



## Clinical trial results:

### Prospective randomized phase-II trial with Temsirolimus versus Sunitinib in previously untreated patients with advanced or metastatic non-clear cell renal carcinoma

#### Summary

EudraCT number	2009-010143-13
Trial protocol	DE
Global end of trial date	02 July 2016

#### Results information

Result version number	v1 (current)
This version publication date	05 September 2020
First version publication date	05 September 2020

#### Trial information

##### Trial identification

Sponsor protocol code	C-II-006
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##### Additional study identifiers

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

Notes:

#### Sponsors

Sponsor organisation name	CESAR Central European Society for Anticancer Drug Research-EWIV
Sponsor organisation address	Hanglueßgasse 4/1-3, Vienna, Austria, 1150
Public contact	Prof. Viktor Grünwald, Medizinische Hochschule Hannover, 0049 5115323140, gruenwald.viktor@mh-hannover.de
Scientific contact	Dr. Max Roessler, CESAR Central European Society for Anticancer Drug Research-EWIV, 0043 1522 30 9316, max.roessler@cesar.or.at

Notes:

#### Paediatric regulatory details

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

Notes:

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**Results analysis stage**

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Analysis stage	Final
Date of interim/final analysis	30 November 2016
Is this the analysis of the primary completion data?	Yes
Primary completion date	02 July 2016
Global end of trial reached?	Yes
Global end of trial date	02 July 2016
Was the trial ended prematurely?	Yes

Notes:

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**General information about the trial**

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Main objective of the trial:

Primary objective of the study is to demonstrate a statistical significant difference between the two arms in progression free survival (PFS) measured from randomisation until progression or death, whichever occurs first.

Protection of trial subjects:

All drugs used in the study were used according to the technical information. Procedures that determine efficacy (CT scans, MRI) and safety (blood count, blood chemistry and coagulation) are performed as in routine operations and therefore do not represent an additional burden for those patients participating in this clinical trial. Blood samples taken outside the routine for the accompanying programs do not pose any additional risk to patients. In summary, it is not possible to predict whether there will be a direct benefit for the individual patients. However, the risk for patients in the study is not higher than for patients not treated in the study. Furthermore, there is a benefit for future patients due to the progress of knowledge. It can be concluded that the benefit of this research project outweighs the risks involved.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	09 July 2009
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

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**Population of trial subjects**

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**Subjects enrolled per country**

Country: Number of subjects enrolled	Germany: 22
Worldwide total number of subjects	22
EEA total number of subjects	22

Notes:

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**Subjects enrolled per age group**

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In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	0

Adults (18-64 years)	14
From 65 to 84 years	7
85 years and over	1

## Subject disposition

### Recruitment

Recruitment details:

17 study sites in Germany were activated for patient recruitment. Only 10 of the study sites actively recruited patients into the study. Patient recruitment took place from 09Jul2009 (FPI) to 27Aug2015 (LPLV).

### Pre-assignment

Screening details:

The screening criteria were defined by the inclusion and exclusion criteria as defined in the study protocol.

### Period 1

Period 1 title	Treatment Phase (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Not blinded

### Arms

Are arms mutually exclusive?	Yes
<b>Arm title</b>	Arm A

Arm description:

Temsirolimus is supplied in vials containing 30 mg of temsirolimus-concentrate (1.2 ml) together with a diluent (2.2 ml). When diluted, the solution contains 10 mg/ml. Temsirolimus is administered on days 1, 8, 15, 22, 29, 36 of each treatment cycle (cycle duration is 6 weeks). The recommended dose of temsirolimus for advanced renal cell carcinoma administered intravenously is 25 mg infused over a 30- to 60-minute period once weekly. Patients must be given intravenous diphenhydramine 25 to 50 mg (or similar antihistamine) approximately 30 minutes before the start of each dose of temsirolimus. Treatment is continued until disease progression.

Arm type	Experimental
Investigational medicinal product name	Temsirolimus
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Concentrate and solvent for solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

Temsirolimus is supplied in vials containing 30 mg of temsirolimus-concentrate (1.2 ml) together with a diluent (2.2 ml). When diluted, the solution contains 10 mg/ml. Temsirolimus is administered on days 1, 8, 15, 22, 29, 36 of each treatment cycle (cycle duration is 6 weeks). The recommended dose of temsirolimus for advanced renal cell carcinoma administered intravenously is 25 mg infused over a 30- to 60-minute period once weekly. Patients must be given intravenous diphenhydramine 25 to 50 mg (or similar antihistamine) approximately 30 minutes before the start of each dose of temsirolimus. Treatment is continued until disease progression.

<b>Arm title</b>	Arm B
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Arm description:

Sunitinib is available as hard capsules in 3 different strengths: 12.5 mg, 25 mg and 50 mg. 50 mg Sunitinib was administered orally on days 1-28 of each treatment cycle, followed by 2 weeks (days 29-42) of treatment pause (duration of treatment cycles 6 weeks). Treatment was continued until disease progression.

Arm type	Experimental
Investigational medicinal product name	Sunitinib
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Capsule, hard
Routes of administration	Oral use

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**Dosage and administration details:**

Sunitinib is available as hard capsules in 3 different strengths: 12.5 mg, 25 mg and 50 mg. 50 mg Sunitinib was administered orally on days 1-28 of each treatment cycle, followed by 2 weeks (days 29-42) of treatment pause (duration of treatment cycles 6 weeks). Treatment was continued until disease progression.

<b>Number of subjects in period 1</b>	Arm A	Arm B
Started	12	10
Completed	12	10

## Baseline characteristics

### Reporting groups

Reporting group title	Arm A
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Reporting group description:

Temsirolimus is supplied in vials containing 30 mg of temsirolimus-concentrate (1.2 ml) together with a diluent (2.2 ml). When diluted, the solution contains 10 mg/ml. Temsirolimus is administered on days 1, 8, 15, 22, 29, 36 of each treatment cycle (cycle duration is 6 weeks). The recommended dose of temsirolimus for advanced renal cell carcinoma administered intravenously is 25 mg infused over a 30- to 60-minute period once weekly. Patients must be given intravenous diphenhydramine 25 to 50 mg (or similar antihistamine) approximately 30 minutes before the start of each dose of temsirolimus. Treatment is continued until disease progression.

Reporting group title	Arm B
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Reporting group description:

Sunitinib is available as hard capsules in 3 different strengths: 12.5 mg, 25 mg and 50 mg. 50 mg Sunitinib was administered orally on days 1-28 of each treatment cycle, followed by 2 weeks (days 29-42) of treatment pause (duration of treatment cycles 6 weeks). Treatment was continued until disease progression.

Reporting group values	Arm A	Arm B	Total
Number of subjects	12	10	22
Age categorical Units: Subjects			
In utero	0	0	0
Preterm newborn infants (gestational age < 37 wks)	0	0	0
Newborns (0-27 days)	0	0	0
Infants and toddlers (28 days-23 months)	0	0	0
Children (2-11 years)	0	0	0
Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	9	5	14
From 65-84 years	2	5	7
85 years and over	1	0	1
Age continuous Units: years			
arithmetic mean	57.4	64.8	
standard deviation	± 14.8	± 11.8	-
Gender categorical Units: Subjects			
Female	4	2	6
Male	8	8	16

### Subject analysis sets

Subject analysis set title	Arm A
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Subject analysis set type	Intention-to-treat
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Subject analysis set description:

Patients which have been randomized in Arm A of the study.

Subject analysis set title	Arm B
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Subject analysis set type	Intention-to-treat
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Subject analysis set description:

Patient which have been randomized in Arm B of the study.

<b>Reporting group values</b>	Arm A	Arm B	
Number of subjects	12	10	
Age categorical			
Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	9	5	
From 65-84 years	2	5	
85 years and over	1	0	
Age continuous			
Units: years			
arithmetic mean	57.4	64.8	
standard deviation	± 14.8	± 11.8	
Gender categorical			
Units: Subjects			
Female	4	2	
Male	8	8	

## End points

### End points reporting groups

Reporting group title	Arm A
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Reporting group description:

Temsirolimus is supplied in vials containing 30 mg of temsirolimus-concentrate (1.2 ml) together with a diluent (2.2 ml). When diluted, the solution contains 10 mg/ml. Temsirolimus is administered on days 1, 8, 15, 22, 29, 36 of each treatment cycle (cycle duration is 6 weeks). The recommended dose of temsirolimus for advanced renal cell carcinoma administered intravenously is 25 mg infused over a 30- to 60-minute period once weekly. Patients must be given intravenous diphenhydramine 25 to 50 mg (or similar antihistamine) approximately 30 minutes before the start of each dose of temsirolimus. Treatment is continued until disease progression.

Reporting group title	Arm B
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Reporting group description:

Sunitinib is available as hard capsules in 3 different strengths: 12.5 mg, 25 mg and 50 mg. 50 mg Sunitinib was administered orally on days 1-28 of each treatment cycle, followed by 2 weeks (days 29-42) of treatment pause (duration of treatment cycles 6 weeks). Treatment was continued until disease progression.

Subject analysis set title	Arm A
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Subject analysis set type	Intention-to-treat
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Subject analysis set description:

Patients which have been randomized in Arm A of the study.

Subject analysis set title	Arm B
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Subject analysis set type	Intention-to-treat
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Subject analysis set description:

Patients which have been randomized in Arm B of the study.

### Primary: Primary Endpoint

End point title	Primary Endpoint <sup>[1]</sup>
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End point description:

End point type	Primary
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End point timeframe:

Date of first diagnosis until progressive disease

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: The study has been terminated prematurely due to poor recruitment. The statistical analysis as planned in the study protocol was not done. Instead a descriptive analysis was performed.

End point values	Arm A	Arm B	Arm A	Arm B
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	12	10	12	10
Units: Months				
median (confidence interval 95%)	9.3 (1.6 to 15.9)	13.2 (1.9 to 15.9)	9.3 (1.6 to 15.9)	13.2 (1.9 to 15.9)

### Statistical analyses

No statistical analyses for this end point



## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

All information on AEs and SAEs will be reported during the treatment phase up to 4 weeks after the end of the treatment phase. Any SAEs beyond 28 days after the last dose of study medication considered related to the study medication will be reported.

Assessment type	Systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	20.0
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### Reporting groups

Reporting group title	Arm A
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Reporting group description:

Temsirolimus is supplied in vials containing 30 mg of temsirolimus-concentrate (1.2 ml) together with a diluent (2.2 ml). When diluted, the solution contains 10 mg/ml. Temsirolimus is administered on days 1, 8, 15, 22, 29, 36 of each treatment cycle (cycle duration is 6 weeks). The recommended dose of temsirolimus for advanced renal cell carcinoma administered intravenously is 25 mg infused over a 30- to 60-minute period once weekly. Patients must be given intravenous diphenhydramine 25 to 50 mg (or similar antihistamine) approximately 30 minutes before the start of each dose of temsirolimus. Treatment is continued until disease progression.

Reporting group title	Arm B
-----------------------	-------

Reporting group description:

Sunitinib is available as hard capsules in 3 different strengths: 12.5 mg, 25 mg and 50 mg. 50 mg Sunitinib was administered orally on days 1-28 of each treatment cycle, followed by 2 weeks (days 29-42) of treatment pause (duration of treatment cycles 6 weeks). Treatment was continued until disease progression.

Serious adverse events	Arm A	Arm B	
Total subjects affected by serious adverse events			
subjects affected / exposed	7 / 12 (58.33%)	6 / 10 (60.00%)	
number of deaths (all causes)	7	5	
number of deaths resulting from adverse events			
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Metastases to peritoneum			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Vascular disorders			
Lymphoedema			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Surgical and medical procedures			

Lymphadenectomy			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
General disorders and administration site conditions			
Chest pain			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Disease progression			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Fatigue			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
General physical health deterioration			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
local swelling			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
multi-organ failure			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Respiratory, thoracic and mediastinal disorders			
Pulmonary embolism			

subjects affected / exposed	1 / 12 (8.33%)	1 / 10 (10.00%)	
occurrences causally related to treatment / all	0 / 1	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Investigations			
Electrocardiogram QT prolonged			
subjects affected / exposed	0 / 12 (0.00%)	2 / 10 (20.00%)	
occurrences causally related to treatment / all	0 / 0	2 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
Nervous system disorders			
Hemiparesis			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Posterior reversible encephalopathy syndrome			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood and lymphatic system disorders			
Anemia			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Leukopenia			
subjects affected / exposed	0 / 12 (0.00%)	2 / 10 (20.00%)	
occurrences causally related to treatment / all	0 / 0	2 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
Thrombocytopenia			
subjects affected / exposed	0 / 12 (0.00%)	2 / 10 (20.00%)	
occurrences causally related to treatment / all	0 / 0	2 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastrointestinal disorders			
Abdominal pain			

subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Renal and urinary disorders			
Acute kidney injury			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Haematuria			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Renal failure			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Musculoskeletal and connective tissue disorders			
Back pain			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Infections and infestations			
Abscess neck			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Arthritis infective			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastroenteritis			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	

Pneumonia			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Urinary tract infection			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Metabolism and nutrition disorders			
Hypokalaemia			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hyponatraemia			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	

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

<b>Non-serious adverse events</b>	Arm A	Arm B	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	11 / 12 (91.67%)	10 / 10 (100.00%)	
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Acrochordon			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Tumour pain			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Vascular disorders			
Flushing			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Haematoma			

subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Hot flush			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Hypertension			
subjects affected / exposed	2 / 12 (16.67%)	2 / 10 (20.00%)	
occurrences (all)	2	3	
Hypotension			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Lymphoedema			
subjects affected / exposed	1 / 12 (8.33%)	1 / 10 (10.00%)	
occurrences (all)	1	1	
General disorders and administration site conditions			
Chest discomfort			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Chest pain			
subjects affected / exposed	2 / 12 (16.67%)	0 / 10 (0.00%)	
occurrences (all)	2	0	
Chills			
subjects affected / exposed	2 / 12 (16.67%)	1 / 10 (10.00%)	
occurrences (all)	2	2	
Fatigue			
subjects affected / exposed	2 / 12 (16.67%)	5 / 10 (50.00%)	
occurrences (all)	4	12	
Feeling cold			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
local swelling			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Mucosal inflammation			

subjects affected / exposed occurrences (all)	4 / 12 (33.33%) 4	4 / 10 (40.00%) 5	
Oedema subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 1	0 / 10 (0.00%) 0	
Oedema peripheral subjects affected / exposed occurrences (all)	3 / 12 (25.00%) 3	0 / 10 (0.00%) 0	
Pain subjects affected / exposed occurrences (all)	0 / 12 (0.00%) 0	1 / 10 (10.00%) 1	
Peripheral swelling subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 2	0 / 10 (0.00%) 0	
Pyrexia subjects affected / exposed occurrences (all)	3 / 12 (25.00%) 25	1 / 10 (10.00%) 1	
Immune system disorders Hypersensitivity subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 1	1 / 10 (10.00%) 1	
Oral herpes subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 1	0 / 10 (0.00%) 0	
Reproductive system and breast disorders Benign prostatic hyperplasia subjects affected / exposed occurrences (all)	0 / 12 (0.00%) 0	1 / 10 (10.00%) 1	
Pelvic pain subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 1	0 / 10 (0.00%) 0	
vaginal inflammation subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 2	0 / 10 (0.00%) 0	
Respiratory, thoracic and mediastinal disorders			

Cough			
subjects affected / exposed	2 / 12 (16.67%)	0 / 10 (0.00%)	
occurrences (all)	2	0	
Dysphonia			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Dyspnoea			
subjects affected / exposed	4 / 12 (33.33%)	0 / 10 (0.00%)	
occurrences (all)	4	0	
Epistaxis			
subjects affected / exposed	1 / 12 (8.33%)	2 / 10 (20.00%)	
occurrences (all)	1	2	
Haemoptysis			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	2	0	
Oropharyngeal pain			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	2	0	
Pleural effusion			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	2	0	
Pleurisy			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Psychiatric disorders			
Depression			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Insomnia			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Sleep disorder			
subjects affected / exposed	2 / 12 (16.67%)	0 / 10 (0.00%)	
occurrences (all)	3	0	
Tension			



subjects affected / exposed occurrences (all)	0 / 12 (0.00%) 0	1 / 10 (10.00%) 1	
Investigations			
Alanine aminotransferase increased subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 3	0 / 10 (0.00%) 0	
Aspartate aminotransferase increased subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 2	0 / 10 (0.00%) 0	
Blood cholesterol increased subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 6	0 / 10 (0.00%) 0	
Blood lactate dehydrogenase increased subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 2	0 / 10 (0.00%) 0	
C-reactive protein increased subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 1	0 / 10 (0.00%) 0	
Haemoglobin decreased subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 1	0 / 10 (0.00%) 0	
Low density lipoprotein increased subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 4	0 / 10 (0.00%) 0	
Weight decreased subjects affected / exposed occurrences (all)	0 / 12 (0.00%) 0	1 / 10 (10.00%) 2	
Weight increased subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 1	0 / 10 (0.00%) 0	
Injury, poisoning and procedural complications			
Wound subjects affected / exposed occurrences (all)	0 / 12 (0.00%) 0	1 / 10 (10.00%) 1	
Nervous system disorders			

Ageusia			
subjects affected / exposed	0 / 12 (0.00%)	2 / 10 (20.00%)	
occurrences (all)	0	5	
Dizziness			
subjects affected / exposed	1 / 12 (8.33%)	1 / 10 (10.00%)	
occurrences (all)	1	1	
Dysgeusia			
subjects affected / exposed	4 / 12 (33.33%)	3 / 10 (30.00%)	
occurrences (all)	4	3	
Headache			
subjects affected / exposed	2 / 12 (16.67%)	2 / 10 (20.00%)	
occurrences (all)	3	2	
Intercostal neuralgia			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Neuropathy peripheral			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Paraesthesia			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Blood and lymphatic system disorders			
anemia			
subjects affected / exposed	1 / 12 (8.33%)	1 / 10 (10.00%)	
occurrences (all)	1	1	
Leukopenia			
subjects affected / exposed	0 / 12 (0.00%)	3 / 10 (30.00%)	
occurrences (all)	0	5	
neutopenia			
subjects affected / exposed	0 / 12 (0.00%)	2 / 10 (20.00%)	
occurrences (all)	0	2	
Thrombocytopenia			
subjects affected / exposed	0 / 12 (0.00%)	3 / 10 (30.00%)	
occurrences (all)	0	6	
Ear and labyrinth disorders			

Inner ear inflammation subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 2	0 / 10 (0.00%) 0	
Middle ear effusion subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 1	0 / 10 (0.00%) 0	
Vertigo subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 2	1 / 10 (10.00%) 1	
Eye disorders Dry eye subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 1	0 / 10 (0.00%) 0	
Eye oedema subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 1	2 / 10 (20.00%) 2	
Gastrointestinal disorders Abdominal discomfort subjects affected / exposed occurrences (all)	0 / 12 (0.00%) 0	1 / 10 (10.00%) 1	
Abdominal pain subjects affected / exposed occurrences (all)	5 / 12 (41.67%) 9	1 / 10 (10.00%) 2	
Abdominal pain upper subjects affected / exposed occurrences (all)	3 / 12 (25.00%) 3	1 / 10 (10.00%) 1	
Cheilitis subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 1	0 / 10 (0.00%) 0	
Constipation subjects affected / exposed occurrences (all)	3 / 12 (25.00%) 4	1 / 10 (10.00%) 1	
Diarrhoea subjects affected / exposed occurrences (all)	3 / 12 (25.00%) 3	2 / 10 (20.00%) 4	
Dry mouth			

subjects affected / exposed	1 / 12 (8.33%)	1 / 10 (10.00%)
occurrences (all)	1	1
Dyspepsia		
subjects affected / exposed	1 / 12 (8.33%)	5 / 10 (50.00%)
occurrences (all)	1	10
Dysphagia		
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)
occurrences (all)	1	0
Epigastric discomfort		
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)
occurrences (all)	0	1
Flatulence		
subjects affected / exposed	1 / 12 (8.33%)	1 / 10 (10.00%)
occurrences (all)	1	2
Gastritis		
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)
occurrences (all)	2	0
Haemorrhoids		
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)
occurrences (all)	0	1
Mouth ulceration		
subjects affected / exposed	2 / 12 (16.67%)	0 / 10 (0.00%)
occurrences (all)	2	0
Nausea		
subjects affected / exposed	3 / 12 (25.00%)	5 / 10 (50.00%)
occurrences (all)	6	11
Oral pain		
subjects affected / exposed	2 / 12 (16.67%)	1 / 10 (10.00%)
occurrences (all)	2	1
Stomatitis		
subjects affected / exposed	4 / 12 (33.33%)	3 / 10 (30.00%)
occurrences (all)	7	3
Tongue discolouration		
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)
occurrences (all)	0	1
Vomiting		

subjects affected / exposed	2 / 12 (16.67%)	3 / 10 (30.00%)	
occurrences (all)	2	4	
Gamma-glutamyltransferase increased			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	3	0	
Hepatobiliary disorders			
Jaundice			
subjects affected / exposed	0 / 12 (0.00%)	2 / 10 (20.00%)	
occurrences (all)	0	3	
Skin and subcutaneous tissue disorders			
Acne			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Alopecia			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Dry skin			
subjects affected / exposed	1 / 12 (8.33%)	2 / 10 (20.00%)	
occurrences (all)	1	2	
Erythema			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Hair colour changes			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Hyperhidrosis			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Nail disorder			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Night sweats			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Onychoclasia			

subjects affected / exposed	2 / 12 (16.67%)	0 / 10 (0.00%)	
occurrences (all)	2	0	
Palmar-plantar erythrodysaesthesia syndrome			
subjects affected / exposed	1 / 12 (8.33%)	3 / 10 (30.00%)	
occurrences (all)	1	4	
Pruritus			
subjects affected / exposed	5 / 12 (41.67%)	0 / 10 (0.00%)	
occurrences (all)	6	0	
Rash			
subjects affected / exposed	6 / 12 (50.00%)	1 / 10 (10.00%)	
occurrences (all)	9	1	
Skin erosion			
subjects affected / exposed	1 / 12 (8.33%)	1 / 10 (10.00%)	
occurrences (all)	1	2	
Skin fissures			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Skin lesion			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Xeroderma			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Yellow skin			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	5	
Renal and urinary disorders			
Bladder irritation			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Renal failure			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Musculoskeletal and connective tissue disorders			

Arthralgia		
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)
occurrences (all)	0	2
Back pain		
subjects affected / exposed	2 / 12 (16.67%)	1 / 10 (10.00%)
occurrences (all)	3	1
Bone pain		
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)
occurrences (all)	0	1
Flank pain		
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)
occurrences (all)	0	1
Intervertebral disc protrusion		
subjects affected / exposed	2 / 12 (16.67%)	0 / 10 (0.00%)
occurrences (all)	2	0
monarthrititis		
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)
occurrences (all)	1	0
Musculoskeletal chest pain		
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)
occurrences (all)	3	0
Musculoskeletal pain		
subjects affected / exposed	2 / 12 (16.67%)	1 / 10 (10.00%)
occurrences (all)	2	1
Musculoskeletal stiffness		
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)
occurrences (all)	1	0
Myalgia		
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)
occurrences (all)	0	1
Myofascial pain syndrome		
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)
occurrences (all)	1	0
Neck pain		
subjects affected / exposed	2 / 12 (16.67%)	0 / 10 (0.00%)
occurrences (all)	4	0

Osteoarthritis			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	2	0	
Pain in extremity			
subjects affected / exposed	1 / 12 (8.33%)	1 / 10 (10.00%)	
occurrences (all)	3	1	
Spinal pain			
subjects affected / exposed	3 / 12 (25.00%)	0 / 10 (0.00%)	
occurrences (all)	5	0	
Infections and infestations			
Abscess oral			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Tonsillitis			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Anal fungal infection			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	2	
Bronchitis			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Folliculitis			
subjects affected / exposed	2 / 12 (16.67%)	0 / 10 (0.00%)	
occurrences (all)	4	0	
Fungal infection			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Furuncle			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Genital herpes zoster			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Gingivitis			



subjects affected / exposed	1 / 12 (8.33%)	1 / 10 (10.00%)	
occurrences (all)	1	1	
Herpes zoster			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Laryngitis			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Mastoiditis			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Nasopharyngitis			
subjects affected / exposed	2 / 12 (16.67%)	1 / 10 (10.00%)	
occurrences (all)	5	1	
Oesophageal candidiasis			
subjects affected / exposed	0 / 12 (0.00%)	1 / 10 (10.00%)	
occurrences (all)	0	1	
Oral candidiasis			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Rhinitis			
subjects affected / exposed	2 / 12 (16.67%)	0 / 10 (0.00%)	
occurrences (all)	2	0	
Upper respiratory tract infection			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Urinary tract infection			
subjects affected / exposed	2 / 12 (16.67%)	1 / 10 (10.00%)	
occurrences (all)	2	1	
Viral upper respiratory tract infection			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Vulvovaginal candidiasis			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Metabolism and nutrition disorders			

Cachexia			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Decreased appetite			
subjects affected / exposed	4 / 12 (33.33%)	3 / 10 (30.00%)	
occurrences (all)	5	8	
Hypercholesterolaemia			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	2	0	
Hyperglycaemia			
subjects affected / exposed	1 / 12 (8.33%)	1 / 10 (10.00%)	
occurrences (all)	1	1	
Hyperlipidaemia			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	1	0	
Hypertriglyceridaemia			
subjects affected / exposed	1 / 12 (8.33%)	0 / 10 (0.00%)	
occurrences (all)	6	0	

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
29 March 2010	In a new product information for Sunitinib fistula formation was included as a potential adverse event. This was incorporated into the study protocol and informed consent.

Notes:

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### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported