

## A Long Term Safety Study of Degarelix in Patients With Prostate Cancer

This study has been completed.

Sponsor:	Ferring Pharmaceuticals
Collaborators:	
Information provided by (Responsible Party):	Ferring Pharmaceuticals
ClinicalTrials.gov Identifier:	NCT00967018

### Purpose

Patients that completed any of the trials; CS27 (NCT00738673), CS28 (NCT00831233), CS30 (NCT00833248) or CS31 (NCT00884273) will be given the opportunity to receive monthly doses of degarelix until the drug is launched in their country. Safety parameters such as electrocardiogram (ECG), blood and urine samples and general health state will be studied. Note: patients completing the CS27 trial did not participate in the CS34 trial.

Condition	Intervention	Phase
Prostate Cancer	Drug: Degarelix	Phase 3

Study Type: Interventional

Study Design: Treatment, Single Group Assignment, Open Label, N/A, Safety Study

Official Title: A Phase IIIb, Non-randomized, Open-label, Multi-Centre, Follow-on Safety Trial of Monthly Doses of Degarelix in Patients With Prostate Cancer

Further study details as provided by Ferring Pharmaceuticals:

Primary Outcome Measure:

- Number of Participants With Markedly Abnormal Values in Safety Laboratory Variables [Time Frame: Up to 22.5 months] [Designated as safety issue: Yes]  
The figures present the number of participants who had markedly abnormal levels of safety laboratory variables. Only the laboratory variables that had at least one percentage of participants in either group with abnormal value are presented, more variables were included in the study.
- Number of Participants With Markedly Abnormal Values in Vital Signs and Body Weight [Time Frame: Up to 22.5 months] [Designated as safety issue: Yes]

This outcome measure included incidence of markedly abnormal changes in blood pressure (systolic and diastolic), pulse, and body weight. The table presents the number of participants with normal baseline and at least one post-baseline markedly abnormal value.

Other Pre-specified Outcome Measures:

- Serum Levels of Prostate Specific Antigen (PSA) Over Time [Time Frame: from baseline to 72 weeks] [Designated as safety issue: No]  
PSA levels were measured over time. The table below shows median levels at baseline (n=77 participants), 24 weeks (n=56), 36 weeks (n=58), 48 weeks (n=48), 72 weeks (n=9)
- Serum Levels of Testosterone Over Time [Time Frame: from baseline to week 72] [Designated as safety issue: No]  
Testosterone levels were measured over time. The table below shows median levels at baseline (n=77 participants), 24 weeks (n=68), 36 weeks (n=59), 48 weeks (n=54), 72 weeks (n=9)

Enrollment: 77

Study Start Date: August 2009

Primary Completion Date: November 2011

Study Completion Date: December 2011

Arms	Assigned Interventions
Experimental: Degarelix The degarelix doses were administered into the abdominal wall every 28 days. For patients treated with goserelin in the previous trials (CS28, CS30 and CS31), a starting dose of 240 mg (40 mg/mL) degarelix was administered on Day 0 as two 3 mL subcutaneous (s.c.) injections. The subsequent maintenance of 80 mg (20 mg/mL) degarelix were administered as single 4 mL s.c. injections at 28 day intervals from day 28 to the end of the trial. For patients treated with degarelix in the previous trials, maintenance doses of 80 mg (20 mg/mL) degarelix were continued and were administered as single 4 mL s.c. injections at 28 day intervals to the end of the trial.	Drug: Degarelix

## Eligibility

Ages Eligible for Study: 18 Years and older

Genders Eligible for Study: Male

Accepts Healthy Volunteers: No

## Criteria

#### Inclusion Criteria:

- Completed any of the trials; FE 200486 CS27, CS28, CS30 or CS31

#### Exclusion Criteria:

- Discontinued any of the trials: FE 200486 CS27, CS28, CS30 or CS31



## Contacts and Locations

### Locations

#### Belgium

Institut Jules Bordet  
Bruxelles, Belgium  
St. Elisabethziekenhuis  
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#### Denmark

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Herlev Hospital  
Ballerup, Denmark  
Sygehus Syd - Næstved Sygehus  
Næstved, Denmark  
Roskilde Sygehus  
Roskilde, Denmark  
Århus Universitetshospital - Skejby  
Århus, Denmark

#### Finland

HYKS/kirurgian klin./urologia  
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Kuopio, Finland  
OYS/kirurgian klinik  
Oulu, Finland  
TAYS/kirurgian klinik  
Tampere, Finland

#### France

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Centre Oscar Lambret  
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CRLC Val d' Aurelle - Oncology Radiotherapy  
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Paris, France  
Hôpital Tenon  
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St Brieuc Cedex, France  
Centre Paul Strauss  
Strassbourg, France  
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Toulon, France  
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Toulouse, France  
IGR  
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#### Portugal

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Barcelona, Spain  
Hospital Universitari Vall d'Hebron

Barcelona, Spain  
Fundación Puigvert  
Barcelona, Spain  
Hospital de Basurto  
Bilbao, Spain  
Hospital universitario Ramón y Cajal  
Madrid, Spain  
Hospital Clínico Universitario S. Carlos  
Madrid, Spain  
Hospital Doce de Octubre  
Madrid, Spain  
Hospital Universitario Puerta de Hierro  
Majadahonda, Spain  
Hospital Manacor  
Manacor, Spain  
Hospital Universitario Central de Asturias  
Oviedo, Spain  
Hospital Santiago de Compostela  
Santiago de Compostela, Spain  
Hospital Virgen Macarena  
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Valencia, Spain  
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#### Sweden

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Investigators

Study Director:

Clinical Development Support

Ferring Pharmaceuticals

## More Information

Responsible Party: Ferring Pharmaceuticals

Study ID Numbers: FE200486 CS34

EudraCT No: 2008-006827-29

Health Authority: Sweden: Medical Products Agency

Finland: Finnish Medicines Agency

Norway: Norwegian Medicines Agency

Portugal: National Pharmacy and Medicines Institute

Italy: The Italian Medicines Agency

Belgium: Federal Agency for Medicinal Products and Health  
Products

Turkey: Ministry of Health

Spain: Spanish Agency of Medicines

France: Afssaps - Agence française de sécurité sanitaire des  
produits de santé (Saint-Denis)

Greece: National Organization of Medicines

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## Study Results

## Participant Flow

Recruitment Details	
	The patients were recruited from 16 sites in Belgium, France, Italy, Spain, Sweden and Turkey. The study was conducted between 31 August 2009 (FPFV) and 29 November 2011 (LPLV).

## Reporting Groups

	Description
Degarelix	The degarelix doses were administered into the abdominal wall every 28 days. For patients treated with goserelin in the previous trials (CS28, CS30 and CS31), a starting dose of 240 mg (40 mg/mL) degarelix was administered on Day 0 as two 3 mL subcutaneous (s.c.) injections. The subsequent maintenance of 80 mg (20 mg/mL) degarelix were administered as single 4 mL s.c. injections at 28 day intervals from day 28 to the end of the trial. For patients treated with degarelix in the previous trials, maintenance doses of 80 mg (20 mg/mL) degarelix were continued and were administered as single 4 mL s.c. injections at 28 day intervals to the end of the trial.

## Overall Study

	Degarelix
Started	77
Completed	56
Not Completed	21
Adverse Event	2
Physician Decision	7
Lost to Follow-up	2
Withdrawal by Subject	1
Miscellaneous Reasons	9



## Baseline Characteristics

### Reporting Groups

	Description
Degarelix	The degarelix doses were administered into the abdominal wall every 28 days. For patients treated with goserelin in the previous trials (CS28, CS30 and CS31), a starting dose of 240 mg (40 mg/mL) degarelix was administered on Day 0 as two 3 mL subcutaneous (s.c.) injections. The subsequent maintenance of 80 mg (20 mg/mL) degarelix were administered as single 4 mL s.c. injections at 28 day intervals from day 28 to the end of the trial. For patients treated with degarelix in the previous trials, maintenance doses of 80 mg (20 mg/mL) degarelix were continued and were administered as single 4 mL s.c. injections at 28 day intervals to the end of the trial.

### Baseline Measures

	Degarelix
Number of Participants	77



	Degarelix
Age, Continuous [units: years] Mean (Standard Deviation)	71.9 (7.59)
Gender, Male/Female [units: participants]	
Female	0
Male	77
Region of Enrollment [units: participants]	
France	2
Spain	11
Belgium	2
Turkey	14
Italy	35
Sweden	13
Body Mass Index (BMI) [units: kilogram per square meter] Mean (Standard Deviation)	27.2 (4.2)
Gleason Score <sup>[1]</sup> [units: Participants]	
Gleason Score 2-4	1
Gleason Score 5-6	18
Gleason Score 7-10	58
Stage of Prostate Cancer <sup>[2]</sup> [units: Participants]	
Localized	36
Locally Advanced	19
Metastatic	15
Not Classifiable	7

- [1] The Gleason score is a system of grading the aggressiveness of the prostate cancer and how fast it is likely to grow and spread. Scale is 2-10, with low numbers being the least aggressive and 10 being the most aggressive.
- [2] Prostate cancer stage was classified according to the Tumor, Nodes, and Metastatic (TNM) scale to describe the extent of cancer. Localized refers to tumors without involvement of lymph nodes or metastasis. Advanced localized can be larger tumors that may involve the lymph nodes but no metastasis. Metastatic are more advanced cancers that are spreading beyond the original tumor. Some participants did not have their prostate cancer classified for the complete TNM scale (7 participants).

## Outcome Measures

### 1. Primary Outcome Measure:

Measure Title	Number of Participants With Markedly Abnormal Values in Safety Laboratory Variables
Measure Description	The figures present the number of participants who had markedly abnormal levels of safety laboratory variables. Only the laboratory variables that had at least one percentage of participants in either group with abnormal value are presented, more variables were included in the study.
Time Frame	Up to 22.5 months
Safety Issue?	Yes

Analysis Population Description  
[Not Specified]

### Reporting Groups

	Description
Degarelix	The degarelix doses were administered into the abdominal wall every 28 days. For patients treated with goserelin in the previous trials (CS28, CS30 and CS31), a starting dose of 240 mg (40 mg/mL) degarelix was administered on Day 0 as two 3 mL subcutaneous (s.c.) injections. The subsequent maintenance of 80 mg (20 mg/mL) degarelix were administered as single 4 mL s.c. injections at 28 day intervals from day 28 to the end of the trial. For patients treated with degarelix in the previous trials, maintenance doses of 80 mg (20 mg/mL) degarelix were continued and were administered as single 4 mL s.c. injections at 28 day intervals to the end of the trial.

### Measured Values

	Degarelix
Number of Participants Analyzed	77
Number of Participants With Markedly Abnormal Values in Safety Laboratory Variables [units: Participants]	
B-Haematocrit (Ratio) $\leq 0.37$	24

	Degarelix
B-Haemoglobin (g/L) $\leq 115$	6
B-White blood cell count ( $10^9/L$ ) $\leq 2.8$	2
B-White blood cell count ( $10^9/L$ ) $\geq 16.0$	1
B-Red blood cell count ( $10^{12}/L$ ) $\leq 3.5$	3
B-Platelet count ( $10^9/L$ ) $\leq 75$	1
S-Aspartate aminotransferase (IU/L) $> 3 \times \text{ULN}$	1
S-Potassium (mmol/L) $\geq 5.8$	1
S-Urea nitrogen (mmol/L) $\geq 10.7$	5

## 2. Primary Outcome Measure:

Measure Title	Number of Participants With Markedly Abnormal Values in Vital Signs and Body Weight
Measure Description	This outcome measure included incidence of markedly abnormal changes in blood pressure (systolic and diastolic), pulse, and body weight. The table presents the number of participants with normal baseline and at least one post-baseline markedly abnormal value.
Time Frame	Up to 22.5 months
Safety Issue?	Yes

Analysis Population Description  
[Not Specified]

## Reporting Groups

	Description
Degarelix	The degarelix doses were administered into the abdominal wall every 28 days. For patients treated with goserelin in the previous trials (CS28, CS30 and CS31), a starting dose of 240 mg (40 mg/mL) degarelix was administered on Day 0 as two 3 mL subcutaneous (s.c.) injections. The subsequent maintenance of 80 mg (20 mg/mL) degarelix were administered as single 4 mL s.c. injections at 28 day intervals from day 28 to the end of the trial. For patients treated with degarelix in the previous trials, maintenance doses of 80 mg (20 mg/mL) degarelix were continued and were administered as single 4 mL s.c. injections at 28 day intervals to the end of the trial.

## Measured Values

	Degarelix
Number of Participants Analyzed	77
Number of Participants With Markedly Abnormal Values in Vital Signs and Body Weight [units: Participants]	
Diastolic blood pressure $\leq 50$ and decrease $\geq 15$	1
Diastolic blood pressure $\geq 105$ and increase $\geq 15$	1
Systolic blood pressure $\leq 90$ and decrease $\geq 20$	1
Systolic blood pressure $\geq 180$ and increase $\geq 20$	0
Heart rate $\leq 50$ and decrease $\geq 15$	0
Heart rate $\geq 120$ and increase $\geq 15$	1
Body weight decrease of $\geq 7$ percent	0
Body weight increase of $\geq 7$ percent	2

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

Measure Title	Serum Levels of Prostate Specific Antigen (PSA)Over Time
Measure Description	PSA levels were measured over time. The table below shows median levels at baseline (n=77 participants), 24 weeks (n=56), 36 weeks (n=58), 48 weeks (n=48), 72 weeks (n=9)
Time Frame	from baseline to 72 weeks
Safety Issue?	No

### Analysis Population Description

The table below shows median levels at baseline (n=77 participants), 24 weeks (n=56), 36 weeks (n=58), 48 weeks (n=48), 72 weeks (n=9)

## Reporting Groups

	Description
Degarelix	The degarelix doses were administered into the abdominal wall every 28 days. For patients treated with goserelin in the previous trials (CS28, CS30 and CS31), a starting dose of 240 mg (40 mg/mL) degarelix was administered on Day 0 as two 3 mL subcutaneous (s.c.) injections. The subsequent maintenance of 80 mg (20 mg/mL) degarelix were administered as single 4 mL s.c. injections at 28 day intervals from day 28 to the end of the trial. For patients treated with degarelix in the previous trials, maintenance doses of 80 mg (20 mg/mL) degarelix were continued and were administered as single 4 mL s.c. injections at 28 day intervals to the end of the trial.

## Measured Values

	Degarelix
Number of Participants Analyzed	77
Serum Levels of Prostate Specific Antigen (PSA) Over Time [units: ng/mL] Median (Full Range)	
Baseline (0 weeks)	1.4 (0.05 to 431.3)
Week 24	0.75 (0.05 to 58.5)
Week 36	0.6 (0.05 to 508.8)
Week 48	0.55 (0.05 to 606.5)
Week 72	1.9 (0.05 to 168)

## 4. Other Pre-specified Outcome Measure:

Measure Title	Serum Levels of Testosterone Over Time
Measure Description	Testosterone levels were measured over time. The table below shows median levels at baseline (n=77 participants), 24 weeks (n=68), 36 weeks (n=59), 48 weeks (n=54), 72 weeks (n=9)
Time Frame	from baseline to week 72
Safety Issue?	No

## Analysis Population Description

The table below shows median levels at baseline (n=77 participants), 24 weeks (n=68), 36 weeks (n=59), 48 weeks (n=54), 72 weeks (n=9)

## Reporting Groups

	Description
Degarelix	The degarelix doses were administered into the abdominal wall every 28 days. For patients treated with goserelin in the previous trials (CS28, CS30 and CS31), a starting dose of 240 mg (40 mg/mL) degarelix was administered on Day 0 as two 3 mL subcutaneous (s.c.) injections. The subsequent maintenance of 80 mg (20 mg/mL) degarelix were administered as single 4 mL s.c. injections at 28 day intervals from day 28 to the end of the trial. For patients treated with degarelix in the previous trials, maintenance doses of 80 mg (20 mg/mL) degarelix were continued and were administered as single 4 mL s.c. injections at 28 day intervals to the end of the trial.

## Measured Values

	Degarelix
Number of Participants Analyzed	77
Serum Levels of Testosterone Over Time [units: ng/mL] Median (Full Range)	
Baseline (Week 0)	0.05 (0.05 to 8.07)
Week 24	0.05 (0.05 to 0.54)
Week 36	0.05 (0.05 to 0.26)
Week 48	0.08 (0.05 to 0.62)
Week 72	0.12 (0.05 to 0.22)

## Reported Adverse Events

Time Frame	Baseline to end of treatment (maximum exposure to degarelix is approximately 25 months)
Additional Description	Each participant's condition was monitored throughout the trial from the time of signing the informed consent until the end of the follow-up period. The investigator was to record all adverse events (AEs) in the AE log of the participant's Case Report Form.

## Reporting Groups

	Description
Degarelix	The degarelix doses were administered into the abdominal wall every 28 days. For patients treated with goserelin in the previous trials (CS28, CS30 and CS31), a starting dose of 240 mg (40 mg/mL) degarelix was administered on Day 0 as two 3 mL subcutaneous (s.c.) injections. The subsequent maintenance of 80 mg (20 mg/mL) degarelix were administered as single 4 mL s.c. injections at 28 day intervals from day 28 to the end of the trial. For patients treated with degarelix in the previous trials, maintenance doses of 80 mg (20 mg/mL) degarelix were continued and were administered as single 4 mL s.c. injections at 28 day intervals to the end of the trial.

## Serious Adverse Events

	Degarelix
	Affected/At Risk (%)
Total	5/77 (6.49%)
Blood and lymphatic system disorders	
Thrombocytopenia <sup>A</sup> †	1/77 (1.3%)
Eye disorders	
Vitreous haemorrhage <sup>A</sup> †	1/77 (1.3%)
General disorders	
Chest pain <sup>A</sup> †	1/77 (1.3%)
Infections and infestations	
Gastroenteritis <sup>A</sup> †	1/77 (1.3%)
Nervous system disorders	
Convulsion <sup>A</sup> †	1/77 (1.3%)

† Indicates events were collected by systematic assessment.

A Term from vocabulary, MedDRA 12.0

## Other Adverse Events

Frequency Threshold Above Which Other Adverse Events are Reported: 2%

	Degarelix
	Affected/At Risk (%)
Total	30/77 (38.96%)

	Degarelix
	Affected/At Risk (%)
Gastrointestinal disorders	
Haematochezia <sup>A</sup> †	2/77 (2.6%)
Rectal tenesmus <sup>A</sup> †	2/77 (2.6%)
General disorders	
Chest pain <sup>A</sup> †	2/77 (2.6%)
Chills <sup>A</sup> †	4/77 (5.19%)
Injection site inflammation <sup>A</sup> †	7/77 (9.09%)
Injection site pain <sup>A</sup> †	4/77 (5.19%)
Infections and infestations	
Gastroenteritis <sup>A</sup> †	2/77 (2.6%)
Influenza <sup>A</sup> †	6/77 (7.79%)
Viral upper respiratory tract <sup>A</sup> †	2/77 (2.6%)
Musculoskeletal and connective tissue disorders	
Back pain <sup>A</sup> †	2/77 (2.6%)
Musculoskeletal pain <sup>A</sup> †	4/77 (5.19%)
Neoplasms benign, malignant and unspecified (incl cysts and polyps)	
Prostate cancer <sup>A</sup> †	2/77 (2.6%)
Nervous system disorders	
Dizziness <sup>A</sup> †	2/77 (2.6%)
Syncope <sup>A</sup> †	2/77 (2.6%)
Vascular disorders	
Hot flush <sup>A</sup> †	2/77 (2.6%)

† Indicates events were collected by systematic assessment.

A Term from vocabulary, MedDRA 12.0



## Limitations and Caveats

[Not specified]

## 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.

The only disclosure restriction on the PI is that the sponsor can review the draft manuscript prior to publication and can request delay of publication where any contents are deemed patentable by the sponsor or confidential to the sponsor. Comments will be given within four weeks from receipt of the draft manuscript. Additional time may be required to allow Ferring to seek patent protection of the invention.

### Results Point of Contact:

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