Clinical trial results:
A randomized phase II pilot - trial, examining the safety, pharmacokinetics, pharmacodynamics, and clinical efficacy of escalating doses of alteplase in patients with acute lung injury / acute respiratory distress syndrome / severe pneumonia

Summary

EudraCT number	2010-024377-40
Trial protocol	AT
Global end of trial date	24 April 2017

Results information

Result version number	v1 (current)
This version publication date	26 October 2019
First version publication date	26 October 2019

Trial information

Trial identification

Sponsor protocol code	TPA-ALI

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Medizinische Universität Wien, UniKlinik für Klinische Pharmakologie
Sponsor organisation address	Währingergürtel 18-20, Vienna, Austria, 1090
Public contact	Bernd Jilma, UniKlinik für Klinische Pharmakologie, +43 14040029810, bernd.jilma@meduniwien.ac.at
Scientific contact	Bernd Jilma, UniKlinik für Klinische Pharmakologie, +43 14040029810, bernd.jilma@meduniwien.ac.at

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	24 April 2018
Is this the analysis of the primary completion data?	Yes
Primary completion date	24 April 2017
Global end of trial reached?	Yes
Global end of trial date	24 April 2017
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To investigate safety, pharmacokinetics, pharmacodynamics, and clinical efficacy of escalating doses of alteplase in patients with acute lung injury / acute respiratory distress syndrome / severe pneumonia

Protection of trial subjects:

No other specific measures than the standard measures of good clinical and scientific practice were put in place for the protection of subjects.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	06 May 2011
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: 1
Worldwide total number of subjects	1
EEA total number of subjects	1

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)	1
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

1 patient was included in this trial on February 7th 2012.
This was a single center study which was performed at the Medical University of Vienna, Austria.

Pre-assignment

Screening details:

One patient was screened, who was all successfully included in the trial according to the applicable in- and exclusion criteria.

Pre-assignment period milestones

Number of subjects started	1
Number of subjects completed	1

Period 1

Period 1 title	Main Trial (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator, Carer

Blinding implementation details:

Placebos and Verum infusions were not distinguishable from each other by their physicochemical properties. An unblinded study nurse under supervision of an unblinded physician who had access to treatment allocation codes prepared study drugs. They were not otherwise involved in conducting the trial.

Arms

Arm title	rTPA

Arm description:

Verum arm

Arm type	Experimental
Investigational medicinal product name	Alteplase
Investigational medicinal product code	
Other name	Actilyse
Pharmaceutical forms	Infusion
Routes of administration	Intravenous use

Dosage and administration details:

0.5 mg/kg or 1.0 mg/kg, over 2 hours continuous i.v.

Number of subjects in period 1	rTPA
Started	1
Completed	1

Baseline characteristics

Reporting groups	
Reporting group title	rTPA
Reporting group description:	
Verum arm	

Reporting group values	rTPA	Total	
Number of subjects	1	1	
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)	1	1	
From 65-84 years	0	0	
85 years and over	0	0	
Age continuous Units: years			
arithmetic mean	54		
standard deviation	± 0	-	
Gender categorical Units: Subjects			
Female	0	0	
Male	1	1	

Subject analysis sets	
Subject analysis set title	Subject analysis
Subject analysis set type	Full analysis
Subject analysis set description:	
Only one patient was included.	

Reporting group values	Subject analysis		
Number of subjects	1		
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)	1		
From 65-84 years	0		
85 years and over	0		
Age continuous			
Units: years			
arithmetic mean	54		
standard deviation	± 0		
Gender categorical			
Units: Subjects			
Female	0		
Male	1		

End points

End points reporting groups

Reporting group title	rTPA
Reporting group description: Verum arm	
Subject analysis set title	Subject analysis
Subject analysis set type	Full analysis
Subject analysis set description: Only one patient was included.	

Primary: PaO2/FiO2 ratio

End point title	PaO2/FiO2 ratio
End point description:	
End point type	Primary
End point timeframe: ratio before and at the end of infusion, at 4, 6, 24, 30, 48, 54, and 72h after the start of the infusion	

End point values	rTPA	Subject analysis		
Subject group type	Reporting group	Subject analysis set		
Number of subjects analysed	1	1		
Units: ratio				
<150	1	1		
>150	0	0		

Statistical analyses

Statistical analysis title	primary Analysis
Statistical analysis description: Kruskal-Wallis ANOVA	
Comparison groups	rTPA v Subject analysis
Number of subjects included in analysis	2
Analysis specification	Pre-specified
Analysis type	equivalence
P-value	≤ 0.05
Method	Kruskal-wallis

Adverse events

Adverse events information[1]	
Timeframe for reporting adverse events: Screening until follow up.	
Assessment type	Systematic

Dictionary used	
Dictionary name	ICD
Dictionary version	10

Reporting groups	
Reporting group title	rTPA
Reporting group description: -	

Serious adverse events	rTPA		
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 1 (0.00%)		
number of deaths (all causes)	1		
number of deaths resulting from adverse events	0		

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

Non-serious adverse events	rTPA		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	0 / 1 (0.00%)		

Notes:

[1] - There are no non-serious adverse events recorded for these results. It is expected that there will be at least one non-serious adverse event reported.
Justification: Only one patient was included in the trial.

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported