



## 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
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##### 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

85 years and over	0
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## 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 <sup>[1]</sup>
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
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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.

<b>Number of subjects in period 1</b>	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
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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 <sup>[1]</sup>
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.

<b>End point values</b>	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 <sup>[2]</sup>
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 (± 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 <sup>[3]</sup>
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End point description:

End point type	Primary
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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 (± 10.82641)			

## Statistical analyses

No statistical analyses for this end point

### Primary: Pulse

End point title	Pulse <sup>[4]</sup>
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End point description:

End point type	Primary
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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 <sup>[5]</sup>
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End point description:

End point type	Primary
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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 <sup>[6]</sup>
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End point description:

End point type	Primary
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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.

<b>End point values</b>	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 <sup>[7]</sup>
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End point description:

End point type	Primary
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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.

<b>End point values</b>	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 <sup>[8]</sup>
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End point description:

End point type	Primary
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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 <sup>[9]</sup>
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End point description:

End point type	Primary
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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 <sup>[10]</sup>
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End point description:

End point type	Primary
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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.

<b>End point values</b>	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

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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
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	18
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### Reporting groups

Reporting group title	Overall trial
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Reporting group description: -

<b>Serious adverse events</b>	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 %

<b>Non-serious adverse events</b>	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)  Shivering subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 1  1 / 12 (8.33%) 1		
Gastrointestinal disorders Heartburn subjects affected / exposed occurrences (all)  RUQ pain subjects affected / exposed occurrences (all)  Diarrhea subjects affected / exposed occurrences (all)  Obstipation subjects affected / exposed occurrences (all)  Abdominal pain subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 1  2 / 12 (16.67%) 2  2 / 12 (16.67%) 2  1 / 12 (8.33%) 1  1 / 12 (8.33%) 1		
Skin and subcutaneous tissue disorders Facial swelling subjects affected / exposed occurrences (all)  Exanthema subjects affected / exposed occurrences (all)	1 / 12 (8.33%) 1  1 / 12 (8.33%) 1		

Infections and infestations Common cold subjects affected / exposed occurrences (all)	2 / 12 (16.67%) 2		
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## 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 $\geq 30$ beats/ hours calculated as mean over the continuous ECG recording period; Additional stop criterion: $\geq 2$ subjects experiencing premature ventricular ectopic beats $\geq 30$ beats/hour calculated as mean over the continuous ECG recording period.

Notes:

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### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported