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# Background

- Over 35,000 Canadians annually suffer from a hip fracture
- 30 day mortality rate for men is 9% and 5% for women
- Economic impact of hip fractures in Canada is > \$1 billion annually
  - Survivors are at substantial risk of disability:
    - 11% will become bed ridden
    - 16% will require treatment in a long-term care facility
    - 80% will require the use of a walking aid at 1 year





# **Trial Design**

- Parallel group international RCT
- Sample size: 3,000 patients
  - 69 hospitals in 17 countries





# Intervention





# **Patient Population**

#### **Inclusion Criteria**

1. Age ≥ 45 years

2. Hip fracture from low energy mechanism requiring surgery diagnosed during study hours

#### **Exclusion Criteria**

- 1. Requiring emergent surgery or intervention(s) for another reason
- 2. Open hip fracture
- 3. Periprosthetic fracture
- 4. Bilateral hip fractures
- 5. Therapeutic anticoagulation for which there is no reversal method
- 6. History of HIT and current use of warfarin with INR  $\geq$  1.5
- 7. Refusal to participate
- 8. Previous participation in the HIP ATTACK Trial



## Outcomes

### **Primary Outcome**

- To determine the effect of accelerated medical clearance and surgery compared to standard care on the 90-day risk of the following two coprimary outcomes:
  - 1) all-cause mortality; and
  - 2) major perioperative complications (i.e., a composite of mortality,





## Outcomes

### **Secondary and Tertiary Outcomes**

- Individual clinical outcomes at 90 days and 1 year
- Functional outcomes (SF-36v2, delirium, new residence in a nursing home, length of hospital, critical care and rehabilitation stays)
- Acute and chronic post-surgical incisional pain
- Mortality and institutionalization status of dependents and non-dependents
- Health economics and quality-adjusted life years



## Follow-up

Baseline

Post- rand

Days 1-7

Hospital

Discharge

- Demographics and medical history
  - Baseline vitals and laboratory assessments
  - Numeric Pain Scale score and SF-36
- Acute or newly diagnosed medical conditions
  - Daily troponin and creatinine measurements
- · Dates/times of first mobilization, first stood and first full weight bearing
- Daily Numeric Pain Scale scores
- Daily Confusion Assessments

• Discharge location

- Events since randomization
- Numeric Pain Scale score at discharge







