



Clinical trial results:

Dipeptidyl peptidase-4 Inhibition in Psoriasis patients with diabetes (DIP): A Randomized Clinical Trial.

Summary

EudraCT number	2012-005505-51
Trial protocol	IE
Global end of trial date	15 January 2016

Results information

Result version number	v1 (current)
This version publication date	01 June 2019
First version publication date	01 June 2019

Trial information

Trial identification

Sponsor protocol code	DPIDM-2012-01
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Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01991197
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	University College Dublin
Sponsor organisation address	Catherine McAuley Centre, 21 Nelson Street, Dublin, Ireland, Dublin 7
Public contact	Rabia Hussain, University College Dublin, 353 17164593, rabia.hussain@ucd.ie
Scientific contact	Rabia Hussain, University College Dublin, 353 17164593, rabia.hussain@ucd.ie

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	29 March 2018
Is this the analysis of the primary completion data?	No
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Global end of trial reached?	Yes
Global end of trial date	15 January 2016
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The primary objective of the research project is to determine the change in the psoriasis area and severity index (Δ PASI) during 16 weeks of treatment with a dipeptidyl peptidase-4 inhibitor (Januvia®, 100mg daily) in psoriasis patients with type 2 diabetes. This will be compared to the Δ PASI in psoriasis patients with type 2 diabetes during 16 weeks of treatment with a comparator (Diamicron®, 80mg to 320mg daily).

Protection of trial subjects:

If a participant's plasma glycated haemoglobin level (HbA1c) was above 64mmol/mol eight weeks after commencing one of the study IMPs insulin therapy was used to improve glycaemic control. The Summary of Product Characteristics (SPC) states that the dose of Januvia® is 100mg once daily (using tablets for oral ingestion). For research participants with moderate kidney disease ($\text{CrCl} < 50 \text{ ml/min}$ or $\text{eGFR} < 50 \text{ ml/min/1.73m}^2$), the Summary of Product Characteristics (SPC) states that the dose of Januvia® is 50mg once daily (using tablets for oral ingestion). In keeping with this all participants with an $\text{eGFR} < 50 \text{ ml/min/1.73m}^2$ who were due to receive Januvia® would receive 50mg once daily. The dose of Diamicron® to be used in the study (80mg per day initially and increasing to 320mg per day in successive steps) is consistent with the doses stated in the SPC for the marketed product. In the case of the development of a condition that was expected to continue indefinitely, the investigator referred, in a timely fashion, the research participant for appropriate treatment. In this case, the investigator ensured that an initial diagnosis had been made and that appropriate treatment of the condition had commenced.

The sponsor monitored the progress of all clinical investigations being conducted.

In case of any damage or injury occurring to a patient in association with the investigational medicinal product or their participation in the study, the sponsor had insurance which covered the liability of the sponsor, the investigator and other persons involved in the study in compliance with the laws of Ireland.

All investigators were qualified and practicing physicians and were thus insured by the clinical indemnity scheme.

Background therapy:

Topical or systemic treatment for psoriasis

Evidence for comparator:

Sitagliptin, a DPP-4 inhibitor, is an oral glucose-lowering agent approved for the treatment of type 2 diabetes mellitus. DPP-4 inhibitors prevent the degradation of insulin secretagogues such as glucagon-like peptide-1 thereby ameliorating hyperglycaemia without causing hypoglycaemia. DPP-4 inhibition may have systemic anti-inflammatory effects and a reduction in serum C-reactive protein. This randomised controlled trial assessed the effects of the DPP-4 inhibitor sitagliptin and a comparator diabetes agent, the sulphonylurea, gliclazide, on psoriasis severity psychological morbidity, cardiovascular disease risk factor profiles and immune parameters.

Actual start date of recruitment	06 January 2014
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Ireland: 20
Worldwide total number of subjects	20
EEA total number of subjects	20

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	17
From 65 to 84 years	3
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Potentially eligible research participants were identified through a patient databases and review of healthcare records in St Vincent's University Hospital and Adelaide and Meath Hospital. Participants were recruited by the investigators/qualified designee during clinic or by invitation letter. Consenting was done by PILs and consent forms.

Pre-assignment

Screening details:

Screening performed during screening visit. 89 candidates were assessed for eligibility of whom 68 did not meet inclusion criteria and 1 declined to participate.

Period 1

Period 1 title	Baseline Period
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator, Assessor

Blinding implementation details:

Both the research participants and the investigator were unaware of the investigational medicinal product that the research participant was allocated initially to receive.

Arms

Are arms mutually exclusive?	Yes
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Arm title	Sitagliptin
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Arm description:

Participants received 100 mg daily (2 x 50 mg tablets) for 16 weeks (until visit 5) and one gliclazide matched placebo capsule once daily for 4 weeks (until visit 3). After four weeks participants received one gliclazide matched placebo capsule twice daily for 4 weeks (until visit 4). After a further four weeks participants received two gliclazide matched placebo capsules twice daily for 8 weeks (until visit 5).

Arm type	Experimental
Investigational medicinal product name	Sitagliptin
Investigational medicinal product code	
Other name	Januvia
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

100 mg daily (2 x 50 mg tablets)

Arm title	Gliclazide
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Arm description:

Participants received two sitagliptin matched placebo tablets once daily for 16 weeks (until visit 5) and one capsule containing a gliclazide 80mg tablet daily for 4 weeks (until visit 3). After four weeks participants received one gliclazide 80mg capsule twice daily for 4 weeks (until visit 4). After a further four weeks research participants received two gliclazide 80mg capsules twice daily for 8 weeks (until visit 5).

Arm type	Active comparator
Investigational medicinal product name	Gliclazide
Investigational medicinal product code	
Other name	Diamicron
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

One capsule containing a gliclazide 80mg tablet daily for 4 weeks (until visit 3) then 2 x 80 mg tablet

daily for another 4 weeks (until visit 4) then 2 x 80 mg tablet 2 x daily for 8 weeks (until visit 5)

Number of subjects in period 1	Sitagliptin	Gliclazide
Started	9	11
Completed	9	11

Period 2

Period 2 title	Closed-label stage
Is this the baseline period?	No
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Investigator, Assessor, Subject

Blinding implementation details:

Both the research participants and the investigator were unaware of the investigational medicinal product that the research participant was allocated initially to receive.

Arms

Are arms mutually exclusive?	Yes
Arm title	Sitagliptin

Arm description:

Participants received 100 mg daily (2 x 50 mg tablets) for 16 weeks (until visit 5) and one gliclazide matched placebo capsule once daily for 4 weeks (until visit 3). After four weeks participants received one gliclazide matched placebo capsule twice daily for 4 weeks (until visit 4). After a further four weeks participants received two gliclazide matched placebo capsules twice daily for 8 weeks (until visit 5).

Arm type	Experimental
Investigational medicinal product name	Sitagliptin
Investigational medicinal product code	
Other name	Januvia
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

100 mg daily (2 x 50 mg tablets)

Arm title	Gliclazide
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Arm description:

Participants received two sitagliptin matched placebo tablets once daily for 16 weeks (until visit 5) and one capsule containing a gliclazide 80mg tablet daily for 4 weeks (until visit 3). After four weeks participants received one gliclazide 80mg capsule twice daily for 4 weeks (until visit 4). After a further four weeks research participants received two gliclazide 80mg capsules twice daily for 8 weeks (until

visit 5).

Arm type	Active comparator
Investigational medicinal product name	Gliclazide
Investigational medicinal product code	
Other name	Diamicron
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

One capsule containing a gliclazide 80mg tablet daily for 4 weeks (until visit 3) then 2 x 80 mg tablet daily for another 4 weeks (until visit 4) then 2 x 80 mg tablet 2 x daily for 8 weeks (until visit 5)

Number of subjects in period 2	Sitagliptin	Gliclazide
Started	9	11
Completed	7	9
Not completed	2	2
Consent withdrawn by subject	2	-
Adverse event, non-fatal	-	2

Period 3

Period 3 title	Open-label stage
Is this the baseline period?	No
Allocation method	Not applicable
Blinding used	Not blinded

Arms

Are arms mutually exclusive?	Yes
Arm title	Sitagliptin for whole trial

Arm description:

After sixteen weeks treatment all remaining participants in both arms progressed to the open-label phase of the trial, and received sitagliptin 100mg daily for sixteen weeks.

Arm type	Experimental
Investigational medicinal product name	Sitagliptin
Investigational medicinal product code	
Other name	Januvia
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

100 mg daily (2 x 50 mg tablets)

Arm title	Sitagliptin after 16 weeks gliclazide
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Arm description:

After sixteen weeks treatment all remaining participants in both arms progressed to the open-label phase of the trial, and received sitagliptin 100mg daily for sixteen weeks.

Arm type	Active comparator
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Investigational medicinal product name	Sitagliptin
Investigational medicinal product code	
Other name	Januvia
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

100 mg daily (2 x 50 mg tablets)

Number of subjects in period 3	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide
Started	7	9
Completed	6	8
Not completed	1	1
Lost to follow-up	1	1

Baseline characteristics

Reporting groups

Reporting group title	Sitagliptin
Reporting group description:	
Participants received 100 mg daily (2 x 50 mg tablets) for 16 weeks (until visit 5) and one gliclazide matched placebo capsule once daily for 4 weeks (until visit 3). After four weeks participants received one gliclazide matched placebo capsule twice daily for 4 weeks (until visit 4). After a further four weeks participants received two gliclazide matched placebo capsules twice daily for 8 weeks (until visit 5).	
Reporting group title	Gliclazide
Reporting group description:	
Participants received two sitagliptin matched placebo tablets once daily for 16 weeks (until visit 5) and one capsule containing a gliclazide 80mg tablet daily for 4 weeks (until visit 3). After four weeks participants received one gliclazide 80mg capsule twice daily for 4 weeks (until visit 4). After a further four weeks research participants received two gliclazide 80mg capsules twice daily for 8 weeks (until visit 5).	

Reporting group values	Sitagliptin	Gliclazide	Total
Number of subjects	9	11	20
Age categorical			
Units: Subjects			
In utero			0
Preterm newborn infants (gestational age < 37 wks)			0
Newborns (0-27 days)			0
Infants and toddlers (28 days-23 months)			0
Children (2-11 years)			0
Adolescents (12-17 years)			0
Adults (18-64 years)			0
From 65-84 years			0
85 years and over			0
Age continuous			
Age at recruitment			
Units: years			
median	57.2	59.8	
inter-quartile range (Q1-Q3)	54.4 to 61.5	58.2 to 64.3	-
Gender categorical			
Units: Subjects			
Female	7	9	16
Male	2	2	4
Ethnicity			
Units: Subjects			
Caucasian	9	11	20
Smoking status			
Units: Subjects			
Never	2	5	7
Current	2	2	4
Former	5	4	9
Any psoriasis treatment at baseline			
Units: Subjects			

Yes	7	8	15
No	2	3	5
Any topical psoriasis therapy at baseline Units: Subjects			
TAR	1	2	3
Corticosteroid	3	4	7
Vitamin D analogue	1	1	2
Vitamin D analogue/corticosteroid	2	2	4
Coal tar 12%, salicylic acid 2%	0	1	1
None	2	1	3
Any biologic treatment at baseline Units: Subjects			
Adalimumab	2	1	3
None	7	10	17
Any systemic psoriasis treatment at baseline Units: Subjects			
Yes	0	0	0
No	9	11	20
Any diabetes medication at baseline Units: Subjects			
Yes	7	11	18
No	2	0	2
Duration of psoriasis Units: years			
arithmetic mean	30	33.2	-
standard deviation	± 9.6	± 17.2	-
Alcohol consumption Units: units/week			
median	2	6	-
inter-quartile range (Q1-Q3)	0 to 2	0 to 10	-
Systolic blood pressure			
Systolic blood pressure while sitting			
Units: mmHg			
median	132	134	-
inter-quartile range (Q1-Q3)	129 to 145	126 to 151	-
Diastolic blood pressure			
Diastolic blood pressure while sitting			
Units: mmHg			
median	89	80	-
inter-quartile range (Q1-Q3)	78 to 91	74 to 97	-
Pulse			
Units: bpm			
arithmetic mean	73.3	71.2	-
standard deviation	± 11.1	± 11.9	-
Weight			
Units: kg			
median	97.6	105.1	-
inter-quartile range (Q1-Q3)	82.8 to 112.2	78.4 to 118.1	-
Body mass index			
Units: kg/m2			
median	31.1	36.8	-

inter-quartile range (Q1-Q3)	29.1 to 33.9	25.9 to 37.5	-
PASI			
Psoriasis Area and Severity Index			
Units: score			
arithmetic mean	8.9	9.6	
standard deviation	± 1.9	± 2.6	-
BSA			
Body Surface Area			
Units: percent			
arithmetic mean	9.1	11.8	
standard deviation	± 2.4	± 7.3	-
DLQI			
Dermatology Life Quality Index			
Units: score			
median	3	7	
inter-quartile range (Q1-Q3)	3 to 7	2 to 10	-
HADS Anxiety			
Hospital Anxiety and Depression Scale - Anxiety score			
Units: score			
median	4	5	
inter-quartile range (Q1-Q3)	3 to 5	1 to 9	-
HADS Depression			
Hospital Anxiety and Depression Scale - Depression score			
Units: score			
median	1	3	
inter-quartile range (Q1-Q3)	1 to 3	0 to 4	-
EQ-5D Index			
EuroQol five item questionnaire utility scores			
Units: score			
median	1	1	
inter-quartile range (Q1-Q3)	0.8 to 1	0.85 to 1	-
HAQ-8			
Health Assessment Questionnaire 8 item score			
Units: score			
median	0	0	
inter-quartile range (Q1-Q3)	0 to 2	0 to 1	-
EQ-5D VAS			
EuroQol visual analogue scale			
Units: score			
median	80	80	
inter-quartile range (Q1-Q3)	70 to 80	70 to 90	-
Glucose			
Blood glucose concentration			
Units: mmol/L			
median	7.6	7.6	
inter-quartile range (Q1-Q3)	7.5 to 9	6.3 to 9.3	-
Cholesterol			
Blood cholesterol concentration			
Units: mmol/L			
median	3.6	3.9	
inter-quartile range (Q1-Q3)	3.5 to 4.3	3.8 to 4.7	-
LDL			

Blood low-density lipoprotein cholesterol concentration			
Units: mmol?			
median	2.1	2.1	
inter-quartile range (Q1-Q3)	1.8 to 2.4	1.6 to 3.0	-
HDL			
Blood high-density lipoprotein cholesterol concentration			
Units: mmol/L			
median	1.1	1.2	
inter-quartile range (Q1-Q3)	1.0 to 1.1	1.1 to 1.3	-
Triglycerides			
Blood triglyceride concentration			
Units: mmol/L			
median	1.64	1.66	
inter-quartile range (Q1-Q3)	1.39 to 1.83	1.03 to 2.01	-
hs-CRP			
High sensitivity C-reactive protein concentration			
Units: µg/ml			
median	2.55	11.14	
inter-quartile range (Q1-Q3)	1.16 to 10.58	4.29 to 19.06	-
HbA1C			
Haemoglobin A1C glycation			
Units: mmol/mol			
median	53	59	
inter-quartile range (Q1-Q3)	52 to 59	51 to 61	-
Serum IFNγ			
Serum Interferon-γ concentration			
Units: pg/ml			
median	0	0	
inter-quartile range (Q1-Q3)	0 to 16.72	0 to 4.81	-
Serum IL-23			
Serum interleukin-23 concentration			
Units: pg/ml			
median	0	0	
inter-quartile range (Q1-Q3)	0 to 0	0 to 0	-
Serum IL-10			
Serum interleukin-10 concentration			
Units: pg/ml			
median	0	0	
inter-quartile range (Q1-Q3)	0 to 0	0 to 0	-
Serum IL-17			
Serum interleukin-17 concentration			
Units: pg/ml			
median	0	0	
inter-quartile range (Q1-Q3)	0 to 0	0 to 0	-
Serum IL-6			
Serum interleukin-6 concentration			
Units: pg/ml			
median	0	0	
inter-quartile range (Q1-Q3)	0 to 6.34	0 to 4.51	-
Serum TNFα			
Serum tumour necrosis factor α concentration			
Units: pg/ml			

median	51.51	17.33	
inter-quartile range (Q1-Q3)	11.25 to 132.56	7.19 to 37.08	-
Resistin			
Serum resistin concentration			
Units: ng/ml			
median	8.05	8.88	
inter-quartile range (Q1-Q3)	5.18 to 8.69	7.03 to 13.52	-
Leptin			
Serum leptin concentration			
Units: ng/ml			
median	11.37	12.68	
inter-quartile range (Q1-Q3)	6.26 to 26.78	4.15 to 22.28	-
Adiponectin			
Serum adiponectin concentration			
Units: µg/ml			
median	3.24	6.19	
inter-quartile range (Q1-Q3)	2.2 to 3.68	2.57 to 8.5	-

End points

End points reporting groups

Reporting group title	Sitagliptin
Reporting group description: Participants received 100 mg daily (2 x 50 mg tablets) for 16 weeks (until visit 5) and one gliclazide matched placebo capsule once daily for 4 weeks (until visit 3). After four weeks participants received one gliclazide matched placebo capsule twice daily for 4 weeks (until visit 4). After a further four weeks participants received two gliclazide matched placebo capsules twice daily for 8 weeks (until visit 5).	
Reporting group title	Gliclazide
Reporting group description: Participants received two sitagliptin matched placebo tablets once daily for 16 weeks (until visit 5) and one capsule containing a gliclazide 80mg tablet daily for 4 weeks (until visit 3). After four weeks participants received one gliclazide 80mg capsule twice daily for 4 weeks (until visit 4). After a further four weeks research participants received two gliclazide 80mg capsules twice daily for 8 weeks (until visit 5).	
Reporting group title	Sitagliptin
Reporting group description: Participants received 100 mg daily (2 x 50 mg tablets) for 16 weeks (until visit 5) and one gliclazide matched placebo capsule once daily for 4 weeks (until visit 3). After four weeks participants received one gliclazide matched placebo capsule twice daily for 4 weeks (until visit 4). After a further four weeks participants received two gliclazide matched placebo capsules twice daily for 8 weeks (until visit 5).	
Reporting group title	Gliclazide
Reporting group description: Participants received two sitagliptin matched placebo tablets once daily for 16 weeks (until visit 5) and one capsule containing a gliclazide 80mg tablet daily for 4 weeks (until visit 3). After four weeks participants received one gliclazide 80mg capsule twice daily for 4 weeks (until visit 4). After a further four weeks research participants received two gliclazide 80mg capsules twice daily for 8 weeks (until visit 5).	
Reporting group title	Sitagliptin for whole trial
Reporting group description: After sixteen weeks treatment all remaining participants in both arms progressed to the open-label phase of the trial, and received sitagliptin 100mg daily for sixteen weeks.	
Reporting group title	Sitagliptin after 16 weeks gliclazide
Reporting group description: After sixteen weeks treatment all remaining participants in both arms progressed to the open-label phase of the trial, and received sitagliptin 100mg daily for sixteen weeks.	

Primary: Change from baseline PASI at 16 weeks

End point title	Change from baseline PASI at 16 weeks
End point description:	
End point type	Primary
End point timeframe: At 16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: score				
median (inter-quartile range (Q1-Q3))	0.9 (0.4 to 2.1)	0.8 (0.2 to 2.1)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.648
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline PASI at 32 weeks

End point title	Change from baseline PASI at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
Week 32	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: score				
median (inter-quartile range (Q1-Q3))	-3 (-5.6 to -2)	-1.8 (-3 to 0.3)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide

Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.128
Method	Wilcoxon (Mann-Whitney)

Secondary: PASI-50 at 16 weeks

End point title	PASI-50 at 16 weeks
End point description:	
Number of subjects that achieve a psoriasis area severity index reduction of 50%	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: subjects	1	1		

Statistical analyses

Statistical analysis title	Difference in proportions
Comparison groups	Gliclazide v Sitagliptin
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 1
Method	Fisher exact

Secondary: PASI-75 at 16 weeks

End point title	PASI-75 at 16 weeks
End point description:	
Number of subjects that achieve a psoriasis area severity index reduction of 75%	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: subjects	1	0		

Statistical analyses

No statistical analyses for this end point

Secondary: PASI-90 at 16 weeks

End point title	PASI-90 at 16 weeks
End point description:	
Number of subjects that achieve a psoriasis area severity index reduction of 90%	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: subjects	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: PASI-50 at 32 weeks

End point title	PASI-50 at 32 weeks
End point description:	
Number of subjects that achieve a psoriasis area severity index reduction of 50%	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: subjects	4	2		

Statistical analyses

Statistical analysis title	Difference in proportions
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.336
Method	Fisher exact

Secondary: PASI-75 at 32 weeks

End point title	PASI-75 at 32 weeks
End point description:	
Number of subjects that achieve a psoriasis area severity index reduction of 75%	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: subjects	1	0		

Statistical analyses

Statistical analysis title	Difference in proportions
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.45
Method	Fisher exact

Secondary: PASI-90 at 32 weeks

End point title	PASI-90 at 32 weeks
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End point description:

Number of subjects that achieve a psoriasis area severity index reduction of 90%

End point type	Secondary
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End point timeframe:

32 weeks

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: subjects	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Time-to-PASI-50

End point title	Time-to-PASI-50
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End point description:

Time to a psoriasis area severity index reduction of 50%

End point type	Secondary
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End point timeframe:

Entire trial period

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: weeks				
arithmetic mean (standard deviation)	24.6 (± 3.1)	33.6 (± 3.5)		

Statistical analyses

Statistical analysis title	Difference in survival
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Comparison groups	Sitagliptin v Gliclazide
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Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.059
Method	Logrank

Secondary: Time-to-PASI-75

End point title	Time-to-PASI-75
End point description:	Time to a psoriasis area severity index reduction of 75%
End point type	Secondary
End point timeframe:	Whole study period

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: weeks				
arithmetic mean (standard deviation)	43.8 (± 1.5)	41.8 (± 3.3)		

Statistical analyses

Statistical analysis title	Difference in survival
Comparison groups	Gliclazide v Sitagliptin
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.257
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline DLQI at 16 weeks

End point title	Change from baseline DLQI at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	Week 16

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: score				
median (inter-quartile range (Q1-Q3))	0 (-1 to 1)	-1 (-5 to 1)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.644
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline DLQI at 16 weeks

End point title	Change from baseline DLQI at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: score				
median (inter-quartile range (Q1-Q3))	0 (0 to 1)	-1 (-6 to 1)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin after 16 weeks gliclazide v Sitagliptin for whole trial

Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.486
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline HAQ-8 at 16 weeks

End point title	Change from baseline HAQ-8 at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: score				
median (inter-quartile range (Q1-Q3))	0 (0 to 0)	0 (0 to 0)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.625
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline HAQ-8 at 32 weeks

End point title	Change from baseline HAQ-8 at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: score				
median (inter-quartile range (Q1-Q3))	0 (0 to 0)	0 (0 to 0)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.211
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline HADS anxiety at 16 weeks

End point title	Change from baseline HADS anxiety at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: score				
median (inter-quartile range (Q1-Q3))	-1 (-3 to -1)	0 (-3 to 0)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide

Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.314
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline HADS anxiety at 32 weeks

End point title	Change from baseline HADS anxiety at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: score				
median (inter-quartile range (Q1-Q3))	-2 (-3 to 0)	-1 (-4 to 0)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.877
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline HADS depression at 16 weeks

End point title	Change from baseline HADS depression at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: score				
median (inter-quartile range (Q1-Q3))	0 (-1 to 1)	0 (-3 to 1)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.438
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline HADS depression at 32 weeks

End point title	Change from baseline HADS depression at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: score				
median (inter-quartile range (Q1-Q3))	0 (0 to 0)	0 (-3 to 1)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide

Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.532
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline EQ-5D utility score at 16 weeks

End point title	Change from baseline EQ-5D utility score at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: score				
median (inter-quartile range (Q1-Q3))	0 (0 to 0)	-0.2 (-0.3 to 0)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.047
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline EQ-5D utility score at 32 weeks

End point title	Change from baseline EQ-5D utility score at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: score				
median (inter-quartile range (Q1-Q3))	0 (0 to 0)	0 (-0.2 to 0)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.124
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline weight at 16 weeks

End point title	Change from baseline weight at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: kg				
median (inter-quartile range (Q1-Q3))	-0.5 (-1.3 to 0)	-0.6 (-2.9 to 2.6)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Gliclazide v Sitagliptin

Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.569
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline weight at 32 weeks

End point title	Change from baseline weight at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: kg				
median (inter-quartile range (Q1-Q3))	-0.8 (-1.8 to 0.8)	-0.1 (-1.1 to 2.3)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.27
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline BMI at 16 weeks

End point title	Change from baseline BMI at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: kg/m2				
median (inter-quartile range (Q1-Q3))	-0.2 (-0.4 to 0)	-0.2 (-1 to 0.9)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.676
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline BMI at 32 weeks

End point title	Change from baseline BMI at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: kg/m2				
median (inter-quartile range (Q1-Q3))	-0.3 (-0.6 to 0.3)	0 (-0.4 to 0.7)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide

Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.305
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline systolic blood pressure (sitting) at 16 weeks

End point title	Change from baseline systolic blood pressure (sitting) at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: mmHg				
median (inter-quartile range (Q1-Q3))	5 (-15 to 10)	0 (-24 to 5)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.209
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline systolic blood pressure (sitting) at 32 weeks

End point title	Change from baseline systolic blood pressure (sitting) at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: mmHg				
median (inter-quartile range (Q1-Q3))	4 (-2 to 8)	-9 (-17 to 9)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.403
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline diastolic blood pressure (sitting) at 16 weeks

End point title	Change from baseline diastolic blood pressure (sitting) at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: mmHg				
median (inter-quartile range (Q1-Q3))	-7 (-11 to 5)	-2 (-16 to 5)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide

Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.909
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline diastolic blood pressure (sitting) at 32 weeks

End point title	Change from baseline diastolic blood pressure (sitting) at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: mmHg				
median (inter-quartile range (Q1-Q3))	-3 (-10 to 2)	-4 (-9 to 5)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.879
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline pulse at 16 weeks

End point title	Change from baseline pulse at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: bpm				
median (inter-quartile range (Q1-Q3))	2 (-2 to 5)	1 (-4 to 7)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.97
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline pulse at 32 weeks

End point title	Change from baseline pulse at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: bpm				
median (inter-quartile range (Q1-Q3))	0 (-1 to 6)	5 (-3 to 10)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide

Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.568
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline glucose at 16 weeks

End point title	Change from baseline glucose at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: mmol/L				
median (inter-quartile range (Q1-Q3))	-0.5 (-1.8 to 0.6)	-1.7 (-3.2 to 0.8)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.422
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline glucose at 32 weeks

End point title	Change from baseline glucose at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: mmol/L				
median (inter-quartile range (Q1-Q3))	-0.2 (-1.3 to 0.8)	-0.1 (-1.7 to 0.3)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.761
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline HbA1c at 16 weeks

End point title	Change from baseline HbA1c at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: mmol/mol				
median (inter-quartile range (Q1-Q3))	-2 (-4 to 2)	-8 (-11 to -2)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide

Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.074
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline HbA1c at 32 weeks

End point title	Change from baseline HbA1c at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: mmol/mol				
median (inter-quartile range (Q1-Q3))	-4 (-6 to 2)	-5 (-7 to -2)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.34
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline cholesterol at 16 weeks

End point title	Change from baseline cholesterol at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: mmol/L				
median (inter-quartile range (Q1-Q3))	0.1 (-0.2 to 0.5)	-0.1 (-0.5 to 0.1)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.321
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline cholesterol at 32 weeks

End point title	Change from baseline cholesterol at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: mmol/L				
median (inter-quartile range (Q1-Q3))	0.1 (-0.2 to 0.5)	0.1 (-0.2 to 0.4)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide

Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.674
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline LDL at 16 weeks

End point title	Change from baseline LDL at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: mmol/L				
median (inter-quartile range (Q1-Q3))	0.04 (-0.1 to 0.24)	-0.15 (-0.43 to 0.06)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.184
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline LDL at 32 weeks

End point title	Change from baseline LDL at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: mmol/L				
median (inter-quartile range (Q1-Q3))	0.22 (-0.23 to 0.29)	0.09 (-0.30 to 0.25)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.494
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline HDL at 16 weeks

End point title	Change from baseline HDL at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: mmol/L				
median (inter-quartile range (Q1-Q3))	-0.01 (-0.06 to 0.06)	-0.04 (-0.05 to 0.07)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide

Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 1
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline HDL at 32 weeks

End point title	Change from baseline HDL at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: mmol/L				
median (inter-quartile range (Q1-Q3))	0 (-0.04 to 0.06)	0 (-0.15 to 0.18)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.879
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline triglycerides at 16 weeks

End point title	Change from baseline triglycerides at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: mmol/L				
median (inter-quartile range (Q1-Q3))	-0.07 (-0.27 to 0.03)	-0.17 (-0.51 to -0.05)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.362
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline triglycerides at 32 weeks

End point title	Change from baseline triglycerides at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: mmol/L				
median (inter-quartile range (Q1-Q3))	-0.04 (-0.07 to 0.67)	0.04 (-0.16 to 0.58)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide

Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.543
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline hs-CRPI at 16 weeks

End point title	Change from baseline hs-CRPI at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: µg/ml				
median (inter-quartile range (Q1-Q3))	0 (-0.83 to 0.16)	8.4 (2.37 to 11.19)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.03
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline hs-CRP at 32 weeks

End point title	Change from baseline hs-CRP at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: µg/ml				
median (inter-quartile range (Q1-Q3))	-0.06 (-0.86 to 0)	1.9 (0.64 to 6.87)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.138
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IFN γ at 16 weeks

End point title	Change from baseline IFN γ at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: pg/ml				
median (inter-quartile range (Q1-Q3))	0 (0 to 0)	0 (0 to 6.66)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Gliclazide v Sitagliptin

Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.771
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IFN γ at 32 weeks

End point title	Change from baseline IFN γ at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: pg/ml				
median (inter-quartile range (Q1-Q3))	0 (0 to 7.23)	0 (0 to 6.25)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.556
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IL-23 at 16 weeks

End point title	Change from baseline IL-23 at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: pg/ml				
median (inter-quartile range (Q1-Q3))	0 (0 to 0)	0 (0 to 46.1)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.212
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IL-23 at 32 weeks

End point title	Change from baseline IL-23 at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: pg/ml				
median (inter-quartile range (Q1-Q3))	0 (0 to 0)	0 (0 to 57.63)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide

Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.512
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IL-17 at 16 weeks

End point title	Change from baseline IL-17 at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: pg/ml				
median (inter-quartile range (Q1-Q3))	0 (0 to 0)	0 (0 to 0)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Gliclazide v Sitagliptin
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.076
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IL-17 at 32 weeks

End point title	Change from baseline IL-17 at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: pg/ml				
median (inter-quartile range (Q1-Q3))	0 (0 to 0)	0 (0 to 0)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.109
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IL-6 at 16 weeks

End point title	Change from baseline IL-6 at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	16 weeks

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: pg/ml				
median (inter-quartile range (Q1-Q3))	0 (-0.85 to 0)	0 (-1.84 to 2.99)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide

Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.308
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IL-6 at 32 weeks

End point title	Change from baseline IL-6 at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: pg/ml				
median (inter-quartile range (Q1-Q3))	0 (0 to 0)	2.81 (-0.29 to 3.44)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.068
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline TNF alpha at 16 weeks

End point title	Change from baseline TNF alpha at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: pg/ml				
median (inter-quartile range (Q1-Q3))	0 (-2.08 to 0)	0 (-1.64 to 10.87)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.36
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline TNF alpha at 32 weeks

End point title	Change from baseline TNF alpha at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: pg/ml				
median (inter-quartile range (Q1-Q3))	0 (-11.25 to 0)	0 (-7.8 to 14.55)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide

Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.18
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IL-10 at 16 weeks

End point title	Change from baseline IL-10 at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: pg/ml				
median (inter-quartile range (Q1-Q3))	0 (0 to 0)	0 (0 to 0)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.269
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IL-10 at 32 weeks

End point title	Change from baseline IL-10 at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: pg/ml				
median (inter-quartile range (Q1-Q3))	0 (0 to 0)	0 (0 to 0)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.269
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline Resistin at 16 weeks

End point title	Change from baseline Resistin at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: ng/ml				
median (inter-quartile range (Q1-Q3))	-0.5 (-1.32 to 0)	-0.13 (-1.81 to 2.28)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide

Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.569
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline Resistin at 32 weeks

End point title	Change from baseline Resistin at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: ng/ml				
median (inter-quartile range (Q1-Q3))	-0.5 (-1.99 to 0)	-0.41 (-1.81 to 0.45)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.849
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline Leptin at 16 weeks

End point title	Change from baseline Leptin at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: ng/ml				
median (inter-quartile range (Q1-Q3))	-0.07 (-2.42 to 0)	0.43 (-3.25 to 8.37)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.087
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline Leptin at 32 weeks

End point title	Change from baseline Leptin at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: ng/ml				
median (inter-quartile range (Q1-Q3))	0 (-1.54 to 3.92)	0.27 (-0.8 to 0.43)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide

Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.621
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline Adiponectin at 16 weeks

End point title	Change from baseline Adiponectin at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	9	11		
Units: µg/ml				
median (inter-quartile range (Q1-Q3))	0.65 (0 to 0.85)	-0.61 (-2.2 to 0.33)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	20
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.037
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline PASI at 32 weeks

End point title	Change from baseline PASI at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: µg/ml				
median (inter-quartile range (Q1-Q3))	-0.78 (-0.88 to 0)	-1.17 (-3.65 to 0.13)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.21
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline total gastric inhibitory polypeptide at 16 weeks

End point title	Change from baseline total gastric inhibitory polypeptide at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: pg/ml				
median (inter-quartile range (Q1-Q3))	-9.74 (-28.96 to 9.20)	0 (-36.42 to 3.44)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide

Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.87
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline total gastric inhibitory polypeptide at 32 weeks

End point title	Change from baseline total gastric inhibitory polypeptide at 32 weeks
End point description:	
End point type	Secondary
End point timeframe: 32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: pg/ml				
median (inter-quartile range (Q1-Q3))	-7.11 (-41.30 to -1.9)	-13.73 (-47.45 to 61.69)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.63
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline active GLP-1 at 16 weeks

End point title	Change from baseline active GLP-1 at 16 weeks
End point description:	
End point type	Secondary
End point timeframe: 16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: pM				
median (inter-quartile range (Q1-Q3))	7.57 (0 to 11.51)	2.58 (0 to 5.87)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.18
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline active GLP-1 at 32 weeks

End point title	Change from baseline active GLP-1 at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: pM				
median (inter-quartile range (Q1-Q3))	4.67 (0 to 9.4)	12.78 (5.44 to 13.63)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide

Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.12
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline insulin at 16 weeks

End point title	Change from baseline insulin at 16 weeks
End point description:	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: µU/ml				
median (inter-quartile range (Q1-Q3))	-3.91 (-17.52 to 2.61)	3.24 (1.36 to 7.54)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.02
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline insulin at 32 weeks

End point title	Change from baseline insulin at 32 weeks
End point description:	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	7	9		
Units: µU/ml				
median (inter-quartile range (Q1-Q3))	-4.77 (-5.54 to 1.88)	0.18 (-0.86 to 6.92)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	16
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.15
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IL-17 mRNA at 16 weeks

End point title	Change from baseline IL-17 mRNA at 16 weeks
End point description:	
Skin sample	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	3	3		
Units: dCt				
median (inter-quartile range (Q1-Q3))	3.41 (0 to 3.85)	2.09 (1.17 to 2.8)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide

Number of subjects included in analysis	6
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.51
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IL-17 mRNA at 32 weeks

End point title	Change from baseline IL-17 mRNA at 32 weeks
End point description:	
Skin sample	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	3	3		
Units: dCt				
median (inter-quartile range (Q1-Q3))	0 (-0.04 to 4.06)	2.35 (1.17 to 8.66)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	6
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.28
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline TNF alpha mRNA at 16 weeks

End point title	Change from baseline TNF alpha mRNA at 16 weeks
End point description:	
Skin sample	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	3	3		
Units: dCt				
median (inter-quartile range (Q1-Q3))	0.65 (0 to 0.95)	0.98 (-0.07 to 1.14)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	6
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.51
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline TNF alpha mRNA at 32 weeks

End point title	Change from baseline TNF alpha mRNA at 32 weeks
End point description:	
Skin sample	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	3	3		
Units: dCt				
median (inter-quartile range (Q1-Q3))	0 (-1.09 to 1.91)	0.45 (-0.07 to 0.78)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin after 16 weeks gliclazide v Sitagliptin for whole trial

Number of subjects included in analysis	6
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.83
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline DPP4 mRNA at 16 weeks

End point title	Change from baseline DPP4 mRNA at 16 weeks
End point description:	
Skin sample	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	3	3		
Units: dCt				
median (inter-quartile range (Q1-Q3))	0 (-0.43 to 4.81)	-1.12 (-2.63 to -0.39)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	6
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.13
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline DPP4 mRNA at 32 weeks

End point title	Change from baseline DPP4 mRNA at 32 weeks
End point description:	
Skin sample	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	3	3		
Units: dCt				
median (inter-quartile range (Q1-Q3))	0.06 (0 to 3.95)	-2.35 (-2.63 to -1.45)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	6
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.05
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IL-23 mRNA at 16 weeks

End point title	Change from baseline IL-23 mRNA at 16 weeks
End point description:	
Skin sample	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	3	3		
Units: dCt				
median (inter-quartile range (Q1-Q3))	0 (-0.21 to 2.97)	0.91 (-1.34 to 1.54)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide

Number of subjects included in analysis	6
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.83
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IL-23 mRNA at 32 weeks

End point title	Change from baseline IL-23 mRNA at 32 weeks
End point description:	
Skin sample	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	3	3		
Units: dCt				
median (inter-quartile range (Q1-Q3))	0.66 (0 to 3.81)	0.25 (-1.34 to 1.37)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	6
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.51
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IL-12 mRNA at 16 weeks

End point title	Change from baseline IL-12 mRNA at 16 weeks
End point description:	
Skin sample	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	3	3		
Units: dCt				
median (inter-quartile range (Q1-Q3))	0 (-2.37 to 4.19)	0.52 (-0.14 to 3.34)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	6
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.83
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IL-12 mRNA at 32 weeks

End point title	Change from baseline IL-12 mRNA at 32 weeks
End point description:	
Skin sample	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	3	3		
Units: dCt				
median (inter-quartile range (Q1-Q3))	0 (-0.9 to 4.92)	-0.13 (-1.44 to 3.34)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide

Number of subjects included in analysis	6
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.51
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IFN γ mRNA at 16 weeks

End point title	Change from baseline IFN γ mRNA at 16 weeks
End point description:	
Skin sample	
End point type	Secondary
End point timeframe:	
16 weeks	

End point values	Sitagliptin	Gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	3	3		
Units: dCt				
median (inter-quartile range (Q1-Q3))	2.86 (0 to 2.93)	1.1 (-2.17 to 1.62)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin v Gliclazide
Number of subjects included in analysis	6
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.28
Method	Wilcoxon (Mann-Whitney)

Secondary: Change from baseline IFN γ mRNA at 32 weeks

End point title	Change from baseline IFN γ mRNA at 32 weeks
End point description:	
Skin sample	
End point type	Secondary
End point timeframe:	
32 weeks	

End point values	Sitagliptin for whole trial	Sitagliptin after 16 weeks gliclazide		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	3	3		
Units: dCt				
median (inter-quartile range (Q1-Q3))	0.39 (0 to 3)	0.55 (-2.17 to 0.98)		

Statistical analyses

Statistical analysis title	Difference in medians
Comparison groups	Sitagliptin for whole trial v Sitagliptin after 16 weeks gliclazide
Number of subjects included in analysis	6
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.83
Method	Wilcoxon (Mann-Whitney)

Adverse events

Adverse events information

Timeframe for reporting adverse events:

36 weeks

Assessment type	Systematic
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Dictionary used

Dictionary name	NA
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Dictionary version	NA
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Reporting groups

Reporting group title	Sitagliptin
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Reporting group description:

Participants received 100 mg daily (2 x 50 mg tablets) for 16 weeks (until visit 5) and one gliclazide matched placebo capsule once daily for 4 weeks (until visit 3). After four weeks participants received one gliclazide matched placebo capsule twice daily for 4 weeks (until visit 4). After a further four weeks participants received two gliclazide matched placebo capsules twice daily for 8 weeks (until visit 5).

Reporting group title	Gliclazide
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Reporting group description:

Participants received two sitagliptin matched placebo tablets once daily for 16 weeks (until visit 5) and one capsule containing a gliclazide 80mg tablet daily for 4 weeks (until visit 3). After four weeks participants received one gliclazide 80mg capsule twice daily for 4 weeks (until visit 4). After a further four weeks research participants received two gliclazide 80mg capsules twice daily for 8 weeks (until visit 5).

Serious adverse events	Sitagliptin	Gliclazide	
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 9 (11.11%)	2 / 11 (18.18%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events	0	0	
Nervous system disorders			
Demyelinating disorder			
subjects affected / exposed	0 / 9 (0.00%)	1 / 11 (9.09%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Migraine			
subjects affected / exposed	0 / 9 (0.00%)	1 / 11 (9.09%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Musculoskeletal and connective tissue disorders			
Osteomyelitis			

subjects affected / exposed	0 / 9 (0.00%)	1 / 11 (9.09%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Metabolism and nutrition disorders			
Hypoglycaemia			
subjects affected / exposed	1 / 9 (11.11%)	0 / 11 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Frequency threshold for reporting non-serious adverse events: 0 %

Non-serious adverse events	Sitagliptin	Gliclazide	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	6 / 9 (66.67%)	10 / 11 (90.91%)	
Investigations			
Elevated haemoglobin			
subjects affected / exposed	0 / 9 (0.00%)	1 / 11 (9.09%)	
occurrences (all)	0	1	
Injury, poisoning and procedural complications			
Back pain post injury			
subjects affected / exposed	1 / 9 (11.11%)	0 / 11 (0.00%)	
occurrences (all)	1	0	
Injury to right arm			
subjects affected / exposed	0 / 9 (0.00%)	1 / 11 (9.09%)	
occurrences (all)	0	1	
Cardiac disorders			
Heart murmur			
subjects affected / exposed	1 / 9 (11.11%)	0 / 11 (0.00%)	
occurrences (all)	1	0	
Gastrointestinal disorders			
Gastroenteritis			
subjects affected / exposed	1 / 9 (11.11%)	0 / 11 (0.00%)	
occurrences (all)	1	0	
Diarrhoea			
subjects affected / exposed	1 / 9 (11.11%)	0 / 11 (0.00%)	
occurrences (all)	1	0	

Respiratory, thoracic and mediastinal disorders Nasopharyngitis subjects affected / exposed occurrences (all)	1 / 9 (11.11%) 1	2 / 11 (18.18%) 2	
Skin and subcutaneous tissue disorders Cellulitis subjects affected / exposed occurrences (all) Foot ulcers subjects affected / exposed occurrences (all) Rash subjects affected / exposed occurrences (all)	1 / 9 (11.11%) 2 0 / 9 (0.00%) 0 0 / 9 (0.00%) 0	1 / 11 (9.09%) 2 1 / 11 (9.09%) 1 1 / 11 (9.09%) 1	
Musculoskeletal and connective tissue disorders Osteoarthritis subjects affected / exposed occurrences (all)	0 / 9 (0.00%) 0	1 / 11 (9.09%) 1	
Infections and infestations Respiratory tract infection subjects affected / exposed occurrences (all)	2 / 9 (22.22%) 3	3 / 11 (27.27%) 5	
Metabolism and nutrition disorders Hypoglycaemia subjects affected / exposed occurrences (all) Hyperglycaemia subjects affected / exposed occurrences (all) Elevated cholesterol subjects affected / exposed occurrences (all) Elevated triglycerides subjects affected / exposed occurrences (all)	1 / 9 (11.11%) 1 1 / 9 (11.11%) 1 0 / 9 (0.00%) 0 0 / 9 (0.00%) 0	9 / 11 (81.82%) 16 1 / 11 (9.09%) 1 2 / 11 (18.18%) 2 2 / 11 (18.18%) 2	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
23 January 2014	A substantial amendment to change the trial from an open label to a double blind trial was submitted to and approved by the regulatory authority the HPRA. On the advice of the sponsor representative and Co-ordinating Investigator for this study, it was decided the study should focus on the efficacy of the IMP; safety data would no longer be analysed as an endpoint. A secondary efficacy endpoint of 'Change in psoriasis area and severity index after 32 weeks of treatment' was added. This was omitted in error from the original protocol. We changed from Diamicon MR 30mg tablets to Diamicon 80mg tablets which are comparable as stated in the SmPC for Diamicon MR. The reason for changing the formulation was to avoid potentially costly and time consuming dissolution analysis which would be required if a modified release tablet rather than a normal release tablet was overencapsulated. These amendments were made prior to enrollment of participants.
08 January 2015	An amendment changed the inclusion criteria specifying that a potentially suitable participant should have a glycated haemoglobin (HbA1c) between 6.5% and 8.5% (48mmol/mol and 69mmol/mol) to between 6.5% and 9.5% (48mmol/mol and 80mmol/mol) to enhance recruitment. This amendment was made during the trial and approved by the HPRA.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

This study did not recruit the planned number of patients needed to achieve its primary end-point (n=40). Given this limitation, there are no significant differences in improvements in psoriasis severity between sitagliptin and gliclazide.

Notes: