



Clinical trial results: A Safety Pilot Study of Px-104 in non alcoholic fatty liver disease (NAFLD) patients

Summary

| | |
|--------------------------|-----------------|
| EudraCT number | 2013-002984-24 |
| Trial protocol | AT |
| Global end of trial date | 07 January 2015 |

Results information

| | |
|--------------------------------|--------------|
| Result version number | v1 (current) |
| This version publication date | 23 June 2016 |
| First version publication date | 23 June 2016 |

Trial information

Trial identification

| | |
|-----------------------|------------------|
| Sponsor protocol code | PHS-Px-104-II-01 |
|-----------------------|------------------|

Additional study identifiers

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

Notes:

Sponsors

| | |
|------------------------------|---|
| Sponsor organisation name | Phenex Pharmaceuticals AG |
| Sponsor organisation address | Waldhofer Straße 104, Heidelberg, Germany, 69123 |
| Public contact | Sponsor, Phenex Pharmaceuticals AG, +49 06221-65282-13, manfred.birkel@phenex-pharma.com |
| Scientific contact | Sponsor, Phenex Pharmaceuticals AG, +49 06221-65282-13, manfred.birkel@phenex-pharma.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 | 07 January 2015 |
| Is this the analysis of the primary completion data? | Yes |
| Primary completion date | 07 January 2015 |
| Global end of trial reached? | Yes |
| Global end of trial date | 07 January 2015 |
| Was the trial ended prematurely? | No |

Notes:

General information about the trial

Main objective of the trial:

Safety and tolerability assessment will be made by monitoring the subjects for adverse events and by interpreting the results of the ECGs, various laboratory tests (changes in ALT/AST) and the subjects' diaries.

Protection of trial subjects:

The following safety assessments were done to protect trial subjects:

- Cardiovascular monitoring

12-lead ECG, continuous ECG monitoring 20–24 hours prior to the first dose administration and on Days 7, 14, 21 and 26 (+1) for 23–25 hours, measurement of blood pressure and pulse rate

- Laboratory monitoring

Hematology, coagulation, clinical chemistry, serology, urinalysis

Background therapy: -

Evidence for comparator: -

| | |
|---|-------------------|
| Actual start date of recruitment | 02 September 2013 |
| 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 | Austria: 12 |
| Worldwide total number of subjects | 12 |
| EEA total number of subjects | 12 |

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) | 10 |
| From 65 to 84 years | 2 |

Subject disposition

Recruitment

Recruitment details:

Recruitment of patients was done at the Department for Gastroenterology and Hepatology, General Hospital of Vienna, from 25.10.2013 (first patient in) until 12.11.2014 (last patient in). Adult patients with non-alcoholic fatty liver disease (NAFLD) were screened for eligibility after giving their written informed consent to the clinical trial.

Pre-assignment

Screening details:

21 patients were screened for eligibility. 6 patients were considered as screening failures (according to inclusion/exclusion criteria). 7 patients were considered as drop outs during the conduct of the study. 3 of the 7 drop outs occurred before receiving study drug. All in all 12 patients received study drug.

Pre-assignment period milestones

| | |
|------------------------------|-------------------|
| Number of subjects started | 21 ^[1] |
| Number of subjects completed | 12 |

Pre-assignment subject non-completion reasons

| | |
|----------------------------|---|
| Reason: Number of subjects | In-/Exclusion criteria not fulfilled/fulfilled: 6 |
| Reason: Number of subjects | Organizational reasons: 3 |

Notes:

[1] - The number of subjects reported to have started the pre-assignment period are not the same as the worldwide number enrolled in the trial. It is expected that these numbers will be the same.

Justification: According to the clinical study protocol, 12 patients in 1 group were planned. Study participants who voluntarily withdraw consent (due to any other reason than an AE) or study drop-outs were replaced. Therefore 21 patients were screened but only 12 patients were enrolled in the study (= received study medication).

Period 1

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

Arms

| | |
|------------------|---------------|
| Arm title | Treatment arm |
|------------------|---------------|

Arm description:

All patients enrolled in this study received the study medication; there was no randomization or blinding done.

| | |
|--|--------------|
| Arm type | Experimental |
| Investigational medicinal product name | Px104 |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Capsule |
| Routes of administration | Oral use |

Dosage and administration details:

5 mg Px-104 capsules were taken by the patients once a day for 28 days.

| Number of subjects in period 1 | Treatment arm |
|---------------------------------------|---------------|
| Started | 12 |
| Study completion | 8 |
| Received treatment | 12 |
| Completed | 8 |
| Not completed | 4 |
| Adverse event, non-fatal | 3 |
| Organizational reasons | 1 |

Baseline characteristics

Reporting groups

| | |
|-----------------------|------------------|
| Reporting group title | Treatment period |
|-----------------------|------------------|

Reporting group description: -

| Reporting group values | Treatment period | Total | |
|---------------------------------------|------------------|-------|--|
| Number of subjects | 12 | 12 | |
| Age categorical Units: Subjects | | | |
| Adults (18-64 years) | 10 | 10 | |
| From 65-84 years | 2 | 2 | |
| Gender categorical Units: Subjects | | | |
| Female | 4 | 4 | |
| Male | 8 | 8 | |

End points

End points reporting groups

| | |
|---|---------------|
| Reporting group title | Treatment arm |
| Reporting group description: All patients enrolled in this study received the study medication; there was no randomization or blinding done. | |

Primary: Number of AEs, SAEs, TEAEs

| | |
|--|---|
| End point title | Number of AEs, SAEs, TEAEs ^[1] |
| End point description: | |
| End point type | Primary |
| End point timeframe: From Baseline to End of Study Visit. | |

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: All variables were presented using descriptive statistical techniques.

| End point values | Treatment arm | | | |
|-----------------------------|-----------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 12 | | | |
| Units: number | 27 | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Changes in blood pressure (systolic) from baseline

| | |
|---|---|
| End point title | Changes in blood pressure (systolic) from baseline ^[2] |
| End point description: | |
| End point type | Primary |
| End point timeframe: From baseline to end of study | |

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: All variables were presented using descriptive statistical techniques.

| | | | | |
|--------------------------------------|----------------------|--|--|--|
| End point values | Treatment arm | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 12 | | | |
| Units: mmHg | | | | |
| arithmetic mean (standard deviation) | 1.3 (\pm 15.4204) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Changes in blood pressure (diastolic) from baseline

| | |
|-----------------|--|
| End point title | Changes in blood pressure (diastolic) from baseline ^[3] |
|-----------------|--|

End point description:

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

End point timeframe:

From baseline to end of study

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: All variables were presented using descriptive statistical techniques.

| | | | | |
|--------------------------------------|-----------------------|--|--|--|
| End point values | Treatment arm | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 12 | | | |
| Units: mmHg | | | | |
| arithmetic mean (standard deviation) | 0.9 (\pm 10.82641) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Pulse

| | |
|-----------------|----------------------|
| End point title | Pulse ^[4] |
|-----------------|----------------------|

End point description:

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

End point timeframe:

From baseline to end of study

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: All variables were presented using descriptive statistical techniques.

| | | | | |
|--------------------------------------|-----------------|--|--|--|
| End point values | Treatment arm | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 12 | | | |
| Units: bpm | | | | |
| arithmetic mean (standard deviation) | 3.8 (± 9.46103) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Body temperature

| | |
|-----------------|---------------------------------|
| End point title | Body temperature ^[5] |
|-----------------|---------------------------------|

End point description:

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

End point timeframe:

From baseline to end of study

Notes:

[5] - 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: All variables were presented using descriptive statistical techniques.

| | | | | |
|--------------------------------------|-------------------|--|--|--|
| End point values | Treatment arm | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 12 | | | |
| Units: °C | | | | |
| arithmetic mean (standard deviation) | -0.02 (± 0.38816) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Occurrence of VES

| | |
|-----------------|----------------------------------|
| End point title | Occurrence of VES ^[6] |
|-----------------|----------------------------------|

End point description:

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

End point timeframe:

From screening to end of study

Notes:

[6] - 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: All variables were presented using descriptive statistical techniques.

| | | | | |
|-----------------------------|-----------------|--|--|--|
| End point values | Treatment arm | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 12 | | | |
| Units: number | 5 | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Change in QTc

| | |
|-----------------|------------------------------|
| End point title | Change in QTc ^[7] |
|-----------------|------------------------------|

End point description:

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

End point timeframe:

From baseline to end of study

Notes:

[7] - 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: All variables were presented using descriptive statistical techniques.

| | | | | |
|--------------------------------------|----------------------|--|--|--|
| End point values | Treatment arm | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 12 | | | |
| Units: ms | | | | |
| arithmetic mean (standard deviation) | 7.81818 (± 23.31016) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Change of ALT from baseline

| | |
|-----------------|--|
| End point title | Change of ALT from baseline ^[8] |
|-----------------|--|

End point description:

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

End point timeframe:

From baseline to end of study

Notes:

[8] - 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: All variables were presented using descriptive statistical techniques.

| | | | | |
|--------------------------------------|---------------------------|--|--|--|
| End point values | Treatment arm | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 12 | | | |
| Units: U/l | | | | |
| arithmetic mean (standard deviation) | 8.90909 (\pm 16.82531) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Change of AST from baseline

| | |
|-----------------|--|
| End point title | Change of AST from baseline ^[9] |
|-----------------|--|

End point description:

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

End point timeframe:

From baseline to end of study

Notes:

[9] - 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: All variables were presented using descriptive statistical techniques.

| | | | | |
|--------------------------------------|--------------------------|--|--|--|
| End point values | Treatment arm | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 12 | | | |
| Units: U/l | | | | |
| arithmetic mean (standard deviation) | 3.72727 (\pm 7.44434) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Change of Bilirubin from baseline

| | |
|-----------------|---|
| End point title | Change of Bilirubin from baseline ^[10] |
|-----------------|---|

End point description:

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

End point timeframe:

From baseline to end of study

Notes:

[10] - 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: All variables were presented using descriptive statistical techniques.

| | | | | |
|--------------------------------------|-----------------------------|--|--|--|
| End point values | Treatment arm | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 12 | | | |
| Units: mg/dl | | | | |
| arithmetic mean (standard deviation) | 0.03889 (\pm 0.23677) | | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

From baseline to end of study.

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

Dictionary used

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

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

Reporting groups

| | |
|-----------------------|---------------|
| Reporting group title | Overall trial |
|-----------------------|---------------|

Reporting group description: -

| Serious adverse events | Overall trial | | |
|---|----------------|--|--|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 0 / 12 (0.00%) | | |
| number of deaths (all causes) | 0 | | |
| number of deaths resulting from adverse events | 0 | | |

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

| Non-serious adverse events | Overall trial | | |
|---|------------------|--|--|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 11 / 12 (91.67%) | | |
| Cardiac disorders | | | |
| Palpitation | | | |
| subjects affected / exposed | 1 / 12 (8.33%) | | |
| occurrences (all) | 1 | | |
| Asymptomatic ventricular extrasystoles | | | |
| subjects affected / exposed | 1 / 12 (8.33%) | | |
| occurrences (all) | 1 | | |
| Extrasystoles | | | |
| subjects affected / exposed | 2 / 12 (16.67%) | | |
| occurrences (all) | 2 | | |
| Nervous system disorders | | | |

| | | | |
|---|----------------------|--|--|
| Headache subjects affected / exposed occurrences (all) | 3 / 12 (25.00%) 9 | | |
| Dizziness subjects affected / exposed occurrences (all) | 1 / 12 (8.33%) 1 | | |
| General disorders and administration site conditions | | | |
| Fever subjects affected / exposed occurrences (all) | 1 / 12 (8.33%) 1 | | |
| Shivering subjects affected / exposed occurrences (all) | 1 / 12 (8.33%) 1 | | |
| Gastrointestinal disorders | | | |
| Heartburn subjects affected / exposed occurrences (all) | 1 / 12 (8.33%) 1 | | |
| RUQ pain subjects affected / exposed occurrences (all) | 2 / 12 (16.67%) 2 | | |
| Diarrhea subjects affected / exposed occurrences (all) | 2 / 12 (16.67%) 2 | | |
| Obstipation subjects affected / exposed occurrences (all) | 1 / 12 (8.33%) 1 | | |
| Abdominal pain subjects affected / exposed occurrences (all) | 1 / 12 (8.33%) 1 | | |
| Skin and subcutaneous tissue disorders | | | |
| Facial swelling subjects affected / exposed occurrences (all) | 1 / 12 (8.33%) 1 | | |
| Exanthema subjects affected / exposed occurrences (all) | 1 / 12 (8.33%) 1 | | |

| | | | |
|--|----------------------|--|--|
| Infections and infestations Common cold subjects affected / exposed occurrences (all) | 2 / 12 (16.67%) 2 | | |
|--|----------------------|--|--|

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

| Date | Amendment |
|-----------------|--|
| 22 January 2014 | The conduct of another 24h-ECG is optional at the screening visit; On days 1, 7, 14, 21 and 28 an additional urin test is done; Body weight will also be measured on days 1, 7, 14, 21 and 28. |
| 12 March 2014 | Additional exclusion criterion: Monomorphic or polymorphic ventricular ectopic beats ≥ 30 beats/ hours calculated as mean over the continuous ECG recording period; Additional stop criterion: ≥ 2 subjects experiencing premature ventricular ectopic beats ≥ 30 beats/hour calculated as mean over the continuous ECG recording period. |

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported