio), 2007:
 Rosenstock, 2009:
 Rosenstock* (vilda vs rosi), 2007:

2 DPP-4 inhibitors add on current treatment

| Trial | Treatments | Patients | Trials design and methods |
|--|--|---|---------------------------|
| saxagliptin vs placebo (add on current treatment) | | | |
| saxagliptin, renal study n=NA follow-up: 12 weeks | saxagliptin versus placebo added to patients current diabetes treatment | patients with moderate to severe renal impairment or end-stage renal disease | Parallel groups |

References

saxagliptin, renal study, :

3 DPP-4 inhibitors add on insulin

| Trial | Treatments | Patients | Trials design and methods |
|--|---|--|---------------------------|
| saxagliptin vs placebo (add on insulin) | | | |
| CV181-057 [NCT00757588] n=NA follow-up: | Saxagliptin, 5 mg versus placebo (on top insulin) | Subjects With Type 2 Diabetes Who Have Inadequate Glycemic Control on Insulin Alone or on Insulin in Combination With Metformin | |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|---|---|---|---------------------------|
| vildagliptin vs placebo (add on insulin) | | | |
| Fonseca , 2007 [NCT00099931] n=144/152 follow-up: 24 weeks | vildagliptin 100 mg daily (add-on to insulin therapy)y) versus placebo (add-on to insulin therapy)y)mag | type 2 diabetes that was inadequately controlled by insulin | double-blind |
| Fonseca , 2008 n=NA follow-up: | - | - | |
| sitagliptin vs placebo (add on insulin+/-MET) | | | |
| Vilsbll , 2010 [NCT00395343] n=322/319 follow-up: | once-daily sitagliptin 100 mg versus placebo | patients with type 2 diabetes inadequately controlled on long-acting, intermediate-acting or premixed insulin | double-blind |

References

CV181-057, :

Fonseca, 2007:

Fonseca , 2008:

Vilsbll, 2010:

4 DPP-4 inhibitors add on MET

| Trial | Treatments | Patients | Trials design and methods |
|---|--|---|--|
| sitagliptin vs control (add on MET) | | | |
| Reasner , 2011 [NCT00482729] n=NA follow-up: | sitagliptin/metformin 50/500 mg bid uptitrated over 4 weeks to achieve maximum doses of sitagliptin/metformin 50/1000 mg bid versus metformin monotherapy | drug-naive patients with type 2 diabetes | Cross over NA |
| linagliptin vs glimepiride (add on MET) | | | |
| Gallwitz , 2012 [NCT00622284] n=777/775 follow-up: 104 weeks | linagliptin (5 mg once daily) add-on therapy to preferably >1500 mg metformin versus glimepiride (14 mg) orally once daily add-on therapy to preferably >1500 mg metformin | type 2 diabetes mellitus with insufficient glycaemic control with metformin | Parallel groups double-blind USA |
| sitagliptin vs glimepiride (add on MET) | | | |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|---|---|--|--|
| Arechavaleta , 2011 [NCT00701090] n=516/519 follow-up: 30 weeks | sitagliptin 100 mg daily versus glimepiride (starting dose 1 mg/day and up-titrated, based upon patient's self-monitoring of blood glucose results, to a maximum dose of up to 6 mg/day) | patients with type 2 diabetes inadequately controlled on metformin monotherapy | Parallel groups double-blind |
| alogliptin vs placebo (add on MET) | | | |
| Nauck , 2009 [NCT00286442] n=210/104 follow-up: 26 weeks | alogliptin 12.5 and 25 mg once daily versus placebo | patients whose HbA(1c) levels were inadequately controlled on metformin alone | Parallel groups double-blind |
| linagliptin vs placebo (add on MET) | | | |
| Taskinen [NCT00601250] n=524/177 follow-up: | linagliptin 5 mg once daily versus placebo add on MET | patients with inadequately controlled type 2 diabetes for whom metformin therapy is inappropriate due to intolerability or contraindication | |
| linagliptin 1218.65 <i>ongoing</i> [NCT01215097] n=NA follow-up: 24 weeks | 5 mg of Linagliptin administered orally once daily versus placebo (on top metformin) | patients with type 2 diabetes and insufficient glycaemic control with metformin | parallel groups double-blind China |
| saxagliptin vs placebo (add on MET) | | | |
| CV181-066 [NCT00683657] n=NA follow-up: | Saxagliptin versus placebo | Subjects With Type 2 Diabetes Who Have Inadequate Glycemic Control With Diet And Exercise And A Stable Dose Of Metformin 1500 mg/Day | |
| CV181-080 [NCT00885378] n=NA follow-up: | 2.5 mg Saxagliptin, Twice Daily versus placebo | Subjects With Type 2 Diabetes Mellitus Who Have Inadequate Glycemic Control on Metformin IR Alone | |
| DeFronzo , 2009 [NCT00121667] n=191/179 follow-up: 24 weeks | saxagliptin (2.5, 5, or 10 mg once daily) versus placebo | Patients With Inadequately Controlled Type 2 Diabetes With Metformin Alone | |
| Jadzinsky , 2009 [NCT00327015] n=NA follow-up: | saxagliptin versus placebo | treatment-naive patients with type 2 diabetes (T2D) and inadequate glycaemic control | |
| sitagliptin vs placebo (add on MET) | | | |
| Charbonnel , 2006 [NCT0086515] n=NA follow-up: | sitagliptin 100 mg daily (add-on to metformin therapy) versus placebo (add-on to metformin therapy); | - | |
| Nauck , 2007 [NCT00094770] n=NA follow-up: | sitagliptin 100 mg daily (add-on to metformin therapy) versus placebo (add-on to metformin therapy); | - | |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|---|--|--|----------------------------------|
| raz , 2008 [NCT00337610] n=NA follow-up: | sitagliptin 100 mg once daily versus placebo | patients with type 2 diabetes | |
| Scott** (sit vs pbo on top met) , 2007 n=NA follow-up: | sitagliptin 100 mg daily (add-on to metformin therapy) versus placebo (add-on to metformin therapy). | patients with type 2 diabetes who were inadequately on mET monotherapy | |
| vildagliptin vs placebo (add on MET) | | | |
| Ahren , 2004 n=56/51 follow-up: 12 weeks | vildagliptin 50 mg daily (add-on to metformin therapy) versus placebo (add-on to metformin therapy)mag | patients with type 2 diabetes | double-blind |
| Bosi , 2007 [NCT00099892] n=185/182 follow-up: | vildagliptin (50 or) 100 mg daily (add-on to metformin therapy) versus placebo (add-on to metformin therapy)mag | patients with type 2 diabetes inadequately controlled with metformin | double-blind |
| Bosi , 2009 [NCT00382096] n=1179 follow-up: 24 weeks | vildagliptin plus high-dose metformin combination therapy (50 mg + 1000 mg twice daily), versus high-dose metformin monotherapy (1000 mg twice daily). | treatment-naive patients with type 2 diabetes mellitus | |
| Goodman , 2009 n=125/122 follow-up: 24 weeks | ildagliptin 100 mg given in the morning, vildagliptin 100 mg given in the evening versus placebo | patients inadequately controlled with metformin | Parallel groups double-blind |
| NCT00396071 [NCT00396071] n=NA follow-up: | vildagliptin versus placebo | Patients With Type 2 Diabetes Treated With Metformin | Cross over |
| NCT00494884 (Wollmer) [NCT00494884] n=NA follow-up: | Vildagliptin 100 mg o.d. versus placebo | Patients With Type 2 Diabetes Inadequately Controlled With Metformin | |
| NCT00728351 [NCT00728351] n=NA follow-up: | Vildagliptin and Metformin (25/1000 mg Bid) versus Metformin Monotherapy (1000 mg Bid) | Patients With Type 2 Diabetes Inadequately Controlled With Metformin Monotherapy | |
| NCT00822211 [NCT00822211] n=NA follow-up: 24 weeks | Vildagliptin 50 mg Bid or qd versus placebo | Chinese Type 2 Diabetes Inadequately Controlled With Metformin Monotherapy | Parallel groups |
| sitagliptin vs rosiglitazone (add on MET) | | | |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|---|---|--|----------------------------------|
| Rigby , 2010 n=NA follow-up: 16 weeks | sitagliptin phosphate, 100 mg daily versus rosiglitazone maleate, 4 mg daily | type 2 diabetes mellitus inadequately controlled by metformin monotherapy | open |
| saxagliptin vs sitagliptin (add on MET) | | | |
| saxagliptin vs sitagliptin n=403/398 follow-up: 18 weeks | saxagliptin 5 mg once daily add on metformin versus sitagliptin 100 mg once daily add on metformin | adults with type 2 diabetes who did not attain adequate glycemic control on metformin therapy alone | Parallel groups |
| vildagliptin vs Sulfonylurea (add on to MET) | | | |
| Ferrannini , 2009 [NCT00106340] n=1396/1393 follow-up: 52 weeks | vildagliptin 50 mg twice daily versus glimepiride titrated up to 6 mg/day | Patients inadequately controlled on metformin monotherapy (HbA(1c) 6.5-8.5%) | Parallel groups double-blind |
| sitagliptin vs Sulphonylurea (on top MET) | | | |
| Al Sifri , 2011 n=507/514 follow-up: | sitagliptin 100 mg qd versus prestudy sulphonylurea | Muslim patients with type 2 diabetes who were treated with a stable dose of a sulphonylurea with or without metformin for at least 3 months | Parallel groups open |
| vildagliptin vs TZD (add on MET) | | | |
| GALIAN (Blonde) , 2009 [NCT00396227] n=1653/825 follow-up: | vildagliptin 100 mg versus TZD (agent and dose at the investigators' discretion | patients inadequately controlled [haemoglobin A(1C) (HbA(1c)): 7-10%] on a stable dose of metformin (>or =1000 mg/day). | |
| vildagliptin vs pioglitazone (add on MET) | | | |
| Bolli , 2008 [NCT00237237] n=295/281 follow-up: | vildagliptin 100 mg daily (add-on to metformin therapy) versus pioglitazone 30 mg daily (add-on to metformin therapy) | patients with type 2 diabetes inadequately controlled with metformin monotherapy | double-blind |

References

Reasner, 2011:

Gallwitz, 2012:

Arechavaleta, 2011:

Nauck, 2009:

Taskinen, 0:

linagliptin 1218.65, 0:

CV181-066, :

CV181-080, :

DeFronzo, 2009:

Jadzinsky, 2009:

Charbonnel, 2006:

Nauck, 2007:

raz, 2008:
 Scott** (sit vs pbo on top met), 2007:
 Ahren, 2004:
 Bosi, 2007:
 Bosi, 2009:
 Goodman, 2009:
 NCT00396071, :
 NCT00494884 (Wollmer), :
 NCT00728351, :
 NCT00822211, :
 Rigby , 2010:
 saxagliptin vs sitagliptin, :
 Ferrannini, 2009:
 Al Sifri, 2011:
 GALIANT (Blonde), 2009:
 Bolli, 2008:

5 DPP-4 inhibitors add on MET+SU

| Trial | Treatments | Patients | Trials design and methods |
|--|---|---|---------------------------|
| linagliptin vs Metformin + sulfonylurea | | | |
| Owens [NCT00602472] n=NA follow-up: 24 weeks | linagliptin versus combination of metformin and an SU | type 2 diabetes mellitus with insufficient glycaemic control with metformin in combination with a sulphonylurea | Argentina |

References

Owens, 0:

6 DPP-4 inhibitors add on MET+TZD

| Trial | Treatments | Patients | Trials design and methods |
|--|--|--|---------------------------|
| linagliptin vs placebo (add on MET+TZD) | | | |
| linagliptin 1218.61 <i>ongoing</i> [NCT00996658] n=NA follow-up: | Linagliptin (5 mg once daily) versus placebo (add on therapy to metformin in combination with pioglitazone) | Type 2 Diabetic Patients With Inadequate Glycaemic Control on Metformin in Combination With Pioglitazone | |

References

linagliptin 1218.61, 0:

7 DPP-4 inhibitors add on SU

| Trial | Treatments | Patients | Trials design and methods |
|---|---|---|---------------------------|
| vildagliptin vs placebo (add on glimepiride) | | | |
| Kikuchi , 2010 [NCT00325117] n=102/100 follow-up: 12 weeks | vildagliptin 50mg twice-daily versus placebo | Japanese patients with Type 2 diabetes mellitus | double-blind Japan |
| linagliptin vs placebo (add on SU) | | | |
| Lewin , 2010 [NCT00819091] n=NA follow-up: 18 weeks | linagliptin 5 mg versus placebo (add-on to sulphonylurea) | patients with type 2 diabetes and insufficient glycaemic control | double-blind |

References

Kikuchi, 2010:

Lewin, 2010:

8 DPP-4 inhibitors add on TZD

| Trial | Treatments | Patients | Trials design and methods |
|---|---|--|---------------------------|
| sitagliptin vs placebo (add on PIO) | | | |
| Rosenstock , 2006 [NCT00086502] n=NA follow-up: 24 weeks | sitagliptin 100 mg once daily versus placebo | patients with type 2 diabetes and inadequate glycemic control | double-blind |
| saxagliptin vs placebo (add on TZD) | | | |
| Hollander [NCT00295633] n=NA follow-up: | saxagliptin (2.5 or 5 mg) versus placebo | patients with type 2 diabetes and inadequate control on thiazolidinedione alone | |
| sitagliptin vs placebo (on top PIO) | | | |
| Rosenstock (sit on top pio vs pbo) , 2006 [NCT00086502] n=NA follow-up: | sitagliptin 100 mg daily (add-on to pioglitazone therapy)sl versus placebo (add-on to pioglitazone therapy); | - | |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|--|--|--|---------------------------|
| vildagliptin vs placebo (on top pioglitazone) | | | |
| Garber , 2007 [NCT00099853] n=463 follow-up: | vildagliptin 50 or 100 mg daily (add-on to pioglitazone therapy) versus placebo (add-on to pioglitazone therapy) | - | |
| vildagliptin vs placebo (add on TZD) | | | |
| Rosenstock** (vilda + pio vs pio) , 2007 [NCT00101803] n=NA follow-up: 24 weeks | vildagliptin 50 mg or 100 mg daily plus 15 mg or 30 mg pioglitazone daily versus pioglitazone 30 mg daily | drug-naive patients with type 2 diabetes | double-blind |

References

Rosenstock , 2006:

Hollander, :

Rosenstock (sit on top pio vs pbo), 2006:

Garber, 2007:

Rosenstock** (vilda + pio vs pio), 2007:

19

9 DPP-4 inhibitors in combination

| Trial | Treatments | Patients | Trials design and methods |
|---|--|---|---------------------------|
| saxagliptin + glyburide vs glyburide uptitration | | | |
| CV181-040 [NCT00313313] n=NA follow-up: 24 weeks | saxagliptin added to a submaximal sulphonylurea dose versus uptitration of sulphonylurea monotherapy | patients with type 2 diabetes and inadequate glycaemic control with sulphonylurea monotherapy | |
| saxagliptin plus metformin XR 1500mg vs metformin up to 2000mg | | | |
| CV181-085 [NCT00918138] n=NA follow-up: | Saxagliptin in Combination With Metformin XR 1500 mg versus Up-titrated Metformin XR to 2000 mg | Subjects With Type 2 Diabetes Who Have Inadequate Glycemic Control With Diet and Exercise and a Stable Dose of Metformin XR 1500 mg | |

References

CV181-040, :

CV181-085, :

10 DPP-4 inhibitors monotherapy

| Trial | Treatments | Patients | Trials design and methods |
|---|--|---|---------------------------|
| sitagliptin monotherapy vs metformin | | | |
| Aschner , 2010 [NCT00449930] n=528/522 follow-up: 24 weeks | once-daily sitagliptin 100 mg versus twice-daily metformin 1000 mg | treatment-naive patients with type 2 diabetes | double-blind |
| vildagliptin vs metformin | | | |
| Goke , 2008 n=NA follow-up: | vildagliptin (100 mg daily) versus metformin (2 000 mg daily). | drug-naive patients with type 2 diabetes | |
| Schweizer , 2007 [NCT00099866] n=526/254 follow-up: 52 weeks | vildagliptin 100mg versus metformin up to 2000 mg daily | drug-naive patients with Type 2 diabetes | |
| Schweizer , 2009 [NCT00246619] n=169/166 follow-up: | vildagliptin (100 mg daily) versus metformin (titrated to 1500 mg daily) | drug-naive patients with type 2 diabetes aged ≥ 65 years | |
| linagliptin vs placebo | | | |
| Del Prato [NCT00621140] n=NA follow-up: 24 weeks | Linagliptin monotherapy versus placebo | Type 2 Diabetic Patients With Insufficient Glycemic Control | double-blind Croatia |
| linagliptin 1218.46 <i>ongoing</i> [NCT00798161] n=NA follow-up: 24 weeks | - | drug naive or previously treated type 2 diabetic patients with insufficient glycaemic control | Canada |
| linagliptin1218.5 <i>ongoing</i> [NCT00328172] n=NA follow-up: 12 weeks | linagliptin (0.5, 2.5 and 5 mg daily) versus placebo | patients with Type 2 diabetes and insufficient glycemic control | |
| linagliptine 1218.50 <i>ongoing</i> [NCT00740051] n=NA follow-up: 18 weeks | Linagliptin versus Placebo | patients for whom metformin therapy is inappropriate (intolerability, contraindication) | double-blind USA |
| sitagliptin monotherapy vs placebo | | | |
| Aschner , 2006 [NCT00087516] n=NA follow-up: 24 weeks | sitagliptin 100 or 200 mg daily versus placebo | patients with type 2 diabetes | |
| Barzilai , 2011 [NCT00305604] n=NA follow-up: 24 weeks | once-daily sitagliptin (100 or 50 mg, depending on renal function) versus placebo | elderly patients with type 2 diabetes | double-blind US |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|--|---|---|----------------------------------|
| Chan , 2008 n=65/26 follow-up: 12 weeks | sitagliptin versus placebo | patients with type 2 diabetes and chronic renal insufficiency | double-blind |
| Mohan , 2009 n=NA follow-up: 18 weeks | sitagliptin 100mg once daily monotherapy versus placebo | Chinese, Indian, and Korean patients with type 2 diabetes inadequately controlled by diet and exercise. | double-blind |
| Nonaka , 2008 [NCT00371007] n=NA follow-up: | sitagliptin 100 mg daily monotherapy versus placebo | Japanese patients with type 2 diabetes | double-blind |
| Raz , 2006 n=NA follow-up: | sitagliptin 100 mg (or 200 mg) daily versus placebo | patients with type 2 diabetes mellitus and inadequate glycaemic control | |
| vildagliptin monotherapy vs placebo | | | |
| Ahren , 2009 [NCT00390520] n=NA follow-up: | vildagliptin (100 mg/d) versus placebo | drug-naive patients with type 2 diabetes | Cross over |
| Dejager [1] , 2007 [NCT00099905] n=NA follow-up: 24 weeks | vildagliptin 50 mg or 100 mg daily versus placebo | drug-naive patients with type 2 diabetes | double-blind |
| Foley , 2011 <i>unpublished</i> [NCT00260156] n=29/30 follow-up: | vildagliptin 100 mg versus placebo | drug-naive patients with type 2 diabetes and mild hyperglycaemia | |
| Kikuchi , 2009 n=NA follow-up: | vildagliptin 50mg bid versus placebo | Japanese patients with type 2 diabetes mellitus | Japan |
| Pi-Sunyer , 2007 [NCT00120536] n=NA follow-up: 24 weeks | vildagliptin 50 mg or 100 mg daily, imag versus placebo | drug-naive patients with type 2 diabetes | double-blind |
| Pratley , 2006 n=70/28 follow-up: | vildagliptin 25mg bid versus placebo | - | double-blind |
| Ristic , 2005 n=NA follow-up: | vildagliptin 25mg or 50mg or 100mg daily versus placebo | - | |
| saxagliptin vs placebo (monotherapy) | | | |
| CV181-011 <i>unpublished</i> [NCT00121641] n=NA follow-up: 24 weeks | oral saxagliptin 2.5, 5, or 10 mg once daily versus placebo | - | |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|--|--|--|----------------------------------|
| CV181-038 [NCT00316082] n=NA follow-up: | Saxagliptin monotherapy versus placebo | type 2 diabetic subjects who are not controlled with diet and exercise | |
| CV181-041 [NCT00374907] n=NA follow-up: | Saxagliptin versus placebo | Subjects With Type 2 Diabetes Who Are Not Controlled With Diet and Exercise | |
| Rosenstock , 2008 [NCT00950599] n=NA follow-up: 12 weeks | saxagliptin 2.5, 5, 10, 20 or 40 mg once daily versus placebo | drug-naive patients with T2DM and inadequate glycaemic control | |
| vildagliptin vs rosiglitazone | | | |
| Rosenstock , 2009 [NCT00138619] n=396/202 follow-up: | vildagliptin (50 mg b.i.d versus rosiglitazone (8 mg q.d., | drug-naive type 2 diabetes mellitus patients | double-blind |
| Rosenstock* (vilda vs rosi) , 2007 [NCT00099918] n=519/267 follow-up: 24 weeks | vildagliptin 100 mg daily daily versus rosiglitazone 8 mg once daily | drug-naive patients with type 2 diabetes | double-blind |
| sitagliptin monotherapy vs voglibose | | | |
| Iwamoto , 2010 n=NA follow-up: 12 weeks | sitagliptin 50 mg once daily monotherapy versus voglibose 0.2 mg thrice daily before meals | Japanese patients with type 2 diabetes | double-blind |

References

Aschner, 2010:

Goke, 2008:

Schweizer, 2007:

Schweizer, 2009:

Del Prato, 0:

linagliptin 1218.46, 0:

linagliptin1218.5, 0:

linagliptine 1218.50, 0:

Aschner, 2006:

Barzilai, 2011:

Chan, 2008:

Mohan , 2009:

Nonaka, 2008:

Raz, 2006:

Ahren, 2009:

Dejager [1], 2007:
 Foley, 2011:
 Kikuchi, 2009:
 Pi-Sunyer, 2007:
 Pratley, 2006:
 Ristic, 2005:
 CV181-011, :
 CV181-038, :
 CV181-041, :
 Rosenstock, 2008:
 Rosenstock, 2009:
 Rosenstock* (vilda vs rosi), 2007:
 Iwamoto , 2010:

11 meglitinides (glinides)

| Trial | Treatments | Patients | Trials design and methods |
|--|---|---|---------------------------|
| repaglinide vs ??? | | | |
| YSRE0001 [NCT00336310] n=NA follow-up: 12 weeks | Repaglinide versus NA | - | double-blind Taiwan |
| repaglinide vs control (add on MET) | | | |
| Moses , 1999 n=27/27 follow-up: 12 weeks | prestudy dose of metformin with the addition of repaglinide versus prestudy dose of metformin | patients with type 2 diabetes who had inadequate glycemic control (HbA1c >7.1%) when receiving the antidiabetic agent metformin | Parallel groups open |
| repaglinide vs glibenclamide | | | |
| Landgraf , 1999 n=NA follow-up: 14 weeks | repaglinide, administered preprandially three times daily versus glibenclamide, given preprandially once or twice daily | - | double-blind |
| Marbury , 1999 n=NA | - | - | |
| Wolffenbittel , 1999 n=211/109 follow-up: 1 year | repaglinide (0.5-4 mg t.i.d.) versus glyburide (1.75-10.5 mg daily) | - | double-blind |
| nateglinide vs glibenclamide (add on MET) | | | |
| Derosa , 2009 n=124/124 follow-up: 12 months | nateglinide versus glibenclamide | nave type 2 diabetic patients treated with metformin | double-blind |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|---|--|---|----------------------------|
| repaglinide vs gliclazide | | | |
| AGEE-3783 [NCT01022762] n=NA follow-up: | repaglinide (1 mg repaglinide twice daily (weeks 0-4), titrated versus gliclazide (80 mg gliclazide once daily (weeks 0-4), titrated | Chinese subjects with type 2 diabetes who never have been treated with oral anti-diabetic drugs | China |
| repaglinide vs glipizide | | | |
| Madsbad , 2001 n=256 follow-up: 1 year | repaglinide, 1-4 mg at mealtimes versus glipizide, 5-15 mg daily | - | double-blind |
| nateglinide vs glyburide (add on MET) | | | |
| PRESERVE-beta n=NA follow-up: | - | - | |
| repaglinide + insulin vs insulin | | | |
| AGEE-1524 [NCT00799448] n=NA follow-up: | repaglinide combined with insulin NPH versus biphasic human insulin 30 alone | type 2 diabetics inadequately controlled with sulfonylurea (SU) +/- biguanide therapy | open Greece |
| AGEE-3020 n=NA | - | - | |
| mitiglinide+voglibose vs insulin glargine | | | |
| GLORIA [NCT00663884] n=NA follow-up: 16 weeks | combination therapy of 10 mg mitiglinide or 0.2mg voglibose versus insulin glargine | diabetic patients whose glycemic control were not enough despite administration of oral antidiabetic drug or insulin glargine | open Korea |
| nateglinide + metformin vs metformin | | | |
| Horton DOUBLON , 2000 n=172/178 follow-up: 24 weeks | nateglinide (120 mg, ac) and metformin (500 mg, tid) versus 500 mg metformin three times a day | - | |
| repaglinide vs metformin | | | |
| ReMet [NCT00118950] n=NA follow-up: | Repaglinide versus Metformin | Non-Obese Type 2 Diabetic Patients Uncontrolled by Diet | double-blind Denmark |
| Lund , 2007 n=NA follow-up: | repaglinide 2 mg thrice daily versus metformin 1 g twice daily | non-obese patients with type 2 diabetes | Cross over double-blind |
| repaglinide + metformin vs metformin | | | |
| AGEE-1411 [NCT01465152] n=NA follow-up: | - | - | open Spain |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|--|---|---|---------------------------------|
| repaglinide vs Metformin (add on insulin) | | | |
| Reform [NCT00118963] n=NA follow-up: | Repaglinide + BIAsp30 versus Metformin + BIAsp30 | non-obese patients with type-2-diabetes, uncontrolled on diet alone | double-blind |
| mitiglinide vs nateglinide | | | |
| Gao [NCT00461617] n=291 follow-up: 20 weeks | mitiglinide 10 - 20 mg three times daily versus nateglinide 120 mg three times daily | Chinese type 2 diabetes mellitus patients | Parallel groups double-blind |
| mitiglinide vs on top insulin glargine | | | |
| Kumashiro , 2007 n=NA follow-up: | mitiglinide versus on top of once daily insulin glargine | - | |
| repaglinide vs on top pioglitazone | | | |
| Raskin , 2001 n=NA | - | - | |
| repaglinide vs on top rosiglitazone | | | |
| Raskin , 2001 n=NA | - | - | |
| repaglinide vs on top troglitazone | | | |
| Raskin , 2000 n=256 follow-up: 22 weeks | repaglinide (0.54.0 mg at meals), versus combination of repaglinide (14 mg at meals) and troglitazone (200600 mg once daily) | Patients with type 2 diabetes who had inadequate glycemic control (HbA1c 7.0%) during previous monotherapy | open |
| nateglinide vs placebo | | | |
| CDJN608AUS13 n=NA | - | - | |
| CDJN608AUS13 n=NA | - | - | |
| CDJN608A ES03 <i>unpublished</i> n=NA follow-up: | - | - | |
| NAVIGATOR n=NA follow-up: | - | patients with impaired glucose toler-ance (IGT) | |
| Schwarz , 2008 n=66 follow-up: 12 weeks | nateglinide monotherapy (120 mg, before meals) versus placebo | drug-naive patients with T2DM aged >or=65 years | double-blind |
| Schwarz (study 2) , 2008 n=NA follow-up: 12 weeks | nateglinide monotherapy (120 mg, before meals) versus | drug-naive patients with T2DM aged >or=65 years | double-blind |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|---|---|---|----------------------------------|
| Hanefeld , 1990 n=229/60 follow-up: 12 weeks | nateglinide at doses of 30 mg, 60 mg, 120 mg, or 180 mg versus placebo | - | Parallel groups double-blind |
| Horton , 2000 n=179/172 follow-up: | 120 mg nateglinide before meals versus placebo | patients with an HbA1c level between 6.8 and 11.0% during a 4-week placebo run-in | Parallel groups double-blind |
| Mari , 2005 n=108 follow-up: 24 weeks | 30, 60, or 120 mg nateglinide versus placebo | mild type 2 diabetic men and women (fasting glucose 7.0-8.3 mmol/l) on diet treatment | Parallel groups double-blind |
| Marre , 2002 n=NA follow-up: | nateglinide 60 mg, 120 mg before three meals versus placebo | metformin-treated patients with HbA1c between 6.8% and 11% | Parallel groups double-blind |
| Moses , 2001 n=408 follow-up: 16 weeks | 0.5 mg repaglinide at mealtimes (increased to 1 mg after 4 weeks depending on blood glucose response) versus placebo | patients with type 2 diabetes considered poorly controlled by diet, but without a history of previous antidiabetic medication | Parallel groups double-blind |
| Saloranta , 2002 n=675 follow-up: 24 weeks | nateglinide (30, 60, or 120 mg, with meals). versus placebo | patients with type 2 diabetes but only moderately elevated fasting plasma glucose (FPG = 7.0-8.3 mmol/liter) | Parallel groups double-blind |
| repaglinide vs placebo | | | |
| Goldberg , 1998 n=66/33 follow-up: 18 weeks | repaglinide versus placebo | patients with type 2 diabetes | Parallel groups double-blind |
| Jovanovic , 2000 n=286/75 follow-up: 24 weeks | repaglinide 1 mg (n = 140), or repaglinide 4 mg (n = 146) versus placebo | - | double-blind |
| Chuang , 1999 n=NA | - | - | |
| Bech , 2003 n=253 follow-up: 16 weeks | repaglinide initiated at 0.5 mg per meal, increased to 1 mg after 4 weeks if fasting plasma glucose exceeded 7.8 mmol/l. versus placebo | pharmacotherapy-naive patients with Type 2 diabetes | Parallel groups double-blind |
| Goldberg , 1998 n=66/33 follow-up: | repaglinide versus placebo | type 2 diabetes | Parallel groups double-blind |
| Jovanovic , 2000 n=286/75 follow-up: 24 weeks | repaglinide 1 mg or repaglinide 4 mg versus placebo | - | Parallel groups double-blind |
| nateglinide vs placebo (add on insulin) | | | |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|--|--|---|---------------------------------|
| Dashora , 2007 n=55 follow-up: 16 weeks | nateglinide before meals versus placebo | - | double-blind |
| nateglinide vs placebo (add on insulin+MET) | | | |
| Juurinen , 2009 n=NA follow-up: 24 weeks | nateglinide (120 mg three times daily) before main meals versus placebo (add on insulin+MET) | Type 2 diabetes treated with the combination of basal insulin and metformin | Parallel groups double-blind |
| mitiglinide vs placebo (add on MET) | | | |
| NCT01037842 [NCT01037842] n=NA follow-up: 16 weeks | mitiglinide versus placebo | patients with type 2 diabetes who show inadequate glycemic control with metformin monotherapy | double-blind Korea |
| EX-1510-CT-003 [NCT00519142] n=NA follow-up: 24 weeks | metformin + mitiglinide three times a day with meals versus (metformin + placebo for mitiglinide) | patients with Type 2 diabetes mellitus not well controlled with metformin alone | double-blind US |
| nateglinide vs placebo (add on standard treatment) | | | |
| NCT00402909 [NCT00402909] n=NA follow-up: | - | patients with type 2 diabetes who are not achieving glycemic control with glargine, metformin and/or thiazolidinedione only | double-blind |
| nateglinide vs placebo (add on TZD) | | | |
| 026-CL-004 <i>ongoing</i> [NCT00189774] n=NA follow-up: | nateglinide versus placebo (on top pioglitazone) | inadequately controlled type 2 diabetic patients with pioglitazone treatment | double-blind Japan |
| repaglinide vs placebo (on top bedtime NPH-insulin) | | | |
| Landin-Olsson , 1999 n=NA | - | - | - |
| mitiglinide vs placebo (on top pioglitazone) | | | |
| Kaku , 2009 n=NA follow-up: 16 weeks | additional mitiglinide 5 or 10 mg tid versus placebo on top pioglitazone | Japanese type 2 diabetic patients who are insufficiently controlled by pioglitazone monotherapy | Parallel groups multicenter |
| metformin + repaglinide vs repaglinide | | | |
| AGEE-1411 [NCT01465152] n=NA follow-up: 24 weeks | metformin and repaglinide versus repaglinide | subjects with type 2 diabetes in which diet and exercise have failed | open Spain |
| nateglinide vs repaglinide | | | |
| Rosenstock , 2004 n=74/76 follow-up: 16 week | nateglinide monotherapy versus repaglinide monotherapy | type 2 diabetic patients previously treated with diet and exercise | open |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|---|--|--|----------------------------------|
| Li , 2009 n=NA follow-up: | Nateglinide versus repaglinide | - | |
| Li , 2007 n=115/115 follow-up: 12 weeks | nateglinide 90 mg three times daily versus repaglinide 1.0 mg three times daily | Chinese patients with type 2 diabetes | Parallel groups |
| repaglinide + metformin vs repaglinide | | | |
| AGEE-3705 [NCT00819741] n=NA follow-up: | repaglinide plus metformin versus repaglinide alone | Chinese subjects with type 2 diabetes having an HbA1c (glycosylated haemoglobin A1c) over 8.5 % and who never have taken oral sugar-lowering drugs before | open China |
| AGEE-3018 n=NA follow-up: | - | - | |
| repaglinide + metformin vs rosiglitazone + metformin | | | |
| Raskin , 2009 [NCT00399711] n=NA follow-up: 26 weeks | repaglinide and metformin fixed dose combination tablet given as twice daily versus twice daily rosiglitazone and metformin fixed dose combination | subjects with type 2 diabetes currently on monotherapy | open USA |
| repaglinide + metformin vs SU or MET | | | |
| AGEE-3017 [NCT00568984] n=NA follow-up: | combination therapy of repaglinide and metformin versus conventional treatment with a sulphonylurea or metformin in monotherapy | - | China |
| nateglinide vs gliclazide (add on MET) | | | |
| Ristic , 2006 n=133/129 follow-up: 24 weeks | nateglinide plus metformin versus gliclazide plus metformin | Patients with inadequate glucose control on maximal doses of metformin | Parallel groups double-blind |

References

YSRE0001, 0:
Moses, 1999:
Landgraf, 1999:
Marbury, 1999:
Wolffenbuttel, 1999:
Derosa , 2009:
AGEE-3783, 0:
Madsbad, 2001:
PRESERVE-beta, :
AGEE-1524, 0:
AGEE-3020, :

GLORIA, 0:
Horton DOUBLON, 2000:
ReMet, 0:
Lund, 2007:
AGEE-1411, :
Reform, 0:
Gao, 0:
Kumashiro, 2007:
Raskin, 2001:
Raskin, 2001:
Raskin, 2000:
CDJN608AUS13 , :
CDJN608AUS13 , :
CDJN608A ES03, :
NAVIGATOR, :
Schwarz , 2008:
Schwarz (study 2), 2008:
Hanefeld, 1990:
Horton, 2000:
Mari, 2005:
Marre, 2002:
Moses, 2001:
Saloranta, 2002:
Goldberg, 1998:
Jovanovic, 2000:
Chuang, 1999:
Bech, 2003:
Goldberg, 1998:
Jovanovic, 2000:
Dashora , 2007:
Juurinen , 2009:
NCT01037842, :
EX-1510-CT-003, 0:
NCT00402909, :
026-CL-004, 0:
Landin-Olsson, 1999:
Kaku, 2009:
AGEE-1411, 0:
Rosenstock , 2004:
Li, 2009:
Li, 2007:

AGEE-3705, 0:
 AGEE-3018, :
 Raskin , 2009:
 AGEE-3017, 0:
 Ristic, 2006:

12 sulfonylurea G1

| Trial | Treatments | Patients | Trials design and methods |
|---|--|--|---------------------------|
| glimepiride monotherapy vs metformin | | | |
| Charpentier , 2001 n=NA follow-up: 20 weeks | glimepiride monotherapy versus metformin monotherapy | Type 2 diabetic patients aged 35-70 years inadequately controlled by metformin monotherapy 2550 mg daily for at least 4 weeks | double-blind |

References

Charpentier, 2001:

13 sulfonylurea G1 add on MET

| Trial | Treatments | Patients | Trials design and methods |
|--|---|--|---------------------------|
| gliclazide vs nateglinide (add on MET) | | | |
| Ristic , 2006 n=NA follow-up: 52 weeks | gliclazide plus metformin versus nateglinide plus metformin | - | double-blind |
| gliclazide vs pioglitazone (add on MET) | | | |
| Matthews , 2005 n=313/317 follow-up: 52 weeks | gliclazide 80 mg o.d. (titrated up to 320 mg versus pioglitazone 15 mg o.d. (titrated up to 45 mg | Patients with poorly controlled type 2 diabetes | double-blind |
| glimepiride vs placebo (add on MET) | | | |
| LEAD-2 (Nauck) Sulf vs pbo , 2009 [NCT00318461] n=NA follow-up: 26 weeks | glimepiride (4 mg once daily). versus placebo | subjects previously treated with oral antidiabetes (OAD) therapy | double-blind |
| Charpentier , 2001 n=NA follow-up: | metformin and glimepiride versus metformin | Type 2 diabetic patients aged 35-70 years inadequately controlled by metformin monotherapy 2550 mg daily | double-blind France |
| glipizide GITS vs placebo (add on MET) | | | |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|--|---|---|----------------------------------|
| Feinglos , 2005 n=61/61 follow-up: 16 weeks | 2.5 mg glipizide GITS versus placebo | type 2 diabetes inadequately controlled (A1c 7-8.5%) on metformin (>or =1000 mg/day for >or =3 months) | double-blind |
| glibenclamide vs rosiglitazone (add on MET) | | | |
| Garber , 2006 n=NA follow-up: 24 weeks | metformin-glibenclamide 500/2.5 mg tablets (initial daily dose 1000/5 mg) versus metformin 500 mg plus rosiglitazone 4 mg (initial daily dose 1000-2000 mg + 4 mg, depending on previous treatment) | patients with type 2 diabetes inadequately controlled on metformin monotherapy | double-blind |
| gliclazide vs rosiglitazone (add on MET) | | | |
| Khanolkar , 2008 n=NA follow-up: 24 weeks | metformin and gliclazide versus metformin and rosiglitazone | - | |
| SU vs rosiglitazone (add on MET) | | | |
| Hamann , 2008 n=NA follow-up: 52 weeks | combination sulphonylurea plus metformin versus rosiglitazone/metformin fixed-dose combination | overweight individuals with inadequately controlled type 2 diabetes mellitus. Individuals with inadequate glycaemic control (HbA (1c)>or =7%) while on metformin monotherapy (>or =0.85 g/day) | |
| glipizide vs sitagliptin (add on MET) | | | |
| Nauck , 2007 n=NA follow-up: 52 weeks | glipizide versus sitagliptin | - | |

References

Ristic, 2006:
 Matthews, 2005:
 LEAD-2 (Nauck) Sulf vs pbo, 2009:
 Charpentier, 2001:
 Feinglos, 2005:
 Garber, 2006:
 Khanolkar, 2008:
 Hamann, 2008:
 Nauck, 2007:

14 sulfonylureas G2

| Trial | Treatments | Patients | Trials design and methods |
|--------------|-------------------|-----------------|----------------------------------|
| vs | | | |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|---|--|--|---|
| Cefalu , 1998 n=NA | - | - | |
| Hermann , 1994 n=NA | - | - | |
| Charpentier , 2001 n=NA | - | - | |
| glipizide vs glyburide | | | |
| Rosenstock , 1993 n=139 follow-up: 4 months | glipizide, 2.5 or 5 mg/day versus glyburide, 1.25 or 2.5 mg/day | elderly patients with NIDDM that was controlled for at least 3 months with oral sulfonylurea therapy | Parallel groups open |
| Birkeland , 1994 n=NA follow-up: | glipizide versus glyburide | NIDDM patients | |
| Birkeland , 1994 n=NA follow-up: 15 months | glipizide versus glyburide | NIDDM patients | Parallel groups double-blind |
| glipizide vs placebo | | | |
| Simonson , 1997 n=NA follow-up: 4+8 weeks | once-daily doses of 5, 20, 40, or 60 mg glipizide GITS versus placebo | NIDDM patients | Parallel groups double-blind |
| Testa , 1998 n=377/192 follow-up: 12 weeks | 5 to 20 mg of glipizide gastrointestinal therapeutic system (GITS) versus placebo | patients with type 2 diabetes mellitus | Parallel groups USA |
| glyburide vs placebo | | | |
| Garber , 2002 n=NA follow-up: | glyburide 2.5 mg versus placebo | patients with type 2 diabetes who had failed diet and exercise | Parallel groups double-blind |
| Vray , 1995 n=NA follow-up: | glibenclamide (2.5 mg X 3/d) versus placebo | type 2 diabetic outpatients, 40-70 years of age, treated by diet alone or oral anti-diabetic drugs | Factorial plan double-blind China |

References

Cefalu, 1998:
Hermann, 1994:
Charpentier, 2001:
Rosenstock, 1993:
Birkeland, 1994:
Birkeland, 1994:
Simonson, 1997:
Testa, 1998:

Garber, 2002:

Vray, 1995:

15 sulfonylureas G2 add on MET

| Trial | Treatments | Patients | Trials design and methods |
|---|---|---|---------------------------------|
| glibenclamide vs c (add on MET) | | | |
| Hermann , 1991 n=NA follow-up: 6 months | metformin + glibenclamide versus metformin | patients with non-insulin-dependent diabetes mellitus | Parallel groups |
| glyburide vs c (add on MET) | | | |
| DeFronzo , 1995 n=NA follow-up: 29 weeks | metformin and glyburide versus metformin | patients with non-insulin-dependent diabetes mellitus | double-blind USA |
| Erle , 1999 n=NA follow-up: | low-dose glyburide plus metformin versus high-dose glyburide alone | - | Cross over |
| glibenclamide vs control (add on MET) | | | |
| Marre (ass) , 2002 n=NA follow-up: 16 weeks | metformin-glibenclamide 500 mg/2.5 mg or metformin-glibenclamide 500 mg/5 mg, titrated with the intention to achieve fasting plasma glucose (FPG) <or = 7 mmol/l versus metformin 500 mg, | patients with Type 2 diabetes mellitus inadequately controlled by metformin monotherapy | Parallel groups double-blind |
| Tosi , 2003 n=NA follow-up: 6 months | metformin 400 to 2,400 mg/d + glibenclamide 2.5 to 15 mg/d versus metformin (500 to 3,000 mg/d), | - | Cross over double-blind |
| glipizide vs control (add on MET) | | | |
| Goldstein n=NA follow-up: | glipizide/metformin 5/500 mg tablets versus metformin 500-mg | patients with type 2 DM that is uncontrolled by at least half the maximum labeled daily dose of a sulfonylurea | Cross over open |
| glyburide vs control (add on MET) | | | |
| Blonde , 2002 n=NA follow-up: 16 weeks | glyburide/metformin 2.5 mg/500 mg (n = 160); or glyburide/metformin 5 mg/500 mg (n = 162) versus metformin 500 mg | patients with inadequate glycaemic control on at least half-maximal dose of sulphonylurea | Parallel groups double-blind |
| Garber , 2003 n=NA follow-up: | glyburide/metformin versus metformin | patients with type 2 diabetes who had inadequate glycemic control [glycosylated hemoglobin A(1C) (A1C), >7% and <12%) with diet and exercise alone | Parallel groups |

References

Hermann, 1991:

DeFronzo, 1995:

Erle, 1999:

Marre (ass), 2002:

Tosi, 2003:

Goldstein, :

Blonde, 2002:

Garber, 2003:

16 sulfonylureas G3 add on insulin

| Trial | Treatments | Patients | Trials design and methods |
|---|--|---|---------------------------|
| glimepiride vs placebo (add on insulin) | | | |
| Riddle , 1994 <i>unpublished</i> n=72/73 follow-up: | Glimepiride (16 mg/day) plus insulin versus insulin plus placebo | obese patients with type 2 diabetes insufficiently controlled by full dosages of sulphonylureas (glimepiride titrated up to 8mg twice daily and with laboratory-monitored FPG of 10 to 16 mmol/L (180 to 300 mg/dl)) | |

References

Riddle, 1994:

17 sulfonylureas G3 add on MET

| Trial | Treatments | Patients | Trials design and methods |
|--|---|--|---------------------------|
| glimepiride vs placebo (add on MET) | | | |
| LEAD-2 (Nauck) Sulf vs pbo , 2009 [NCT00318461] n=NA follow-up: 26 weeks | glimepiride (4 mg once daily). versus placebo | subjects previously treated with oral antidiabetes (OAD) therapy | double-blind |
| Charpentier , 2001 n=NA follow-up: | metformin and glimepiride versus metformin | Type 2 diabetic patients aged 35-70 years inadequately controlled by metformin monotherapy 2550 mg daily | double-blind France |

References

LEAD-2 (Nauck) Sulf vs pbo, 2009:

Charpentier, 2001:

18 sulfonylureas G3 monotherapy

| Trial | Treatments | Patients | Trials design and methods |
|---|--|---|--|
| glimepiride vs placebo | | | |
| Kaneko , 1993 n=62/31 follow-up: | glimepiride 0.25mg od, 0.5mg od versus placebo | - | |
| Luis Bautista , 2003 n=NA follow-up: 14 weeks | glimepiride with titration to 2 mg and 4 mg for FPG levels >120 mg/dL versus placebo | Mexican American Patients with type 2 diabetes mellitus | Parallel groups double-blind Mexique |
| Rosenstock , 1996 n=416 follow-up: 14 weeks | glimepiride 8 mg q.d., 4 mg b.i.d., 16 mg q.d., or 8 mg b.i.d versus placebo | previously treated NIDDM patients | Parallel groups double-blind |
| Schade , 1998 n=123/126 follow-up: | glimepiride at individually determined optimal dose (1-8 mg of glimepiride) for 10+12 weeks versus placebo | patients with type 2 diabetes mellitus for whom diet therapy is unsuccessful | Parallel groups double-blind |
| Study 201 (Goldberg) , 1996 n=304 follow-up: 14 weeks | glimepiride, 1, 4, or 8 mg once daily versus placebo | patients with NIDDM | Parallel groups double-blind |
| Study 202 n=122/125 follow-up: | glimepiride 1-8mg od versus placebo | - | |
| glimepiride vs glibenclamide | | | |
| Draeger , 1996 n=524/520 follow-up: | glimepiride 1 mg daily versus 2.5 mg glibenclamide | type 2 diabetic patients stabilised on glibenclamide | Parallel groups double-blind |
| Protocol 311 n=427/425 follow-up: | glimepiride 1-8mg od versus glibenclamide 1.75-14 mg/day (od or bid) | - | |
| glimepiride vs gliclazide | | | |
| Charpentier (301F) n=96/107 follow-up: | glimepiride 1-4mg od versus gliclazide 80-320 mg/day (od or bid) | - | |
| glimepiride vs gliclazide or glibenclamide | | | |

continued...

| Trial | Treatments | Patients | Trials design and methods |
|---|--|--|----------------------------------|
| Inukai , 2005 n=172 follow-up: 6 months | glimepiride versus gliclazide or glibenclamide | Japanese type 2 diabetic patients (HbA1C >or = 7.0%), maintained on a conventional SU | Parallel groups open Japan |
| glimepiride od vs glimepiride bid | | | |
| Sonnenberg , 1997 n=50/48 follow-up: | glimepirid e6mg od versus glimepiride 3mg bid | - | Cross over |
| glimepiride vs glipizide | | | |
| Clark (301) , 1997 n=444/208 follow-up: | glimepiride 1-16 mg/day (od or bid) versus glipizide 2.5-40 mg/day (od or bid) | - | |
| glimepiride vs glyburide | | | |
| Dills , 1996 n=289/288 follow-up: | glimepiride 1-16mg od versus non-micronized glyburide 1.25-20mg od | patients with non-insulin dependent diabetes | Parallel groups double-blind |

References

Kaneko, 1993:
Luis Bautista, 2003:
Rosenstock, 1996:
Schade, 1998:
Study 201 (Goldberg), 1996:
Study 202, :
Draeger, 1996:
Protocol 311, :
Charpentier (301F), :
Inukai, 2005:
Sonnenberg, 1997:
Clark (301), 1997:
Dills, 1996:

19 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.