



## Clinical trial results:

### Perioperative fluid management in patients receiving major abdominal surgery – Effects of normal saline versus an acetate buffered balanced infusion solution on the necessity of catecholamines for cardiocirculatory support

#### Summary

EudraCT number	2014-004867-19
Trial protocol	AT
Global end of trial date	28 April 2016

#### Results information

Result version number	v1 (current)
This version publication date	26 October 2017
First version publication date	26 October 2017
Summary attachment (see zip file)	Summary (KATECHOL_Abstract_Eudract.docx)

#### Trial information

##### Trial identification

Sponsor protocol code	v1330032015
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##### Additional study identifiers

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

Notes:

#### Sponsors

Sponsor organisation name	Medical University of Vienna
Sponsor organisation address	Waehringerguertel 18-22, Vienna, Austria,
Public contact	Head of Department, Clinic for General Anesthesiology, Intensive Care and Pain Management, 0041 140100, anesthesie@meduniwien.ac.at
Scientific contact	Head of Department, Clinic for General Anesthesiology, Intensive Care and Pain Management, 0041 140100, anesthesie@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:

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**Results analysis stage**

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Analysis stage	Final
Date of interim/final analysis	28 August 2017
Is this the analysis of the primary completion data?	Yes
Primary completion date	28 April 2016
Global end of trial reached?	Yes
Global end of trial date	28 April 2016
Was the trial ended prematurely?	Yes

Notes:

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**General information about the trial**

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Main objective of the trial:

In this study we want to clarify whether a balanced type fluid solution for perioperative fluid management of patients receiving major abdominal surgery is associated with a lower incidence of need for catecholamines for hemodynamic stability than use of isotonic saline.

Protection of trial subjects:

Patients were monitored closely during and after operation.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	01 March 2015
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

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**Population of trial subjects**

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**Subjects enrolled per country**

Country: Number of subjects enrolled	Austria: 60
Worldwide total number of subjects	60
EEA total number of subjects	60

Notes:

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**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)	45
From 65 to 84 years	15
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details:

All patients scheduled for open elective major abdominal surgery and expected to last a minimum of 2 hours were included in the study.

### Pre-assignment

Screening details:

Major general surgery includes complex visceral resection, partial or total colectomy, stomach surgery, small bowel resection, open gall-bladder resection, splenectomy, adrenalectomy and regional lymphnode dissection, major urological or gynecological surgery.

### Period 1

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

### Arms

Are arms mutually exclusive?	Yes
<b>Arm title</b>	0.9% NaCl
Arm description: -	
Arm type	Active comparator
Investigational medicinal product name	0.9% NaCl
Investigational medicinal product code	
Other name	normal saline
Pharmaceutical forms	Infusion
Routes of administration	Intravenous use

Dosage and administration details:

During the perioperative periode patients received a baseline infusion and fluid resuscitation with the study fluid.

<b>Arm title</b>	acetate-buffered
Arm description: -	
Arm type	Active comparator
Investigational medicinal product name	Elomel isoton
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Infusion
Routes of administration	Intravenous use

Dosage and administration details:

During the perioperative period patients received a continous infusion and fluid resuscitation with the study fluid.

<b>Number of subjects in period 1</b>	0.9% NaCl	acetate-buffered
Started	30	30
Completed	30	30

## Baseline characteristics

## End points

### End points reporting groups

Reporting group title	0.9% NaCl
Reporting group description: -	
Reporting group title	acetate-buffered
Reporting group description: -	

### Primary: need for vasocative agents

End point title	need for vasocative agents
End point description:	
End point type	Primary
End point timeframe:	during the perioperative period

End point values	0.9% NaCl	acetate-buffered		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	30	30		
Units: 1	97	67		

### Statistical analyses

Statistical analysis title	Wilcoxon
Comparison groups	0.9% NaCl v acetate-buffered
Number of subjects included in analysis	60
Analysis specification	Pre-specified
Analysis type	equivalence
P-value	< 0.05
Method	Wilcoxon (Mann-Whitney)

### Secondary: cumulative dose of vasoactive agents

End point title	cumulative dose of vasoactive agents
End point description:	
End point type	Secondary
End point timeframe:	perioperative period

End point values	0.9% NaCl	acetate-buffered		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	30	30		
Units: ng/ml/min				
number (confidence interval 5%)	0.000502 (0.0004 to 0.0006)	0.000044 (0.000034 to 0.000058)		

### Statistical analyses

No statistical analyses for this end point

### Secondary: changes in electrolyte and acid base status

End point title	changes in electrolyte and acid base status
End point description:	
End point type	Secondary
End point timeframe: perioperative periode	

End point values	0.9% NaCl	acetate-buffered		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	30	30		
Units: mmol/l				
number (not applicable)	30	0		

### Statistical analyses

No statistical analyses for this end point

### Secondary: unexpected ICU transfers

End point title	unexpected ICU transfers
End point description:	
End point type	Secondary
End point timeframe: perioperative period	

<b>End point values</b>	0.9% NaCl	acetate- buffered		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	30	30		
Units: count	1	1		

### Statistical analyses

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No statistical analyses for this end point



## Adverse events

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### Adverse events information<sup>[1]</sup>

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Timeframe for reporting adverse events:

From the start of anesthesia to the end of anesthesia.

Assessment type	Systematic
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### Dictionary used

Dictionary name	MedDRA
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Dictionary version	1
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Frequency threshold for reporting non-serious adverse events: 5 %

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#### 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: No serious adverse events were recorded: In this trial, the following events were considered to be efficacy and safety outcomes and are not considered an SAE: hypotension, shock, need for intropes, need for kolloid fluids, need for blood transfusion, need for expected and unexpected intensive care unit transfer.

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

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### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported