European Society of Anaesthesiology and Intensive Care

EuPreCHO

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

RQ2. Does the perioperative management of patients evaluated with vs without preoperative TTE differ in current clinical practice?

RQ3. Do outcomes of patients evaluated with vs without preoperative TTE differ in current clinical practice?

Sample Size

We plan to recruit at least 5500 patients with preoperative TTE within the 3 months before surgery and 2750 patients without preoperative TTE.

Inclusion Criterion

- Patients undergoing elective, in-hospital, intermediate or high-risk noncardiac surgery
- And aged ≥65 years
- Or ≥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. Major pathologies detected by TTE:

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

RQ2. Change in perioperative management:

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

RQ3. Disability-free survival at 30 days post-surgery

European Society of Anaesthesiology and Intensive Care

EuPreCHO

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

More information can be found here:

EuPreCHO