

# Clinical trials of exenatide

TrialResults-center [www.trialresultscenter.org](http://www.trialresultscenter.org)

## 1 diabetes type 2

Trial	Treatments	Patients	Trials design and methods
<b>exenatide vs glargine</b>			
<a href="#">NCT00360334</a> [NCT00360334] n=118/116 follow-up:	-	-	
<b>exenatide 20g vs glibenclamide</b>			
<a href="#">Derosa , 2010</a> n=63/65 follow-up:	exenatide 10 microg twice a day versus glibenclamide 5 mg three times a day	patients with uncontrolled type 2 diabetes mellitus receiving therapy with metformin	
<b>exenatide vs placebo</b>			
<a href="#">EXSCEL , 2017</a> [NCT01144338] n=7356/7396 follow-up: 3.2 years median	subcutaneous injections of extended-release exenatide at a dose of 2 mg once weakly versus placebo	patients with type 2 diabetes, with or without previous cardiovascular disease	Parallel groups double-blind
<a href="#">Liutkus , 2010</a> n=111/54 follow-up:	exenatide twice-daily versus placebo	subjects suboptimally controlled with TZDs with or without metformin	
<b>exenatide 10g/d vs placebo</b>			
<a href="#">H8O-MC-GWBJ, 9698, 10g/d , 2008</a> n=NA follow-up: 24 weeks	exenatide twice daily 5 et 10 g for 24 weeks versus placebo	Drug-Naive Patients with Type 2 Diabetes and inadequate glycemic control through diet and exercise	Parallel groups double-blind 4 countries
<b>exenatide 20g/d vs placebo</b>			
<a href="#">Apovian , 2010</a> n=96/98 follow-up: 24 weeks	10 microg exenatide twice daily injection + lifestyle modification program versus placebo + lifestyle modification program	overweight or obese participants with type 2 diabetes treated with metformin and/or sulfonyleurea	Parallel groups double-blind

continued...

<b>Trial</b>	<b>Treatments</b>	<b>Patients</b>	<b>Trials design and methods</b>
<b>H8O-MC-GWBJ, 9698, 20g/d, 2008</b> <i>unpublished</i> n=78/78 follow-up: 24 weeks	exenatide twice daily 10 g for 24 weeks versus placebo	Drug-Naive Patients with Type 2 Diabetes and inadequate glycemic control through diet and exercise	Parallel groups double-blind 4 countries
<b>exenatide other doses vs placebo</b>			
<b>Moretto (DOUBLONS avec drucker), 2008</b> [NCT00381342] n=155/78 follow-up: 24 weeks	Exenatide 1020 g daily versus Placebo	-	Parallel groups double blind United States, Puerto Rico, Romania, Russia, India
<b>NCT00085969</b> <i>unpublished</i> [NCT00085969] n=99 follow-up: 28 days	exenatide for 28 days versus placebo	subjects with type 2 diabetes mellitus	double-blind USA
<b>Poon, 2005</b> [NCT00044694] n=NA follow-up: 28 days	exenatide at 2.5, 5.0, 7.5, or 10.0 microg administered b.i.d. for 28 days versus placebo	patients with type 2 diabetes	Parallel groups double-blind
<b>exenatide 20g/d vs placebo (add on insulin)</b>			
<b>Buse, 2011</b> [NCT00765817] n=138/123 follow-up: 30 weeks	twice-daily 10 g exenatide injections versus placebo (on top insulin glargine)	Adults with type 2 diabetes and an HbA1c level of 7.1% to 10.5% who were receiving insulin glargine alone or in combination with metformin or pioglitazone (or both agents)	Parallel groups double-blind Greece, Israel, Mexico, United Kingdom, USA
<b>exenatide other doses vs placebo (add on MER+/-SU)</b>			
<b>Fineman, 2003</b> n=109 follow-up: 28 days	exenatide 3 regimen (0.08 micro g/kg) for 28 days versus placebo	patients with tyep 2 diabetes treated with diet and a sulfonylurea and/or metformin	Parallel groups double-blind USA
<b>exenatide 10g/d vs placebo (add on MET)</b>			
<b>DeFronzo 10g/d, 2005</b> [NCT00039013] n=110/113 follow-up: 30 weeks	Exenatide 1020 g daily versus Placebo on-top of Metformin	patients with type 2 diabetes failing to achieve glycemic control with maximally effective metformin doses	Parallel groups double blind USA
<b>exenatide 20g/d vs placebo (add on MET)</b>			
<b>DeFronzo 20g/d, 2005</b> [NCT00039013] n=NA follow-up: 30 weeks	Exenatide 1020 g daily versus Placebo on-top of Metformin	patients with type 2 diabetes failing to achieve glycemic control with maximally effective metformin doses	Parallel groups double blind USA

continued...

Trial	Treatments	Patients	Trials design and methods
<b>exenatide weekly vs placebo (add on MET)</b>			
Kim , 2007 [NCT00103935] n=30/15 follow-up: 15 weeks	exenatide LAR 0.8 or 2 g daily versus Placebo on-top of metformin	subjects with type 2 diabetes suboptimally controlled with metformin and/or diet and exercise	Parallel groups double blind
<b>exenatide 20g/d vs placebo (add on MET+/-SU)</b>			
Gao , 2009 [NCT00324363] n=234/232 follow-up: 16 weeks	exenatide 5 mg then 10 mg twice-daily for 4 and 12 weeks versus placebo	Asian descent with type 2 diabetes and inadequate glycemic control taking metformin alone or Met and sulfonylureas	Parallel groups double-blind 4 countries
<b>exenatide 10g/d vs placebo (add on SU)</b>			
Buse 10g/d , 2004 [NCT00039026] n=125/123 follow-up: 30 weeks	Exenatide 5g twice daily versus Placebo on-top of SU	patients with type 2 diabetes failing maximally effective doses of a sulfonylurea as monotherapy	Parallel groups double blind (not adequate) US
<b>exenatide 20g/d vs placebo (add on SU)</b>			
Buse 20g/d , 2004 n=129/123 follow-up: 30 weeks	Exenatide 10g twice daily versus Placebo on-top of SU	patients with type 2 diabetes failing maximally effective doses of a sulfonylurea as monotherapy	double blind (not adequate) US
<b>exenatide 10g/d vs placebo (add on SU+/-MET/TZD)</b>			
Kadowaki (trial 8683) , 2009 n=111/40 follow-up: 12 weeks	Exenatide 10g daily for 12 weeks versus Placebo on-top of sulphonylureas +/-metformin/thiazolidinediones	Japanese patients with type 2 diabetes suboptimally controlled despite therapeutic dose of sulfonylurea, SU+biguanide or SU+thiazolidinedione	Parallel groups open Japan
<b>exenatide 10g/d vs placebo (add on SU+MET)</b>			
Kendall 10g/d , 2005 [NCT00035984] n=245/247 follow-up: 30 weeks	Exenatide 5 g bid versus Placebo on-top of sulphonylureas+metformin	patients with type 2 diabetes unable to achieve glycemic control with metformin-sulfonylurea combination therapy	Parallel groups double blind USA
<b>exenatide 20g/d vs placebo (add on SU+MET)</b>			
Kendall 20g/d , 2005 [NCT00035984] n=241/247 follow-up: 30 weeks	Exenatide 10 g bid versus Placebo on-top of sulphonylureas+metformin	patients with type 2 diabetes unable to achieve glycemic control with metformin-sulfonylurea combination therapy	Parallel groups double blind USA
<b>exenatide 20g/d vs placebo (add on TZD+/-MET)</b>			

continued...

<b>Trial</b>	<b>Treatments</b>	<b>Patients</b>	<b>Trials design and methods</b>
Zinman 20g/j , 2007 [NCT00099320] n=121/112 follow-up: 16 weeks	Exenatide 20 g daily versus Placebo on-top of thiazolidinediones+/-metformin	patients with type 2 diabetes that was suboptimally controlled with TZD treatment (with or without metformin)	double blind Canada, Spain, and the United States
Zinman 20g/j A MODIFIER , 2007 n=121/112 follow-up: 16 weeks	exenatide Subcutaneous abdominal injections of 10 microg twice daily versus placebo	patients with type 2 diabetes that was suboptimally controlled with TZD treatment (with or without metformin)	Parallel groups double-blind Canada, Spain, and the United States
<b>exenatide 10g/d vs placebo add on MET+/-TZD</b>			
Gill , 2010 n=28/26 follow-up: 12 weeks	exenatide (5 microg for 4 weeks followed by 10 microg) for 12 weeks versus placebo	subjects with type 2 diabetes mellitus on metformin and/or a thiazolidinedione	Parallel groups double-blind
<b>exenatide once monthly vs weekly exenatide</b>			
phase 2 exenatide once monthly unpublished n=121 follow-up: 20 weeks	exenatide once monthly at a low, medium or high dose, each administered once every four weeks, for a total of 20 weeks versus exenatide 2mg once weekly	adults with type 2 diabetes who were not achieving adequate glucose control using diet and exercise alone or with a stable regimen of metformin, pioglitazone, or both	Parallel groups open
<b>exenatide 20g/d vs BIAsp 30 daily</b>			
Bergenstal (once daily) , 2009 n=NA follow-up: 24 weeks	exenatide(5 microg BID for 4 weeks and 10 microg BID thereafter) versus biphasic insulin aspart 70/30 (BIAsp 30) 30 QD (12 U before supper)	subjects with type 2 diabetes mellitus insulin naive, not achieving glycemic targets with metformin and sulfonyleurea	Parallel groups open
<b>exenatide 20g/d vs BIAsp 30 twice daily</b>			
Bergenstal (twice daily) , 2009 n=NA follow-up:	exenatide (5 microg BID for 4 weeks and 10 microg BID thereafter) versus biphasic insulin aspart 70/30 (BIAsp 30) 30 BID (12 U divided equally between pre-breakfast and pre-supper)	subjects with type 2 diabetes mellitus insulin naive, not achieving glycemic targets with metformin and sulfonyleurea	Parallel groups open
<b>exenatide before lunch and dinner vs exenatide before breakfast and dinner</b>			
Exenatide Trial 10749 n=187/190 follow-up:	exenatide (10 g twice daily) administered subcutaneously before lunch and dinner versus exenatide (10 g twice daily) administered subcutaneously before breakfast and dinner	patients with type 2 Diabetes using oral antidiabetic therapy	Parallel groups open 2 countries

continued...

Trial	Treatments	Patients	Trials design and methods
<b>exenatide other doses vs glargine</b>			
HEELA (Davies) , 2009 n=NA follow-up:	exenatide 5C10 g bid versus insulin glargine o.d. (titrated to target fasting plasma glucose 5.6 mmol/l)	Patients (BMI>27 kg/m2) with elevated cardiovascular risk and type 2 diabetes inadequately controlled on two or three oral antidiabetes drugs	
<b>exenatide 20g/d vs insulin (add on SU+MET)</b>			
Heine , 2005 n=282/267 follow-up: 26 weeks	Exenatide 20 g daily versus Insulin on-top of sulphonylureas+metformin	-	open
<b>exenatide 20g/d vs insulin (add on SU/MET)</b>			
Barnett , 2007 [NCT00099619] n=136/127 follow-up: 16 weeks	Exenatide 20 g daily versus Insulin	patients with type 2 diabetes	Cross over open Australia, Greece,Hungary, Italy, Mexico, and Poland
Davis , 2007 [NCT00099333] n=33/16 follow-up: 16 weeks	Exenatide 20 g daily versus Insulin on-top of sulphonylureas/metformin	patients with type 2 diabetes using insulin in combination with oral antidiabetes agents	Parallel groups open USA
<b>exenatide 20g/d vs insulin BIAsp twice daily add on SU+MET</b>			
Nauck , 2007 [NCT00082407] n=253/248 follow-up: 52 weeks	Exenatide 20 g daily versus Insulin on-top of sulphonylureas+metformin	patients with type 2 diabetes who were suboptimally controlled with sulfonylurea and metformin	Parallel groups open 13 countries
<b>exenatide weekly vs insulin glargine</b>			
DURATION-3 (Diamant) , 2010 [NCT00641056] n=233/223 follow-up: 26 weeks	exenatide (2 mg, once-a-week injection) versus insulin glargine once-daily injection	adults with type 2 diabetes who had suboptimum glycaemic control despite use of maximum tolerated doses of blood-glucose-lowering drugs for 3 months or longer	Parallel groups open (blind analysis) USA, Puerto Rico, Europe, Russia, Australia, Korea, Taiwan, Mexico
<b>exenatide 20g/d vs insulin glargine (add on MET)</b>			
Bunck , 2009 [NCT00097500] n=36/33 follow-up: 52 weeks	exenatide 10g bid versus insulin glargine	metformin-treated patients with type 2 diabetes	Parallel groups
<b>exenatide other doses vs insulin glargine (add on MET/SU)</b>			

continued...

Trial	Treatments	Patients	Trials design and methods
Trial 8078 n=NA follow-up:	exenatide versus Insulin Glargine	Patients with Type 2 Diabetes Using Metformin or Sulfonylurea for Whom Insulin Is the Next Appropriate Therapy	

More details and results :

- insulin secretagogues peptides (incretins) for diabetes type 2 in all type of patients at <http://www.trialresultscenter.org/go-Q381>
- antidiabetic drugs for diabetes type 2 in patients inadequately controlled on metformin at <http://www.trialresultscenter.org/go-Q509>
- antidiabetic drugs for diabetes type 2 in Patients inadequately controlled on MET+SU therapy at <http://www.trialresultscenter.org/go-Q510>
- antidiabetic drugs for diabetes type 2 in patients with insufficient glycaemic control with bitherapy at <http://www.trialresultscenter.org/go-Q511>
- antidiabetic drugs for diabetes type 2 in patients inadequately controlled on monotherapy at <http://www.trialresultscenter.org/go-Q512>
- antidiabetic drugs for diabetes type 2 in patients inadequately controlled with insulin at <http://www.trialresultscenter.org/go-Q513>
- glucose lowering for cardiovascular prevention for diabetes type 2 in all type of patients at <http://www.trialresultscenter.org/go-Q576>

## References

**NCT00360334, :**

**Derosa, 2010:**

Derosa G, Maffioli P, Salvadeo SA, Ferrari I, Ragonesi PD, Querci F, Franzetti IG, Gadaleta G, Ciccarelli L, Piccinni MN, D'Angelo A, Cicero AF Exenatide versus glibenclamide in patients with diabetes. *Diabetes Technol Ther* 2010;12:233-40 [20151774] [10.1089/dia.2009.0141](https://doi.org/10.1089/dia.2009.0141)

**EXSCEL, 2017:**

Holman RR, Bethel MA, Mentz RJ, Thompson VP, Lokhnygina Y, Buse JB, Chan JC, Choi J, Gustavson SM, Iqbal N, Maggioni AP, Marso SP, hman P, Pagidipati NJ, Poulter N, Ramachandran A, Zinman B, Hernandez AF Effects of Once-Weekly Exenatide on Cardiovascular Outcomes in Type 2 Diabetes. *N Engl J Med* 2017;: [28910237]

**Liutkus, 2010:**

Liutkus J, Rosas Guzman J, Norwood P, Pop L, Northrup J, Cao D, Trautmann M A placebo-controlled trial of exenatide twice-daily added to thiazolidinediones alone or in combination with metformin. *Diabetes Obes Metab* 2010;12:1058-65 [20977576] [10.1111/j.1463-1326.2010.01251.x](https://doi.org/10.1111/j.1463-1326.2010.01251.x)

**H8O-MC-GWBJ, 9698, 10g/d, 2008:**

**Apovian, 2010:**

Apovian CM, Bergenstal RM, Cuddihy RM, Qu Y, Lenox S, Lewis MS, Glass LC Effects of exenatide combined with lifestyle modification in patients with type 2 diabetes. *Am J Med* 2010;123:468.e9-17 [20399326] [10.1016/j.amjmed.2009.11.019](https://doi.org/10.1016/j.amjmed.2009.11.019)

**H8O-MC-GWBJ, 9698, 20g/d, 2008:**

unpublished

**Moretto (DOUBLONS avec drucker), 2008:**

Moretto TJ, Milton DR, Ridge TD, Macconell LA, Okerson T, Wolka AM, Brodows RG Efficacy and tolerability of exenatide monotherapy over 24 weeks in antidiabetic drug-naïve patients with type 2 diabetes: a randomized, double-blind, placebo-controlled, parallel-group study. *Clin Ther* 2008;30:1448-60 [18803987] [10.1016/j.clinthera.2008.08.006](https://doi.org/10.1016/j.clinthera.2008.08.006)

**NCT00085969, :**

unpublished

**Poon, 2005:**

Poon T, Nelson P, Shen L, Mihm M, Taylor K, Fineman M, Kim D Exenatide improves glycemic control and reduces body weight in subjects with type 2 diabetes: a dose-ranging study. *Diabetes Technol Ther* 2005;7:467-77 [15929678] [10.1089/dia.2005.7.467](https://doi.org/10.1089/dia.2005.7.467)

Nelson P, Poon T, Guan X, Schnabel C, Wintle M, Fineman M The incretin mimetic exenatide as a monotherapy in patients with type 2 diabetes. *Diabetes Technol Ther* 2007;9:317-26 [17705687] [10.1089/dia.2006.0024](https://doi.org/10.1089/dia.2006.0024)

**Buse, 2011:**

Buse JB, Bergenstal RM, Glass LC, Heilmann CR, Lewis MS, Kwan AY, Hoogwerf BJ, Rosenstock J Use of twice-daily exenatide in Basal insulin-treated patients with type 2 diabetes: a randomized, controlled trial. *Ann Intern Med* 2011 Jan 18;154:103-12 [21138825] [10.1059/0003-4819-154-2-201101180-00300](https://doi.org/10.1059/0003-4819-154-2-201101180-00300)

**Fineman, 2003:**

Fineman MS, Bicsak TA, Shen LZ, Taylor K, Gaines E, Varns A, Kim D, Baron AD Effect on glycemic control of exenatide (synthetic exendin-4) additive to existing metformin and/or sulfonylurea treatment in patients with type 2 diabetes. *Diabetes Care* 2003;26:2370-7 [12882864]

**DeFronzo 10g/d, 2005:**

DeFronzo RA, Ratner RE, Han J, Kim DD, Fineman MS, Baron AD Effects of exenatide (exendin-4) on glycemic control and weight over 30 weeks in metformin-treated patients with type 2 diabetes. *Diabetes Care* 2005;28:1092-100 [15855572]

Blonde L, Klein EJ, Han J, Zhang B, Mac SM, Poon TH, Taylor KL, Trautmann ME, Kim DD, Kendall DM Interim analysis of the effects of exenatide treatment on A1C, weight and cardiovascular risk factors over 82 weeks in 314 overweight patients with type 2 diabetes. *Diabetes Obes Metab* 2006;8:436-47 [16776751] [10.1111/j.1463-1326.2006.00602.x](https://doi.org/10.1111/j.1463-1326.2006.00602.x)

Ratner RE, Maggs D, Nielsen LL, Stonehouse AH, Poon T, Zhang B, Bicsak TA, Brodows RG, Kim DD Long-term effects of exenatide therapy over 82 weeks on glycaemic control and weight in over-weight metformin-treated patients with type 2 diabetes mellitus. *Diabetes Obes Metab* 2006;8:419-28 [16776749] [10.1111/j.1463-1326.2006.00589.x](https://doi.org/10.1111/j.1463-1326.2006.00589.x)

**DeFronzo 20g/d, 2005:**

DeFronzo RA, Ratner RE, Han J, Kim DD, Fineman MS, Baron AD Effects of exenatide (exendin-4) on glycemic control and weight over 30 weeks in metformin-treated patients with type 2 diabetes. *Diabetes Care* 2005;28:1092-100 [15855572]

**Kim, 2007:**

Kim D, MacConell L, Zhuang D, Kothare PA, Trautmann M, Fineman M, Taylor K Effects of once-weekly dosing of a long-acting release formulation of exenatide on glucose control and body weight in subjects with type 2 diabetes. *Diabetes Care* 2007;30:1487-93 [[17353504](#)] [10.2337/dc06-2375](#)

**Gao, 2009:**

Gao Y, Yoon KH, Chuang LM, Mohan V, Ning G, Shah S, Jang HC, Wu TJ, Johns D, Northrup J, Brodows R Efficacy and safety of exenatide in patients of Asian descent with type 2 diabetes inadequately controlled with metformin or metformin and a sulphonylurea. *Diabetes Res Clin Pract* 2009;83:69-76 [[19019476](#)] [10.1016/j.diabres.2008.09.037](#)

**Buse 10g/d, 2004:**

Buse JB, Henry RR, Han J, Kim DD, Fineman MS, Baron AD Effects of exenatide (exendin-4) on glycemic control over 30 weeks in sulphonylurea-treated patients with type 2 diabetes. *Diabetes Care* 2004;27:2628-35 [[15504997](#)]

Riddle MC, Henry RR, Poon TH, Zhang B, Mac SM, Holcombe JH, Kim DD, Maggs DG Exenatide elicits sustained glycaemic control and progressive reduction of body weight in patients with type 2 diabetes inadequately controlled by sulphonylureas with or without metformin. *Diabetes Metab Res Rev* 2006;22:483-91 [[16634116](#)] [10.1002/dmrr.646](#)

Blonde L, Klein EJ, Han J, Zhang B, Mac SM, Poon TH, Taylor KL, Trautmann ME, Kim DD, Kendall DM Interim analysis of the effects of exenatide treatment on A1C, weight and cardiovascular risk factors over 82 weeks in 314 overweight patients with type 2 diabetes. *Diabetes Obes Metab* 2006;8:436-47 [[16776751](#)] [10.1111/j.1463-1326.2006.00602.x](#)

**Buse 20g/d, 2004:**

Buse JB, Henry RR, Han J, Kim DD, Fineman MS, Baron AD Effects of exenatide (exendin-4) on glycemic control over 30 weeks in sulphonylurea-treated patients with type 2 diabetes. *Diabetes Care* 2004;27:2628-35 [[15504997](#)]

**Kadowaki (trial 8683), 2009:**

Kadowaki T, Namba M, Yamamura A, Sowa H, Wolka AM, Brodows RG Exenatide exhibits dose-dependent effects on glycemic control over 12 weeks in Japanese patients with suboptimally controlled type 2 diabetes. *Endocr J* 2009;56:415-24 [[19194050](#)]

**Kendall 10g/d, 2005:**

Kendall DM, Riddle MC, Rosenstock J, Zhuang D, Kim DD, Fineman MS, Baron AD Effects of exenatide (exendin-4) on glycemic control over 30 weeks in patients with type 2 diabetes treated with metformin and a sulphonylurea. *Diabetes Care* 2005;28:1083-91 [[15855571](#)]

**Kendall 20g/d, 2005:**

Kendall DM, Riddle MC, Rosenstock J, Zhuang D, Kim DD, Fineman MS, Baron AD Effects of exenatide (exendin-4) on glycemic control over 30 weeks in patients with type 2 diabetes treated with metformin and a sulphonylurea. *Diabetes Care* 2005;28:1083-91 [[15855571](#)]

**Zinman 20g/j, 2007:**

Zinman B, Hoogwerf BJ, Durn Garca S, Milton DR, Giaconia JM, Kim DD, Trautmann ME, Brodows RG The effect of adding exenatide to a thiazolidinedione in suboptimally controlled type 2 diabetes: a randomized trial. *Ann Intern Med* 2007;146:477-85 [[17404349](#)]

**Zinman 20g/j A MODIFIER, 2007:**

Zinman B, Hoogwerf BJ, Durn Garca S, Milton DR, Giaconia JM, Kim DD, Trautmann ME, Brodows RG The effect of adding exenatide to a thiazolidinedione in suboptimally controlled type 2 diabetes: a randomized trial. *Ann Intern Med* 2007;146:477-85 [[17404349](#)]

**Gill, 2010:**

Gill A, Hoogwerf BJ, Burger J, Bruce S, Macconell L, Yan P, Braun D, Giaconia J, Malone J Effect of exenatide on heart rate and blood pressure in subjects with type 2 diabetes mellitus: a double-blind, placebo-controlled, randomized pilot study. *Cardiovasc Diabetol* 2010;9:6 [[20109208](#)] [10.1186/1475-2840-9-6](#)



**phase 2 exenatide once monthly, :**

unpublished

**Bergental (once daily), 2009:**

Bergental R, Lewin A, Bailey T, Chang D, Gylvin T, Roberts V Efficacy and safety of biphasic insulin aspart 70/30 versus exenatide in subjects with type 2 diabetes failing to achieve glycemic control with metformin and a sulfonylurea. *Curr Med Res Opin* 2009;25:65-75 [[19210140](#)] [10.1185/03007990802597951](#)

**Bergental (twice daily), 2009:**

Bergental R, Lewin A, Bailey T, Chang D, Gylvin T, Roberts V Efficacy and safety of biphasic insulin aspart 70/30 versus exenatide in subjects with type 2 diabetes failing to achieve glycemic control with metformin and a sulfonylurea. *Curr Med Res Opin* 2009;25:65-75 [[19210140](#)] [10.1185/03007990802597951](#)

**Exenatide Trial 10749, :**

**HEELA (Davies), 2009:**

Davies MJ, Donnelly R, Barnett AH, Jones S, Nicolay C, Kilcoyne A Exenatide compared with long-acting insulin to achieve glycaemic control with minimal weight gain in patients with type 2 diabetes: results of the Helping Evaluate Exenatide in patients with diabetes compared with Long-Acting insulin (HEELA) study. *Diabetes Obes Metab* 2009 Dec;11:1153-62 [[19930005](#)]

**Heine, 2005:**

Heine RJ, Van Gaal LF, Johns D, Mihm MJ, Widel MH, Brodows RG Exenatide versus insulin glargine in patients with suboptimally controlled type 2 diabetes: a randomized trial. *Ann Intern Med* 2005;143:559-69 [[16230722](#)]

**Barnett, 2007:**

Barnett AH, Burger J, Johns D, Brodows R, Kendall DM, Roberts A, Trautmann ME Tolerability and efficacy of exenatide and titrated insulin glargine in adult patients with type 2 diabetes previously uncontrolled with metformin or a sulfonylurea: a multinational, randomized, open-label, two-period, crossover noninferiority trial. *Clin Ther* 2007;29:2333-48 [[18158075](#)] [10.1016/j.clinthera.2007.11.006](#)

**Davis, 2007:**

Davis SN, Johns D, Maggs D, Xu H, Northrup JH, Brodows RG Exploring the substitution of exenatide for insulin in patients with type 2 diabetes treated with insulin in combination with oral antidiabetes agents. *Diabetes Care* 2007;30:2767-72 [[17595353](#)] [10.2337/dc06-2532](#)

**Nauck, 2007:**

Nauck MA, Duran S, Kim D, Johns D, Northrup J, Festa A, Brodows R, Trautmann M A comparison of twice-daily exenatide and biphasic insulin aspart in patients with type 2 diabetes who were suboptimally controlled with sulfonylurea and metformin: a non-inferiority study. *Diabetologia* 2007;50:259-67 [[17160407](#)] [10.1007/s00125-006-0510-2](#)

**DURATION-3 (Diamant), 2010:**

Diamant M, Van Gaal L, Stranks S, Northrup J, Cao D, Taylor K, Trautmann M Once weekly exenatide compared with insulin glargine titrated to target in patients with type 2 diabetes (DURATION-3): an open-label randomised trial. *Lancet* 2010 Jun 26;375:2234-2243 [[20609969](#)] [10.1016/S0140-6736\(10\)60406-0](#)

**Bunck, 2009:**

Bunck MC, Diamant M, Cornr A, Eliasson B, Malloy JL, Shaginian RM, Deng W, Kendall DM, Taskinen MR, Smith U, Yki-Jrvinen H, Heine RJ One-year treatment with exenatide improves beta-cell function, compared with insulin glargine, in metformin-treated type 2 diabetic patients: a randomized, controlled trial. *Diabetes Care* 2009;32:762-8 [[19196887](#)] [10.2337/dc08-1797](#)

Bunck MC, Cornr A, Eliasson B, Heine RJ, Shaginian RM, Taskinen MR, Smith U, Yki-Jrvinen H, Diamant M Effects of exenatide on measures of  $\beta$ -cell function after 3 years in metformin-treated patients with type 2 diabetes. *Diabetes Care* 2011;34:2041-7 [[21868779](#)] [10.2337/dc11-0291](#)

Bunck MC, Cornr A, Eliasson B, Heine RJ, Shaginian RM, Wu Y, Yan P, Smith U, Yki-Jrvinen H, Diamant M, Taskinen MR One-year treatment with exenatide vs. insulin glargine: effects on postprandial glycemia, lipid profiles, and oxidative stress. *Atherosclerosis* 2010;212:223-9 [20494360] [10.1016/j.atherosclerosis.2010.04.024](https://doi.org/10.1016/j.atherosclerosis.2010.04.024)  
**Trial 8078, :**

Entry terms: exenatide, bydureon, exendin-4, Ex4 peptide, exendin 4, AC 2993 LAR, Byetta, AC 2993,