## ACUTE Study - A propensity matched cohort study of the impact of Chemoprophylaxis on venoUs ThromboEmbolism in surgical patients

## Plain English Summary

After surgery, some patients may develop blood clots in their veins, a condition known as venous thromboembolism (VTE). These clots often form in the legs and can cause swelling and pain. If a clot travels to the lungs, it can lead to serious health problems like chest pain, difficulty breathing, or even death.

Surgery is a major risk factor for VTE. To reduce the risk of VTE after surgery, doctors often prescribe medications called blood thinners (or anticoagulants). These medications make it harder for the blood to clot. However, the best way to use these medications—such as how long patients should take them and who will benefit the most—is not fully clear. Additionally, blood thinners can increase the risk of bleeding, so it's important to balance the benefits and risks.

## Purpose of the Study

This study aims to improve our understanding of how to prevent blood clots after surgery. Specifically, we want to find out:

- 1. The risk of blood clots following different operations
- 2. What current practice is for blood thinner prescribing across the country and how this compares to the guidelines
- 3. To find the best treatment regime of blood thinners to reduce VTE risk

# Who Can Participate

We are inviting adults over 18 years old who are scheduled for surgery requiring general anaesthesia and at least one overnight stay in the hospital. This includes all types of operations from all specialties. Patients will be recruited from 20 centres using an "opt-out" approach. This means they will be automatically included in the study unless they indicate they would not like to be.

#### What Participation Involves

- Standard Care: Participants will receive the usual care recommended by their surgical team. This could range from not receiving blood thinners to getting them during their hospital stay or continuing them at home.
- Data Collection: We'll collect information about each patient's surgery, medical history, and any medications they are taking.
- Follow-Up: At 90 days after surgery, we'll contact participants by phone or online to ask about any instances of blood clots or bleeding they may have experienced.

# Benefits of the Study

By taking part in this study, participants will help us:

- Identify which operations have a higher risk of blood clots
- Compare VTE prevention strategies between different hospitals
- Find the best medicines and durations of treatment to prevent blood clots

## Sharing the Results

The trial has been designed alongside patients and experts. The trial results will inform international guidelines and will be published in leading scientific journals. Furthermore, results will be shared through supporting organisations' websites and associated social media.