

# Intraoperative fluid optimisation using stroke volume variation in high risk surgical patients

<b>Submission date</b> 19/10/2009	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 29/10/2009	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
<b>Last Edited</b> 12/04/2021	<b>Condition category</b> Surgery	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

**Contact name**  
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**Contact details**  
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## Additional identifiers

**Protocol serial number**  
N/A

## Study information

**Scientific Title**  
Intraoperative fluid optimisation using stroke volume variation in high risk surgical patients: a randomised prospective single-centre study

**Acronym**

SVVOPT

**Study objectives**

Stroke volume variation guided fluid optimisation during major abdominal surgery in comparison with standard haemodynamic management may reduce organ dysfunction development and postoperative morbidity in high risk surgical patients.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Local Research Ethics Committee of University Hospital in Plzen, approved on 14/06/2007

**Study design**

Open randomised controlled trial

**Primary study design**

Interventional

**Study type(s)**

Not Specified

**Health condition(s) or problem(s) studied**

Fluid optimisation of high risk surgical patients undergoing major abdominal surgery

**Interventions**

Patients were randomised into protocol or control group using sealed envelopes method.

Fluid management in control group patients was managed using routine cardiovascular and clinical monitoring.

Haemodynamic optimisation of protocol group patients was provided with colloid boluses of 3 ml/kg guided by stroke volume variation and other haemodynamic variables according to the protocol based on data obtained by Vigileo™/FloTrac™ monitor.

After operation fluid management and overall postoperative care was the same in both groups.

Patients were followed at least 30 days after operation, if hospitalised at this day then till hospital discharge.

**Intervention Type**

Procedure/Surgery

**Phase**

Not Applicable

**Primary outcome(s)**

Postoperative morbidity based on occurrence (rate and number) of postoperative infectious and organ complications until 30 days after operation.

**Key secondary outcome(s)**

1. Duration of hospital and intensive care unit (ICU) stay
2. All cause mortality
3. Biochemical parameters of oxygen debt during operation and in early postoperative period (8 hours)

**Completion date**

30/05/2009

## Eligibility

**Key inclusion criteria**

High risk surgical patients of both gender scheduled for intraabdominal surgery with presumed blood loss of more than 1,000 ml or longer than 120 minutes with open peritoneal cavity.

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Sex**

All

**Total final enrolment**

120

**Key exclusion criteria**

1. Patients aged less than 18 years
2. Patients with irregular heart rhythm
3. Those with body weight less than 55 kg or more than 140 kg

**Date of first enrolment**

01/07/2007

**Date of final enrolment**

30/05/2009

## Locations

**Countries of recruitment**

Czech Republic

**Study participating centre**

Department of Anesthesia and Intensive Care

Plzen

Czech Republic  
30460

## Sponsor information

### Organisation

Charles University Teaching Hospital Plzen (Czech Republic)

### ROR

<https://ror.org/024d6js02>

## Funder(s)

### Funder type

Government

### Funder Name

Ministry of Education (Czech Republic) (project ref: MSM0021620819)

### Alternative Name(s)

Ministry of Education of the Republic of Korea, , MOE

### Funding Body Type

Government organisation

### Funding Body Subtype

National government

### Location

Korea, South

## Results and Publications

### Individual participant data (IPD) sharing plan

### IPD sharing plan summary

Not provided at time of registration

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>		01/01/2010	12/04/2021	Yes	No

<a href="#">Abstract results</a>		13/03/2009	No	No
<a href="#">Other publications</a>	economic evaluation results	22/05/2014	Yes	No