# Does measuring pre-surgery brain oxygen levels in sick elderly patients coming in for major elective non-cardiac surgery allow us to predict who will have more complications, including death, major organ failure, and post-operative delirium

ACTRN12616000873426

| | |
|---|---|
| **Status** | RECRUITING |
| **Sponsor** | Liverpool Hospital |
| **Enrollment** | 400 participants |

## Plain Language Summary

This study is testing whether measuring the oxygen levels in the brain before surgery — using a simple, painless sensor placed on the forehead — can predict which older patients are at higher risk of serious complications or death after major non-cardiac surgery (such as abdominal or vascular surgery). Low brain oxygen levels may signal that the heart and lungs are not working at full capacity. Results of this study could help surgeons and anaesthetists better identify high-risk patients before they go to the operating theatre.

You may be eligible if:
- You are 60 years or older
- You are scheduled for an elective (planned) major non-cardiac surgery expected to last at least 2 hours
- You are expected to stay in hospital for at least 2 days after surgery
- Your anaesthetic risk is classified as ASA 3 or 4 (moderate to high risk)
- You will receive general anaesthesia (with or without regional anaesthesia)

You may NOT be eligible if:
- You have previously been enrolled in this study

Talk to your doctor about whether this trial might be right for you.

## Key Eligibility Criteria

### Inclusion (5)

- Adult patients, greater than or equal to 60 years old
- elective, non-cardiac, surgery
- major surgery expected to last for greater than or equal to 2 hours, with expected greater than or equal to 2 days as hospital in-patient
- ASA 3 or 4
- receiving a general anaesthesia, with or without a regional anaesthesia technique

### Exclusion (1)

- Previously enrolled in study

## Locations (2 total)

Liverpool Hospital - Liverpool, NSW, Australia
Macquarie University Hospital - Macquarie Park, NSW, Australia

https://www.anzctr.org.au/Trial/Registration/TrialReview.aspx?ACTRN=ACTRN12616000873426