

Protocol Registration Receipt

04/05/2013

Grantor: CDER IND/IDE Number: 43,468 Serial Number: 637

Study In Postmenopausal Women With Type 2 Diabetes Looking At Approved Diabetes Drugs And How They Affect Bone Health

This study has been completed.

Sponsor:	GlaxoSmithKline
Collaborators:	
Information provided by (Responsible Party):	GlaxoSmithKline
ClinicalTrials.gov Identifier:	NCT00679939

► Purpose

The purpose of this study is to determine the effects of rosiglitazone on the bone in postmenopausal women with type 2 diabetes mellitus

Condition	Intervention	Phase
Diabetes Mellitus, Type 2	Drug: Rosiglitazone Drug: Metformin	Phase 4

Study Type: Interventional

Study Design: Treatment, Parallel Assignment, Double Blind (Subject, Investigator), Randomized, Pharmacodynamics Study

Official Title: A 52 Week Randomized, Double-Blind, Multicenter, Mechanistic Study With a 24 Week Open-Label Follow-Up to Evaluate the Effect of AVANDIA<sup>TM</sup> on Bone in Postmenopausal Women With Type 2 Diabetes Mellitus

#### Further study details as provided by GlaxoSmithKline:

##### Primary Outcome Measure:

- Adjusted Percent Change From Baseline in Femoral Neck (FN) Bone Mineral Density (BMD) Via Dual-energy X-ray Absorptiometry (DXA) at Week 52

[Time Frame: Baseline and Week 52] [Designated as safety issue: Yes]

FN BMD (measured in grams per centimeters squared [g/cm<sup>2</sup>]) was measured by DXA. Bone mineral density is calculated as the mineral content of a bone divided by the area of the bone. DXA is the principal technique used for measuring BMD. Percent change from Baseline at Week 52 was calculated as (BMD at Week 52 minus BMD at Baseline)/BMD at Baseline x 100% and was assessed by analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Change in FN BMD at Week 52 was only analyzed within the Rosiglitazone arm.

- Adjusted Percent Change From Baseline in Femoral Neck (FN) Bone Mineral Density (BMD) Via Dual-energy X-ray Absorptiometry (DXA) at Week 76+10 Days [Time Frame: Baseline and Week 76+10 days] [Designated as safety issue: No]

FN BMD (measured in grams per centimeters squared [g/cm<sup>2</sup>]) was measured by DXA. Bone mineral density is calculated as the mineral content of a bone divided by the area of the bone. DXA is the principal technique used for measuring BMD. Percent change from Baseline at Week 76+10 days was calculated as (BMD at Week 76+10 days minus BMD at Baseline)/BMD at Baseline x 100% and was assessed by analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.

- Adjusted Percent Change in Femoral Neck (FN) Bone Mineral Density (BMD) Via Dual-energy X-ray Absorptiometry (DXA) From Week 52 +10 Days to Week 76+10 Days [Time Frame: Week 52+10 days and Week 76+10 days] [Designated as safety issue: No]

FN BMD (measured in grams per centimeters squared [g/cm<sup>2</sup>]) was measured by DXA. Bone mineral density is calculated as the mineral content of a bone divided by the area of the bone. DXA is the principal technique used for measuring BMD. Percent change from Week 52+10 days to Week 76+10 days was calculated as (BMD at Week 76+10 days minus BMD at Week 52+10 days)/BMD at Week 52+10 days x 100% and was assessed by analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.

##### Secondary Outcome Measures:

- Adjusted Percent Change From Baseline in Femoral Neck, Total Hip, Trochanter, and Lumbar Spine BMD Via DXA at Week 52 [Time Frame: Baseline and Week 52] [Designated as safety issue: Yes]

BMD (measured in grams per centimeters squared [g/cm<sup>2</sup>]) was measured by DXA. Percent change from Baseline at Week 52 was calculated as (BMD at Week 52 minus BMD at Baseline)/BMD at Baseline x 100% and was assessed by analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.

- Adjusted Percent Change in Femoral Neck, Total Hip, Trochanter, and Lumbar Spine BMD Via DXA From Week 52+10 Days to Week 76 + 10 Days [Time Frame: Week 52 + 10 days and Week 76 + 10 days] [Designated as safety issue: No]

BMD (measured in grams per centimeters squared [g/cm<sup>2</sup>]) was measured by DXA. Percent change from Week 52 + 10 days to Week 76 + 10 days

was calculated as (BMD at Week 76 + 10 days minus BMD at Week 52 + 10 days)/BMD at Week 52 + 10 days x 100% and was assessed by analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.

- Adjusted Percent Change in Femoral Neck, Total Hip, Trochanter, and Lumbar Spine BMD Via DXA From Week 52+30 Days to Week 76 + 30 Days [Time Frame: Week 52 + 30 days and Week 76 + 30 days] [Designated as safety issue: Yes]

BMD (measured in grams per centimeters squared [g/cm<sup>2</sup>]) was measured by DXA. Percent change from Week 52 + 30 days to Week 76 + 30 days was calculated as (BMD at Week 76 + 30 days minus BMD at Week 52 + 30 days)/BMD at Week 52 + 30 days x 100% and was assessed by analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.

- Adjusted Percent Change From Baseline in Bone Specific Alkaline Phosphatase (BSAP) and Procollagen Type 1 N-propeptide (P1NP) at Week 52 and Week 76 [Time Frame: Baseline, Week 52, and Week 76] [Designated as safety issue: Yes]

BSAP and P1NP levels were measured in micrograms per liter (mcg/L) from blood samples. BSAP and P1NP are indicators of bone buildup or formation. GM, geometric mean; SE, standard error. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.

- Adjusted Percent Change in Bone Specific Alkaline Phosphatase (BSAP) and Procollagen Type 1 N-propeptide (P1NP) From Week 52 to Week 76 [Time Frame: Week 52 and Week 76] [Designated as safety issue: Yes]

BSAP and P1NP levels were measured in micrograms per liter (mcg/L) from blood samples. BSAP and P1NP are indicators of bone buildup or formation. GM, geometric mean; SE, standard error. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.

- Adjusted Percent Change From Baseline in Carboxyterminal Cross-linked Telopeptide of Type 1 Collagen (CTX) at Week 52 and Week 76 [Time Frame: Baseline, Week 52, and Week 76] [Designated as safety issue: Yes]

CTX levels were measured in picograms per milliliter (pg/ml) from blood samples. CTX is an indicator of bone break down or resorption. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.

- Adjusted Percent Change in Carboxyterminal Cross-linked Telopeptide of Type 1 Collagen (CTX) From Week 52 to Week 76 [Time Frame: Week 52 and Week 76] [Designated as safety issue: Yes]

CTX levels were measured in picograms per milliliter (pg/ml) from blood samples. CTX is an indicator of bone break down or resorption. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.

- Adjusted Percent Change From Baseline in 25-Hydroxyvitamin D (Vitamin D) at Week 52 and Week 76 [Time Frame: Baseline, Week 52, and Week 76] [Designated as safety issue: Yes]

Vitamin D levels were measured in nanomoles per Liter (nmol/L) from blood samples. Vitamin D is required for good bone health. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.

- Adjusted Percent Change in 25-Hydroxyvitamin D (Vitamin D) From Week 52 to Week 76 [Time Frame: Week 52 and Week 76] [Designated as safety issue: Yes]

Vitamin D levels were measured in nanomoles per Liter (nmol/L) from blood samples. Vitamin D is required for good bone health. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.

- Adjusted Percent Change From Baseline in Intact Parathyroid Hormone (PTH) at Week 52 and Week 76 [Time Frame: Baseline, Week 52, and Week 76] [Designated as safety issue: Yes]

Intact PTH levels were measured in nanograms per Liter (ng/L) from blood samples. Intact PTH is the amount of PTH circulating in the blood and influences bone health. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.

- Adjusted Percent Change in Intact Parathyroid Hormone (PTH) From Week 52 to Week 76 [Time Frame: Week 52 and Week 76] [Designated as safety issue: Yes]

Intact PTH levels were measured in nanograms per Liter (ng/L) from blood samples. Intact PTH is the amount of PTH circulating in the blood and influences bone health. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.

- Percent Change From Baseline in Serum Estradiol at Week 52 and Week 76 [Time Frame: Baseline, Week 52, and Week 76] [Designated as safety issue: Yes]

Serum estradiol levels were measured in picomoles per Liter (pmol/L) from blood samples. Estradiol is one form of the female sex hormone estrogen and influences bone health. Percent change from baseline was based on log-transformed data.

- Percent Change in Serum Estradiol From Week 52 to Week 76 [Time Frame: Week 52 and Week 76] [Designated as safety issue: Yes]

Serum estradiol levels were measured in picomoles per Liter (pmol/L) from blood samples. Estradiol is one form of the female sex hormone estrogen and influences bone health. Percent change from baseline was based on log-transformed data.

- Percent Change From Baseline in Total Testosterone at Week 52 and Week 76 [Time Frame: Baseline, Week 52, and Week 76] [Designated as safety issue: Yes]

Total testosterone levels were measured in nanomoles per Liter (nmol/L) from blood samples. Testosterone is a male sex hormone and influences bone health; total testosterone is the entire amount circulating in blood. Percent change from baseline was based on log-transformed data.

- Percent Change in Total Testosterone From Week 52 to Week 76 [Time Frame: Week 52 and Week 76] [Designated as safety issue: Yes]

Total testosterone levels were measured in nanomoles per Liter (nmol/L) from blood samples. Testosterone is a male sex hormone and influences bone health; total testosterone is the entire amount circulating in blood. Percent change from baseline was based on log-transformed data.

- Percent Change From Baseline in Free Testosterone at Week 52 and Week 76 [Time Frame: Baseline, Week 52, and Week 76] [Designated as safety issue: Yes]

Free testosterone levels were measured as a percentage of total testosterone from blood samples. Free testosterone is the amount of testosterone available to the body for use. Percent change from baseline was based on log-transformed data.

- Percent Change in Free Testosterone From Week 52 to Week 76 [Time Frame: Week 52 and Week 76] [Designated as safety issue: Yes]

Free testosterone levels were measured as a percentage of total testosterone from blood samples. Free testosterone is the amount of testosterone available to the body for use. Percent change from baseline was based on log-transformed data.

- Percent Change From Baseline in Sex Hormone Binding Globulin (SHBG) at Week 52 and Week 76 [Time Frame: Baseline, Week 52, and Week 76] [Designated as safety issue: Yes]

SHBG levels were measured in nanomoles per liter (nmol/L) from blood samples. SHBG binds to estradiol and testosterone and influences the amount of estradiol or testosterone available to the body for use. Percent change from baseline was based on log-transformed data.

- Percent Change in Sex Hormone Binding Globulin (SHBG) From Week 52 to Week 76 [Time Frame: Week 52 and Week 76] [Designated as safety issue: Yes]

SHBG levels were measured in nanomoles per liter (nmol/L) from blood samples. SHBG binds to estradiol and testosterone and influences the amount of estradiol or testosterone available to the body for use. Percent change from baseline was based on log-transformed data.

Other Pre-specified Outcome Measures:

- Percent Change in Percentage of Free Estradiol From Week 52 to Week 76 [Time Frame: Week 52 and Week 76] [Designated as safety issue: Yes]  
Free estradiol levels were measured as a percentage of serum estrogen from blood samples. Free estradiol is the amount of estrogen available to the body for use. Percent change was based on log-transformed data.
- Percent Change in Free Estradiol From Week 52 to Week 76 [Time Frame: Week 52 and Week 76] [Designated as safety issue: Yes]  
Free estradiol levels were measured in picomoles per Liter (pmol/L) from blood samples. Free estradiol is the amount of estrogen available to the body for use. Change was based on log-transformed data.

Enrollment: 226

Study Start Date: April 2008

Study Completion Date: September 2010

Primary Completion Date: March 2010

Arms	Assigned Interventions
Active Comparator: Arm 1 Treatment A rosiglitazone up to 8mg/day	Drug: Rosiglitazone up to 8mg/day  Other Names: Rosiglitazone
Active Comparator: Arm 2 Treatment B metformin up to 2000mg/day	Drug: Metformin up to 2000mg/day

## Eligibility

Ages Eligible for Study: 55 Years to 80 Years

Genders Eligible for Study: Female

Inclusion Criteria:

- Female, >55 to <80 years
- >5 years menopausal

- Type 2 Diabetes Mellitus (T2DM) diagnosis according to American Diabetes Association (ADA), American Association of Clinical Endocrinologists (AACE), Canadian Diabetes Association (CDA), World Health Organization/International Diabetes Federation (WHO/IDF)
- Drug-naïve (HbA1c < or = 9.0%); OR Prior monotherapy, submaximal doses of metformin (< or = 1000mg Metformin), sulfonylureas (< or = 5mg Glyburide, < or = 10mg Glipizide or < or = 8mg glimepiride) or full dose Januvia (100mg) (HbA1c < or = 8.5%); OR Prior monotherapy, > submaximal doses of metformin (>1000mg) or sulfonylureas (>5mg Glyburide, >10mg Glipizide or >8mg glimepiride) (HbA1c < or = 7.0%)
- Weighs <300 lbs (136.4 kg)
- Two or more vertebra (L1-L4) suitable for BMD measurement by dual x-ray absorptiometry (DXA)
- Absolute BMD value consistent with T-score >-2.5 at femoral neck, lumbar spine and total hip

#### Exclusion Criteria:

- Type 1 Diabetes Mellitus (T1DM) or history of diabetic ketoacidosis (DKA)
- Renal or hepatic disease (clinically significant)
- Hepatocellular reaction, severe edema, or medically serious fluid event associated with thiazolidinedione (TZD)
- Recent (<6mos) history or clinical intervention for angina or myocardial infarction or is taking nitrates
- Any stage of heart failure, i.e. New York Heart Association (NYHA) class I-IV
- Systolic BP >160mmHg or diastolic BP >90mmHg while on antihypertensive
- Hypersensitivity to TZDs, biguanides
- Prior treatment with two or more oral anti-diabetic (OAD) agents
- Bilateral hip replacements
- Concurrent diseases affecting bone metabolism
- Active malabsorption syndrome
- Serum calcium outside the central lab reference range
- Thyroid replacement therapy, serum thyroid stimulating hormone (TSH) must be within range
- Vitamin D deficiency
- Previous treatment with: strontium, intravenous (IV) bisphosphonate, fluoride, hormones, calcineurin inhibitors or methotrexate
- Chronic systemic corticosteroid [e.g. glucocorticoid, mineralocorticoid] treatment of no more than two intra-articular injections within the past year or use of oral parenteral, or long-term, high-dose inhaled corticosteroids



## Contacts and Locations

### Investigators

Study Director:

GSK Clinical Trials

GlaxoSmithKline

## More Information

### Publications:

Fitzpatrick L, Bilezikian J, Wooddell M, Paul G, Kolatkar N, Nino A, Miller C, Bogado C, Arnaud C, Cobitz A. AVD111179 Mechanism of Action Study to Evaluate the Effect of Rosiglitazone on Bone in Postmenopausal Women with Type 2 Diabetes Mellitus: Study Design and Baseline Characteristics. J Drug Asses. 2011;1(.):11-19.

Responsible Party: GlaxoSmithKline

Study ID Numbers: AVD111179

Health Authority: Canada: Health Canada

United States: Food and Drug Administration

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## Study Results

## Participant Flow

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be

	Description
	down-titrated to alleviate any MET-related tolerability issues.

#### 52-Week Double-Blind (DB) Period

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Started	114	112
Completed	77	85
Not Completed	37	27
Withdrew Consent	17	13
Adverse Event	14	12
Investigator Discretion	5	0
Protocol Violation	1	0
Lost to Follow-up	0	2

#### 24-Week Open-Label (OL) Period

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Started	76 <sup>[1]</sup>	84 <sup>[2]</sup>
Completed	69	80
Not Completed	7	4
Adverse Event	0	1



	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Protocol Violation	1	1
Met Stopping Criteria	3	1
Physician Decision	1	0
Withdrawal by Subject	2	1

[1] One participant who completed the DB Period did not receive the OL dose of MET.

[2] One participant who completed the DB Period did not receive the OL dose of MET.

## Baseline Characteristics

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Baseline Measures

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period	Total
Number of Participants	114	111	225
Age, Continuous <sup>[1]</sup> Years [units: Years] Mean (Standard Deviation)	63.6 (6.61)	64.0 (6.46)	63.8 (6.52)
Gender, Male/Female <sup>[2]</sup> [units: Participants]			
Female	114	111	225
Male	0	0	0
Race/Ethnicity, Customized <sup>[3]</sup> [units: participants]			
White - White/Caucasian/European	82	78	160
African American/African	2	8	10
American Indian or Alaskan Native	6	5	11
Asian - Central/South Asian	13	10	23
South East Asian	4	6	10
Mixed Race	3	2	5
East Asia	4	2	6

<sup>[1]</sup> Baseline Characteristics were summarized for all participants in the Safety Population, comprised of all randomized participants who received at least one dose of study medication. One participant in the Metformin arm did not receive study medication and was not included in

the Safety Population.

- [2] Baseline Characteristics were summarized for all participants in the Safety Population, comprised of all randomized participants who received at least one dose of study medication. One participant in the Metformin arm did not receive study medication and was not included in the Safety Population.
- [3] Baseline Characteristics were summarized for all participants in the Safety Population, comprised of all randomized participants who received at least one dose of study medication. One participant in the Metformin arm did not receive study medication and was not included in the Safety Population.

## Outcome Measures

### 1. Primary Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck (FN) Bone Mineral Density (BMD) Via Dual-energy X-ray Absorptiometry (DXA) at Week 52
Measure Description	FN BMD (measured in grams per centimeters squared [g/cm <sup>2</sup> ]) was measured by DXA. Bone mineral density is calculated as the mineral content of a bone divided by the area of the bone. DXA is the principal technique used for measuring BMD. Percent change from Baseline at Week 52 was calculated as (BMD at Week 52 minus BMD at Baseline)/BMD at Baseline x 100% and was assessed by analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Change in FN BMD at Week 52 was only analyzed within the Rosiglitazone arm.
Time Frame	Baseline and Week 52
Safety Issue?	Yes

### Analysis Population Description

Safety Population. Only evaluable participants with a value at baseline and at Week 52 for the parameter of interest were analyzed. Only participants with Baseline DXA and Week 52 DXA measurements performed on or prior to initiating open-label MET are included in this primary analysis.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period
Number of Participants Analyzed	52
Adjusted Percent Change From Baseline in Femoral Neck (FN) Bone Mineral Density (BMD) Via Dual-energy X-ray Absorptiometry (DXA) at Week 52 [units: percent change] Mean (Standard Error)	-1.24 (0.619)

## 2. Primary Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck (FN) Bone Mineral Density (BMD) Via Dual-energy X-ray Absorptiometry (DXA) at Week 76+10 Days
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Measure Description	FN BMD (measured in grams per centimeters squared [g/cm <sup>2</sup> ]) was measured by DXA. Bone mineral density is calculated as the mineral content of a bone divided by the area of the bone. DXA is the principal technique used for measuring BMD. Percent change from Baseline at Week 76+10 days was calculated as (BMD at Week 76+10 days minus BMD at Baseline)/BMD at Baseline x 100% and was assessed by analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Baseline and Week 76+10 days
Safety Issue?	No

### Analysis Population Description

Safety Population. Only evaluable participants with a value at baseline and at Week 76 performed up to 10 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	65	70
Adjusted Percent Change From Baseline in Femoral Neck (FN) Bone Mineral Density (BMD) Via Dual-energy X-ray Absorptiometry (DXA) at Week 76+10 Days [units: percent change] Mean (Standard Error)	-1.91 (0.624)	0.31 (0.636)

### 3. Primary Outcome Measure:

Measure Title	Adjusted Percent Change in Femoral Neck (FN) Bone Mineral Density (BMD) Via Dual-energy X-ray Absorptiometry (DXA) From Week 52 +10 Days to Week 76+10 Days
Measure Description	FN BMD (measured in grams per centimeters squared [g/cm <sup>2</sup> ]) was measured by DXA. Bone mineral density is calculated as the mineral content of a bone divided by the area of the bone. DXA is the principal technique used for measuring BMD. Percent change from Week 52+10 days to Week 76+10 days was calculated as (BMD at Week 76+10 days minus BMD at Week 52+10 days)/BMD at Week 52+10 days x 100% and was assessed by analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Week 52+10 days and Week 76+10 days
Safety Issue?	No

## Analysis Population Description

Safety Population. Only evaluable participants with a value at Week 52 performed up to 10 days after initiating OL MET and at Week 76 performed up to 10 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	56	62
Adjusted Percent Change in Femoral Neck (FN) Bone Mineral Density (BMD) Via Dual-energy X-ray Absorptiometry (DXA) From Week 52 +10 Days to Week	-0.07 (0.589)	-0.02 (0.585)

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
76+10 Days [units: percent change] Mean (Standard Error)		

#### 4. Secondary Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck, Total Hip, Trochanter, and Lumbar Spine BMD Via DXA at Week 52
Measure Description	BMD (measured in grams per centimeters squared [g/cm <sup>2</sup> ]) was measured by DXA. Percent change from Baseline at Week 52 was calculated as (BMD at Week 52 minus BMD at Baseline)/BMD at Baseline x 100% and was assessed by analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Baseline and Week 52
Safety Issue?	Yes

#### Analysis Population Description

Safety Population. Only evaluable participants with a value at baseline and at Week 52 for the parameter of interest were analyzed. Only participants with Baseline DXA and Week 52 DXA measurements performed on or prior to initiating open-label MET were analyzed. Not all participants had correct positioning for the DXA lumbar spine measurement.

#### Reporting Groups

	Description
Rosiglitazone in DB Period;	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg)



	Description
Metformin in OL Period	in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	52	54
Adjusted Percent Change From Baseline in Femoral Neck, Total Hip, Trochanter, and Lumbar Spine BMD Via DXA at Week 52 [units: percent change] Mean (Standard Error)		
Femoral neck, n=52, 54	-1.24 (0.619)	0.72 (0.659)
Total hip, n=52, 54	-0.77 (0.417)	-0.38 (0.440)
Trochanter, n=52, 54	-0.21 (0.725)	-0.78 (0.768)

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Lumbar spine, n=51, 53	-1.21 (0.473)	0.12 (0.505)

## 5. Secondary Outcome Measure:

Measure Title	Adjusted Percent Change in Femoral Neck, Total Hip, Trochanter, and Lumbar Spine BMD Via DXA From Week 52+10 Days to Week 76 + 10 Days
Measure Description	BMD (measured in grams per centimeters squared [g/cm <sup>2</sup> ]) was measured by DXA. Percent change from Week 52 + 10 days to Week 76 + 10 days was calculated as (BMD at Week 76 + 10 days minus BMD at Week 52 + 10 days)/BMD at Week 52 + 10 days x 100% and was assessed by analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Week 52 + 10 days and Week 76 + 10 days
Safety Issue?	No

## Analysis Population Description

Safety Population. Only evaluable participants with a value at Week 52 performed up to 10 days after initiating OL MET and at Week 76 performed up to 10 days after stopping OL MET for the parameter of interest were analyzed. Not all participants had correct positioning for the DXA lumbar spine measurement.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to

	Description
	open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	56	62
Adjusted Percent Change in Femoral Neck, Total Hip, Trochanter, and Lumbar Spine BMD Via DXA From Week 52+10 Days to Week 76 + 10 Days [units: percent change] Mean (Standard Error)		
Femoral neck, n=56, 62	-0.07 (0.589)	-0.02 (0.585)
Total hip, n=56, 62	0.40 (0.304)	-0.13 (0.301)
Trochanter, n=56, 62	-0.02 (0.475)	-0.68 (0.469)
Lumbar spine, n=55, 62	0.26 (0.440)	1.03 (0.442)

## 6. Secondary Outcome Measure:

Measure Title	Adjusted Percent Change in Femoral Neck, Total Hip, Trochanter, and Lumbar Spine BMD Via DXA From Week 52+30 Days to Week 76 + 30 Days
Measure Description	BMD (measured in grams per centimeters squared [g/cm <sup>2</sup> ]) was measured by DXA. Percent change from Week 52 + 30 days to Week 76 + 30 days was calculated as (BMD at Week 76 + 30 days minus BMD at Week 52 + 30 days)/BMD at Week 52 + 30 days x 100% and was assessed by analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

## Analysis Population Description

Safety Population. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET and Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed. Not all participants had correct positioning for all of the DXA measurements.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were

	Description
	switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	65	73
Adjusted Percent Change in Femoral Neck, Total Hip, Trochanter, and Lumbar Spine BMD Via DXA From Week 52+30 Days to Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Femoral neck, n=64, 73	-0.27 (0.559)	-0.25 (0.535)
Total hip, n=64, 73	0.00 (0.298)	-0.27 (0.283)
Trochanter, n=64, 73	-0.17 (0.495)	-0.47 (0.470)
Lumbar spine, n=65, 70	0.54 (0.445)	0.90 (0.442)

### 7. Secondary Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Bone Specific Alkaline Phosphatase (BSAP) and Procollagen Type 1 N-propeptide (P1NP) at Week 52 and Week 76
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Measure Description	BSAP and P1NP levels were measured in micrograms per liter (mcg/L) from blood samples. BSAP and P1NP are indicators of bone buildup or formation. GM, geometric mean; SE, standard error. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Baseline, Week 52, and Week 76
Safety Issue?	Yes

### Analysis Population Description

Safety Population. Only evaluable participants with a value at Baseline and at Week 52 or Week 76 for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg). RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin	Metformin (MET) initiated at a total daily dose of 1000 mg. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone	Metformin
Number of Participants Analyzed	78	84
Adjusted Percent Change From Baseline in Bone Specific Alkaline Phosphatase (BSAP) and Procollagen Type 1 N-propeptide (P1NP) at Week 52 and Week 76 [units: percent change]		
Week 52, GM - SE, BSAP, n=78, 84	-15.2	-29.7
Week 52, GM, BSAP, n=78, 84	-12.3	-27.3
Week 52, GM + SE, BSAP, n=78, 84	-9.3	-24.8
Week 76, GM - SE, BSAP, n=64, 77	-18.7	-26.7
Week 76, GM, BSAP, n=64, 77	-15.9	-24.3
Week 76, GM + SE, BSAP, n=64, 77	-12.9	-21.8
Week 52, GM - SE, P1NP, n=76, 83	5.0	-16.5
Week 52, GM, P1NP, n=76, 83	9.0	-13.3
Week 52, GM + SE, P1NP, n=76, 83	13.3	-9.9
Week 76 GM - SE, P1NP, n=63, 75	-11.2	-14.5
Week 76, GM, P1NP, n=63, 75	-6.9	-10.5
Week 76, GM + SE, P1NP, n=63, 75	-2.4	-6.4

#### 8. Secondary Outcome Measure:

Measure Title	Adjusted Percent Change in Bone Specific Alkaline Phosphatase (BSAP) and Procollagen Type 1 N-propeptide (P1NP) From Week 52 to Week 76
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Measure Description	BSAP and P1NP levels were measured in micrograms per liter (mcg/L) from blood samples. BSAP and P1NP are indicators of bone buildup or formation. GM, geometric mean; SE, standard error. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Week 52 and Week 76
Safety Issue?	Yes

### Analysis Population Description

Safety Population. Only evaluable participants with a value at Week 52 and at Week 76 for the parameter of interest were analyzed. One participant did not have P1NP measured.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values



	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	64	76
Adjusted Percent Change in Bone Specific Alkaline Phosphatase (BSAP) and Procollagen Type 1 N-propeptide (P1NP) From Week 52 to Week 76 [units: percent change]		
GM - SE, BSAP, n=64, 76	-5.6	4.3
GM, BSAP, n=64, 76	-2.0	8.0
GM + SE, BSAP, n=64, 76	1.8	11.8
GM - SE, P1NP, n=63, 76	-15.8	3.2
GM, P1NP, n=63, 76	-12.4	7.0
GM + SE, P1NP, n=63, 76	-9.0	11.0

#### 9. Secondary Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Carboxyterminal Cross-linked Telopeptide of Type 1 Collagen (CTX) at Week 52 and Week 76
Measure Description	CTX levels were measured in picograms per milliliter (pg/ml) from blood samples. CTX is an indicator of bone break down or resorption. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.

Time Frame	Baseline, Week 52, and Week 76
Safety Issue?	Yes

### Analysis Population Description

Safety Population. Only evaluable participants with a value at Baseline and at Week 52 or Week 76 for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	77	84
Adjusted Percent Change From Baseline		

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
in Carboxyterminal Cross-linked Telopeptide of Type 1 Collagen (CTX) at Week 52 and Week 76 [units: percent change]		
Week 52, GM - SE, n=77, 84	11.3	-7.8
Week 52, GM, n=77, 84	18.1	-2.3
Week 52, GM + SE, n=77, 84	25.4	3.7
Week 76, GM - SE, n=63, 77	-19.5	-4.5
Week 76, GM, n=63, 77	-13.1	2.6
Week 76, GM + SE, n=63, 77	-6.1	10.3

#### 10. Secondary Outcome Measure:

Measure Title	Adjusted Percent Change in Carboxyterminal Cross-linked Telopeptide of Type 1 Collagen (CTX) From Week 52 to Week 76
Measure Description	CTX levels were measured in picograms per milliliter (pg/ml) from blood samples. CTX is an indicator of bone break down or resorption. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Week 52 and Week 76
Safety Issue?	Yes

## Analysis Population Description

Safety Population. Only evaluable participants with a value at Week 52 and at Week 76 for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	64	76
Adjusted Percent Change in Carboxyterminal Cross-linked Telopeptide of Type 1 Collagen (CTX) From Week 52 to Week 76 [units: percent change]		

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
GM - SE	-31.2	2.2
GM	-26.7	8.4
GM + SE	-21.9	14.9

#### 11. Secondary Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in 25-Hydroxyvitamin D (Vitamin D) at Week 52 and Week 76
Measure Description	Vitamin D levels were measured in nanomoles per Liter (nmol/L) from blood samples. Vitamin D is required for good bone health. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Baseline, Week 52, and Week 76
Safety Issue?	Yes

#### Analysis Population Description

Safety Population. Only evaluable participants with a value at Baseline and at Week 52 or Week 76 for the parameter of interest were analyzed.

#### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the

	Description
	follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	61	65
Adjusted Percent Change From Baseline in 25-Hydroxyvitamin D (Vitamin D) at Week 52 and Week 76 [units: percent change]		
Week 52, GM - SE, n=61, 65	-27.9	-15.9
Week 52, GM, n=61, 65	-24.7	-12.2
Week 52, GM + SE, n=61, 65	-21.4	-8.4
Week 76, GM - SE, n=55, 58	-21.3	-12.5
Week 76, GM, n=55, 58	-18.1	-8.9
Week 76, GM + SE, n=55, 58	-14.6	-5.2

## 12. Secondary Outcome Measure:

Measure Title	Adjusted Percent Change in 25-Hydroxyvitamin D (Vitamin D) From Week 52 to Week 76
Measure Description	Vitamin D levels were measured in nanomoles per Liter (nmol/L) from blood samples. Vitamin D is required for good bone health. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Week 52 and Week 76
Safety Issue?	Yes

### Analysis Population Description

Safety Population. Only evaluable participants with a value at Week 52 and at Week 76 for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be

	Description
	down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	63	76
Adjusted Percent Change in 25-Hydroxyvitamin D (Vitamin D) From Week 52 to Week 76 [units: percent change]		
GM - SE	-4.7	-7.7
GM	0.1	-3.2
GM + SE	5.1	1.5

#### 13. Secondary Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Intact Parathyroid Hormone (PTH) at Week 52 and Week 76
Measure Description	Intact PTH levels were measured in nanograms per Liter (ng/L) from blood samples. Intact PTH is the amount of PTH circulating in the blood and influences bone health. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Baseline, Week 52, and Week 76



Safety Issue?	Yes
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## Analysis Population Description

Safety Population. Only evaluable participants with a value at Baseline and at Week 52 or Week 76 for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	64	71
Adjusted Percent Change From Baseline in Intact Parathyroid Hormone (PTH) at Week 52 and Week 76		

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
[units: percent change]		
Week 52, GM - SE, n=64, 71	-16.5	-25.9
Week 52, GM, n=64, 71	-12.0	-22.0
Week 52, GM + SE, n=64, 71	-7.2	-17.8
Week 76, GM - SE, n=56, 64	-28.8	-26.2
Week 76, GM, n=56, 64	-23.1	-20.8
Week 76, GM + SE, n=56, 64	-17.0	-15.0

#### 14. Secondary Outcome Measure:

Measure Title	Adjusted Percent Change in Intact Parathyroid Hormone (PTH) From Week 52 to Week 76
Measure Description	Intact PTH levels were measured in nanograms per Liter (ng/L) from blood samples. Intact PTH is the amount of PTH circulating in the blood and influences bone health. Percent change was based on log-transformed data and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Week 52 and Week 76
Safety Issue?	Yes

#### Analysis Population Description

Safety Population. Only evaluable participants with a value at Week 52 and at Week 76 for the parameter of interest were analyzed.

#### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	64	75
Adjusted Percent Change in Intact Parathyroid Hormone (PTH) From Week 52 to Week 76 [units: percent change]		
GM - SE	-13.2	-1.7
GM	-7.4	4.3
GM + SE	-1.3	10.7

## 15. Secondary Outcome Measure:

Measure Title	Percent Change From Baseline in Serum Estradiol at Week 52 and Week 76
Measure Description	Serum estradiol levels were measured in picomoles per Liter (pmol/L) from blood samples. Estradiol is one form of the female sex hormone estrogen and influences bone health. Percent change from baseline was based on log-transformed data.
Time Frame	Baseline, Week 52, and Week 76
Safety Issue?	Yes

## Analysis Population Description

Safety Population. Only evaluable participants with a value at Baseline and at Week 52 or Week 76 for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	74	82
Percent Change From Baseline in Serum Estradiol at Week 52 and Week 76 [units: percent change]		
Week 52, GM - SE, n=74, 82	-17.0838	-31.4166
Week 52, GM, n=74, 82	-3.453	-17.280
Week 52, GM + SE, n=74, 82	12.4189	-0.2292
Week 76, GM - SE, n=64, 76	-16.0971	0.4372
Week 76, GM, n=64, 76	0.215	21.389
Week 76, GM - SE, n=64, 76	19.6987	46.7122

## 16. Secondary Outcome Measure:

Measure Title	Percent Change in Serum Estradiol From Week 52 to Week 76
Measure Description	Serum estradiol levels were measured in picomoles per Liter (pmol/L) from blood samples. Estradiol is one form of the female sex hormone estrogen and influences bone health. Percent change from baseline was based on log-transformed data.
Time Frame	Week 52 and Week 76
Safety Issue?	Yes

## Analysis Population Description

Safety Population. Only evaluable participants with a value at Week 52 and at Week 76 for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	64	77
Percent Change in Serum Estradiol From Week 52 to Week 76 [units: percent change]		
GM - SE	-15.2056	29.3058

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
GM	0.513	50.823
GM + SE	19.1447	75.9217

#### 17. Secondary Outcome Measure:

Measure Title	Percent Change From Baseline in Total Testosterone at Week 52 and Week 76
Measure Description	Total testosterone levels were measured in nanomoles per Liter (nmol/L) from blood samples. Testosterone is a male sex hormone and influences bone health; total testosterone is the entire amount circulating in blood. Percent change from baseline was based on log-transformed data.
Time Frame	Baseline, Week 52, and Week 76
Safety Issue?	Yes

#### Analysis Population Description

Safety Population. Only evaluable participants with a value at Baseline and at Week 52 or Week 76 for the parameter of interest were analyzed.

#### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day

	Description
	to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	74	82
Percent Change From Baseline in Total Testosterone at Week 52 and Week 76 [units: percent change]		
Week 52, GM - SE, n=74, 82	14.1569	-5.8206
Week 52, GM, n=74, 82	19.689	1.044
Week 52, GM + SE, n=74, 82	25.4897	8.4082
Week 76, GM - SE, n=64, 75	-12.5441	-8.2870
Week 76, GM, n=64, 75	-8.156	-2.932
Week 76, GM + SE, n=64, 75	-3.5470	2.7363



## 18. Secondary Outcome Measure:

Measure Title	Percent Change in Total Testosterone From Week 52 to Week 76
Measure Description	Total testosterone levels were measured in nanomoles per Liter (nmol/L) from blood samples. Testosterone is a male sex hormone and influences bone health; total testosterone is the entire amount circulating in blood. Percent change from baseline was based on log-transformed data.
Time Frame	Week 52 and Week 76
Safety Issue?	Yes

## Analysis Population Description

Safety Population. Only evaluable participants with a value at Week 52 and at Week 76 for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be

	Description
	down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	64	76
Percent Change in Total Testosterone From Week 52 to Week 76 [units: percent change]		
GM - SE	-29.0307	-13.9923
GM	-24.373	-7.102
GM + SE	-19.4104	0.3411

#### 19. Secondary Outcome Measure:

Measure Title	Percent Change From Baseline in Free Testosterone at Week 52 and Week 76
Measure Description	Free testosterone levels were measured as a percentage of total testosterone from blood samples. Free testosterone is the amount of testosterone available to the body for use. Percent change from baseline was based on log-transformed data.
Time Frame	Baseline, Week 52, and Week 76
Safety Issue?	Yes

## Analysis Population Description

Safety Population. Only evaluable participants with a value at Baseline and at Week 52 or Week 76 for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	74	82
Percent Change From Baseline in Free Testosterone at Week 52 and Week 76 [units: percent change]		
Week 52, GM - SE, n=74, 82	-9.9964	2.5725

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Week 52, GM, n=74, 82	-5.940	6.266
Week 52, GM + SE, n=74, 82	1.7006	10.0934
Week 76, GM - SE, n=64, 75	-0.3232	-1.9532
Week 76, GM, n=64, 75	3.687	2.478
Week 76, GM + SE, n=64, 75	7.8593	7.1093

## 20. Secondary Outcome Measure:

Measure Title	Percent Change in Free Testosterone From Week 52 to Week 76
Measure Description	Free testosterone levels were measured as a percentage of total testosterone from blood samples. Free testosterone is the amount of testosterone available to the body for use. Percent change from baseline was based on log-transformed data.
Time Frame	Week 52 and Week 76
Safety Issue?	Yes

## Analysis Population Description

Safety Population. Only evaluable participants with a value at Week 52 and at Week 76 for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose

	Description
	of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	64	76
Percent Change in Free Testosterone From Week 52 to Week 76 [units: percent change]		
GM - SE	3.1109	-6.9549
GM	8.993	-3.537
GM + SE	15.2100	0.0073

#### 21. Secondary Outcome Measure:

Measure Title	Percent Change From Baseline in Sex Hormone Binding Globulin (SHBG) at Week 52 and Week 76
Measure Description	SHBG levels were measured in nanomoles per liter (nmol/L) from blood samples. SHBG binds to estradiol and testosterone and influences the amount of estradiol or testosterone available to the body for use. Percent change from baseline was based on log-transformed data.
Time Frame	Baseline, Week 52, and Week 76
Safety Issue?	Yes

### Analysis Population Description

Safety Population. Only evaluable participants with a value at Baseline and at Week 52 or Week 76 for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	74	83
Percent Change From Baseline in Sex Hormone Binding Globulin (SHBG) at Week 52 and Week 76 [units: percent change]		
Week 52, GM - SE, n=74, 83	33.2608	4.3929
Week 52, GM, n=74, 83	37.563	8.146
Week 52, GM + SE, n=74, 83	42.0049	12.0349
Week 76, GM - SE, n=61, 67	-0.2973	4.0983
Week 76, GM, n=61, 67	3.137	9.846
Week 76, GM + SE, n=61, 67	6.6896	15.9116

## 22. Secondary Outcome Measure:

Measure Title	Percent Change in Sex Hormone Binding Globulin (SHBG) From Week 52 to Week 76
Measure Description	SHBG levels were measured in nanomoles per liter (nmol/L) from blood samples. SHBG binds to estradiol and testosterone and influences the amount of estradiol or testosterone available to the body for use. Percent change from baseline was based on log-transformed data.
Time Frame	Week 52 and Week 76

Safety Issue?	Yes
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### Analysis Population Description

Safety Population. Only evaluable participants with a value at Week 52 and at Week 76 for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	62	66
Percent Change in Sex Hormone Binding Globulin (SHBG) From Week 52 to Week 76		



	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
[units: percent change]		
GM - SE	-27.0129	-3.9036
GM	-24.624	-0.825
GM + SE	-22.1566	2.3517

### 23. Other Pre-specified Outcome Measure:

Measure Title	Percent Change in Percentage of Free Estradiol From Week 52 to Week 76
Measure Description	Free estradiol levels were measured as a percentage of serum estrogen from blood samples. Free estradiol is the amount of estrogen available to the body for use. Percent change was based on log-transformed data.
Time Frame	Week 52 and Week 76
Safety Issue?	Yes

### Analysis Population Description

Safety Population. Only evaluable participants with a value at Week 52 and Week 76 for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to

	Description
	open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	33	38
Percent Change in Percentage of Free Estradiol From Week 52 to Week 76 [units: percent change]		
GM - SE	-7.6337	-5.4666
GM	-2.683	-0.975
GM + SE	2.5337	3.7301

#### 24. Other Pre-specified Outcome Measure:

Measure Title	Percent Change in Free Estradiol From Week 52 to Week 76
Measure Description	Free estradiol levels were measured in picomoles per Liter (pmol/L) from blood samples. Free estradiol is the amount of estrogen available to the body for use. Change was based on log-transformed data.
Time Frame	Week 52 and Week 76
Safety Issue?	Yes

### Analysis Population Description

Safety Population. Only evaluable participants with a value at Week 52 and Week 76 for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	27	33
Percent Change in Free Estradiol From Week 52 to Week 76 [units: percent change]		
GM - SE	-29.5250	96.1843
GM	-3.239	173.932
GM + SE	32.8525	282.4903

## 25. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck, Total Hip, Trochanter, and Lumbar Spine BMD Via DXA at Week 52 + 10 Days and Week 76 + 10 Days
Measure Description	BMD (measured in grams per centimeters squared [g/cm <sup>2</sup> ]) was measured by DXA. Percent change from Baseline at Week 52 + 10 days or Week 76 + 10 days was calculated as (BMD at Week 52 + 10 days (or Week 76 + 10 days ) minus BMD at Baseline)/BMD at Baseline x 100% and was assessed by analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Baseline, Week 52 + 10 days, and Week 76 + 10 days
Safety Issue?	Yes

## Analysis Population Description

Safety Population. Only evaluable participants with a value at Baseline and at Week 52 performed up to 10 days after initiating OL MET or at Week 76 performed up to 10 days after stopping OL MET for the parameter of interest were analyzed. Not all participants had the correct positioning for the DXA lumbar spine measurement.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	70	78
Adjusted Percent Change From Baseline in Femoral Neck, Total Hip, Trochanter, and Lumbar Spine BMD Via DXA at Week 52 + 10 Days and Week 76 + 10 Days [units: percent change]		

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Mean (Standard Error)		
Week 52 + 10 days; Femoral neck (FN), n=70, 78	-1.47 (0.521)	0.22 (0.512)
Week 52 + 10 days; Total hip (TH), n=70, 78	-1.62 (0.386)	-0.72 (0.379)
Week 52 + 10 days; Trochanter (Tro.), n=70, 78	-1.45 (0.602)	-1.04 (0.589)
Week 52 + 10 days; Lumbar spine (LS), n=70, 76	-1.41 (0.416)	0.04 (0.419)
Week 76 + 10 days; FN, n=65, 70	-1.91 (0.624)	0.31 (0.636)
Week 76 + 10 days; TH, n=65, 70	-1.70 (0.415)	-0.83 (0.420)
Week 76 + 10 days; Tro., n=65, 70	-2.14 (0.644)	-1.35 (0.650)
Week 76 + 10 days; LS, n=65, 71	-1.24 (0.452)	0.85 (0.457)

## 26. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck, Total Hip, Trochanter, and Lumbar Spine BMD Via DXA at Week 52 + 30 Days and Week 76 + 30 Days
Measure Description	BMD (measured in grams per centimeters squared [g/cm <sup>2</sup> ]) was measured by DXA. Percent change from Baseline at Week 52 + 30 days or Week 76 + 30 days was calculated as (BMD at Week 52 + 30 days (or Week 76 + 30 days) minus BMD at Baseline)/BMD at Baseline x 100% and was assessed by analysis of covariance

	(ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Baseline, Week 52 + 30 days, and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed. Not all participants had the correct positioning for all of the DXA measurements.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	79	83
Adjusted Percent Change From Baseline in Femoral Neck, Total Hip, Trochanter, and Lumbar Spine BMD Via DXA at Week 52 + 30 Days and Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days; Femoral neck (FN), n=77, 83	-1.59 (0.503)	0.24 (0.498)
Week 52 + 30 days; Total hip (TH), n=77, 83	-1.79 (0.370)	-0.72 (0.364)
Week 52 + 30 days; Trochanter (Tro.), n=77, 83	-1.83 (0.583)	-1.01 (0.574)
Week 52 + 30 days; Lumbar spine (LS), n=79, 81	-1.60 (0.417)	0.11 (0.421)
Week 76 + 30 days; FN, n=66, 74	-2.05 (0.620)	0.29 (0.619)
Week 76 + 30 days; TH, n=66, 74	-1.79 (0.408)	-0.68 (0.404)
Week 76 + 30 days; Tro., n=66, 74	-2.53 (0.508)	-0.96 (0.575)
Week 76 + 30 days; LS, n=66, 72	-1.15 (0.464)	1.13 (0.467)

## 27. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck, Total Hip, Trochanter, and Intertrochanter Areal BMD Via
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	Quantitative Computed Tomography (QCT) at Week 52 + 30 Days and Week 76 + 30 Days
Measure Description	BMD (measured in grams per centimeters squared [g/cm <sup>2</sup> ]) was measured by QCT. BMD by QCT is the 2-dimensional volume that mimics the DXA measurement for the same region. Percent change from Baseline at Week 52 + 30 days or Week 76 + 30 days was calculated as (BMD at Week 52 + 30 days (or Week 76 + 30 days) minus BMD at baseline)/BMD at Baseline x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Baseline, Week 52 + 30 days, and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up

	Description
	phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	32	35
Adjusted Percent Change From Baseline in Femoral Neck, Total Hip, Trochanter, and Intertrochanter Areal BMD Via Quantitative Computed Tomography (QCT) at Week 52 + 30 Days and Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days; Femoral neck (FN), n=32, 35	-2.39 (0.895)	0.09 (0.986)
Week 52 + 30 days; Total hip (TH), n=32, 35	-3.39 (0.475)	0.09 (0.521)
Week 52 + 30 days; Trochanter (Tro.), n=32, 35	-4.53 (0.612)	-0.23 (0.669)
Week 52+30 days; Intertrochanter (Inter.),n=32, 35	-3.36 (0.515)	0.77 (0.565)
Week 76+30 days; Femoral neck (FN), n=31, 30	-1.98 (0.587)	-1.52 (0.705)

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Week 76 + 30 days; TH, n=31, 30	-2.11 (0.495)	-0.32 (0.591)
Week 76 + 30 days; Tro., n=31, 30	-2.86 (0.752)	-1.28 (0.892)
Week 76 + 30 days; Inter., n=31, 30	-1.66 (0.525)	0.30 (0.627)

## 28. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change in Femoral Neck, Total Hip, Trochanter, and Intertrochanter Areal BMD Via Quantitative Computed Tomography (QCT) From Week 52+30 Days to Week 76 + 30 Days
Measure Description	BMD (measured in grams per centimeters squared [g/cm <sup>2</sup> ]) was measured by QCT. BMD by QCT is the 2-dimensional volume that mimics the DXA measurement for the same region. Percent change from Week 52 + 30 days to Week 76 + 30 days was calculated as (BMD at Week 76 + 30 days minus BMD at Week 52 + 30 days)/BMD at Week 52 + 30 days x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

## Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Percent Change in Femoral Neck, Total Hip, Trochanter, and Intertrochanter Areal BMD Via Quantitative Computed Tomography (QCT) From Week 52+30 Days to Week 76 + 30 Days [units: percent change] Mean (Standard Error)		

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
percent change	0.95 (0.728)	-1.39 (0.866)
Total hip	1.61 (0.346)	-0.18 (0.411)
Trochanter	1.81 (0.534)	-0.91 (0.632)
Intertrochanter	2.05 (0.428)	-0.25 (0.507)

## 29. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Total Hip (TH) Integral, TH Trabecular, and TH Cortical vBMD Via QCT at Week 52 + 30 Days and at Week 76 + 30 Days
Measure Description	Volumetric (v)BMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. vBMD is the 3-dimensional density of a region of bone. Cortical bone is dense bone. Trabecular bone is spongy bone. Integral bone is the sum of cortical and trabecular bone measurements. Cortical thickness is the width of the cortical shell. Percent change from Baseline was calculated as (vBMD at Week 52+30 days (or Week 76+30 days) minus vBMD at baseline)/vBMD at Baseline x 100% and was assessed by ANCOVA with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Baseline, Week 52 + 30 days, and Week 76 + 30 days
Safety Issue?	Yes

## Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	32	35
Adjusted Percent Change From Baseline in Total Hip (TH) Integral, TH Trabecular, and TH Cortical vBMD Via QCT at Week 52 + 30 Days and at Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days; Integral, n=32, 35	-3.60 (0.587)	0.99 (0.645)

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Week 52 + 30 days; Trabecular, n=32, 35	-3.63 (1.243)	0.21 (1.376)
Week 52 + 30 days; Cortical, n=32, 35	-0.54 (0.537)	0.52 (0.603)
Week 76 + 30 days; Integral, n=31, 30	-1.70 (0.657)	0.85 (0.786)
Week 76 + 30 days; Trabecular, n=31, 30	-2.66 (1.211)	0.70 (1.445)
Week 76 + 30 days; Cortical, n=31, 30	0.23 (0.421)	0.50 (0.518)

### 30. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change in Total Hip (TH) Integral, TH Trabecular, and TH Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days
Measure Description	Volumetric (v)BMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. vBMD is the 3-dimensional density of a region of bone. Cortical bone is dense bone. Trabecular bone is spongy bone. Integral bone is the sum of cortical and trabecular bone measurements. Cortical thickness is the width of the cortical shell. Percent change from Week 52 + 30 days was calculated as (vBMD at Week 76 + 30 days minus vBMD at Week 52 + 30 days)/ vBMD at Week 52 + 30 days x 100% and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

## Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Percent Change in Total Hip (TH) Integral, TH Trabecular, and TH Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days		



	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
[units: percent change] Mean (Standard Error)		
Integral	2.24 (0.483)	-0.20 (0.5746)
Trabecular	0.90 (1.252)	1.15 (1.491)
Cortical	0.94 (0.449)	-0.06 (0.548)

### 31. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck (FN) Integral, FN Trabecular, and FN Cortical vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days
Measure Description	vBMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. Percent change from Baseline at Week 52 + 30 days or Week 76 + 30 days was calculated as (vBMD at Week 52 + 30 days (or Week 76 + 30 days) minus vBMD at baseline)/vBMD at Baseline x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Baseline, Week 52 + 30 days, and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	32	35
Adjusted Percent Change From Baseline in Femoral Neck (FN) Integral, FN Trabecular, and FN Cortical vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days, Integral, n=32, 35	-3.72 (1.097)	0.58 (1.208)

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Week 52 + 30 days, Trabecular, n=32, 35	-1.83 (1.695)	0.91 (1.867)
Week 52 + 30 days, Cortical, n=32, 35	-1.00 (0.735)	-0.20 (0.819)
Week 76 + 30 days, Integral, n=31, 30	-2.13 (0.946)	-0.61 (1.141)
Week 76 + 30 days, Trabecular, n=31, 30	-1.05 (1.798)	2.27 (2.141)
Week 76 + 30 days, Cortical, n=31, 30	-0.46 (0.599)	-1.60 (0.723)

### 32. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change in Femoral Neck (FN) Integral, FN Trabecular, and FN Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days
Measure Description	vBMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. Percent change from Week 52 + 30 days to Week 76 + 30 days was calculated as (vBMD at Week 76 + 30 days minus vBMD at Week 52 + 30 days)/vBMD at Week 52 + 30 days x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	No

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76

performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Percent Change in Femoral Neck (FN) Integral, FN Trabecular, and FN Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days [units: percent change] Mean (Standard Error)		

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Integral	2.21 (0.871)	-1.37 (1.040)
Trabecular	0.27 (1.721)	2.21 (2.044)
Cortical	1.03 (0.774)	-1.30 (0.929)

### 33. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Trochanter Integral, Trochanter Trabecular, and Trochanter Cortical vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days
Measure Description	vBMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. Percent change from Baseline at Week 52 + 30 days or Week 76 + 30 days was calculated as (vBMD at Week 52 + 30 days (or Week 76 + 30 days) minus vBMD at baseline)/vBMD at Baseline x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Baseline, Week 52 + 30 days, and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	32	35
Adjusted Percent Change From Baseline in Trochanter Integral, Trochanter Trabecular, and Trochanter Cortical vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days, Integral, n=32, 35	-4.80 (0.666)	0.01 (0.730)

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Week 52 + 30 days, Trabecular, n=32, 35	-3.43 (1.157)	0.67 (1.275)
Week 52 + 30 days, Cortical, n=32, 35	-1.26 (0.490)	-0.18 (0.540)
Week 76 + 30 days, Integral, n=31, 30	-2.88 (0.748)	-0.93 (0.889)
Week 76 + 30 days, Trabecular, n=31, 30	-2.42 (1.085)	0.92 (1.293)
Week 76 + 30 days, Cortical, n=31, 30	-0.49 (0.384)	-0.64 (0.462)

#### 34. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change in Trochanter Integral, Trochanter Trabecular, and Trochanter Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days
Measure Description	vBMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. Percent change from Week 52 + 30 days to Week 76 + 30 days was calculated as (vBMD at Week 76 + 30 days minus vBMD at Week 52 + 30 days)/vBMD at Week 52 + 30 days x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

#### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76

performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Percent Change in Trochanter Integral, Trochanter Trabecular, and Trochanter Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days [units: percent change] Mean (Standard Error)		



	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
percent change	2.22 (0.506)	-0.90 (0.600)
Trabecular	1.07 (1.138)	0.95 (1.353)
Cortical	0.78 (0.396)	-0.65 (0.474)

### 35. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Intertrochanter Integral, Intertrochanter Trabecular, and Intertrochanter Cortical vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days
Measure Description	vBMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. Percent change from Baseline at Week 52 + 30 days or Week 76 + 30 days was calculated as (vBMD at Week 52 + 30 days (or Week 76 + 30 days) minus vBMD at baseline)/vBMD at Baseline x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Baseline, Week 52 + 30 days, and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	32	35
Adjusted Percent Change From Baseline in Intertrochanter Integral, Intertrochanter Trabecular, and Intertrochanter Cortical vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days, Integral, n=32, 35	-3.47 (0.621)	2.18 (0.683)

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Week 52 + 30 days, Trabecular, n=32, 35	-4.26 (1.341)	-0.22 (1.485)
Week 52 + 30 days, Cortical, n=32, 35	-0.76 (0.568)	0.99 (0.631)
Week 76 + 30 days, Integral, n=31, 30	-0.92 (0.746)	1.88 (0.895)
Week 76 + 30 days, Trabecular, n=31, 30	-3.09 (1.278)	0.27 (1.525)
Week 76 + 30 days, Cortical, n=31, 30	0.41 (0.472)	0.79 (0.573)

### 36. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change in Intertrochanter Integral, Intertrochanter Trabecular, and Intertrochanter Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days
Measure Description	vBMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. Percent change from Week 52 + 30 days to Week 76 + 30 days was calculated as (vBMD at Week 76 + 30 days minus vBMD at Week 52 + 30 days)/vBMD at Week 52 + 30 days x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Percent Change in Intertrochanter Integral, Intertrochanter Trabecular, and Intertrochanter Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days [units: percent change]		

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Mean (Standard Error)		
percent change	2.83 (0.563)	-0.46 (0.671)
Trabecular	1.16 (1.298)	1.21 (1.545)
Cortical	1.29 (0.479)	-0.27 (0.577)

### 37. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Vertebral Trabecular vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days
Measure Description	BMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. Percent change from Baseline at Week 52 + 30 days or Week 76 + 30 days was calculated as (vBMD at Week 52 + 30 days (or Week 76 + 30 days) minus vBMD at baseline)/vBMD at Baseline x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Baseline, Week 52 + 30 days, and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	32	35
Adjusted Percent Change From Baseline in Vertebral Trabecular vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days, n=32, 35	-6.71 (1.454)	-1.72 (1.601)
Week 76 + 30 days, n=31, 30	-5.15 (1.121)	-3.91 (1.337)

### 38. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change in Vertebral Trabecular vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days
Measure Description	BMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. Percent change from Week 52 + 30 days to Week 76 + 30 days was calculated as (vBMD at Week 76 + 30 days minus vBMD at Week 52 + 30 days)/vBMD at Week 52 + 30 days x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up

	Description
	phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Percent Change in Vertebral Trabecular vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days [units: percent change] Mean (Standard Error)	3.53 (1.454)	-2.11 (1.727)

### 39. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck (FN) Supero-posterior Integral, Trabecular, and Cortical vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days
Measure Description	vBMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. Percent change from Baseline at Week 52 + 30 days or Week 76 + 30 days was calculated as (vBMD at Week 52 + 30 days (or Week 76 + 30 days) minus vBMD at baseline)/vBMD at Baseline x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Supero-posterior is the upper and back section of the FN.



Time Frame	Baseline, Week 52 + 30 days, and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	32	35

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Adjusted Percent Change From Baseline in Femoral Neck (FN) Supero-posterior Integral, Trabecular, and Cortical vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days, Integral, n=32, 35	-10.26 (2.194)	-0.03 (2.417)
Week 52 + 30 days, Trabecular, n=32, 35	2.77 (5.848)	5.57 (6.420)
Week 52 + 30 days, Cortical, n=32, 35	-3.76 (0.836)	-0.66 (0.922)
Week 76 + 30 days, Integral, n=31, 30	-4.21 (2.094)	1.07 (2.508)
Week 76 + 30 days, Trabecular, n=31, 30	2.37 (7.040)	10.24 (8.362)
Week 76 + 30 days, Cortical, n=31, 30	-1.65 (0.730)	-1.30 (0.877)

#### 40. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change From Baseline in Femoral Neck (FN) Supero-posterior and Cortical vBMD Via QCT at Week 76 + 30 Days
Measure Description	vBMD was measured by QCT. Change from Baseline at Week 76 + 30 days was calculated as vBMD at Week 76 + 30 days minus vBMD at baseline and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region.

	Supero-posterior is the upper and back section of the FN.
Time Frame	Baseline and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	31	30
Adjusted Change From Baseline in Femoral Neck (FN) Supero-posterior and Cortical vBMD Via QCT at Week 76 + 30 Days [units: mg/cm^3] Mean (Standard Error)	-8.007 (3.4199)	-7.006 (4.1114)

#### 41. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change in Femoral Neck (FN) Supero-posterior Integral, Trabecular, and Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days
Measure Description	vBMD (measured in milligrams per centimeters cubed [mg/cm^3]) was measured by QCT. Percent change from Week 52 + 30 days to Week 76 + 30 days was calculated as (vBMD at Week 76 + 30 days minus vBMD at Week 52 + 30 days)/vBMD at Week 52 + 30 days x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Supero-posterior is the upper and back section of the FN.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

#### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Percent Change in Femoral Neck (FN) Supero-posterior Integral, Trabecular, and Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Integral	8.29 (3.262)	0.52 (3.884)

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Trabecular	36.05 (31.815)	-11.69 (37.721)
Cortical	2.17 (0.944)	-0.94 (1.129)

#### 42. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change in Femoral Neck (FN) Supero-posterior Cortical vBMD Via QCT From Week 52 + 30 Days to Week 76 + 30 Days
Measure Description	vBMD was measured by QCT. Change from Week 52 + 30 days to Week 76 + 30 days was calculated as vBMD at Week 76 + 30 days minus vBMD at Week 52 + 30 days and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Supero-posterior is the upper and back section of the FN.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

#### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

#### Reporting Groups

	Description
Rosiglitazone in DB Period;	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg)

	Description
Metformin in OL Period	in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Change in Femoral Neck (FN) Supero-posterior Cortical vBMD Via QCT From Week 52 + 30 Days to Week 76 + 30 Days [units: mg/cm <sup>3</sup> ] Mean (Standard Error)	9.30 (4.287)	-4.92 (5.130)

#### 43. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck (FN) Supero-posterior Cortical Thickness Via QCT at Week 52 + 30 Days and Week 76 + 30 Days
Measure Description	Cortical thickness (measured in millimeters) was measured by QCT. Percent change was calculated as (thickness at Week 52 + 30 days (or Week 76 + 30 days) minus thickness at Baseline)/thickness at Baseline x 100%
Time Frame	Baseline, Week 52 + 30 days, and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.



## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	32	35
Adjusted Percent Change From Baseline in Femoral Neck (FN) Supero-posterior Cortical Thickness Via QCT at Week 52 + 30 Days and Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days, n=32, 35	-20.48 (3.614)	1.00 (3.986)
Week 76 + 30 days, n=31,30	-3.52 (3.674)	-1.50 (4.423)

## 44. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change From Baseline in Femoral Neck (FN) Supero-posterior Cortical Thickness Via QCT at Week 76 + 30 Days
Measure Description	Cortical thickness was measured by QCT. Change from baseline was calculated as thickness at Week 76 + 30 days minus thickness at Baseline.
Time Frame	Baseline and Week 76 + 30 days
Safety Issue?	Yes

## Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	31	30
Adjusted Change From Baseline in Femoral Neck (FN) Supero-posterior Cortical Thickness Via QCT at Week 76 + 30 Days [units: millimeters] Mean (Standard Error)	-0.95 (0.0537)	-0.067 (0.0647)

#### 45. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change in Femoral Neck (FN) Supero-posterior Cortical Thickness Via QCT From Week 52+30 Days to Week 76 + 30 Days
Measure Description	Cortical thickness (measured in millimeters) was measured by QCT. Percent change was calculated as (thickness at Week 76 + 30 days minus thickness at Week 52 + 30 days)/thickness at Week 52 + 30 days x 100%.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

#### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

#### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000

	Description
	mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Percent Change in Femoral Neck (FN) Supero-posterior Cortical Thickness Via QCT From Week 52+30 Days to Week 76 + 30 Days [units: percent change] Mean (Standard Error)	32.42 (10.358)	-7.80 (2.383)

#### 46. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change in Femoral Neck (FN) Supero-posterior Cortical Thickness Via QCT From Week 52 + 30 Days to Week 76 + 30 Days
Measure Description	Cortical thickness was measured by QCT. Change was calculated as thickness at Week 76 + 30 days minus thickness at Week 52 + 30 days.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

## Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Change in Femoral Neck (FN) Supero-posterior Cortical Thickness Via QCT From Week 52 + 30 Days to Week 76 + 30 Days	0.18 (0.049)	-0.05 (0.059)

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
[units: millimeters] Mean (Standard Error)		

#### 47. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck (FN) Supero-anterior Integral, Trabecular, and Cortical vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days
Measure Description	vBMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. Percent change from Baseline at Week 52 + 30 days or Week 76 + 30 days was calculated as (vBMD at Week 52 + 30 days (or Week 76 + 30 days) minus vBMD at baseline)/vBMD at Baseline x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Supero-anterior is the upper and front section of the FN.
Time Frame	Baseline, Week 52 plus 30 days, and Week 76 + 30 days
Safety Issue?	Yes

#### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

#### Reporting Groups

	Description
Rosiglitazone in DB Period;	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg)

	Description
Metformin in OL Period	in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	32	35
Adjusted Percent Change From Baseline in Femoral Neck (FN) Supero-anterior Integral, Trabecular, and Cortical vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days, Integral, n=32, 35	-6.56 (2.106)	-0.58 (2.311)
Week 52 + 30 days, Trabecular, n=32,	3.59 (4.719)	2.82 (5.180)

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
35		
Week 52 + 30 days, Cortical, n=32, 35	-1.91 (0.901)	-0.25 (0.977)
Week 76 + 30 days, Integral, n=31, 30	-4.97 (2.384)	-2.45 (2.838)
Week 76 + 30 days, Trabecular, n=31, 30	-0.85 (6.050)	3.98 (7.171)
Week 76 + 30 days, Cortical, n=31, 30	-0.93 (0.745)	-1.49 (0.876)

#### 48. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change From Baseline in Femoral Neck (FN) Supero-anterior Cortical vBMD Via QCT at Week 76 + 30 Days
Measure Description	vBMD was measured by QCT. Change from Baseline at Week 76 + 30 days was calculated as vBMD at Week 76 + 30 days minus vBMD at baseline and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Supero-anterior is the upper and front section of the FN.
Time Frame	Baseline and Week 76 + 30 days
Safety Issue?	Yes

#### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.



## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	31	30
Adjusted Change From Baseline in Femoral Neck (FN) Supero-anterior Cortical vBMD Via QCT at Week 76 + 30 Days [units: mg/cm <sup>3</sup> ] Mean (Standard Error)	-4.555 (3.5006)	-7.553 (4.1177)

#### 49. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change in Femoral Neck (FN) Supero-anterior Integral, Trabecular, and Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days
Measure Description	vBMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. Percent change from Week 52 + 30 days to Week 76 + 30 days was calculated as (vBMD at Week 76 + 30 days minus vBMD at Week 52 + 30 days)/vBMD at Week 52 + 30 days x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Supero-anterior is the upper and front section of the FN.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

#### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

#### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week

	Description
	2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Percent Change in Femoral Neck (FN) Supero-anterior Integral, Trabecular, and Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Integral	2.96 (2.202)	-1.81 (2.609)
Trabecular	-2.78 (4.677)	6.63 (5.531)
Cortical	1.19 (0.778)	-1.28 (0.912)

#### 50. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change in Femoral Neck (FN) Supero-anterior Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days
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Measure Description	vBMD was measured by QCT. Change from Week 52 + 30 days to Week 76 + 30 days was calculated as vBMD at Week 76 + 30 days minus vBMD at Week 52 + 30 days and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Supero-anterior is the upper and front section of the FN.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Change in Femoral Neck (FN) Supero-anterior Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days [units: mg/cm^3] Mean (Standard Error)	5.19 (3.686)	-6.24 (4.319)

#### 51. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck (FN) Supero-anterior Cortical Thickness Via QCT at Week 52 + 30 Days and Week 76 + 30 Days
Measure Description	Cortical thickness (measured in millimeters) was measured by QCT. Percent change was calculated as (thickness at Week 52 + 30 days(or Week 76 + 30 days) minus thickness at Baseline)/thickness at Baseline x 100%.
Time Frame	Baseline, Week 52 + 30 days, and Week 76 + 30 days
Safety Issue?	Yes

#### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

#### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	32	35
Adjusted Percent Change From Baseline in Femoral Neck (FN) Supero-anterior Cortical Thickness Via QCT at Week 52 + 30 Days and Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days, n=32, 35	-13.45 (5.002)	5.05 (5.453)
Week 76 + 30 days, n=31, 30	-4.23 (4.491)	-4.78 (5.327)

## 52. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change From Baseline in Femoral Neck (FN) Supero-anterior Cortical Thickness Via QCT at Week 76 + 30 Days
Measure Description	Cortical thickness was measured by QCT. Change from baseline was calculated as thickness at Week 76 + 30 days minus thickness at Baseline.
Time Frame	Baseline and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be

	Description
	down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	31	30
Adjusted Change From Baseline in Femoral Neck (FN) Supero-anterior Cortical Thickness Via QCT at Week 76 + 30 Days [units: millimeters] Mean (Standard Error)	-0.117 (0.0484)	-0.087 (0.0575)

#### 53. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change in Femoral Neck (FN) Supero-anterior Cortical Thickness Via QCT From Week 52 + 30 Days to Week 76 + 30 Days
Measure Description	Cortical thickness (measured in millimeters) was measured by QCT. Percent change was calculated as (thickness at Week 76 + 30 days minus thickness at Week 52 + 30 days)/thickness at Week 52 + 30 days x 100%.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes



## Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Percent Change in Femoral Neck (FN) Supero-anterior Cortical Thickness Via QCT From Week 52 + 30 Days to Week 76 + 30 Days	14.02 (6.779)	-13.65 (7.995)

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
[units: percent change] Mean (Standard Error)		

#### 54. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change in Femoral Neck (FN) Supero-anterior Cortical Thickness Via QCT From Week 52+30 Days to Week 76 + 30 Days
Measure Description	Cortical thickness was measured by QCT. Change was calculated as thickness at Week 76 + 30 days minus thickness at Week 52 + 30 days.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

#### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

#### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be

	Description
	down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Change in Femoral Neck (FN) Supero-anterior Cortical Thickness Via QCT From Week 52+30 Days to Week 76 + 30 Days [units: millimeters] Mean (Standard Error)	0.11 (0.052)	-0.13 (0.061)

#### 55. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck (FN) Infero-posterior Integral, Trabecular, and Cortical vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days
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Measure Description	vBMD (measured in milligrams per centimeters cubed [mg/cm^3]) was measured by QCT. Percent change from Baseline at Week 52 + 30 days or Week 76 + 30 days was calculated as (vBMD at Week 52 + 30 days (or Week 76 + 30 days) minus vBMD at baseline)/vBMD at Baseline x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Infero-posterior is the lower and back section of the FN.
Time Frame	Baseline, Week 52 + 30 days, and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	32	35
Adjusted Percent Change From Baseline in Femoral Neck (FN) Infero-posterior Integral, Trabecular, and Cortical vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days, Integral, n=32, 35	-4.11 (1.074)	1.74 (1.200)
Week 52 + 30 days, Trabecular, n=32, 35	-84.08 (270.700)	282.16 (297.445)
Week 52 + 30 days, Cortical, n=32, 35	-3.42 (1.531)	1.14 (1.694)
Week 76 + 30 days, Integral, n=31, 30	-3.11 (0.933)	0.01 (1.147)
Week 76 + 30 days, Trabecular, n=31, 30	24.46 (17.473)	13.54 (20.790)
Week 76 + 30 days, Cortical, n=31, 30	-1.32 (1.234)	-1.17 (1.492)

## 56. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change From Baseline in Femoral Neck (FN) Infero-posterior Cortical vBMD Via QCT at Week 76 + 30 Days
Measure Description	vBMD was measured by QCT. Change from Baseline at Week 76 + 30 days was calculated as vBMD at Week 76 + 30 days minus vBMD at

	baseline and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Infero-posterior is the lower and back section of the FN.
Time Frame	Baseline and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	31	30
Adjusted Change From Baseline in Femoral Neck (FN) Infero-posterior Cortical vBMD Via QCT at Week 76 + 30 Days [units: mg/cm <sup>3</sup> ] Mean (Standard Error)	-12.424 (8.9945)	-10.244 (10.8703)

#### 57. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change in Femoral Neck (FN) Infero-posterior Integral, Trabecular, and Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days
Measure Description	vBMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. Percent change from Week 52 + 30 days to Week 76 + 30 days was calculated as (vBMD at Week 76 + 30 days minus vBMD at Week 52 + 30 days)/vBMD at Week 52 + 30 days x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Infero-posterior is the lower and back section of the FN.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

#### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Percent Change in Femoral Neck (FN) Infero-posterior Integral, Trabecular, and Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Integral	1.47 (1.183)	-1.87 (1.435)



	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Trabecular	-39.81 (130.071)	161.81 (154.179)
Cortical	2.67 (1.728)	-2.50 (2.076)

#### 58. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change in Femoral Neck (FN) Infero-posterior Cortical vBMD Via QCT From Week 52 + 30 Days to Week 76 + 30 Days
Measure Description	vBMD was measured by QCT. Change from Week 52 + 30 days to Week 76 + 30 days was calculated as vBMD at Week 76 + 30 days minus vBMD at Week 52 + 30 days and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Infero-posterior is the lower and back section of the FN.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

#### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

#### Reporting Groups

	Description
Rosiglitazone in DB Period;	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg)

	Description
Metformin in OL Period	in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Change in Femoral Neck (FN) Infero-posterior Cortical vBMD Via QCT From Week 52 + 30 Days to Week 76 + 30 Days [units: mg/cm <sup>3</sup> ] Mean (Standard Error)	15.48 (11.544)	-17.59 (13.865)

#### 59. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck (FN) Infero-posterior Cortical Thickness Via QCT at Week 52 + 30 Days and Week 76 + 30 Days
Measure Description	Cortical thickness (measured in millimeters) was measured by QCT. Percent change was calculated as (thickness at Week 52 + 30 days (or Week 76 + 30 days) minus thickness at Baseline)/thickness at Baseline x 100%.
Time Frame	Baseline, Week 52 + 30 days, and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	32	35
Adjusted Percent Change From Baseline in Femoral Neck (FN) Infero-posterior Cortical Thickness Via QCT at Week 52 + 30 Days and Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days, n=32, 35	0.47 (1.977)	-1.27 (2.180)
Week 76 + 30 days, n=31, 30	-1.46 (1.593)	-0.11 (1.910)

## 60. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change From Baseline in Femoral Neck (FN) Infero-posterior Cortical Thickness Via QCT at Week 76 + 30 Days
Measure Description	Cortical thickness was measured by QCT. Change from Baseline was calculated as thickness at Week 76 + 30 days minus thickness at Baseline.
Time Frame	Baseline and Week 76 + 30 days
Safety Issue?	Yes

## Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	31	30
Adjusted Change From Baseline in Femoral Neck (FN) Infero-posterior Cortical Thickness Via QCT at Week 76 + 30 Days [units: millimeters] Mean (Standard Error)	-0.082 (0.0816)	-0.048 (0.0978)

## 61. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change in Femoral Neck (FN) Infero-posterior Cortical Thickness Via QCT From Week 52 + 30 Days to Week 76 + 30 Days
Measure Description	Cortical thickness (measured in millimeters) was measured by QCT. Percent change was calculated as (thickness at Week 76 + 30 days minus thickness at Week 52 + 30 days)/thickness at Week 52 + 30 days x 100%.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000

	Description
	mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Percent Change in Femoral Neck (FN) Infero-posterior Cortical Thickness Via QCT From Week 52 + 30 Days to Week 76 + 30 Days [units: percent change] Mean (Standard Error)	-1.48 (1.552)	2.04 (1.846)

#### 62. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change in Femoral Neck (FN) Infero-posterior Cortical Thickness Via QCT From Week 52 + 30 Days to Week 76 + 30 Days
Measure Description	Cortical thickness was measured by QCT. Change was calculated as thickness at Week 76 + 30 days minus thickness at Week 52 + 30 days.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

## Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Change in Femoral Neck (FN) Infero-posterior Cortical Thickness Via QCT From Week 52 + 30 Days to Week 76 + 30 Days	-0.08 (0.078)	0.07 (0.093)



	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
[units: millimeters] Mean (Standard Error)		

### 63. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck (FN) Infero-anterior Integral, Trabecular, and Cortical vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days
Measure Description	vBMD (measured in milligrams per centimeters cubed [mg/cm <sup>3</sup> ]) was measured by QCT. Percent change from Baseline at Week 52 + 30 days or Week 76 + 30 days was calculated as (vBMD at Week 52 + 30 days (or Week 76 + 30 days) minus vBMD at baseline)/vBMD at Baseline x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Infero-anterior is the lower and front section of the FN.
Time Frame	Baseline, Week 52 + 30 days, and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period;	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg)

	Description
Metformin in OL Period	in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	32	35
Adjusted Percent Change From Baseline in Femoral Neck (FN) Infero-anterior Integral, Trabecular, and Cortical vBMD Via QCT at Week 52 + 30 Days and Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days, Integral, n=32, 35	-4.35 (1.950)	1.26 (2.163)
Week 52, Trabecular, n=32, 35	-161.59	930.71

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
	(774.589)	(851.727)
Week 52, Cortical, n=32, 35	-1.85 (1.309)	0.85 (1.563)
Week 76 + 30 days, Integral, n=31, 30	-0.29 (2.301)	0.54 (2.810)
Week 76 + 30 days, Trabecular, n=31, 30	81.29 (35.959)	37.81 (42.791)
Week 76 + 30 days, Cortical, n=31, 30	1.45 (1.149)	-0.63 (1.409)

#### 64. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change From Baseline in Femoral Neck (FN) Infero-anterior Cortical vBMD Via QCT at Week 76 + 30 Days
Measure Description	vBMD was measured by QCT. Change from Baseline at Week 76 + 30 days was calculated as vBMD at Week 76 + 30 days minus vBMD at baseline and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Infero-anterior is the lower and front section of the FN.
Time Frame	Baseline and Week 76 + 30 days
Safety Issue?	Yes

#### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	31	30
Adjusted Change From Baseline in Femoral Neck (FN) Infero-anterior Cortical vBMD Via QCT at Week 76 + 30 Days [units: mg/cm <sup>3</sup> ] Mean (Standard Error)	7.901 (6.9912)	-5.025 (8.5722)

65. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change in Femoral Neck (FN) Infero-anterior Integral, Trabecular, and Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days
Measure Description	vBMD (measured in milligrams per centimeters cubed [mg/cm^3]) was measured by QCT. Percent change from Week 52 + 30 days to Week 76 + 30 days was calculated as (vBMD at Week 76 + 30 days minus vBMD at Week 52 + 30 days)/vBMD at Week 52 + 30 days x 100% and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Infero-anterior is the lower and front section of the FN.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up

	Description
	phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Percent Change in Femoral Neck (FN) Infero-anterior Integral, Trabecular, and Cortical vBMD Via QCT From Week 52+30 Days to Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Integral	5.05 (1.878)	0.38 (2.268)
Trabecular	-90.60 (167.792)	260.13 (199.323)
Cortical	3.68 (1.649)	-1.64 (2.016)

#### 66. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change in Femoral Neck (FN) Infero-anterior Cortical vBMD Via QCT From Week 52 + 30 Days to Week 76 + 30 Days
Measure Description	vBMD was measured by QCT. Change from Week 52 + 30 days to

	Week 76 + 30 days was calculated as vBMD at Week 76 + 30 days minus vBMD at Week 52 + 30 days and was assessed by an analysis of covariance (ANCOVA) with terms for treatment, baseline value, prior therapy, and region. Infero-anterior is the lower and front section of the FN.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Change in Femoral Neck (FN) Infero-anterior Cortical vBMD Via QCT From Week 52 + 30 Days to Week 76 + 30 Days [units: mg/cm <sup>3</sup> ] Mean (Standard Error)	20.15 (9.677)	-10.73 (11.830)

#### 67. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change From Baseline in Femoral Neck (FN) Infero-anterior Cortical Thickness Via QCT at Week 52 + 30 Days and Week 76 + 30 Days
Measure Description	Cortical thickness (measured in millimeters) was measured by QCT. Percent change was calculated as (thickness at Week 52 + 30 days (or Week 76 + 30 days) minus thickness at Baseline)/thickness at Baseline x 100%.
Time Frame	Baseline, Week 52 + 30 days, and Week 76 + 30 days
Safety Issue?	Yes

#### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

#### Reporting Groups



	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	32	35
Adjusted Percent Change From Baseline in Femoral Neck (FN) Infero-anterior Cortical Thickness Via QCT at Week 52 + 30 Days and Week 76 + 30 Days [units: percent change] Mean (Standard Error)		
Week 52 + 30 days, n=32, 35	-6.05 (2.393)	0.64 (2.656)
Week 76 + 30 days, n=31, 30	-3.59 (2.804)	0.39 (3.421)

#### 68. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change From Baseline in Femoral Neck (FN) Infero-anterior Cortical Thickness Via QCT at Week 76 + 30 Days
Measure Description	Cortical thickness was measured by QCT. Change was calculated as thickness at Week 76 + 30 days minus thickness at Baseline.
Time Frame	Baseline and Week 76 + 30 days
Safety Issue?	Yes

#### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Baseline and at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

#### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	31	30
Adjusted Change From Baseline in Femoral Neck (FN) Infero-anterior Cortical Thickness Via QCT at Week 76 + 30 Days [units: millimeters] Mean (Standard Error)	-0.120 (0.0931)	-0.040 (0.1135)

## 69. Post-Hoc Outcome Measure:

Measure Title	Adjusted Percent Change in Femoral Neck (FN) Infero-anterior Cortical Thickness Via QCT From Week 52 + 30 Days to Week 76 + 30 Days
Measure Description	Cortical thickness (measured in millimeters) was measured by QCT. Percent change was calculated as (thickness at Week 76 + 30 days minus thickness at Week 52 + 30 days)/thickness at Week 52 + 30 days x 100%.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

## Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Percent Change in Femoral Neck (FN) Infero-anterior Cortical Thickness Via QCT From Week 52 + 30 Days to Week 76 + 30 Days [units: percent change] Mean (Standard Error)	3.12 (2.127)	1.56 (2.257)

#### 70. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change in Femoral Neck (FN) Infero-anterior Cortical Thickness Via QCT From Week 52 + 30 Days to Week 76 + 30 Days
Measure Description	Cortical thickness was measured by QCT. Change was calculated as thickness at Week 76 + 30 days minus thickness at Week 52 + 30 days.
Time Frame	Week 52 + 30 days and Week 76 + 30 days
Safety Issue?	Yes

### Analysis Population Description

Safety Population, QCT subset. Only evaluable participants with a value at Week 52 performed up to 30 days after initiating OL MET or at Week 76 performed up to 30 days after stopping OL MET for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

## Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	30	30
Adjusted Change in Femoral Neck (FN) Infero-anterior Cortical Thickness Via QCT From Week 52 + 30 Days to Week 76 + 30 Days [units: millimeters] Mean (Standard Error)	0.09 (0.065)	0.01 (0.078)

## 71. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change From Baseline in Albumin-adjusted Serum Calcium (AASC) at Week 52 and Week 76
Measure Description	AASC levels were measured from blood samples. AASC is the amount of free calcium circulating in the blood and calcium is required for good bone health. Change from baseline was calculated as the Week 52 or Week 76 value minus the baseline value and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Baseline, Week 52, and Week 76
Safety Issue?	Yes

## Analysis Population Description

Safety Population. Only evaluable participants with a value at Baseline and at Week 52 or Week 76 for the parameter of interest were analyzed.

## Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	73	83
Adjusted Change From Baseline in Albumin-adjusted Serum Calcium (AASC) at Week 52 and Week 76 [units: millimoles per Liter (mmol/L)] Mean (Standard Error)		
Week 52, n=73, 83	0.01 (0.009)	0.03 (0.009)
Week 76, n=64, 75	0.03 (0.010)	0.04 (0.010)

## 72. Post-Hoc Outcome Measure:

Measure Title	Adjusted Change in Albumin-adjusted Serum Calcium (AASC) From Week 52 to Week 76
Measure Description	AASC levels were measured from blood samples. AASC is the amount of free calcium circulating in the blood and calcium is required for good bone health. Change from Week 52 was calculated as the Week 76 value minus the Week 52 value and was assessed by an ANCOVA with terms for treatment, baseline value, prior therapy, and region.
Time Frame	Week 52 and Week 76
Safety Issue?	Yes

### Analysis Population Description

Safety Population. Only evaluable participants with a value at Week 52 and at Week 76 for the parameter of interest were analyzed.

### Reporting Groups

	Description
Rosiglitazone in DB Period; Metformin in OL Period	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg) in the 52-week DB Period. RSG could be uptitrated to a total daily dose of 8 mg at Week 4. At Week 52, all participants were switched to open-label (OL) Metformin (MET) therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin in DB Period; Metformin in OL Period	Metformin (MET) initiated at a total daily dose of 1000 mg in the 52-week DB Period. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4. At Week 52, all participants were switched to open-label MET therapy for 24 weeks during the follow-up phase; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be



	Description
	down-titrated to alleviate any MET-related tolerability issues.

### Measured Values

	Rosiglitazone in DB Period; Metformin in OL Period	Metformin in DB Period; Metformin in OL Period
Number of Participants Analyzed	64	74
Adjusted Change in Albumin-adjusted Serum Calcium (AASC) From Week 52 to Week 76 [units: millimoles per Liter (mmol/L)] Mean (Standard Error)	0.01 (0.011)	0.00 (0.010)

## Reported Adverse Events

### Reporting Groups

	Description
Rosiglitazone: DB	Rosiglitazone (RSG) initiated at a total daily dose of 4 milligrams (mg). RSG could be uptitrated to a total daily dose of 8 mg at Week 4 in the 52-week Double-Blind (DB) Period.
Metformin: DB	Metformin (MET) initiated at a total daily dose of 1000 mg. MET could be uptitrated to 1500 mg/day at Week 2 and to 2000 mg/day at Week 4 in the 52-week DB Period.
Rosiglitazone: MET OL	At Week 52, all participants receiving RSG in the DB Period were switched to open-label Metformin (MET) therapy for 24 weeks during the Open-label (OL) Period; all participants were force-titrated from

	Description
	1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.
Metformin: MET OL	At Week 52, all participants receiving MET in the DB Period were switched to open-label MET therapy for 24 weeks during the OL Period; all participants were force-titrated from 1000 mg/day to 2000 mg/day over a 4-week period. However, participants could be down-titrated to alleviate any MET-related tolerability issues.

#### Time Frame

76 weeks

#### Additional Description

Serious adverse events (SAEs) and AEs were collected in the Safety Population, comprised of all randomized participants who received at least one dose of study medication.

#### Serious Adverse Events

	Rosiglitazone: DB	Metformin: DB	Rosiglitazone: MET OL	Metformin: MET OL
Total # participants affected/at risk	7/114 (6.14%)	5/111 (4.5%)	0/76 (0%)	0/84 (0%)
Cardiac disorders				
Coronary artery disease † <sup>A</sup>				
# participants affected/at risk	0/114 (0%)	1/111 (0.9%)	0/76 (0%)	0/84 (0%)
# events				
Gastrointestinal				

	Rosiglitazone: DB	Metformin: DB	Rosiglitazone: MET OL	Metformin: MET OL
disorders				
Umbilical hernia, obstructive † <sup>A</sup>				
# participants affected/at risk	1/114 (0.88%)	0/111 (0%)	0/76 (0%)	0/84 (0%)
# events				
General disorders				
Device dislocation † <sup>A</sup>				
# participants affected/at risk	1/114 (0.88%)	0/111 (0%)	0/76 (0%)	0/84 (0%)
# events				
Generalised oedema † <sup>A</sup>				
# participants affected/at risk	1/114 (0.88%)	0/111 (0%)	0/76 (0%)	0/84 (0%)
# events				
Sudden cardiac death † <sup>A</sup>				
# participants affected/at risk	1/114 (0.88%)	0/111 (0%)	0/76 (0%)	0/84 (0%)
# events				
Infections and infestations				
Enteritis infectious † <sup>A</sup>				

	Rosiglitazone: DB	Metformin: DB	Rosiglitazone: MET OL	Metformin: MET OL
# participants affected/at risk	0/114 (0%)	1/111 (0.9%)	0/76 (0%)	0/84 (0%)
# events				
Escherichia infection † <sup>A</sup>				
# participants affected/at risk	1/114 (0.88%)	0/111 (0%)	0/76 (0%)	0/84 (0%)
# events				
Pyelonephritis † <sup>A</sup>				
# participants affected/at risk	1/114 (0.88%)	0/111 (0%)	0/76 (0%)	0/84 (0%)
# events				
Urinary tract infection † <sup>A</sup>				
# participants affected/at risk	1/114 (0.88%)	1/111 (0.9%)	0/76 (0%)	0/84 (0%)
# events				
Injury, poisoning and procedural complications				
Wrist fracture † <sup>A</sup>				
# participants affected/at risk	0/114 (0%)	1/111 (0.9%)	0/76 (0%)	0/84 (0%)
# events				
Investigations				
Alanine aminotransferase				

	Rosiglitazone: DB	Metformin: DB	Rosiglitazone: MET OL	Metformin: MET OL
increased † <sup>A</sup>				
# participants affected/at risk	0/114 (0%)	1/111 (0.9%)	0/76 (0%)	0/84 (0%)
# events				
Nervous system disorders				
Cerebral infarction † <sup>A</sup>				
# participants affected/at risk	0/114 (0%)	1/111 (0.9%)	0/76 (0%)	0/84 (0%)
# events				
Presyncope † <sup>A</sup>				
# participants affected/at risk	1/114 (0.88%)	0/111 (0%)	0/76 (0%)	0/84 (0%)
# events				
Respiratory, thoracic and mediastinal disorders				
Asthma † <sup>A</sup>				
# participants affected/at risk	0/114 (0%)	1/111 (0.9%)	0/76 (0%)	0/84 (0%)
# events				
Pleural effusion † <sup>A</sup>				
# participants affected/at risk	1/114 (0.88%)	0/111 (0%)	0/76 (0%)	0/84 (0%)

	Rosiglitazone: DB	Metformin: DB	Rosiglitazone: MET OL	Metformin: MET OL
# events				
Vascular disorders				
Hypertension † <sup>A</sup>				
# participants affected/at risk	1/114 (0.88%)	0/111 (0%)	0/76 (0%)	0/84 (0%)
# events				

† Indicates events were collected by systematic assessment.

A Term from vocabulary, MedDRA, v13

## Other Adverse Events

Frequency Threshold Above Which Other Adverse Events are Reported: 5%

	Rosiglitazone: DB	Metformin: DB	Rosiglitazone: MET OL	Metformin: MET OL
Total # participants affected/at risk	47/115 (40.87%)	45/111 (40.54%)	12/76 (15.79%)	8/84 (9.52%)
Gastrointestinal disorders				
Diarrhoea † <sup>A</sup>				
# participants affected/at risk	3/115 (2.61%)	15/111 (13.51%)	6/76 (7.89%)	1/84 (1.19%)
# events				
Dyspepsia † <sup>A</sup>				
# participants affected/at risk	2/115 (1.74%)	6/111 (5.41%)	0/76 (0%)	0/84 (0%)

	Rosiglitazone: DB	Metformin: DB	Rosiglitazone: MET OL	Metformin: MET OL
# events				
Nausea † <sup>A</sup>				
# participants affected/at risk	3/115 (2.61%)	3/111 (2.7%)	3/76 (3.95%)	5/84 (5.95%)
# events				
General disorders				
Fatigue † <sup>A</sup>				
# participants affected/at risk	6/115 (5.22%)	4/111 (3.6%)	0/76 (0%)	0/84 (0%)
# events				
Oedemal peripheral † <sup>A</sup>				
# participants affected/at risk	17/115 (14.78%)	0/111 (0%)	0/76 (0%)	0/84 (0%)
# events				
Infections and infestations				
Influenza † <sup>A</sup>				
# participants affected/at risk	3/115 (2.61%)	6/111 (5.41%)	0/76 (0%)	1/84 (1.19%)
# events				
Nasopharyngitis † <sup>A</sup>				
# participants affected/at risk	7/115 (6.09%)	7/111 (6.31%)	1/76 (1.32%)	0/84 (0%)

	Rosiglitazone: DB	Metformin: DB	Rosiglitazone: MET OL	Metformin: MET OL
# events				
Investigations				
Weight increased † <sup>A</sup>				
# participants affected/at risk	9/115 (7.83%)	1/111 (0.9%)	0/76 (0%)	0/84 (0%)
# events				
Musculoskeletal and connective tissue disorders				
Arthralgia † <sup>A</sup>				
# participants affected/at risk	5/115 (4.35%)	6/111 (5.41%)	1/76 (1.32%)	0/84 (0%)
# events				
Back pain † <sup>A</sup>				
# participants affected/at risk	6/115 (5.22%)	5/111 (4.5%)	1/76 (1.32%)	0/84 (0%)
# events				
Nervous system disorders				
Headache † <sup>A</sup>				
# participants affected/at risk	9/115 (7.83%)	5/111 (4.5%)	1/76 (1.32%)	1/84 (1.19%)
# events				



	Rosiglitazone: DB	Metformin: DB	Rosiglitazone: MET OL	Metformin: MET OL
Respiratory, thoracic and mediastinal disorders				
Cough † <sup>A</sup>				
# participants affected/at risk	6/115 (5.22%)	1/111 (0.9%)	1/76 (1.32%)	1/84 (1.19%)
# events				

† Indicates events were collected by systematic assessment.

A Term from vocabulary, MedDRA, v13

## More Information

### Certain Agreements:

Principal Investigators are NOT employed by the organization sponsoring the study.

There IS an agreement between the Principal Investigator and the Sponsor (or its agents) that restricts the PI's rights to discuss or publish trial results after the trial is completed.

GSK agreements may vary with individual investigators, but will not prohibit any investigator from publishing. GSK supports the publication of results from all centers of a multi-center trial but requests that reports based on single-site data not precede the primary publication of the entire clinical trial.

### Limitations and Caveats:

### Results Point of Contact:

Name/Official Title: GSK Response Center

Organization: GlaxoSmithKline

Phone: 866-435-7343

Email: