



Clinical trial results:

A randomized, controlled Phase III study investigating IMA901 multi-peptide cancer vaccine in patients receiving sunitinib as first-line therapy for advanced/metastatic renal cell carcinoma

Summary

EudraCT number	2010-022459-45
Trial protocol	DE HU GB NL IT
Global end of trial date	28 July 2015

Results information

Result version number	v1 (current)
This version publication date	23 January 2019
First version publication date	23 January 2019

Trial information

Trial identification

Sponsor protocol code	IMA901-301
-----------------------	------------

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01265901
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Immatics Biotechnologies GmbH
Sponsor organisation address	Paul-Ehrlich-Str. 15, Tübingen, Germany, 72076
Public contact	Reception, Immatics Biotechnologies GmbH, +49 707153970, info@immatics.com
Scientific contact	Reception, Immatics Biotechnologies GmbH, +49 707153970, info@immatics.com

Notes:

Paediatric regulatory details

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

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	10 May 2016
Is this the analysis of the primary completion data?	Yes
Primary completion date	12 March 2015
Global end of trial reached?	Yes
Global end of trial date	28 July 2015
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The primary objective of the present phase III study is to investigate whether IMA901 can prolong overall survival in patients with metastatic and/or locally advanced renal cell carcinoma (RCC) when added to standard first-line therapy with sunitinib

Protection of trial subjects:

This study was conducted in compliance with local legal and regulatory requirements and in conformance with Good Clinical Practice standards. All subjects were fully informed about nature, scope and possible consequences of the clinical trial in a language appropriate for the subject.

Background therapy:

sunitinib as first-line therapy for advanced/metastatic renal cell carcinoma

Evidence for comparator: -

Actual start date of recruitment	22 December 2010
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Netherlands: 1
Country: Number of subjects enrolled	Norway: 1
Country: Number of subjects enrolled	Poland: 64
Country: Number of subjects enrolled	United Kingdom: 18
Country: Number of subjects enrolled	France: 26
Country: Number of subjects enrolled	Germany: 29
Country: Number of subjects enrolled	Hungary: 30
Country: Number of subjects enrolled	Italy: 16
Country: Number of subjects enrolled	Russian Federation: 113
Country: Number of subjects enrolled	Romania: 9
Country: Number of subjects enrolled	United States: 32
Worldwide total number of subjects	339
EEA total number of subjects	194

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	212
From 65 to 84 years	127
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Between Dec 22, 2010, and Dec 15, 2012 1171 patients were screened at 124 clinical sites in Germany, France, Italy, the Netherlands, Norway, UK, Hungary, Poland, Russia, Romania, and USA, of whom 339 were randomly assigned to receive sunitinib plus IMA901 (n=204) or sunitinib monotherapy (n=135).

Pre-assignment

Screening details:

The following steps were performed before randomization: check for inclusion/exclusion criteria, eligibility for first-line therapy with sunitinib, contraindications, medical history of the subjects and signing informed consent forms.

Period 1

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

Arms

Are arms mutually exclusive?	Yes
Arm title	sunitinib plus IMA901

Arm description:

Patients randomized to the vaccination arm (Arm 1) received a total of 10 vaccinations with IMA901 + GM-CSF (Visits 1 to 10) in addition to sunitinib during the vaccination period (length of approximately 4 months). Pre-treatment with Cyclophosphamide was given to all patients in Arm 1 three days before first vaccination.

Arm type	Experimental
Investigational medicinal product name	IMA901
Investigational medicinal product code	IMA901
Other name	
Pharmaceutical forms	Powder for injection
Routes of administration	Intradermal use

Dosage and administration details:

IMA901 was administered intradermal with a dose of 4,13 mg at each vaccination.

Investigational medicinal product name	Leukine
Investigational medicinal product code	GM-CSF
Other name	
Pharmaceutical forms	Powder for solution for injection
Routes of administration	Intradermal use

Dosage and administration details:

GM-CSF was given intradermally with a dose of 75 µg shortly before the vaccination with IMA901.

Investigational medicinal product name	Endoxan
Investigational medicinal product code	Cyclophosphamide
Other name	
Pharmaceutical forms	Powder for solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

Cyclophosphamide was given 3 days before the first vaccination with a dose of 300mg/m² BSA intravenously

Investigational medicinal product name	Sutent
Investigational medicinal product code	Sunitinib
Other name	

Pharmaceutical forms	Capsule, hard
Routes of administration	Oral use

Dosage and administration details:

Sunitinib was given 50 mg orally once daily, with a complete sunitinib cycle defined as 4 weeks on treatment followed by 2 weeks off treatment

Arm title	sunitinib
------------------	-----------

Arm description:

Patients randomized to the control arm (Arm 2) received a sunitinib monotherapy.

Arm type	Active comparator
Investigational medicinal product name	sutent
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Capsule, hard
Routes of administration	Oral use

Dosage and administration details:

Sunitinib was given 50 mg orally once daily, with a complete sunitinib cycle defined as 4 weeks on treatment followed by 2 weeks off treatment

Number of subjects in period 1	sunitinib plus IMA901	sunitinib
Started	204	135
Completed	185	130
Not completed	19	5
did not receive cyclophosphamide	3	-
Consent withdrawn by subject	12	2
other reasons	4	3

Baseline characteristics

Reporting groups

Reporting group title	sunitinib plus IMA901
-----------------------	-----------------------

Reporting group description:

Patients randomized to the vaccination arm (Arm 1) received a total of 10 vaccinations with IMA901 + GM-CSF (Visits 1 to 10) in addition to sunitinib during the vaccination period (length of approximately 4 months). Pre-treatment with Cyclophosphamide was given to all patients in Arm 1 three days before first vaccination.

Reporting group title	sunitinib
-----------------------	-----------

Reporting group description:

Patients randomized to the control arm (Arm 2) received a sunitinib monotherapy.

Reporting group values	sunitinib plus IMA901	sunitinib	Total
Number of subjects	204	135	339
Age categorical Units: Subjects			

Age continuous Units: years arithmetic mean standard deviation	62.2 ± 8.9	59.8 ± 9.6	-
Gender categorical Units: Subjects			
Female	62	47	109
Male	142	88	230
Karnofsky Performance Status Units: Subjects			
60-70%	0	3	3
80-90%	112	64	176
100%	92	68	160
Risk group (Heng) Units: Subjects			
Favorable	56	35	91
Intermediate	145	96	241
Poor	3	4	7
Nephrectomy Units: Subjects			
Yes	183	123	306
No	21	12	33
Region Units: Subjects			
Western Europe	55	36	91
Central and Eastern Europe	128	88	216
United States	21	11	32
Body-mass index Units: kg/m ² arithmetic mean standard deviation	27.6 ± 4.8	28.2 ± 4.6	-

Subject analysis sets

Subject analysis set title	Biomarker-positive subgroup 1 (BP-1) in ARM1
Subject analysis set type	Sub-group analysis

Subject analysis set description:

patients treated with sunitinib plus IMA901 with at least one positive biomarker [APOA1 and/or CCL17]

Subject analysis set title	Biomarker-positive subgroup 1 (BP-1) in ARM2
Subject analysis set type	Sub-group analysis

Subject analysis set description:

patients treated with sunitinib (ARM1) with at least one positive biomarker [APOA1 and/or CCL17]

Subject analysis set title	Class I immune Responder
Subject analysis set type	Sub-group analysis

Subject analysis set description:

Patients with Response to at least one Class I TUMAP in the sunitinib plus IMA901 group (ARM1) analysed for immune responses to the peptides contained in IMA901

Subject analysis set title	Class I immune Non-responder
Subject analysis set type	Sub-group analysis

Subject analysis set description:

Patients with no response to any Class I TUMAP in the sunitinib plus IMA901 group (ARM1) analysed for immune responses to the peptides contained in IMA901

Subject analysis set title	Class I multi-peptide Responder
Subject analysis set type	Sub-group analysis

Subject analysis set description:

Patients with Response to ≥ 2 Class I TUMAPs in the sunitinib plus IMA901 group (ARM1) analysed for immune responses to the peptides contained in IMA901

Subject analysis set title	Class I multi-peptide response Non-responder
Subject analysis set type	Sub-group analysis

Subject analysis set description:

Patients with Response to ≤ 1 Class I TUMAP in the sunitinib plus IMA901 group (ARM1) analysed for immune responses to the peptides contained in IMA901

Subject analysis set title	Safety Population Main Phase in ARM1
Subject analysis set type	Safety analysis

Subject analysis set description:

patients randomized to ARM1 to receive sunitinib plus IMA901 having completed Visit D.

Subject analysis set title	Safety Population Main Phase in ARM2
Subject analysis set type	Safety analysis

Subject analysis set description:

all patients randomized to ARM2 to receive sunitinib having completed Visit D.

Reporting group values	Biomarker-positive subgroup 1 (BP-1) in ARM1	Biomarker-positive subgroup 1 (BP-1) in ARM2	Class I immune Responder
Number of subjects	134	95	51
Age categorical Units: Subjects			

Age continuous Units: years arithmetic mean standard deviation	±	±	±
---	---	---	---

Gender categorical Units: Subjects			
Female			
Male			
Karnofsky Performance Status Units: Subjects			
60-70%		2	0
80-90%	70	44	23
100%	64	48	28
Risk group (Heng) Units: Subjects			
Favorable			
Intermediate			
Poor			
Nephrectomy Units: Subjects			
Yes			
No			
Region Units: Subjects			
Western Europe			
Central and Eastern Europe			
United States			
Body-mass index Units: kg/m ² arithmetic mean standard deviation			
	±	±	±

Reporting group values	Class I immune Non-responder	Class I multi-peptide Responder	Class I multi-peptide response Non- responder
Number of subjects	45	16	80
Age categorical Units: Subjects			

Age continuous Units: years arithmetic mean standard deviation			
	±	±	±
Gender categorical Units: Subjects			
Female			
Male			
Karnofsky Performance Status Units: Subjects			
60-70%	0	0	0
80-90%	26	10	39
100%	19	6	41
Risk group (Heng) Units: Subjects			
Favorable			
Intermediate			

Poor			
Nephrectomy Units: Subjects			
Yes No			
Region Units: Subjects			
Western Europe Central and Eastern Europe United States			
Body-mass index Units: kg/m2 arithmetic mean standard deviation		±	±

Reporting group values	Safety Population Main Phase in ARM1	Safety Population Main Phase in ARM2	
Number of subjects	202	132	
Age categorical Units: Subjects			

Age continuous Units: years arithmetic mean standard deviation		±	±
Gender categorical Units: Subjects			
Female Male			
Karnofsky Performance Status Units: Subjects			
60-70%	0	2	
80-90%	110	62	
100%	92	68	
Risk group (Heng) Units: Subjects			
Favorable Intermediate Poor			
Nephrectomy Units: Subjects			
Yes No			
Region Units: Subjects			
Western Europe Central and Eastern Europe United States			
Body-mass index Units: kg/m2 arithmetic mean standard deviation		±	±

End points

End points reporting groups

Reporting group title	sunitinib plus IMA901
Reporting group description: Patients randomized to the vaccination arm (Arm 1) received a total of 10 vaccinations with IMA901 + GM-CSF (Visits 1 to 10) in addition to sunitinib during the vaccination period (length of approximately 4 months). Pre-treatment with Cyclophosphamide was given to all patients in Arm 1 three days before first vaccination.	
Reporting group title	sunitinib
Reporting group description: Patients randomized to the control arm (Arm 2) received a sunitinib monotherapy.	
Subject analysis set title	Biomarker-positive subgroup 1 (BP-1) in ARM1
Subject analysis set type	Sub-group analysis
Subject analysis set description: patients treated with sunitinib plus IMA901 with at least one positive biomarker [APOA1 and/or CCL17]	
Subject analysis set title	Biomarker-positive subgroup 1 (BP-1) in ARM2
Subject analysis set type	Sub-group analysis
Subject analysis set description: patients treated with sunitinib (ARM1) with at least one positive biomarker [APOA1 and/or CCL17]	
Subject analysis set title	Class I immune Responder
Subject analysis set type	Sub-group analysis
Subject analysis set description: Patients with Response to at least one Class I TUMAP in the sunitinib plus IMA901 group (ARM1) analysed for immune responses to the peptides contained in IMA901	
Subject analysis set title	Class I immune Non-responder
Subject analysis set type	Sub-group analysis
Subject analysis set description: Patients with no response to any Class I TUMAP in the sunitinib plus IMA901 group (ARM1) analysed for immune responses to the peptides contained in IMA901	
Subject analysis set title	Class I multi-peptide Responder
Subject analysis set type	Sub-group analysis
Subject analysis set description: Patients with Response to ≥ 2 Class I TUMAPs in the sunitinib plus IMA901 group (ARM1) analysed for immune responses to the peptides contained in IMA901	
Subject analysis set title	Class I multi-peptide response Non-responder
Subject analysis set type	Sub-group analysis
Subject analysis set description: Patients with Response to ≤ 1 Class I TUMAP in the sunitinib plus IMA901 group (ARM1) analysed for immune responses to the peptides contained in IMA901	
Subject analysis set title	Safety Population Main Phase in ARM1
Subject analysis set type	Safety analysis
Subject analysis set description: patients randomized to ARM1 to receive sunitinib plus IMA901 having completed Visit D.	
Subject analysis set title	Safety Population Main Phase in ARM2
Subject analysis set type	Safety analysis
Subject analysis set description: all patients randomized to ARM2 to receive sunitinib having completed Visit D.	

Primary: Overall Survival

End point title	Overall Survival
End point description: based on Kaplan-Meier estimates; cut-off date: 12-MAR-2015 ["99999" indicates that data was not available as respective median and upper limit of 95% confidence interval could not be determined.]	
End point type	Primary
End point timeframe: Overall Survival from randomization to death	

End point values	sunitinib plus IMA901	sunitinib		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	204	135		
Units: days				
median (confidence interval 95%)	1009 (846 to 1258)	99999 (1024 to 99999)		

Statistical analyses

Statistical analysis title	Analysis of Primary Endpoint
Statistical analysis description: The primary endpoint is to evaluate Overall Survival, comparing patients receiving or not vaccination therapy with IMA901 in addition to first-line therapy with sunitinib. Comparison of both treatment arms was performed on basis of Kaplan-Meier estimates	
Comparison groups	sunitinib plus IMA901 v sunitinib
Number of subjects included in analysis	339
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.0784
Method	Logrank

Secondary: Overall survival by biomarker subgroup

End point title	Overall survival by biomarker subgroup
End point description: based on Kaplan-Meier estimates; cut-off date: 12-MAR-2015 ["99999" indicates that data was not available as respective median and upper limit of 95% confidence interval could not be determined.]	
End point type	Secondary
End point timeframe: Overall survival measured from randomization until death.	

End point values	Biomarker-positive subgroup 1 (BP-1) in ARM1	Biomarker-positive subgroup 1 (BP-1) in ARM2		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	134	95		
Units: days				
median (confidence interval 95%)	1258 (922 to 1258)	99999 (1024 to 99999)		

Statistical analyses

Statistical analysis title	Overall survival by Biomarker-positive subgroup
Statistical analysis description:	
Secondary endpoint is to evaluate overall survival in patients who are positive for the prospectively defined primary biomarker signature (identified as being predictive for improved clinical outcome in IMA901-vaccinated patients in the previous phase II study).	
Comparison groups	Biomarker-positive subgroup 1 (BP-1) in ARM1 v Biomarker-positive subgroup 1 (BP-1) in ARM2
Number of subjects included in analysis	229
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.5104
Method	Logrank

Secondary: Progression-free Survival (until EOS)

End point title	Progression-free Survival (until EOS)
End point description:	
Progression-free survival (PFS) using RECIST 1.1, based on the centrally reviewed tumor images.	
End point type	Secondary
End point timeframe:	
Progression-free survival (PFS) is defined as the time from randomization to documented progression or death (until EOS)	

End point values	sunitinib plus IMA901	sunitinib		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	204	135		
Units: days				
median (confidence interval 95%)	463 (379 to 550)	460 (310 to 565)		

Statistical analyses

Statistical analysis title	Analysis of Secondary Endpoint PFS
Comparison groups	sunitinib plus IMA901 v sunitinib
Number of subjects included in analysis	339
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.618
Method	Logrank

Secondary: Progression-free survival including the first 3 months of OS follow-up

End point title	Progression-free survival including the first 3 months of OS follow-up
End point description:	Progression-free survival (PFS) using RECIST 1.1, based on the centrally reviewed tumor images.
End point type	Secondary
End point timeframe:	Progression-free survival (PFS) is defined as the time from randomization to documented progression or death including the first 3 months of survival follow-up.

End point values	sunitinib plus IMA901	sunitinib		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	204	135		
Units: days				
median (confidence interval 95%)	449 (352 to 518)	460 (305 to 565)		

Statistical analyses

Statistical analysis title	Analysis of Secondary Endpoint PFS
Comparison groups	sunitinib plus IMA901 v sunitinib
Number of subjects included in analysis	339
Analysis specification	Pre-specified
Analysis type	non-inferiority
P-value	= 0.423
Method	Logrank

Secondary: Progression-free survival (counted from start of sunitinib treatment) until EOS

End point title	Progression-free survival (counted from start of sunitinib treatment) until EOS
End point description:	Progression-free survival (PFS) using RECIST 1.1, based on the centrally reviewed tumor images.
End point type	Secondary

End point timeframe:

Progression-free survival (PFS) is defined as the time from start of sunitinib first-line treatment to documented progression or death (until EOS)

End point values	sunitinib plus IMA901	sunitinib		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	204	135		
Units: days				
median (confidence interval 95%)	492 (408 to 577)	490 (341 to 587)		

Statistical analyses

Statistical analysis title	Analysis of Secondary Endpoint PFS
Comparison groups	sunitinib plus IMA901 v sunitinib
Number of subjects included in analysis	339
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.698
Method	Logrank

Secondary: Overall survival by Class I immune response

End point title	Overall survival by Class I immune response
End point description:	OS based on Kaplan-Meier estimates and log-rank test by Class I immune response and Class I immune response ["99999" indicates data was not available as upper limit of 95% confidence interval could not be determined.]
End point type	Secondary
End point timeframe:	Survival from randomisation until death.

End point values	Class I immune Responder	Class I immune Non-responder		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	51	45		
Units: days				
median (confidence interval 95%)	1241 (853 to 99999)	973 (689 to 99999)		

Statistical analyses

Statistical analysis title	Overall survival by T cell response
Comparison groups	Class I immune Responder v Class I immune Non-responder
Number of subjects included in analysis	96
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.1806
Method	Logrank

Secondary: Overall survival by Class I multi-peptide response

End point title	Overall survival by Class I multi-peptide response
End point description:	OS based on Kaplan-Meier estimates and log-rank test by Class I multi-peptide response ["99999" indicates that data was not available as upper limit of 95% confidence interval could not be determined.]
End point type	Secondary
End point timeframe:	Survival from randomisation until death

End point values	Class I multi-peptide Responder	Class I multi-peptide response Non-responder		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	16	80		
Units: days				
median (confidence interval 95%)	996 (732 to 99999)	1033 (790 to 99999)		

Statistical analyses

Statistical analysis title	Overall survival by T cell response
Comparison groups	Class I multi-peptide Responder v Class I multi-peptide response Non-responder
Number of subjects included in analysis	96
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.8363
Method	Logrank

Secondary: Best tumor response (central review)

End point title	Best tumor response (central review)
-----------------	--------------------------------------

End point description:

Best tumor response according to RECIST 1.1, based on the centrally reviewed tumor images.

End point type Secondary

End point timeframe:

CR=Complete response; PR=Partial response; SD=Stable disease; PD=Progressive disease; NE=Not evaluable

End point values	sunitinib plus IMA901	sunitinib		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	204	135		
Units: Best overall response (unconfirmed)				
CR	4	8		
PR	84	56		
SD	48	31		
Non-CR/Non-PD	18	9		
PD	31	14		
NE	19	17		

Statistical analyses

No statistical analyses for this end point

Secondary: Best tumor response (central review)

End point title Best tumor response (central review)

End point description:

Best tumor response according to RECIST 1.1, based on the centrally reviewed tumor images.

End point type Secondary

End point timeframe:

CR=Complete response; PR=Partial response; SD=Stable disease; PD=Progressive disease; NE=Not evaluable

End point values	sunitinib plus IMA901	sunitinib		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	204	135		
Units: Best overall response (confirmed)				
CR	4	7		
PR	69	49		
SD	58	36		
Non-CR/Non-PD	17	10		
PD	34	15		
NE	22	18		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

The main safety analysis is based on treatment-emergent AEs (TEAEs) in the main phase defined as any AE that started or deteriorated after or at start of IMP treatment with cyclophosphamide at Visit D and before Visit 18/EOS.

Assessment type	Systematic
-----------------	------------

Dictionary used

Dictionary name	MedDRA
Dictionary version	14

Reporting groups

Reporting group title	sunitinib plus IMA901
-----------------------	-----------------------

Reporting group description:

Patients randomized to the vaccination arm (Arm 1) received a total of 10 vaccinations with IMA901 + GM-CSF (Visits 1 to 10) in addition to sunitinib during the vaccination period (length of approximately 4 months). Pre-treatment with Cyclophosphamide was given to all patients in Arm 1 three days before first vaccination.

Reporting group title	sunitinib
-----------------------	-----------

Reporting group description:

Patients randomized to the control arm (Arm 2) received a sunitinib monotherapy.

Serious adverse events	sunitinib plus IMA901	sunitinib	
Total subjects affected by serious adverse events			
subjects affected / exposed	54 / 202 (26.73%)	27 / 132 (20.45%)	
number of deaths (all causes)	101	54	
number of deaths resulting from adverse events	5	8	
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Gastric cancer			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Malignant melanoma			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Metastatic pain			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Oncologic complication			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Vascular disorders			
Hypertension			
subjects affected / exposed	4 / 202 (1.98%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 4	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Circulatory collapse			
subjects affected / exposed	1 / 202 (0.50%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 1	0 / 1	
Aortic thrombosis			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Deep vein thrombosis			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Extremity necrosis			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (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			
Fatigue			
subjects affected / exposed	1 / 202 (0.50%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Asthenia			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Death			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Hyperthermia			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Mucosal inflammation			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (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	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Immune system disorders			
Hypersensitivity			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Respiratory, thoracic and mediastinal disorders			
Pulmonary embolism			
subjects affected / exposed	0 / 202 (0.00%)	3 / 132 (2.27%)	
occurrences causally related to treatment / all	0 / 0	0 / 3	
deaths causally related to treatment / all	0 / 0	0 / 2	
Respiratory failure			
subjects affected / exposed	2 / 202 (0.99%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 2	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Asthma			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Dyspnoea			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Interstitial lung disease			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Laryngeal oedema			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pleural effusion			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Psychiatric disorders			
Delirium			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Depression			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Investigations			
Alanine aminotransferase increased			
subjects affected / exposed	1 / 202 (0.50%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Aspartate aminotransferase increased			
subjects affected / exposed	1 / 202 (0.50%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	

Injury, poisoning and procedural complications			
Lumbar vertebral fracture			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Multiple injuries			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Tibia fracture			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Cardiac disorders			
Acute myocardial infarction			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Arrhythmia supraventricular			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Atrial fibrillation			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Atrioventricular block			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Atrioventricular block complete			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Cardiac arrest			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Coronary artery disease			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Myocardial infarction			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Nervous system disorders			
Cerebrovascular accident			
subjects affected / exposed	1 / 202 (0.50%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Headache			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hemiparesis			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Spinal cord compression			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Syncope			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood and lymphatic system disorders			

Anaemia			
subjects affected / exposed	3 / 202 (1.49%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 3	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Neutropenia			
subjects affected / exposed	2 / 202 (0.99%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 2	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Thrombocytopenia			
subjects affected / exposed	1 / 202 (0.50%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Disseminated intravascular coagulation			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Leukopenia			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Ear and labyrinth disorders			
Vertigo			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Eye disorders			
Amaurosis			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastrointestinal disorders			
Vomiting			

subjects affected / exposed	1 / 202 (0.50%)	4 / 132 (3.03%)
occurrences causally related to treatment / all	0 / 1	0 / 4
deaths causally related to treatment / all	0 / 0	0 / 0
Abdominal pain		
subjects affected / exposed	4 / 202 (1.98%)	0 / 132 (0.00%)
occurrences causally related to treatment / all	0 / 4	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0
Nausea		
subjects affected / exposed	1 / 202 (0.50%)	2 / 132 (1.52%)
occurrences causally related to treatment / all	0 / 1	0 / 2
deaths causally related to treatment / all	0 / 0	0 / 0
Diarrhoea		
subjects affected / exposed	1 / 202 (0.50%)	1 / 132 (0.76%)
occurrences causally related to treatment / all	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0
Gastric ulcer haemorrhage		
subjects affected / exposed	2 / 202 (0.99%)	0 / 132 (0.00%)
occurrences causally related to treatment / all	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0
Flatulence		
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)
occurrences causally related to treatment / all	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0
Gastric haemorrhage		
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0
Gastrointestinal haemorrhage		
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0
Haematemesis		

subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Ileus			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Intestinal perforation			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Oesophageal varices haemorrhage			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Oesophagitis			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Periproctitis			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hepatobiliary disorders			
Cholangitis acute			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hepatorenal failure			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Skin and subcutaneous tissue disorders			

Palmar-plantar erythrodysesthesia syndrome			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pyoderma gangrenosum			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Skin ulcer			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Renal and urinary disorders			
Renal failure			
subjects affected / exposed	0 / 202 (0.00%)	2 / 132 (1.52%)	
occurrences causally related to treatment / all	0 / 0	0 / 2	
deaths causally related to treatment / all	0 / 0	0 / 1	
Renal impairment			
subjects affected / exposed	1 / 202 (0.50%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Acute prerenal failure			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Calculus urinary			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Haematuria			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Ureteric stenosis			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Endocrine disorders			
Hypothyroidism			
subjects affected / exposed	4 / 202 (1.98%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 4	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Musculoskeletal and connective tissue disorders			
Back pain			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Infections and infestations			
Pneumonia			
subjects affected / exposed	3 / 202 (1.49%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 3	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Infection			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Lower respiratory tract infection			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Osteomyelitis			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pyothorax			

subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Sepsis			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Sinusitis			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Soft tissue infection			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Streptococcal sepsis			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Tooth abscess			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Urethritis			
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Wound infection			
subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Metabolism and nutrition disorders			
Hyperglycaemia			

subjects affected / exposed	1 / 202 (0.50%)	0 / 132 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0
Hyponatraemia		
subjects affected / exposed	0 / 202 (0.00%)	1 / 132 (0.76%)
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: 5 %

Non-serious adverse events	sunitinib plus IMA901	sunitinib	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	179 / 202 (88.61%)	115 / 132 (87.12%)	
Investigations			
Weight decreased			
subjects affected / exposed	30 / 202 (14.85%)	16 / 132 (12.12%)	
occurrences (all)	47	27	
Blood creatinine increased			
subjects affected / exposed	18 / 202 (8.91%)	16 / 132 (12.12%)	
occurrences (all)	20	26	
Aspartate aminotransferase increased			
subjects affected / exposed	15 / 202 (7.43%)	10 / 132 (7.58%)	
occurrences (all)	28	14	
Blood thyroid stimulating hormone increased			
subjects affected / exposed	13 / 202 (6.44%)	11 / 132 (8.33%)	
occurrences (all)	16	15	
Blood lactate dehydrogenase increased			
subjects affected / exposed	17 / 202 (8.42%)	3 / 132 (2.27%)	
occurrences (all)	25	6	
Platelet count decreased			
subjects affected / exposed	13 / 202 (6.44%)	7 / 132 (5.30%)	
occurrences (all)	28	18	
Vascular disorders			

Hypertension subjects affected / exposed occurrences (all)	51 / 202 (25.25%) 80	31 / 132 (23.48%) 40	
Nervous system disorders Dysgeusia subjects affected / exposed occurrences (all) Headache subjects affected / exposed occurrences (all)	29 / 202 (14.36%) 51 12 / 202 (5.94%) 22	20 / 132 (15.15%) 31 8 / 132 (6.06%) 10	
General disorders and administration site conditions Fatigue subjects affected / exposed occurrences (all) Asthenia subjects affected / exposed occurrences (all) Oedema peripheral subjects affected / exposed occurrences (all) Mucosal inflammation subjects affected / exposed occurrences (all) Injection site erythema subjects affected / exposed occurrences (all) Pyrexia subjects affected / exposed occurrences (all)	42 / 202 (20.79%) 70 35 / 202 (17.33%) 80 23 / 202 (11.39%) 38 16 / 202 (7.92%) 22 21 / 202 (10.40%) 32 11 / 202 (5.45%) 22	30 / 132 (22.73%) 47 16 / 132 (12.12%) 31 12 / 132 (9.09%) 17 15 / 132 (11.36%) 24 0 / 132 (0.00%) 0 8 / 132 (6.06%) 13	
Blood and lymphatic system disorders Neutropenia subjects affected / exposed occurrences (all) Anaemia subjects affected / exposed occurrences (all)	39 / 202 (19.31%) 88 32 / 202 (15.84%) 80	19 / 132 (14.39%) 41 15 / 132 (11.36%) 37	

Thrombocytopenia subjects affected / exposed occurrences (all)	29 / 202 (14.36%) 71	16 / 132 (12.12%) 42	
Leukopenia subjects affected / exposed occurrences (all)	24 / 202 (11.88%) 66	20 / 132 (15.15%) 61	
Lymphopenia subjects affected / exposed occurrences (all)	11 / 202 (5.45%) 26	7 / 132 (5.30%) 14	
Gastrointestinal disorders			
Diarrhoea subjects affected / exposed occurrences (all)	55 / 202 (27.23%) 183	38 / 132 (28.79%) 112	
Nausea subjects affected / exposed occurrences (all)	40 / 202 (19.80%) 63	25 / 132 (18.94%) 45	
Stomatitis subjects affected / exposed occurrences (all)	26 / 202 (12.87%) 58	22 / 132 (16.67%) 34	
Vomiting subjects affected / exposed occurrences (all)	28 / 202 (13.86%) 40	18 / 132 (13.64%) 33	
Dyspepsia subjects affected / exposed occurrences (all)	14 / 202 (6.93%) 17	14 / 132 (10.61%) 17	
Abdominal pain upper subjects affected / exposed occurrences (all)	20 / 202 (9.90%) 30	6 / 132 (4.55%) 14	
Abdominal pain subjects affected / exposed occurrences (all)	17 / 202 (8.42%) 29	6 / 132 (4.55%) 8	
Constipation subjects affected / exposed occurrences (all)	9 / 202 (4.46%) 10	9 / 132 (6.82%) 11	
Respiratory, thoracic and mediastinal disorders			

Cough subjects affected / exposed occurrences (all)	19 / 202 (9.41%) 21	11 / 132 (8.33%) 13	
Epistaxis subjects affected / exposed occurrences (all)	18 / 202 (8.91%) 21	10 / 132 (7.58%) 13	
Dyspnoea subjects affected / exposed occurrences (all)	14 / 202 (6.93%) 19	10 / 132 (7.58%) 12	
Skin and subcutaneous tissue disorders			
Palmar-plantar erythrodysesthesia syndrome subjects affected / exposed occurrences (all)	55 / 202 (27.23%) 147	38 / 132 (28.79%) 85	
Dry skin subjects affected / exposed occurrences (all)	15 / 202 (7.43%) 18	7 / 132 (5.30%) 7	
Rash subjects affected / exposed occurrences (all)	15 / 202 (7.43%) 18	5 / 132 (3.79%) 6	
Yellow skin subjects affected / exposed occurrences (all)	13 / 202 (6.44%) 15	7 / 132 (5.30%) 10	
Hair colour changes subjects affected / exposed occurrences (all)	10 / 202 (4.95%) 14	9 / 132 (6.82%) 9	
Erythema subjects affected / exposed occurrences (all)	11 / 202 (5.45%) 14	7 / 132 (5.30%) 7	
Skin discolouration subjects affected / exposed occurrences (all)	12 / 202 (5.94%) 27	6 / 132 (4.55%) 15	
Endocrine disorders			
Hypothyroidism subjects affected / exposed occurrences (all)	63 / 202 (31.19%) 86	35 / 132 (26.52%) 46	
Musculoskeletal and connective tissue disorders			

Back pain			
subjects affected / exposed	24 / 202 (11.88%)	9 / 132 (6.82%)	
occurrences (all)	31	10	
Pain in extremity			
subjects affected / exposed	17 / 202 (8.42%)	11 / 132 (8.33%)	
occurrences (all)	28	14	
Metabolism and nutrition disorders			
Decreased appetite			
subjects affected / exposed	34 / 202 (16.83%)	19 / 132 (14.39%)	
occurrences (all)	51	27	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
23 May 2011	- In the original study protocol sunitinib was considered a Non Investigational Medical Product (NIMP). With the amendment sunitinib was considered an Investigational Medicinal Product (IMP) and provided by the sponsor. The product provided is a clinical image material. The clinical image supplies are qualitatively and quantitatively identical to the commercial product with the exception that they lack markings on the capsule shell. - Specification for End of Trial (EoT) was included
27 September 2013	- With this amendment, the sponsor implemented the qualification criteria for continued sunitinib treatment after completion of the interventional period of the study. - Further, the specification of patient-follow up after primary completion date was given

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported