



Clinical trial results:

Randomized Phase II-III Study Comparing Bevacizumab 7.5 mg/kg in Combination with Chemotherapy Versus Chemotherapy in Extensive-Disease Small-Cell Lung Cancer After Response to PCDE or PE Chemotherapy

PCDE: cisPlatin – Cyclophosphamide – epiDoxorubicin – Etoposide

PE: cisPlatin – Etoposide

Summary

| | |
|--------------------------|----------------|
| EudraCT number | 2009-010187-42 |
| Trial protocol | FR |
| Global end of trial date | 26 July 2013 |

Results information

| | |
|--------------------------------|-----------------|
| Result version number | v1 (current) |
| This version publication date | 08 January 2017 |
| First version publication date | 08 January 2017 |

Trial information

Trial identification

| | |
|-----------------------|-----------|
| Sponsor protocol code | IFCT-0802 |
|-----------------------|-----------|

Additional study identifiers

| | |
|------------------------------------|-------------|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | NCT00930891 |
| WHO universal trial number (UTN) | - |

Notes:

Sponsors

| | |
|------------------------------|---|
| Sponsor organisation name | IFCT |
| Sponsor organisation address | 10 rue de la Grange-Batelière, PARIS, France, |
| Public contact | Sponsor, IFCT, contact@ifct.fr |
| Scientific contact | Sponsor, IFCT, contact@ifct.fr |

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 | 26 January 2015 |
| Is this the analysis of the primary completion data? | Yes |
| Primary completion date | 26 July 2013 |
| Global end of trial reached? | Yes |
| Global end of trial date | 26 July 2013 |
| Was the trial ended prematurely? | Yes |

Notes:

General information about the trial

Main objective of the trial:

Objective response rate (complete response + partial response) after 4 cycles.

Protection of trial subjects:

Reductions of dose of the study treatment.

Best supportive care treatment

Background therapy:

Chemotherapy is thus the standard first-line treatment for small-cell lung cancer and is the only anticancer treatment with demonstrated beneficial effect for patients with extensive-stage disease [Chute, 1999]. Cisplatin-etoposide combination chemotherapy is active in first-line therapy and is the reference combination for many collaborative groups [Chute et al, 1999; Maksymiuk et al, 1994; Ihde et al, 1994]. Two meta-analyses of literature data showed that, as for the combination chemotherapy, chemotherapies based on either one of these two drugs prolong the lives of patients [Pujol et al, 2000; Paesmans et al, 2000]. Furthermore, a recent in vitro study suggests that they have distinct synergistic effects [Jensen et al, 1997]. However, the proportion of patients surviving beyond two years remains below 10%; the low two-year survival rate is due to chemotherapy-resistant relapse [Hansen and Kristjansen, 1991; Aisner J, 1996]. An explanation for this could be the selection of a chemotherapy-resistant phenotype of tumor cells to the induction treatment. New chemotherapy methods are currently being studied to avoid or circumvent this chemotherapy-resistant relapse.

Evidence for comparator: -

| | |
|---|-------------------|
| Actual start date of recruitment | 22 September 2009 |
| Long term follow-up planned | No |
| Independent data monitoring committee (IDMC) involvement? | No |

Notes:

Population of trial subjects

Subjects enrolled per country

| | |
|--------------------------------------|-------------|
| Country: Number of subjects enrolled | France: 147 |
| Worldwide total number of subjects | 147 |
| EEA total number of subjects | 147 |

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 | 0 |

| | |
|---------------------------|-----|
| months) | |
| Children (2-11 years) | 0 |
| Adolescents (12-17 years) | 0 |
| Adults (18-64 years) | 111 |
| From 65 to 84 years | 36 |
| 85 years and over | 0 |

Subject disposition

Recruitment

Recruitment details:

Recruitment period : 22/09/2009 to 19/10/2011.

Territory : France

Pre-assignment

Screening details:

previously untreated extensive small-cell lung cancer

Period 1

| | |
|------------------------------|------------------|
| Period 1 title | Inclusion period |
| Is this the baseline period? | Yes |
| Allocation method | Not applicable |
| Blinding used | Not blinded |

Arms

| | |
|-----------|--------------|
| Arm title | Chemotherapy |
|-----------|--------------|

Arm description:

All patient included received 2 cycles of chemotherapy (PE or PCDE)

| | |
|--|---------------------------------|
| Arm type | Same treatment for all patients |
| Investigational medicinal product name | Cisplatin |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |

Dosage and administration details:

75 mg/m², Day 2 every 21 days for patient receiving PCDE treatment

80 mg/m², Day 2 every 21 days for patient receiving PE treatment

| | |
|--|-----------------------|
| Investigational medicinal product name | Etoposide |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |

Dosage and administration details:

75 mg/m² Day 1, Day 2 and Day 3, every 21 days for patient receiving PCDE treatment

120 mg/m² Day 1, Day 2 and Day 3, every 21 days for patient receiving PE treatment

| | |
|--|-----------------------|
| Investigational medicinal product name | 4'-epidoxorubicin |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |

Dosage and administration details:

30 mg/m², Day 1 every 21 days for patient receiving PCDE treatment only

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

Dosage and administration details:

300 mg/m², Day 1, Day 2, Day 3 every 21 days for patient receiving PCDE treatment only

| Number of subjects in period 1 | Chemotherapy |
|--------------------------------|--------------|
| Started | 147 |
| Completed | 138 |
| Not completed | 9 |
| Consent withdrawn by subject | 1 |
| Adverse event, non-fatal | 1 |
| Protocol deviation | 1 |
| Lack of efficacy | 6 |

| | |
|---|-------------------------|
| Period 2 | |
| Period 2 title | Randomization period |
| Is this the baseline period? | No |
| Allocation method | Randomised - controlled |
| Blinding used | Not blinded |
| Arms | |
| Are arms mutually exclusive? | Yes |
| Arm title | Chemotherapy alone |
| Arm description: - | |
| Arm type | Active comparator |
| Investigational medicinal product name | Cisplatin |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |
| Dosage and administration details: | |
| 75 mg/m ² , Day 2 every 21 days for patient receiving PCDE treatment | |
| 80 mg/m ² , Day 2 every 21 days for patient receiving PE treatment | |
| Investigational medicinal product name | Etoposide |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |
| Dosage and administration details: | |
| 75 mg/m ² Day 1, Day 2 and Day 3, every 21 days for patient receiving PCDE treatment | |
| 120 mg/m ² Day 1, Day 2 and Day 3, every 21 days for patient receiving PE treatment | |
| Investigational medicinal product name | 4'-epidoxorubicin |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |

| | |
|---|----------------------------------|
| Dosage and administration details: | |
| 30 mg/m ² , Day 1 every 21 days for patient receiving PCDE treatment only | |
| Investigational medicinal product name | Cyclophosphamide |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Powder for solution for infusion |
| Routes of administration | Intravenous use |
| Dosage and administration details: | |
| 300 mg/m ² , Day 1, Day 2, Day 3 every 21 days for patient receiving PCDE treatment only | |
| Arm title | Chemotherapy + bevacizumab |
| Arm description: - | |
| Arm type | Experimental |
| Investigational medicinal product name | Cisplatin |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |
| Dosage and administration details: | |
| 75 mg/m ² , Day 2 every 21 days for patient receiving PCDE treatment | |
| 80 mg/m ² , Day 2 every 21 days for patient receiving PE treatment | |
| Investigational medicinal product name | Etoposide |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |
| Dosage and administration details: | |
| 75 mg/m ² Day 1, Day 2 and Day 3, every 21 days for patient receiving PCDE treatment | |
| 120 mg/m ² Day 1, Day 2 and Day 3, every 21 days for patient receiving PE treatment | |
| Investigational medicinal product name | 4'-epidoxorubicin |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |
| Dosage and administration details: | |
| 30 mg/m ² , Day 1 every 21 days for patient receiving PCDE only | |
| Investigational medicinal product name | Cyclophosphamide |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Powder for solution for infusion |
| Routes of administration | Intravenous use |
| Dosage and administration details: | |
| 300 mg/m ² , Day 1, Day 2, Day 3 every 21 days for patient receiving PCDE only | |
| Investigational medicinal product name | Bevacizumab |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |
| Dosage and administration details: | |
| 7,5 mg/m ² Day 1 every 21 days | |

| Number of subjects in period 2 ^[1] | Chemotherapy alone | Chemotherapy + bevacizumab |
|--|--------------------|-------------------------------|
| | | |
| Started | 37 | 37 |
| Completed | 31 | 35 |
| Not completed | 6 | 2 |
| Adverse event, non-fatal | 4 | - |
| Lack of efficacy | 2 | 1 |
| Protocol deviation | - | 1 |

Notes:

[1] - The number of subjects starting the period is not consistent with the number completing the preceding period. It is expected the number of subjects starting the subsequent period will be the same as the number completing the preceding period.

Justification: 64 subjects excluded because they not fulfill the randomization criteria

Baseline characteristics

Reporting groups

| | |
|-----------------------|------------------|
| Reporting group title | Inclusion period |
|-----------------------|------------------|

Reporting group description: -

| Reporting group values | Inclusion period | Total | |
|----------------------------|------------------|-------|--|
| Number of subjects | 147 | 147 | |
| Age categorical | | | |
| Units: Subjects | | | |
| Adults (18-64 years) | 111 | 111 | |
| From 65-84 years | 36 | 36 | |
| Gender categorical | | | |
| Units: Subjects | | | |
| Female | 39 | 39 | |
| Male | 108 | 108 | |
| Produits de chimiothérapie | | | |
| Units: Subjects | | | |
| PCDE | 20 | 20 | |
| PE | 127 | 127 | |
| Performance status | | | |
| Units: Subjects | | | |
| PS 0 - 1 | 118 | 118 | |
| PS 2 | 29 | 29 | |

End points

End points reporting groups

| | |
|---|----------------------------|
| Reporting group title | Chemotherapy |
| Reporting group description: All patient included received 2 cycles of chemotherapy (PE or PCDE) | |
| Reporting group title | Chemotherapy alone |
| Reporting group description: - | |
| Reporting group title | Chemotherapy + bevacizumab |
| Reporting group description: - | |

Primary: Objective reponse rate

| | |
|---|------------------------|
| End point title | Objective reponse rate |
| End point description: | |
| End point type | Primary |
| End point timeframe: 4 cycles after andomization | |

| End point values | Chemotherapy alone | Chemotherapy + bevacizumab | | |
|-----------------------------|--------------------|----------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 37 | 37 | | |
| Units: Number of patient | | | | |
| Complete response | 0 | 0 | | |
| Partial response | 34 | 34 | | |
| Stable disease | 0 | 0 | | |
| Progression | 1 | 1 | | |
| Not done | 1 | 0 | | |
| Non evaluable | 1 | 2 | | |

Statistical analyses

| | |
|---|---|
| Statistical analysis title | Objective reponse rate |
| Comparison groups | Chemotherapy alone v Chemotherapy + bevacizumab |
| Number of subjects included in analysis | 74 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 1 |
| Method | Fisher exact |

Secondary: Objective Reponse rate

| | |
|-----------------|------------------------|
| End point title | Objective Reponse rate |
|-----------------|------------------------|

End point description:

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

after 6 cycles

| End point values | Chemotherapy alone | Chemotherapy + bevacizumab | | |
|-----------------------------|--------------------|----------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 37 | 37 | | |
| Units: Number of patient | | | | |
| Complete response | 3 | 1 | | |
| Partial Response | 23 | 27 | | |
| Stable disease | 0 | 2 | | |
| Progression disease | 4 | 3 | | |
| Evaluation not done | 2 | 0 | | |
| Non evaluable | 5 | 4 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Progression free survival

| | |
|-----------------|---------------------------|
| End point title | Progression free survival |
|-----------------|---------------------------|

End point description:

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Time between randomization and progression or death of any cause

| End point values | Chemotherapy alone | Chemotherapy + bevacizumab | | |
|----------------------------------|--------------------|----------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 37 | 37 | | |
| Units: Months | | | | |
| median (confidence interval 95%) | 5.5 (4.9 to 6) | 5.3 (5 to 6.3) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Overall survival

| | |
|-----------------|------------------|
| End point title | Overall survival |
|-----------------|------------------|

End point description:

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Time between randomization and death any cause.

| End point values | Chemotherapy alone | Chemotherapy + bevacizumab | | |
|----------------------------------|--------------------|----------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 37 | 37 | | |
| Units: Months | | | | |
| median (confidence interval 95%) | 13 (9.7 to 19.8) | 11.1 (8.6 to 13.9) | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Between inclusion and 30 days after the last injection of study drugs

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

Dictionary used

| | |
|-----------------|--------|
| Dictionary name | MedDRA |
|-----------------|--------|

| | |
|--------------------|----|
| Dictionary version | 18 |
|--------------------|----|

Reporting groups

| | |
|-----------------------|--------------|
| Reporting group title | Chemotherapy |
|-----------------------|--------------|

Reporting group description:

All patient included received 2 cycles of chemotherapy (PE or PCDE)

| | |
|-----------------------|--------------------|
| Reporting group title | Chemotherapy alone |
|-----------------------|--------------------|

Reporting group description:

Patients randomized in the arm chemotherapy alone

| | |
|-----------------------|----------------------------|
| Reporting group title | Chemotherapy + bevacizumab |
|-----------------------|----------------------------|

Reporting group description:

Patients randomized in the arm chemotherapy + bevacizumab

| Serious adverse events | Chemotherapy | Chemotherapy alone | Chemotherapy + bevacizumab |
|---|-------------------|--------------------|----------------------------|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 49 / 147 (33.33%) | 6 / 37 (16.22%) | 13 / 37 (35.14%) |
| number of deaths (all causes) | 140 | 37 | 36 |
| number of deaths resulting from adverse events | 4 | 0 | 1 |
| Vascular disorders | | | |
| Pulmonary embolism | | | |
| subjects affected / exposed | 3 / 147 (2.04%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 3 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Thrombosis | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 3 / 37 (8.11%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 2 / 3 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Phlebitis superficial | | | |
| subjects affected / exposed | 0 / 147 (0.00%) | 0 / 37 (0.00%) | 1 / 37 (2.70%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Cardiac disorders | | | |

| | | | |
|---|-----------------|----------------|----------------|
| Acute pulmonary oedema | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Cardiac arrest | | | |
| subjects affected / exposed | 2 / 147 (1.36%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 0 |
| Cardiac disorder | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| Hypertension | | | |
| subjects affected / exposed | 0 / 147 (0.00%) | 0 / 37 (0.00%) | 1 / 37 (2.70%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Nervous system disorders | | | |
| Convulsion | | | |
| subjects affected / exposed | 0 / 147 (0.00%) | 1 / 37 (2.70%) | 1 / 37 (2.70%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 2 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 1 | 0 / 0 |
| Intracranial hemorrhage | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Loss of consciousness | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Personality change | | | |
| subjects affected / exposed | 0 / 147 (0.00%) | 0 / 37 (0.00%) | 1 / 37 (2.70%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| Seizure | | | |

| | | | |
|--|-----------------|----------------|----------------|
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Subdural haematoma | | | |
| subjects affected / exposed | 0 / 147 (0.00%) | 0 / 37 (0.00%) | 1 / 37 (2.70%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| Aphasia | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Coma | | | |
| subjects affected / exposed | 0 / 147 (0.00%) | 0 / 37 (0.00%) | 1 / 37 (2.70%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| Consciousness disturb | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Encephalopathy | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Intracranial hypertension | | | |
| subjects affected / exposed | 0 / 147 (0.00%) | 0 / 37 (0.00%) | 1 / 37 (2.70%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| General disorders and administration site conditions | | | |
| Asthenia | | | |
| subjects affected / exposed | 0 / 147 (0.00%) | 0 / 37 (0.00%) | 2 / 37 (5.41%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 2 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Back pain | | | |

| | | | |
|---|-----------------|----------------|----------------|
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Fever | | | |
| subjects affected / exposed | 0 / 147 (0.00%) | 0 / 37 (0.00%) | 1 / 37 (2.70%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Hepatic pain | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Rectal haemorrhage | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Reduced General Condition | | | |
| subjects affected / exposed | 3 / 147 (2.04%) | 0 / 37 (0.00%) | 2 / 37 (5.41%) |
| occurrences causally related to treatment / all | 1 / 3 | 0 / 0 | 0 / 2 |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 1 |
| Sleep disorder | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Headache | | | |
| subjects affected / exposed | 0 / 147 (0.00%) | 0 / 37 (0.00%) | 1 / 37 (2.70%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Blood and lymphatic system disorders | | | |
| Febrile aplasia | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Hemoglobin decreased | | | |

| | | | |
|---|-----------------|----------------|----------------|
| subjects affected / exposed | 2 / 147 (1.36%) | 1 / 37 (2.70%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 2 / 2 | 1 / 1 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Neutrophil count decreased | | | |
| subjects affected / exposed | 3 / 147 (2.04%) | 3 / 37 (8.11%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 3 / 3 | 3 / 3 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Platelet count decreased | | | |
| subjects affected / exposed | 2 / 147 (1.36%) | 2 / 37 (5.41%) | 2 / 37 (5.41%) |
| occurrences causally related to treatment / all | 2 / 2 | 2 / 2 | 2 / 2 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Gastrointestinal disorders | | | |
| Colitis | | | |
| subjects affected / exposed | 0 / 147 (0.00%) | 1 / 37 (2.70%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0 | 1 / 1 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Constipation | | | |
| subjects affected / exposed | 2 / 147 (1.36%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 1 / 2 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Diarrhoea | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Intestinal obstruction | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Nausea | | | |
| subjects affected / exposed | 3 / 147 (2.04%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 3 / 3 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Vomiting | | | |

| | | | |
|---|-----------------|----------------|----------------|
| subjects affected / exposed | 6 / 147 (4.08%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 6 / 6 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Dehydration | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Anorexia | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Respiratory, thoracic and mediastinal disorders | | | |
| Hemoptysis | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Pneumopathy | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Respiratory failure | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Acute respiratory failure | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| Progression of bronchial progression | | | |
| subjects affected / exposed | 3 / 147 (2.04%) | 0 / 37 (0.00%) | 2 / 37 (5.41%) |
| occurrences causally related to treatment / all | 0 / 3 | 0 / 0 | 0 / 2 |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 2 |
| Hepatobiliary disorders | | | |

| | | | |
|---|-----------------|----------------|----------------|
| Hepatic cytolysis | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| Renal and urinary disorders | | | |
| Acute Renal failure | | | |
| subjects affected / exposed | 3 / 147 (2.04%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 3 / 3 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| Renal failure | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 1 / 37 (2.70%) | 1 / 37 (2.70%) |
| occurrences causally related to treatment / all | 1 / 1 | 1 / 1 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Infections and infestations | | | |
| Abcess | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Febrile neutropenia | | | |
| subjects affected / exposed | 4 / 147 (2.72%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 4 / 4 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| Lung abscess | | | |
| subjects affected / exposed | 1 / 147 (0.68%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Sepsis | | | |
| subjects affected / exposed | 5 / 147 (3.40%) | 0 / 37 (0.00%) | 1 / 37 (2.70%) |
| occurrences causally related to treatment / all | 4 / 5 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 1 / 1 | 0 / 0 | 0 / 0 |
| Bronchitis | | | |
| subjects affected / exposed | 0 / 147 (0.00%) | 0 / 37 (0.00%) | 1 / 37 (2.70%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |

| | | | |
|---|-----------------|----------------|----------------|
| Metabolism and nutrition disorders | | | |
| Hyponatremia | | | |
| subjects affected / exposed | 2 / 147 (1.36%) | 0 / 37 (0.00%) | 0 / 37 (0.00%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |

Frequency threshold for reporting non-serious adverse events: 5 %

| Non-serious adverse events | Chemotherapy | Chemotherapy alone | Chemotherapy + bevacizumab |
|---|--------------------|--------------------|----------------------------|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 146 / 147 (99.32%) | 37 / 37 (100.00%) | 35 / 37 (94.59%) |
| Vascular disorders | | | |
| Venous thromboembolism disorder | | | |
| subjects affected / exposed | 5 / 147 (3.40%) | 6 / 37 (16.22%) | 5 / 37 (13.51%) |
| occurrences (all) | 7 | 13 | 14 |
| General disorders and administration site conditions | | | |
| Generals disorders | | | |
| subjects affected / exposed | 75 / 147 (51.02%) | 30 / 37 (81.08%) | 29 / 37 (78.38%) |
| occurrences (all) | 228 | 131 | 172 |
| Haemorrhage | | | |
| subjects affected / exposed | 3 / 147 (2.04%) | 2 / 37 (5.41%) | 7 / 37 (18.92%) |
| occurrences (all) | 5 | 3 | 17 |
| Pain | | | |
| subjects affected / exposed | 49 / 147 (33.33%) | 14 / 37 (37.84%) | 24 / 37 (64.86%) |
| occurrences (all) | 173 | 58 | 69 |
| Respiratory, thoracic and mediastinal disorders | | | |
| Respiratory disorder | | | |
| subjects affected / exposed | 63 / 147 (42.86%) | 14 / 37 (37.84%) | 16 / 37 (43.24%) |
| occurrences (all) | 351 | 77 | 75 |
| Cardiac disorders | | | |
| Cardiac Disorders | | | |
| subjects affected / exposed | 6 / 147 (4.08%) | 3 / 37 (8.11%) | 1 / 37 (2.70%) |
| occurrences (all) | 20 | 21 | 62 |
| Hypertension | | | |
| subjects affected / exposed | 6 / 147 (4.08%) | 2 / 37 (5.41%) | 7 / 37 (18.92%) |
| occurrences (all) | 10 | 13 | 60 |

| | | | |
|--|-------------------|------------------|------------------|
| Nervous system disorders | | | |
| Neurological disorder | | | |
| subjects affected / exposed | 19 / 147 (12.93%) | 9 / 37 (24.32%) | 13 / 37 (35.14%) |
| occurrences (all) | 90 | 26 | 51 |
| Peripheral neurological disorder | | | |
| subjects affected / exposed | 6 / 147 (4.08%) | 12 / 37 (32.43%) | 12 / 37 (32.43%) |
| occurrences (all) | 11 | 19 | 23 |
| Blood and lymphatic system disorders | | | |
| Anemia | | | |
| subjects affected / exposed | 94 / 147 (63.95%) | 32 / 37 (86.49%) | 34 / 37 (91.89%) |
| occurrences (all) | 165 | 170 | 181 |
| Neutrophil count decreased | | | |
| subjects affected / exposed | 78 / 147 (53.06%) | 17 / 37 (45.95%) | 22 / 37 (59.46%) |
| occurrences (all) | 141 | 74 | 99 |
| Thrombocytopenia | | | |
| subjects affected / exposed | 69 / 147 (46.94%) | 25 / 37 (67.57%) | 28 / 37 (75.68%) |
| occurrences (all) | 114 | 103 | 130 |
| Ear and labyrinth disorders | | | |
| Auditory disorder | | | |
| subjects affected / exposed | 5 / 147 (3.40%) | 3 / 37 (8.11%) | 5 / 37 (13.51%) |
| occurrences (all) | 13 | 13 | 20 |
| Eye disorders | | | |
| Ocular disorder | | | |
| subjects affected / exposed | 0 / 147 (0.00%) | 0 / 37 (0.00%) | 1 / 37 (2.70%) |
| occurrences (all) | 0 | 0 | 1 |
| Gastrointestinal disorders | | | |
| Gastrointestinal disorders | | | |
| subjects affected / exposed | 88 / 147 (59.86%) | 23 / 37 (62.16%) | 29 / 37 (78.38%) |
| occurrences (all) | 305 | 152 | 180 |
| Skin and subcutaneous tissue disorders | | | |
| Skin disorder | | | |
| subjects affected / exposed | 43 / 147 (29.25%) | 15 / 37 (40.54%) | 12 / 37 (32.43%) |
| occurrences (all) | 94 | 81 | 61 |
| Renal and urinary disorders | | | |
| Proteinuria | | | |
| subjects affected / exposed | 0 / 147 (0.00%) | 0 / 37 (0.00%) | 3 / 37 (8.11%) |
| occurrences (all) | 0 | 0 | 4 |
| Renal disorders | | | |

| | | | |
|---|--------------------------|-------------------------|-------------------------|
| subjects affected / exposed occurrences (all) | 12 / 147 (8.16%) 18 | 8 / 37 (21.62%) 18 | 9 / 37 (24.32%) 24 |
| Cystitis and urinary retention subjects affected / exposed occurrences (all) | 1 / 147 (0.68%) 1 | 0 / 37 (0.00%) 0 | 6 / 37 (16.22%) 6 |
| Musculoskeletal and connective tissue disorders Cramps subjects affected / exposed occurrences (all) | 5 / 147 (3.40%) 8 | 0 / 37 (0.00%) 0 | 0 / 37 (0.00%) 0 |
| Infections and infestations Infection subjects affected / exposed occurrences (all) | 14 / 147 (9.52%) 41 | 4 / 37 (10.81%) 13 | 11 / 37 (29.73%) 44 |
| Metabolism and nutrition disorders Metabolic disorder subjects affected / exposed occurrences (all) | 27 / 147 (18.37%) 148 | 12 / 37 (32.43%) 100 | 13 / 37 (35.14%) 125 |

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

| Date | Amendment |
|-----------------|---|
| 19 May 2009 | <ul style="list-style-type: none">- New investigators- Modification of exclusion criteria: patient with cerebral metastasis are eligible if the metastasis are asymptomatic |
| 26 October 2009 | <ul style="list-style-type: none">- Modification of the sponsor adress- 4 new investigators- The exclusion criteria regarding the tumor invading large vessels or invading the proximal tracheobronchial tree is transfered in randomisation criteria |
| 19 October 2011 | <ul style="list-style-type: none">- New investigators- Principal investigators modification for 3 sites- Insurance modification- IDMC only for the phase III part of the trial |

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

Occurence of adverse events not precisely recorded in the CRF.

Notes:

Online references

<http://www.ncbi.nlm.nih.gov/pubmed/25688059>