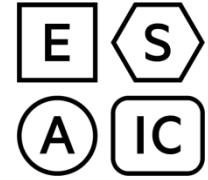
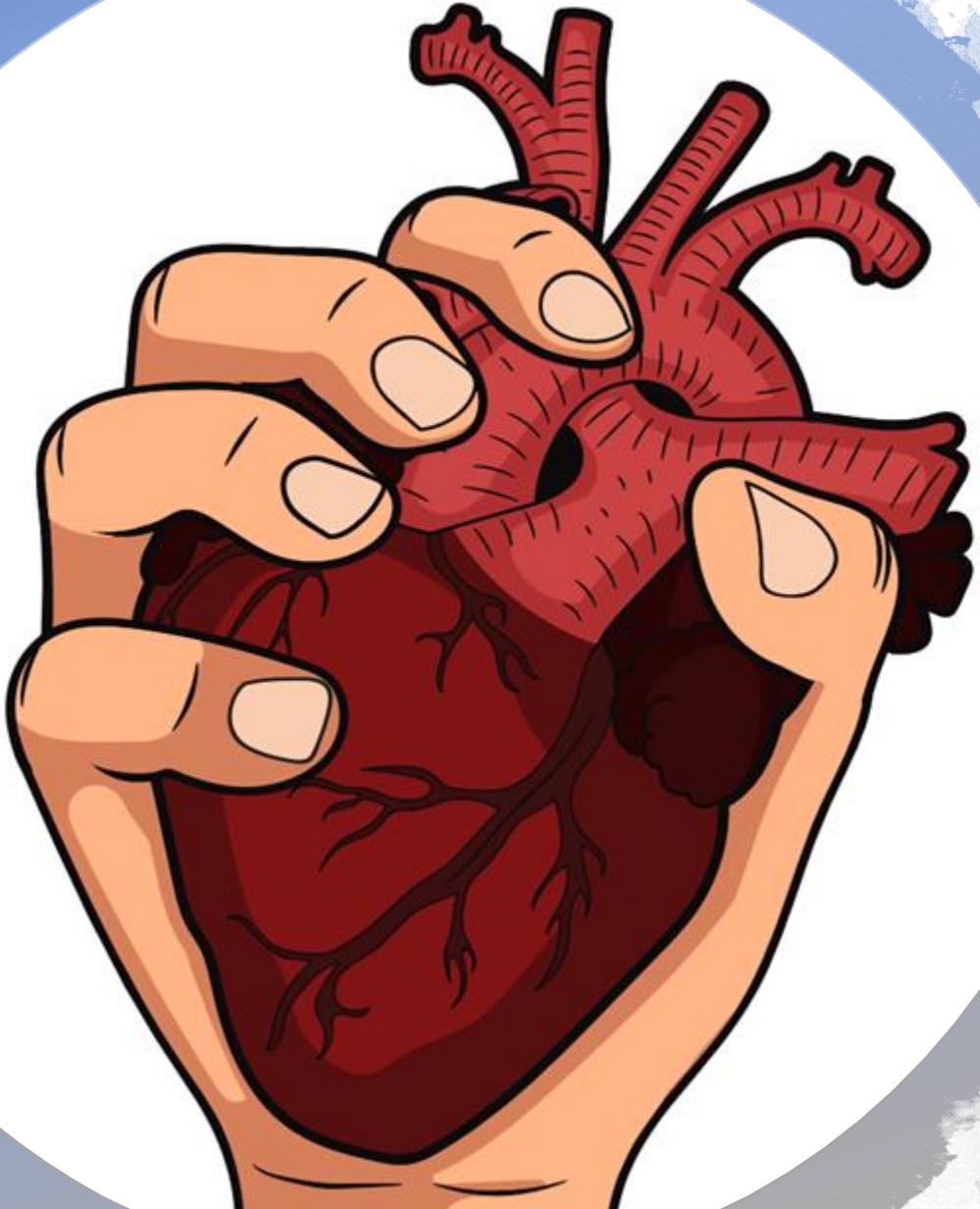




Liverpool University Hospitals  
NHS Foundation Trust



European Society of  
Anaesthesiology and  
Intensive Care



# Squeeze UK

**Postoperative vasopressor usage: a  
prospective observational study:**

**Relation to perioperative atrial  
fibrillation (AF)**

# Site Initiation Visit

What's the context?

Patients who have had major non-cardiac surgery

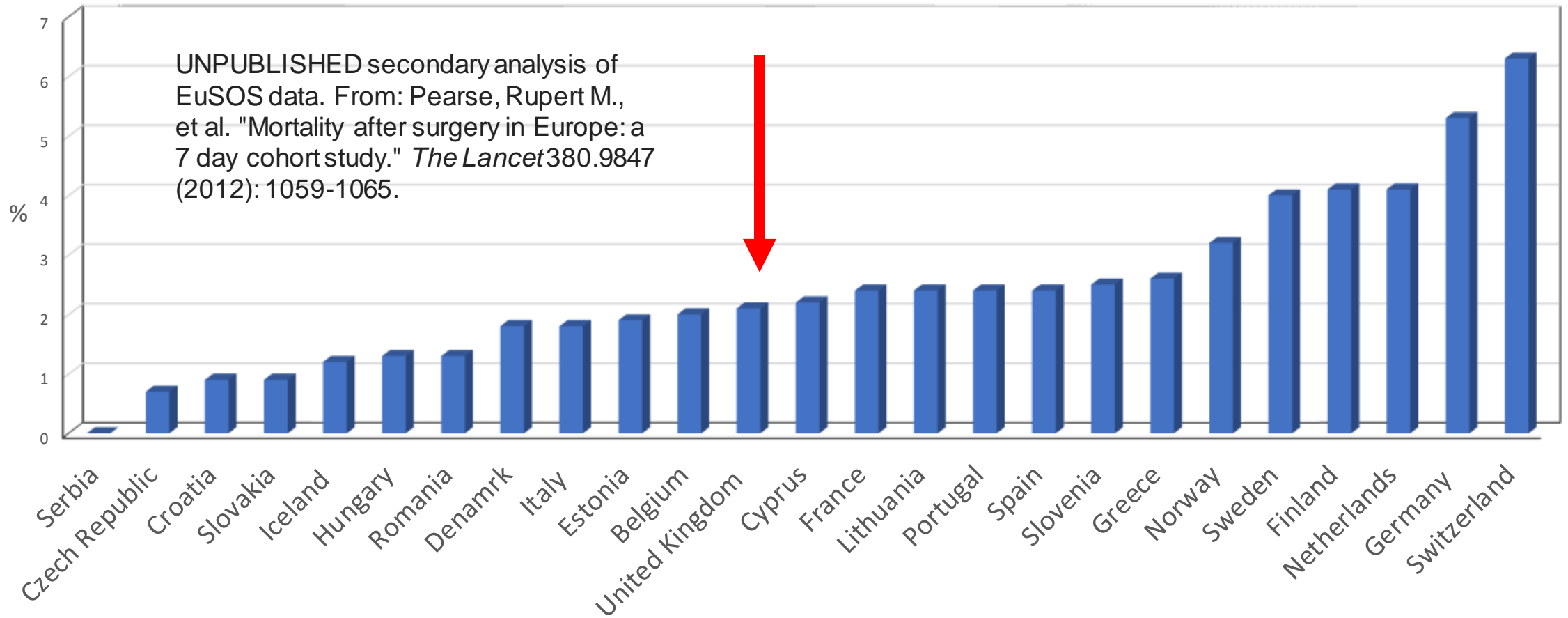
...sometimes get hypotension

...sometimes get treated with continuous infusions of vasopressors

...sometimes develop postoperative atrial fibrillation

There is huge variation in practice

# Variation in practice?



Receipt of inotrope / vasopressor infusion within 24 hrs of surgery

# What are our research questions ?

What proportion of patients receive postoperative vasopressor infusions (PVI)?

Which factors (patient, condition, surgery and intraoperative management), are associated with receipt of PVI?

In the management of patients with PVI, is there variation in practice between individual clinicians, hospitals and countries?

What proportion of patients receiving PVI develop postoperative atrial fibrillation?

Are these variations in practice associated with incidence of associated organ dysfunction & clinical outcome?

# Methods

- Prospective, international, multicentre cohort study
- Funded and sponsored by European Society of Anaesthesiology Clinical Trials Network (Funding extended until 31<sup>st</sup> Dec 2022)
- Distributed recruitment → centralised data collection
- Similar to EuSOS but with specific focus on PVI
- >40 countries, each with a national co-ordinator (NC)
- **In UK, Squeeze UK established, with additional data collection**
- **Aiming for 5000 patients in England and Wales only**

# Consent

- Confidentiality Advisory Group (CAG) approval in place in the UK to waive individual patient consent.
- Patients who would rather not have their information collected can contact the study team to opt-out of the study or can tell the anaesthetist on the day.
- Participating sites should display the Squeeze UK study poster in pre-operative clinical and patient facing areas.

# Two phases of recruitment

## 1. Cohort A

All eligible patients in one week

**Individual sites can pick the recruitment week**

## 2. Cohort B

Up to 30 eligible patients with PVI over a year

**Sites may choose to complete Cohort A or Cohort B first**

In the UK, additional data will be collected for patients that develop postoperative atrial fibrillation.

# Cohort A



**Only 1-3%  
will  
receive  
PVI**

Inclusion criteria	Exclusion criteria
<ol style="list-style-type: none"><li>1. Undergoing surgery (planned or unplanned)</li><li>2. No plans for return home on the day of surgery. (No day case surgery)</li><li>3. Age <math>\geq</math> 18 on day of surgery</li></ol>	<ol style="list-style-type: none"><li>1. Cardiac surgery</li><li>2. Obstetric surgery</li><li>3. Transplant surgery</li><li>4. Preoperatively long-term infusions of vasoactive drugs, such as epoprostenol (prostacyclin)</li><li>5. Mechanical circulatory support: ventricular assist device, intra-aortic balloon pump, artificial heart or similar</li><li>6. Already been enrolled in Squeeze</li></ol>

All patients admitted to participating hospitals during seven consecutive days (~100 patients per site)



# Cohort B



## Inclusion criteria

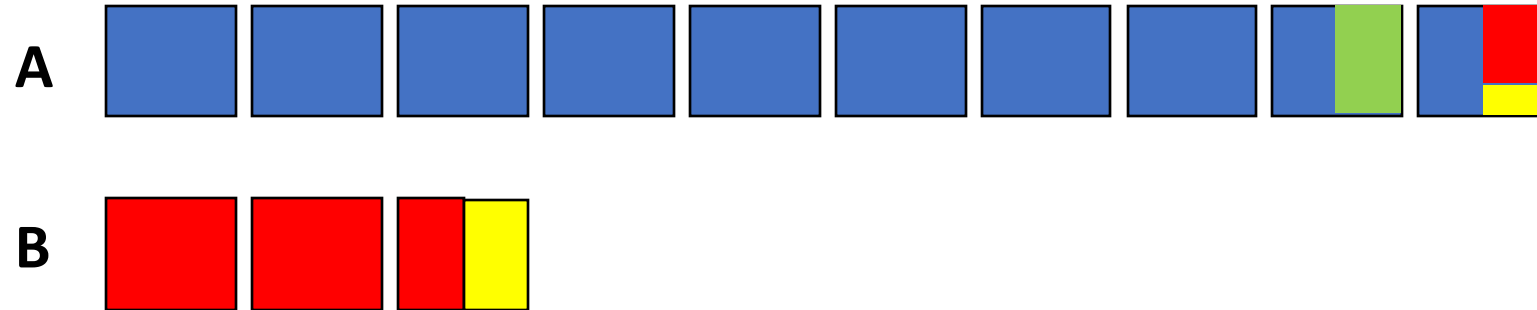
Receiving infusion of vasopressors that continues after the patient has left the operating room.

**All receive  
PVI**

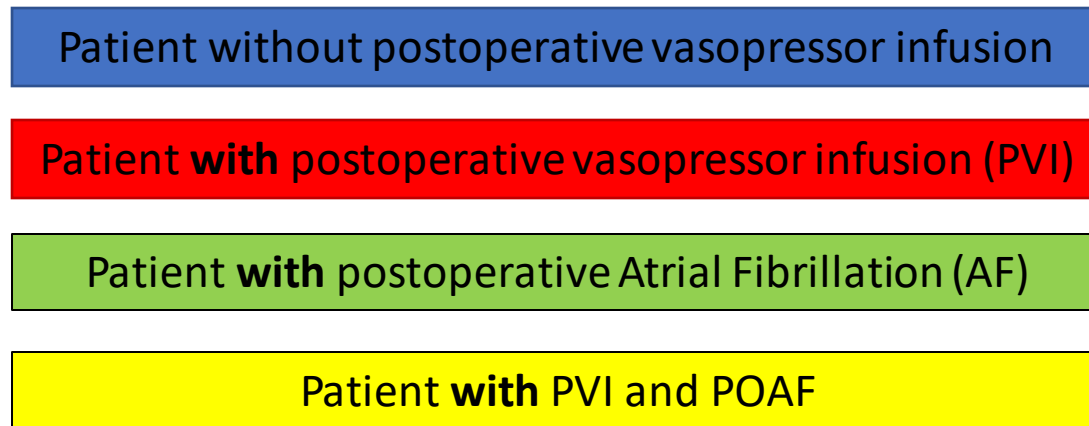
Aiming to recruit 30 patients within one year.

# Data collection overview

Cohort:



Legend:



Complete CRF:

	1	2	3
Blue	<input checked="" type="checkbox"/>		
Red	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Green	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
Yellow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

# Cohort A data collection

- All patients should have CRF 1 completed.
- For patients requiring PVI, complete CRF 1 and CRF 2.
- For patients with POAF, complete CRF 1 and CRF 3
- For patients with PVI and POAF, complete CRFs 1, 2 and 3
  
- Data entry via OpenClinica
- Site logins after site activation
- 9 digit patient ID allocated by site- CCC-HHH-PPP

For example the 1<sup>st</sup> patient at site 044-001 would be 044-001-001

# Cohort B data collection

- All patients should have CRF 1 and CRF 2 completed.
- Data entry via OpenClinica
- 9 digit patient ID allocated by site: CCC-HHH-PPP
- Up to 1 year to reach target of 30

**Patients in Cohort A with PVI do not count towards recruitment target for Cohort B.**

# Requirements from site

- Confirmation of C&C and completed delegation logs
- PI CV, GCP certificate & signed protocol signature page
- All study procedures to be performed in accordance with GCP regulations
- All patient identifiers to be kept at site only
- Maintenance of electronic site file

# Expected outcomes?



Data from

>40,000 patients in cohort A  
>12,800 patients in cohort B



Pre-specified statistical analysis plan



Main manuscript (analysis from Europe, North American and Australasia).

Secondary manuscripts from LMIC and other analyses.



Everyone who contributes towards study conduct will be listed within “The Squeeze Investigators” and will have authorship on any manuscripts.

# ESAIC Central Study Team

## Study Steering Committee

- Ib Jammer (Norway): Co-Chief
- Ben Creagh-Brown (UK): Co-Chief
- Hannah Wunsch (Canada)
- Lui Forni (UK)
- Ramani Moonesinghe (UK)
- Anil Gupta (Sweden)
- Peter Martin (UK)

## ESA Office

- Pierre Harlet

# UK Study Team

## Squeeze UK Study Steering Committee:

Professor Ingeborg Welters

Professor Tony Whitehouse

Dr Tomasz Torlinski

Dr Alicia Waite

Dr Brian Johnston

## Squeeze UK Office:

Karen Williams

## Squeeze UK Sponsor:

Liverpool University Hospitals NHS  
Foundation Trust



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For SQUEEZE updates you can follow us on:  
<https://twitter.com/Squeezestudy>

# Any questions?

- Look at “Frequently Asked Questions” document
- Watch the videos:
- Email us:  
[SqueezeUK@ESAIC.org](mailto:SqueezeUK@ESAIC.org)

