



Clinical trial results:

AN OPEN-LABEL STUDY OF SIPULEUCEL-T IN EUROPEAN MEN WITH METASTATIC, CASTRATE RESISTANT PROSTATE CANCER

Summary

| | |
|--------------------------|----------------|
| EudraCT number | 2011-001192-39 |
| Trial protocol | AT GB NL |
| Global end of trial date | 10 June 2014 |

Results information

| | |
|--------------------------------|------------------|
| Result version number | v1 (current) |
| This version publication date | 14 December 2016 |
| First version publication date | 27 June 2015 |

Trial information

Trial identification

| | |
|-----------------------|-------|
| Sponsor protocol code | P11-1 |
|-----------------------|-------|

Additional study identifiers

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

Notes:

Sponsors

| | |
|------------------------------|---|
| Sponsor organisation name | Dendreon Pharmaceuticals, Inc |
| Sponsor organisation address | 1301 2nd Avenue, Seattle, United States, |
| Public contact | Jennifer Lill, Dendreon Pharmaceuticals, Inc, +1 206-455-2174, jlill@dendreon.com |
| Scientific contact | Jennifer Lill, Dendreon Pharmaceuticals, Inc, +1 206-455-2174, jlill@dendreon.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 June 2014 |
| Is this the analysis of the primary completion data? | Yes |
| Primary completion date | 10 June 2014 |
| Global end of trial reached? | Yes |
| Global end of trial date | 10 June 2014 |
| Was the trial ended prematurely? | No |

Notes:

General information about the trial

Main objective of the trial:

To demonstrate that sipuleucel-T can be successfully manufactured for subjects with mCRPC at a European manufacturing facility.

Protection of trial subjects:

Utilization of an Independent Data Monitoring Committee that met at 3 month intervals and established procedures regarding chain of identity to ensure autologous product is delivered correctly.

Background therapy: -

Evidence for comparator: -

| | |
|---|--------------|
| Actual start date of recruitment | 13 June 2012 |
| 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: 15 |
| Country: Number of subjects enrolled | United Kingdom: 7 |
| Country: Number of subjects enrolled | Austria: 17 |
| Country: Number of subjects enrolled | France: 8 |
| Worldwide total number of subjects | 47 |
| EEA total number of subjects | 47 |

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) | 12 |
| From 65 to 84 years | 34 |

| | |
|-------------------|---|
| 85 years and over | 1 |
|-------------------|---|

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

Administration of informed consent, evaluation of inclusion criteria, clinical evaluations and assorted laboratory tests.

Period 1

| | |
|------------------------------|--------------------------------|
| Period 1 title | Overall Trial (overall period) |
| Is this the baseline period? | Yes |
| Allocation method | Not applicable |
| Blinding used | Not blinded |

Arms

| | |
|-----------|--------------|
| Arm title | sipuleucel-T |
|-----------|--------------|

Arm description:

Each dose of sipuleucel-T contains a minimum of 50 million autologous CD54+ cells activated with PAP-GM-CSF. The recommended course of therapy for sipuleucel-T is 3 complete doses, given at approximately 2-week intervals.

sipuleucel-T: Each dose of sipuleucel-T contains a minimum of 50 million autologous CD54+ cells activated with PAP-GM-CSF. The recommended course of therapy for sipuleucel-T is 3 complete doses, given at approximately 2-week intervals.

| | |
|--|-------------------------|
| Arm type | Experimental |
| Investigational medicinal product name | Sipuleucel-T |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Dispersion for infusion |
| Routes of administration | Intravenous use |

Dosage and administration details:

3 250 mL doses infused approximately 2 weeks apart.

| Number of subjects in period 1 | sipuleucel-T |
|--|--------------|
| Started | 47 |
| Completed | 43 |
| Not completed | 4 |
| Started a medication restricted per the protocol | 4 |

Baseline characteristics

Reporting groups

| | |
|--------------------------------|---------------|
| Reporting group title | Overall Trial |
| Reporting group description: - | |

| Reporting group values | Overall Trial | Total | |
|--|---------------|-------|--|
| Number of subjects | 47 | 47 | |
| 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) | 12 | 12 | |
| From 65-84 years | 34 | 34 | |
| 85 years and over | 1 | 1 | |
| Age continuous | | | |
| Units: years | | | |
| arithmetic mean | 67.2 | | |
| standard deviation | ± 7.8 | - | |
| Gender categorical | | | |
| Units: Subjects | | | |
| Female | 0 | 0 | |
| Male | 47 | 47 | |

Subject analysis sets

| | |
|--|---------------|
| Subject analysis set title | Full analysis |
| Subject analysis set type | Full analysis |
| Subject analysis set description: | |
| All subjects registered were included in the analysis. | |

| Reporting group values | Full analysis | | |
|--|---------------|--|--|
| Number of subjects | 47 | | |
| Age categorical | | | |
| Units: Subjects | | | |
| In utero | 0 | | |
| Preterm newborn infants (gestational age < 37 wks) | 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) | 12 | | |

| | | | |
|-------------------|----|--|--|
| From 65-84 years | 34 | | |
| 85 years and over | 1 | | |

| | | | |
|--------------------|-------|--|--|
| Age continuous | | | |
| Units: years | | | |
| arithmetic mean | 67.2 | | |
| standard deviation | ± 7.8 | | |
| Gender categorical | | | |
| Units: Subjects | | | |
| Female | 0 | | |
| Male | 47 | | |

End points

End points reporting groups

| | |
|-----------------------|--------------|
| Reporting group title | sipuleucel-T |
|-----------------------|--------------|

Reporting group description:

Each dose of sipuleucel-T contains a minimum of 50 million autologous CD54+ cells activated with PAP-GM-CSF. The recommended course of therapy for sipuleucel-T is 3 complete doses, given at approximately 2-week intervals.

sipuleucel-T: Each dose of sipuleucel-T contains a minimum of 50 million autologous CD54+ cells activated with PAP-GM-CSF. The recommended course of therapy for sipuleucel-T is 3 complete doses, given at approximately 2-week intervals.

| | |
|----------------------------|---------------|
| Subject analysis set title | Full analysis |
|----------------------------|---------------|

| | |
|---------------------------|---------------|
| Subject analysis set type | Full analysis |
|---------------------------|---------------|

Subject analysis set description:

All subjects registered were included in the analysis.

Primary: Cumulative CD54 Upregulation

| | |
|-----------------|---|
| End point title | Cumulative CD54 Upregulation ^[1] |
|-----------------|---|

End point description:

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Over 3 infusions of Sipuleucel-T

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: Cumulative CD54 Upregulation parameters will be summarized descriptively (mean, median, standard deviation, minimum, and maximum) by infusion (1, 2, and 3) and cumulative (summed across infusions).

Descriptive statistics are sufficient for this single-arm study.

| | | | | |
|----------------------------------|----------------------|--|--|--|
| End point values | Full analysis | | | |
| Subject group type | Subject analysis set | | | |
| Number of subjects analysed | 47 | | | |
| Units: Ratio | | | | |
| arithmetic mean (standard error) | 34.1 (± 1.24) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: CD54+ cell count

| | |
|-----------------|---------------------------------|
| End point title | CD54+ cell count ^[2] |
|-----------------|---------------------------------|

End point description:

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Cumulative through infusion 3

Notes:

[2] - 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: CD54+ cell count parameters will be summarized descriptively (mean, median, standard deviation, minimum, and maximum) by infusion (1, 2, and 3) and cumulative (summed across infusions)

Descriptive statistics are sufficient for this single-arm study.

| End point values | Full analysis | | | |
|----------------------------------|----------------------|--|--|--|
| Subject group type | Subject analysis set | | | |
| Number of subjects analysed | | | | |
| Units: 10 ⁹ | | | | |
| arithmetic mean (standard error) | 1.58 (± 0.1) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Total nucleated cell count

| | |
|-----------------|---|
| End point title | Total nucleated cell count ^[3] |
|-----------------|---|

End point description:

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Cumulative through infusion 3

Notes:

[3] - 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: Total nucleated cell count parameters will be summarized descriptively (mean, median, standard deviation, minimum, and maximum) by infusion (1, 2, and 3) and cumulative (summed across infusions)

Descriptive statistics are sufficient for this single-arm study.

| End point values | Full analysis | | | |
|----------------------------------|----------------------|--|--|--|
| Subject group type | Subject analysis set | | | |
| Number of subjects analysed | | | | |
| Units: 10 ⁹ | | | | |
| arithmetic mean (standard error) | 12.54 (± 0.74) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Product viability (percentage)

| | |
|-----------------|---|
| End point title | Product viability (percentage) ^[4] |
|-----------------|---|

End point description:

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Infusion 3

Notes:

[4] - 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: Product viability (percentage) parameters will be summarized descriptively (mean, median, standard deviation, minimum, and maximum) by infusion (1, 2, and 3).

Descriptive statistics are sufficient for this single-arm study.

| | | | | |
|--|-----------------------|--|--|--|
| End point values | Full analysis | | | |
| Subject group type | Subject analysis set | | | |
| Number of subjects analysed | | | | |
| Units: percentage | | | | |
| arithmetic mean (full range (min-max)) | 96.75 (90.4 to 99.53) | | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

From informed consent to last visit

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

Dictionary used

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

| | |
|--------------------|------|
| Dictionary version | 14.1 |
|--------------------|------|

Reporting groups

| | |
|-----------------------|--------------|
| Reporting group title | All subjects |
|-----------------------|--------------|

Reporting group description: -

| Serious adverse events | All subjects | | |
|--|----------------|--|--|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 3 / 47 (6.38%) | | |
| number of deaths (all causes) | 0 | | |
| number of deaths resulting from adverse events | | | |
| Injury, poisoning and procedural complications | | | |
| Gastroenteritis radiation | | | |
| subjects affected / exposed | 1 / 47 (2.13%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| General disorders and administration site conditions | | | |
| Fatigue | | | |
| subjects affected / exposed | 1 / 47 (2.13%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Gastrointestinal disorders | | | |
| Pain | | | |
| subjects affected / exposed | 1 / 47 (2.13%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Renal and urinary disorders | | | |
| Calculus urinary | | | |

| | | | |
|---|----------------|--|--|
| subjects affected / exposed | 1 / 47 (2.13%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Urinary Tract Obstruction | | | |
| subjects affected / exposed | 1 / 47 (2.13%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |

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

| | | | |
|---|------------------|--|--|
| Non-serious adverse events | All subjects | | |
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 40 / 47 (85.11%) | | |
| Injury, poisoning and procedural complications | | | |
| Citrate Toxicity | | | |
| subjects affected / exposed | 3 / 47 (6.38%) | | |
| occurrences (all) | 3 | | |
| Vascular disorders | | | |
| Hypertension | | | |
| subjects affected / exposed | 3 / 47 (6.38%) | | |
| occurrences (all) | 3 | | |
| Nervous system disorders | | | |
| Dizziness | | | |
| subjects affected / exposed | 5 / 47 (10.64%) | | |
| occurrences (all) | 5 | | |
| General disorders and administration site conditions | | | |
| Fatigue | | | |
| subjects affected / exposed | 14 / 47 (29.79%) | | |
| occurrences (all) | 14 | | |
| Chills | | | |
| subjects affected / exposed | 10 / 47 (21.28%) | | |
| occurrences (all) | 10 | | |
| Influenza like illness | | | |
| subjects affected / exposed | 3 / 47 (6.38%) | | |
| occurrences (all) | 3 | | |

| | | | |
|---|--|--|--|
| Pain subjects affected / exposed occurrences (all) | 3 / 47 (6.38%) 3 | | |
| Blood and lymphatic system disorders Anaemia subjects affected / exposed occurrences (all) | 3 / 47 (6.38%) 3 | | |
| Gastrointestinal disorders Nausea subjects affected / exposed occurrences (all) Constipation subjects affected / exposed occurrences (all) | 5 / 47 (10.64%) 5 3 / 47 (6.38%) 3 | | |
| Musculoskeletal and connective tissue disorders Back pain subjects affected / exposed occurrences (all) Myalgia subjects affected / exposed occurrences (all) Arthralgia subjects affected / exposed occurrences (all) Bone pain subjects affected / exposed occurrences (all) Pain in extremity subjects affected / exposed occurrences (all) | 11 / 47 (23.40%) 11 4 / 47 (8.51%) 4 3 / 47 (6.38%) 3 3 / 47 (6.38%) 3 3 / 47 (6.38%) 3 | | |
| Infections and infestations Nasopharyngitis subjects affected / exposed occurrences (all) | 3 / 47 (6.38%) 3 | | |

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

| Date | Amendment |
|------------------|---|
| 01 June 2012 | Quality of Life questionnaire assessments added. Clarification of sample size from 10 up to 45 subjects in the statistical analysis (justification for 45 subjects). Statistical clarification for the decision to stop enrollment. |
| 09 July 2013 | Added thromboembolic and CVE reporting criteria of all countries to align with IB, edition 18. |
| 02 December 2013 | Updated leukapheresis and sipuleucel-T risks sections, and infusion section to align with IB, edition 19. |

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported