Document title	**Clinical Study Report Synopsis**
Study title	**A multicentre, prospective, randomised, double-blind, placebo-controlled, international study to assess the effects of 2 g per day of strontium ranelate versus placebo on the time to fracture healing in osteoporotic men and women. "The fracture healing study"**
Study drug	**S12911**
Studied indication	**Osteoporotic men and postmenopausal osteoporotic women**
Development phase	**Phase III**
Protocol code	**CL3-12911-035**
Study initiation date	**10 May 2010**
Study completion date	**21 March 2012**
Main coordinator	[redacted] **- Italy**
Sponsors	**Institut de Recherches Internationales Servier (I.R.I.S.)** **50 rue Carnot** **92284 Suresnes Cedex - France** **Servier United Kingdom** **Gallions, Whexham Springs - Framewood Road - Wexham** **Slough SL3 6RJ - United Kingdom** **Les Laboratoires Servier Representative Office** **Paveletskaya Square 2 - Moscow 115 054 - Russia**
Responsible medical officer	[redacted]
GCP	**This study was performed in accordance with the principles of Good Clinical Practice including the archiving of essential documents.**
Date of the report	**Final version of 21 February 2013**

~~CONFIDENTIAL~~

2. SYNOPSIS

Name of Company: **I.R.I.S.** **50, rue Carnot** **92284 Suresnes Cedex - FRANCE**	**Individual Study Table Referring to Part of the Dossier**	*(For National Authority Use only)*
Name of Finished Product: **Prolelos® Osseor® Protos® Bivalos®**	**Volume:**	
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Title of study: A multicenter, prospective, randomised, double-blind, placebo-controlled, international study to assess the effects of 2 g per day of strontium ranelate *versus* placebo on the time to fracture healing in osteoporotic men and women.
The "Fracture healing study".
Protocol No.: CL3-12911-035 - EudraCT Number 2009-014271-41

International coordinator: [redacted] - Italy

Study centres: Multicentre study: 30 centres in 8 countries included 217 patients: Belgium (1 centre – 1 patient), Brazil (5 centres - 80 patients), Czech Republic (5 centres - 27 patients), Germany (2 centres – 4 patients), Hungary (4 centres - 42 patients), Italy (8 centres - 49 patients), Russia (2 centres - 10 patients), and United-Kingdom (3 centres - 4 patients).

Publication (reference): Not applicable

Studied period:	**Phase of development of the study:**
- Initiation date: 10 May 2010 - Completion date: 21 March 2012	Phase III

Objectives:

The **primary objective** was to demonstrate the efficacy of S 12911 (strontium ranelate 2 g) *versus* placebo in accelerating radiological healing of distal radius fractures, as evidenced by the reduction of time to the bridging in at least 3 out of 4 radial cortices.

The **secondary objectives** were:

To demonstrate the efficacy of strontium ranelate in:

- Enhancing clinical healing, evidenced by
  - Patient-reported outcome tests: European Quality of life - 5D (EQ-5D), Quick Disability of the Arm Shoulder and Hand (QuickDASH), Patient-Rated Wrist Evaluation tests (PRWE tests).
  - Hand grip strength test.
- Enhancing early healing (bridging in at least 3 out of 4 cortices at W8).
- Decreasing the rate of delayed healing (no bridging in at least 3 out of 4 cortices at W24).
- Decreasing the rate of secondary reduction of the fracture (open or closed) after inclusion.
- Accelerating radiological healing of distal radius fractures, as evidenced by an earlier bridging in 1, 2 and 4 out of 4 radial cortices observed on antero-posterior and lateral radiographs.
- Decreasing the time to the disappearance of fracture line, according to Amendment No. 2.

To assess the clinical and biological safety of strontium ranelate over 6 months of treatment.

Methodology:
This was an international, multicentre, prospective, Phase III, double-blind, randomised placebo-controlled study.

Number of patients:
Planned: 200 patients (strontium ranelate 2 g and placebo group: 100 patients each).
Included: 217 patients.

Diagnosis and main criteria for inclusion:
Men and post-menopausal women, aged 50 years or above, diagnosed as osteoporotic before inclusion (defined as Bone Mineral Density (BMD) T-score ≤ -2.5, or BMD T-score ≤ -1, measured at the lumbar spine and/or femoral neck and/or total hip, and an osteoporotic fracture), and having sustained a fracture of the distal radius.

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Study drug:

2 g of strontium ranelate (SrRan) administered orally as 1 sachet once a day (at bedtime). Moreover, all patients received as supplement 1 tablet orally administered of 500 mg calcium and 400 International Unit (IU) of vitamin D3 (Calperos®) once a day (at breakfast). If there was a significant medical reason, the supplementation of calcium could be modified by the investigator as long as the vitamin D3 intake was unchanged, according to Amendment No. 2.

Batch Nos (SrRan): L0035598; L0030298.

Comparator:

2 g of placebo administered orally as 1 sachet once a day (at bedtime). As for patients from the SrRan group, all patients received as supplement 500 mg calcium and 400 IU vitamin D3 (Calperos®) once a day (for which the supplementation of calcium could be modified, see above).

Duration of treatment:

- **Selection period** between selection visit (ASSE) and inclusion visit (W0) without any study treatment intake.
- **Double-blind treatment period**: patients were to receive SrRan treatment or placebo for 24 weeks.

Criteria for evaluation:

Primary efficacy criterion:

Fracture healing defined as radiological healing of distal radius fractures (radiological healing corresponds to the bridging in at least 3 out of 4 cortices as evidenced by antero-posterior and lateral radiographs of the radius).

Secondary efficacy criteria:

- Clinical healing parameters:
  - Patient-reported outcome test scores (European Quality of life - 5D (EQ-5D), Quick Disability of the Arm Shoulder and Hand (QuickDASH), Patient-Rated Wrist Evaluation tests (PRWE tests).
  - Hand grip strength test scores.
- Other parameters:
  - Secondary reduction of the fracture (open or closed) after inclusion.
  - Bridging in 1, 2 and 4 of 4 radial cortices.
  - Disappearance of fracture line, according to Amendment No. 2.
  - Complete radiological healing.

Safety measurements:

- Assessment of adverse events.
- Laboratory safety parameters: sodium, potassium, chloride, blood creatinine, Aspartate AminoTransferase/ALanine AminoTransferase (ASAT/ALAT), Gamma-Glutamyl Transferase (GGT), total Alkaline Phosphatase (ALP), Creatine Phosphokinase (CPK), full blood cell count, prothrombine time.
- Clinical examination parameters: height at selection visit, weight at selection and W24, and at all visits: systolic and diastolic blood pressure and heart rate.

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Statistical methods:

The **Full Analysis Set (FAS)** was defined as: all randomised patients who had taken at least one dose of study treatment and who have at least one assessable post-baseline radiograph and who were not radiologically healed (bridging in at least 3 out of 4 cortices) at W0.

The **Per Protocol Set (PPS)** was defined as: as all patients of the Full Analysis Set without relevant deviations that could affect the evaluation of the study drug on time to radiological healing (primary criterion).

Efficacy analysis

- **Primary criterion**: fracture healing defined as radiological healing of distal radius fractures (The radiological healing bridging in at least 3 out of 4 cortices of the radius, as evidenced by antero-posterior and lateral radiographs of the radius).

Main analysis

The analyses were carried out primarily on the FAS.

The treatment effect on the time to fracture healing was estimated using a linear model with treatment, pooled centre and interval between qualifying fracture and inclusion as factors: Estimate of the difference (standard error) between adjusted group means was provided with its 95% Confidence Interval, and the p-value associated with adjusted treatment effect. Same analysis was performed on the PPS.

To assess the robustness of the main analysis results, sensitivity analyses were performed (to the normality assumption, the adjustment for covariates, the method of time to radiological healing calculation, the re-evaluation information).

Secondary analysis:

The efficacy on the primary criterion was studied between the two groups on the time to fracture healing, using a parametric model on interval censored failure time data (with a Gamma supported distribution).

Moreover, the proportion of patients with healing was described by treatment group at each visit.

- **Secondary criteria**

Clinical healing parameters

- The treatment effect on clinical healing parameters as patient-reported outcome tests (EQ-5D, QuickDASH and PRWE tests) was estimated using a general linear model, with pooled centre and studied score at baseline as covariates on change from baseline to each visit (including END visit).
- The treatment effect on clinical healing parameters as functional tests (hand grip strength test) was estimated using a general linear model, with pooled centre as covariate on the value at each visit (including END visit).

Descriptive statistics were also provided for all the analytical approaches of these criteria.

Other parameters

- Proportion of patients with a secondary reduction of the fracture (open or closed) was described in each treatment group.
- For the bridging in 1, 2 and 4 out of 4 cortices, the same analyses as for the primary criterion were performed.
- The disappearance of fracture line (added by Amendment No. 2) and the complete radiological healing were compared between the two groups using an unadjusted non-parametric approach, based on the Hodges-Lehmann's estimator. Estimate of the difference between group means was provided with its 95% confidence interval as well as the p-value issued from the Mann-Whitney Wilcoxon test. The two groups were also compared using a survival parametric model on interval censoring data. Both groups were compared on the time to disappearance of fracture line (respectively complete radiological healing), using a parametric model on interval censored failure time data. Moreover, the proportion of patients with disappearance of fracture line (respectively complete radiological healing) in each treatment group was described at each visit.

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Statistical methods (Cont'd):
Safety analysis
Descriptive statistics by treatment group were provided in the Safety Set.

SUMMARY - CONCLUSIONS
STUDY POPULATION AND OUTCOME

Disposition of patients

Status		**SrRan**	**Placebo**	**All**
Included (randomised)	n	**109**	**108**	**217**
In compliance with the protocol	n (%)	60 (55.0)	60 (55.6)	120 (55.3)
With a protocol deviation at inclusion	n (%)	49 (45.0)	48 (44.4)	97 (44.7)
Lost to follow-up	n (%)	**-**	**-**	**-**
Withdrawn due to	n (%)	**24 (22.0)**	**20 (18.5)**	**44 (20.3)**
Non-medical reason	n (%)	12 (11.0)	6 (5.6)	18 (8.3)
Adverse event	n (%)	8 (7.3)	6 (5.6)	14 (6.5)
Lack of efficacy	n (%)	2 (1.8)	5 (4.6)	7 (3.2)
Protocol deviation	n (%)	2 (1.8)	3 (2.8)	5 (2.3)
Completed	**n (%)**	**85 (78.0)**	**88 (81.5)**	**173 (79.7)**
In compliance with the protocol	n (%)	71 (65.1)	69 (63.9)	140 (64.5)
With a protocol deviation during the study	n (%)	14 (12.8)	19 (17.6)	33 (15.2)

SrRan Strontium ranelate.
n number of patients.
% calculated as percentage of randomised patients

A total of 217 patients were included and randomly assigned to one of the two treatment groups, with a well-balanced distribution: 109 patients in the strontium ranelate group and 108 patients in the placebo group. A total of 44 patients (20.3% of the randomised patients) withdrew the study, mainly due to non-medical reasons (18 patients, 8.3%), with a slightly higher frequency in the SrRan group than in the placebo group (12 patients, 11.0% *versus* 6 patients, 5.6%, respectively), and adverse events (14 patients, 6.5%), leading to 173 patients (79.7% of the patients) who completed the study: 85 patients in the SrRan group and 88 in the placebo group.
In the Randomised Set, patients were in average 63.9 ± 9.1 years old, and mostly (62.2%) ≤ 65 years. Women were predominant (89.9%), and the majority of patients were Caucasian (91.7%). Body mass index (BMI) was 26.6 ± 4.4 kg/m² in average. All patients but one in the placebo group (considered as having protocol deviation) were osteoporotic, since in average 3.8 ± 19.4 months, with a median = 0, showing that most of them were diagnosed when having their wrist fracture. The mean total hip T-score was -1.39 ± 0.99, with no relevant between-group difference. Regarding the other medical or surgical history, patients reported mostly: vascular disorders (90 patients, 41.5%), mainly hypertension (84 patients, 38.7%), infections and infestations (43 patients, 19.8%), and musculoskeletal and connective tissue disorders (42 patients, 19.4%). Characteristics of the fracture and clinical evaluation (pain and function) at baseline were similar in the two treatment groups.
In the FAS, treatment duration ranged between 2 and 197 days with a mean (± SD) of 152.0 ± 41.4 days (median = 167.0 days). Global compliance was 91.4 ± 17.3% (ranging from 2% to 118%), and was satisfactory as ranging in the [70 - 120] % class for 91.5% of the patients.
Similar baseline characteristics were observed in the FAS and the PPS.

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SUMMARY – CONCLUSIONS (CONT'D)

EFFICACY RESULTS

Primary criterion: radiological fracture healing (in at least 3 out 4 cortices)

- Main analysis: time to fracture healing

Time (in days) to fracture healing (in at least 3 out of 4 cortices) in the FAS (N = 200)

Time to fracture healing (3 out of 4 cortices) (days)		**SrRan (N = 100)**	**Placebo (N = 100)**
	n	95	97
	Mean ± SD	56.9 ± 20.2	56.9 ± 19.9
	Min; Max	33 ; 175	33 ; 177
Statistical analysis			
Main analysis	E (SE) (1)	0.59 (2.79)	
	95% CI (2)	[-4.93 ; 6.10]	
	p-value (3)	0.834	

n number of assessable patients.

(1) Estimate (Standard Error) of adjusted means difference - S 12911 minus placebo using a General linear model.

(2) 95% Confidence interval of the estimate.

(3) Corresponding two-sided p-value.

The time to fracture healing (in at least 3 out 4 cortices) was similar in both treatment groups: 56.9 ± 20.2 days in the SrRan group and 56.9 ± 19.9 days in the placebo group, with no statistically significant between-group difference: E (SE) = 0.59 (2.79) days, 95% CI = [-4.93 ; 6.10], p = 0.834.

Results obtained in the PPS were similar to those described in the FAS, with no statistically significant between-group difference (p = 0.729).

Sensitivity analyses conducted to similar conclusions.

- Secondary analyses

Ratio for time to fracture healing (bridging in at least 3 out 4 cortices)

No statistically significant between-group difference was detected: the estimation of the ratio between SrRan and placebo groups for the time to fracture healing (bridging in at least 3 out of 4 cortices) was: E = 0.99, 95% CI = [0.92 ; 1.06], p = 0.781.

Fracture healing at each visit

The proportion of patients having a fracture healing (in at least 3/4 cortices) was slightly higher in the SrRan group than in the placebo group at W4 and W6 visits:

- W4: 10 patients (10.0%) *versus* 7 patients (7.0%), respectively.
- W6: 52 patients (53.1%) *versus* 45 patients (46.4%), respectively.

On the contrary, the proportion of patients was lower in the SrRan group than in the placebo group at other visits.

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SUMMARY – CONCLUSIONS (cont'd)
EFFICACY RESULTS (cont'd)

Secondary criteria

- ***Clinical healing parameters***

All clinical healing tests showed an improvement of the patients in both treatment groups during the study that tended to be better in the SrRan than in the placebo group for the following tests: PRWE total score, PRWE function sub-score and functional hand grip test. No statistically significant between-group difference was reached for any clinical test in the FAS ($p > 0.05$ at last evaluation), except for the functional hang grip test score at W18 (E (SE) = 7.17 (3.24), 95% CI = [0.77 ; 13.57], p = 0.028).

The mean changes in the FAS were at the last value:

- PRWE
  - Total score: -57.1 ± 25.8 *versus* -55.8 ± 27.3, respectively.
  - PRWE pain score: -21.3 ± 14.0 *versus* -21.8 ± 14.4, respectively.
  - Function sub-score: -35.8 ± 15.0 *versus* -33.8 ± 15.2, respectively.
- Quick DASH test disability symptom score: -50.5 ± 25.6 and -49.7 ± 27.7, respectively.

The mean values at End were in the FAS:

- Functional hand grip strength score: 70.4 ± 31.5 *versus* 64.7 ± 29.1, respectively.
- EQ-5D index: 0.31 ± 0.26 *versus* 0.34 ± 0.31, respectively.
- EQ VAS: 19.3 ± 21.2 *versus* 19.1 ± 24.0, respectively.

- ***Fracture healing in at least 1, 2 or 4 out 4 cortices***

The mean time to fracture healing in at least 1 or 2 out 4 cortices was slightly shorter in the SrRan than in the placebo groups, but no statistically significant between-group difference was detected in the FAS:

- 1 out 4 cortices: 47.2 ± 9.4 days *versus* 50.1 ± 17.2 days, respectively (p = 0.147).
- 2 out 4 cortices: 50.8 ± 15.9 days *versus* 53.2 ± 16.6 days, respectively (p = 0.271).

The mean time to fracture healing in all cortices (4/4) was similar in both treatment groups: 61.8 ± 23.2 days *versus* 61.6 ± 20.3 days (p = 0.795).
From weeks 4 to 7, the proportion of patients having a bridging in at least 1/4 cortices was higher in the SrRan than in the placebo groups:

- W4: 31 patients (31.0% of the assessable patients) *versus* 26 patients (26.0%), respectively.
- W6: 84 patients (85.7%) *versus* 73 patients (75.3%), respectively.
- W7: 93 patients (94.9%) *versus* 89 patients (91.8%), respectively.

Same trends were observed for the bridging in at least 2/4 cortices.

- ***Time to disappearance of the fracture line***

The mean time to disappearance of the fracture line was shorter in the SrRan group than in the placebo group: 100.0 ± 45.6 days *versus* 107.3 ± 47.6 days, respectively, (median: 79.0 *versus* 89.5 days, respectively) but no statistically significant between group difference was reached (p = 0.379).

The proportion of patients having a disappearance of the fracture line was higher in the SrRan group than in the placebo group at each visit, but no statistically significant between-group difference was reached (p = 0.379). Over the W7-W14 period:

- At W7: 14 patients (14.6%) *versus* 10 patients (10.4%), respectively.
- At W14: 67 patients (72.8%) *versus* 61 patients (68.5%), respectively.

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SUMMARY – CONCLUSIONS (Cont'd)

EFFICACY RESULTS (Cont'd)

- ***Time to radiological complete healing***

The time to radiological complete healing was shorter in the SrRan group as compared to placebo group: 98.9 ± 45.1 days (median = 79.0) *versus* 108.1 ± 47.3 days (median = 90.0), although no statistically significant between-group difference was demonstrated (p = 0.248). Over the W7-W14 period, the proportion of patients having a disappearance of the fracture line was higher in the SrRan group than in the placebo group at each visit:

- At W7: 14 patients (14.3%) *versus* 9 patients (9.3%), respectively.
- At W14: 67 patients (68.4%) *versus* 60 patients (61.9%), respectively.

SAFETY RESULTS

Summary of safety results

		SrRan (N = 109)	Placebo (N = 107)
Patients having reported			
at least one EAE	n (%)	55 (50.5)	39 (36.4)
at least one treatment-related EAE	n (%)	8 (7.3)	5 (4.7)
Patients having experienced			
at least one serious adverse event (including death)	n (%)	3 (2.8)	3 (2.8)
at least one treatment-related serious adverse event	n (%)	1 (0.9)	-
a treatment withdrawal due to:			
an EAE	n (%)	9 (8.3)	6 (5.6)
a serious EAE	n (%)	1 (0.9)	1 (0.9)
a treatment-related EAE	n (%)	5 (4.6)	3 (2.8)
a treatment-related serious EAE	n (%)	-	-
Patients who died	n (%)	-	1 (0.9)

N number of patients in each treatment group considered; n number of patients affected ; EAE emergent adverse event; % n/N x 100.

Overall 94 patients (43.5% of the patients) reported 253 emergent adverse events (EAEs), with a higher frequency of patients affected in the SrRan than in the placebo groups:

- 55 patients (50.5%) in the SrRan group reported 133 EAEs.
- 39 patients (36.4%) in the placebo group reported 120 EAEs.

In the SrRan treatment group, the most frequently affected system organs (SOC) were:

- Musculoskeletal and connective tissue disorders, with a higher frequency in the SrRan group than in the placebo group: 16 patients (14.7%) *versus* 11 patients (10.3%). The difference between the two groups was mainly due to arthralgia (8 patients, 7.3% *versus* 5 patients, 4.7%, respectively), and back pain (3 patients, 2.8% *versus* 1 patient, 0.9%, respectively).
- Gastrointestinal disorders with a higher frequency in the SrRan group than in the placebo group: 16 patients (14.7%) *versus* 9 patients (8.4%), respectively, mainly nausea (5 patients, 4.6% *versus* 3 patients, 2.8%, respectively). The difference between the two groups was mainly due to diarrhoea (3 patients, 2.8% *versus* none, respectively) and abdominal pain upper (3 patients, 2.8% *versus* none, respectively).

Moreover, in the SrRan group, vascular disorders were more frequently reported than in the placebo group: 12 patients (11.0%) *versus* 6 patients (5.6%), the difference was mainly due to hypertension (9 patients, 8.3% *versus* 4 patients, 3.7%, respectively). Out of the 9 patients having hypertension reported in the SrRan group, 4 had a worsening of pre-existing essential hypertension.

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SUMMARY – CONCLUSIONS (Cont'd)

SAFETY RESULTS (Cont'd)

Cardiac disorders were more frequently affected in the SrRan group than in the placebo group: 4 patients (3.7%) *versus* 1 patient (0.9%), respectively. None of the preferred terms was affected more than once except atrial fibrillation: 2 EAEs reported in 2 patients (1.8%) in the SrRan group not considered as treatment-related by the investigator (including one patient having pre-existing nodular goiter) *versus* none in the placebo group.

There was no difference in the incidence of nervous system disorders: 12 patients concerned in both treatment groups (11.0% *versus* 11.2%, respectively), and skin and subcutaneous tissue disorders: 4 patients (3.7%) in both treatment groups.

In the SrRan treatment group, the most frequently reported emergent adverse events (EAE) were the following, with higher frequency of patients affected in the SrRan group than in the placebo group:

- Hypertension: 9 patients (8.3%) *versus* 4 patients (3.7%), respectively.
- Arthralgia: 8 patients (7.3%) *versus* 5 patients (4.7%), respectively.

Moreover, the following EAEs were more frequently reported in the SrRan group than in the placebo group: abdominal pain upper: 3 patients (2.8%) *versus* none, respectively, and diarrhoea: 3 patients (2.8%) *versus* none, respectively.

Most of the EAEs recovered: 69.2% of the EAEs in the SrRan group *versus* 77.5% in the placebo group.

Safety results were consistent with the known safety profile of strontium ranelate. To note, no cases of DRESS or Stevens-Johnson syndrome or Venous Thromboembolic Events (deep vein thrombosis or pulmonary embolism) were reported.

A total of 8 patients (7.3%) in the SrRan group and 5 patients (4.7%) in the placebo group had EAEs considered as treatment-related by the investigator. They were mainly due to gastrointestinal disorders reported in 5 patients (4.6%) in the SrRan group *versus* 5 patients, (4.7%) in the placebo group.

A total of 9 patients (8.3%) in the SrRan group and 6 patients (5.6%) in the placebo group had EAEs leading to treatment withdrawal. In the SrRan group, they were mainly due to vascular disorders: 4 patients (3.7%) *versus* none in the placebo group, and gastrointestinal disorders: 3 patients (2.8%) in each treatment group. No particular preferred term was affected in these SOCs. To note, one patient in the SrRan group had a treatment withdrawal due to urticaria.

A total of 10 serious EAEs were reported in 6 patients:

- 6 EAEs in 3 patients (2.8%) in the SrRan group, including one phlebitis superficial considered as treatment-related by the investigator that led to patient's treatment withdrawal.
- 4 EAEs in 3 patients (2.8%) in the placebo group.

One patient died during the study in the placebo group, due to an haemorrhagic shock and a chest injury, following a car accident.

Regarding **biochemistry and haematology parameters,** no relevant change over time nor between-group differences were detected.

Emergent out-of-reference range values for biochemistry affected few patients, with no relevant between group difference except for CPK with high values detected in 11.5% of the patients in the SrRan group *versus* 4.7% in the placebo group. Emergent Potentially Clinically Significant Abnormal (PCSA) values were sparse: ALP and CPK: 2 high values in 2 patients for each parameter in the SrRan group, and potassium: one low value in the placebo group.

Emergent out-of-reference range values for haematology parameters affected few patients in each treatment group (less than 5.0% of the patients) and no relevant between group difference was detected. PCSA values were detected in 1 patient in each treatment group: in the SrRan group, one patient had both low PCSA values for white blood cells and neutrophils, and in the placebo group, one patient had a low PCSA value for white blood cells.

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SUMMARY – CONCLUSIONS (Cont'd)
SAFETY RESULTS (Cont'd)

Vital signs
No clinically relevant change over time nor between-group difference was observed in weight and BMI. Systolic (SBP) and diastolic blood pressures (DBP) slightly decreased in both treatment groups from baseline to last value under treatment:

- SBP: -2.8 ± 14.4 mmHg in the SrRan group and -0.6 ± 15.5 mmHg in the placebo group.
- DBP: -1.6 ± 9.3 mmHg and -1.1 ± 9.0 mmHg, respectively.

CONCLUSION

This exploratory phase III study, conducted over 24 weeks, in osteoporotic patients having conservatively treated distal radius fracture, showed that the mean time to fracture healing in at least 3 out 4 cortices was similar in patients who received SrRan treatment or placebo, with no statistically significant between-group difference. The mean time to the fracture healing (at least 1 or 2 out 4 cortices) was slightly shorter with SrRan treatment than placebo, without statistical significance. Same trends were observed for the mean time to disappearance to the fracture line, and to complete radiological healing: slightly shorter with SrRan treatment than placebo, but not reaching statistical significance. The clinical healing tests showed an improvement of the patients in both treatment groups during the study. Results tended to be better in the SrRan than in placebo group for PRWE total score and function sub-score, and functional hand grip test, without reaching statistical significance at last evaluation. Safety results were consistent with the known safety profile of strontium ranelate.

Date of the report: 21 February 2013