

# ESAIC Clinical Trial Network: EuPreCHO Study

## European study on perioperative management and outcome following Preoperative Transthoracic Echocardiography in noncardiac surgery patients

### Rationale

The impact of preoperative TTE on outcome is controversial and current evidence is mostly based on administrative data. There is also a knowledge gap in terms of what changes in perioperative management are derived from TTE information, and if this has any impact on postoperative outcomes. Further, a secondary analysis of a large international cohort suggests that the ESC guidelines criteria to recommend TTE may not be efficient for the detection of major pathologies .

### Research Questions

**RQ1.** Does the perioperative management of patients evaluated with vs without preoperative TTE differ in current clinical practice?

**RQ2.** Do outcomes of patients evaluated with vs without preoperative TTE differ in current clinical practice?

**RQ3.** What factors enhance the prediction of major pathologies in preoperative TTE?

### Sample Size

We plan to recruit at least **5393 exposed** (TTE within 6 months before surgery) and **2696 non-exposed**.

### Inclusion Criterion

- Patients undergoing elective, in-hospital, intermediate or high-risk noncardiac surgery
- And aged  $\geq 65$  years
- Or  $\geq 2$  cardiovascular risk factors
- Or known cardiovascular disease.

### Exclusion Criteria

- $< 18$  years of age
- Day surgery, urgent/emergency procedures
- Current ICU patient
- Cardiac surgery within the last month prior to the noncardiac procedure
- Unwilling or unable to provide informed consent
- Unable to complete the WHODAS questionnaire
- Previous enrolment in EuPreCHO

### Primary Endpoints

**RQ1.** Change in perioperative management:

- Discussion in preoperative multidisciplinary board and derived decisions
- Optimization of cardiovascular medication,
- Cardiac workup
- Invasive or advanced intraoperative haemodynamic monitoring
- Goal-directed haemodynamic management
- Planned ICU/IMC admission or extended PACU stay

**RQ2.** Disability-free survival at 30 days post-surgery

**RQ3.** Major pathologies detected by TTE:

- Moderate-severe systolic dysfunction,
- Significant diastolic dysfunction,
- Significant right ventricular dysfunction,
- Severe left-sided valvulopathies.

### Your Contribution

As a local Principal Investigator, you will

- Lead the study in your institution
- Identify and enrol patients and collect data
- Communicate with ESAIC and the relevant National Coordinators during all steps

### Chief Investigator

Prof. Dr. Giovanna Lurati Buse  
& Prof. Michelle Chew

### Sponsor

EuPreCHO is sponsored and funded by a grant from the ESAIC Clinical Trial Network.

### Interested?

You will find the study documents at:

<https://esaic.org/study/euprecho/>

Address your questions to: [research@esaic.org](mailto:research@esaic.org)

More information can be found here:

