

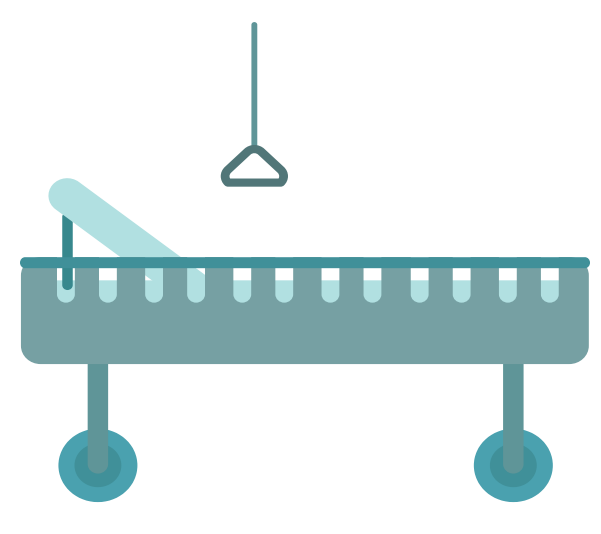
CRASH-2 Trial

Effects of TXA on death, vascular occlusive events, and blood transfusions in trauma patients with significant haemorrhage (CRASH-2): a randomized, placebo-controlled trial

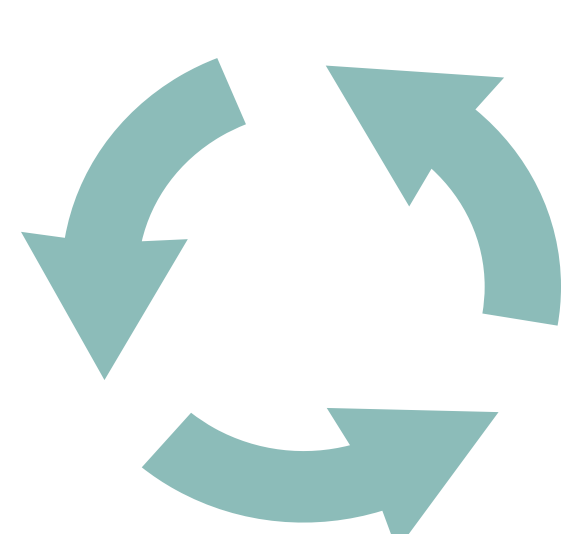
CRASH-2 Trial Collaborators

canadiem MVP INFOGRAPHIC SERIES

BACKGROUND



Tranexamic acid (TXA) can reduce bleeding in patients undergoing elective surgery



Homeostatic responses to surgery and trauma are similar



TXA reduced the need for blood transfusions by 1/3 in elective surgeries

SHOULD TXA BE CONSIDERED IN THE BLEEDING TRAUMA PATIENT?

ELIGIBILITY



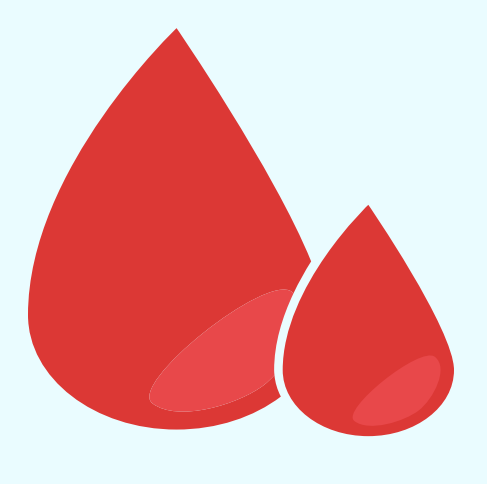
Adult trauma patient



within 8 hours of injury



Hemorrhage with SBP <90 and/or HR >110



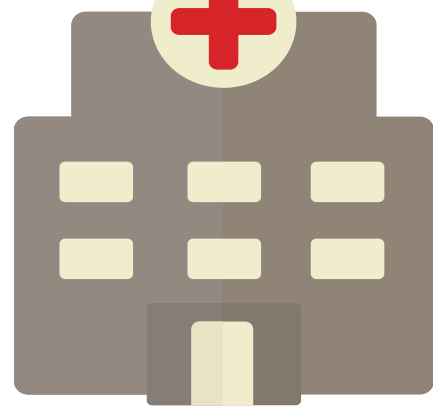
At risk for hemorrhage

METHODS

RANDOMIZED PLACEBO CONTROL TRIAL



40 countries



274 hospitals



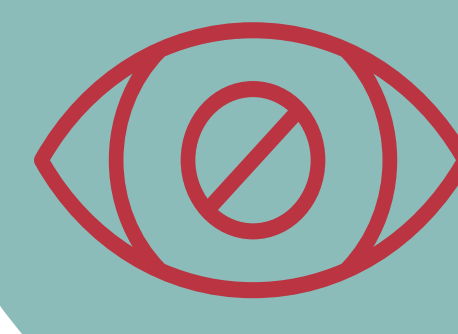
20211 patients

PLACEBO
10067 patients

TXA
10060 patients

STUDY DESIGN

Randomization based on sex, age, time since injury, type of injury, GCS, SBP, RR, central cap refill, country & hospital



Participations & study staff were blinded to treatment

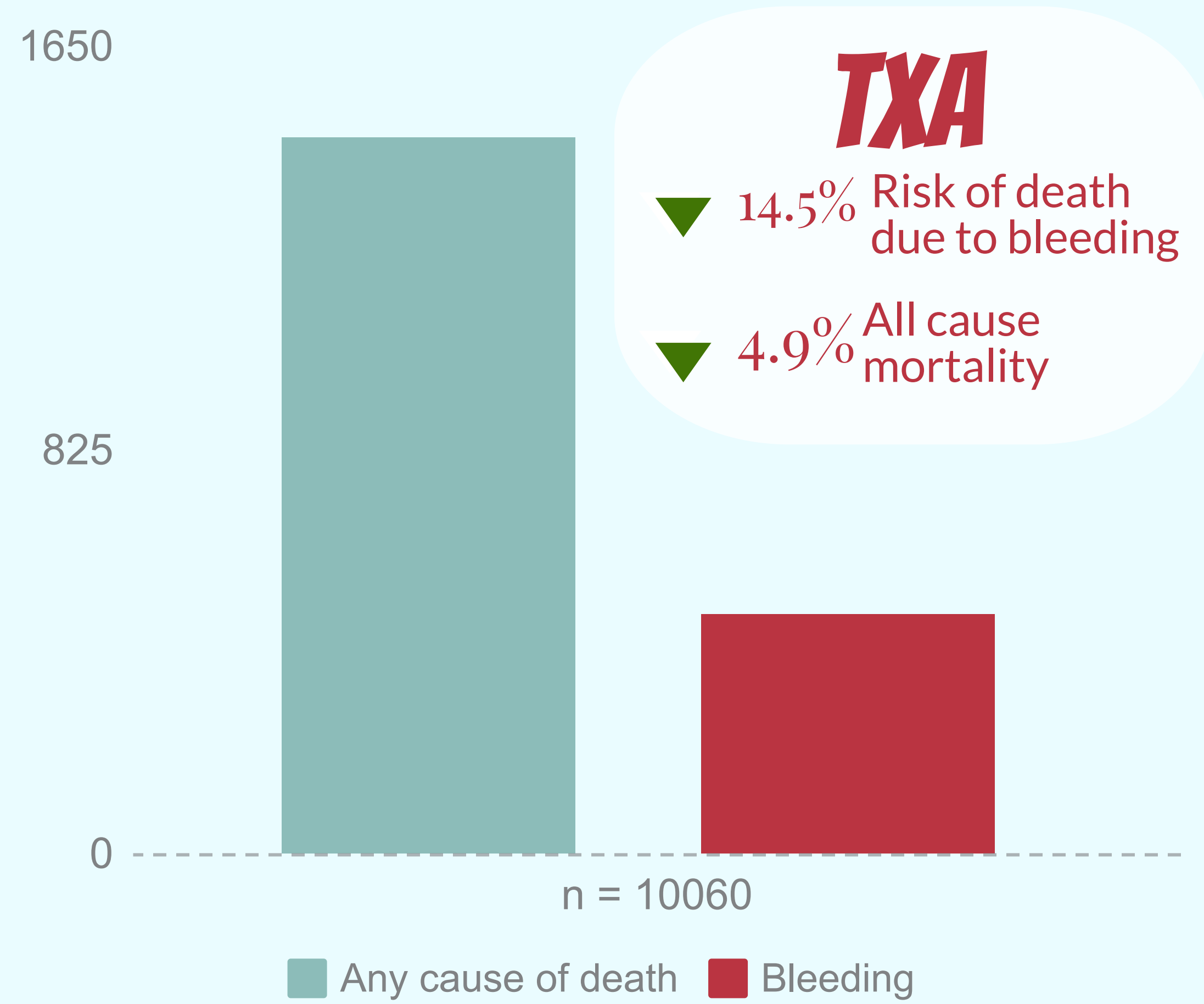
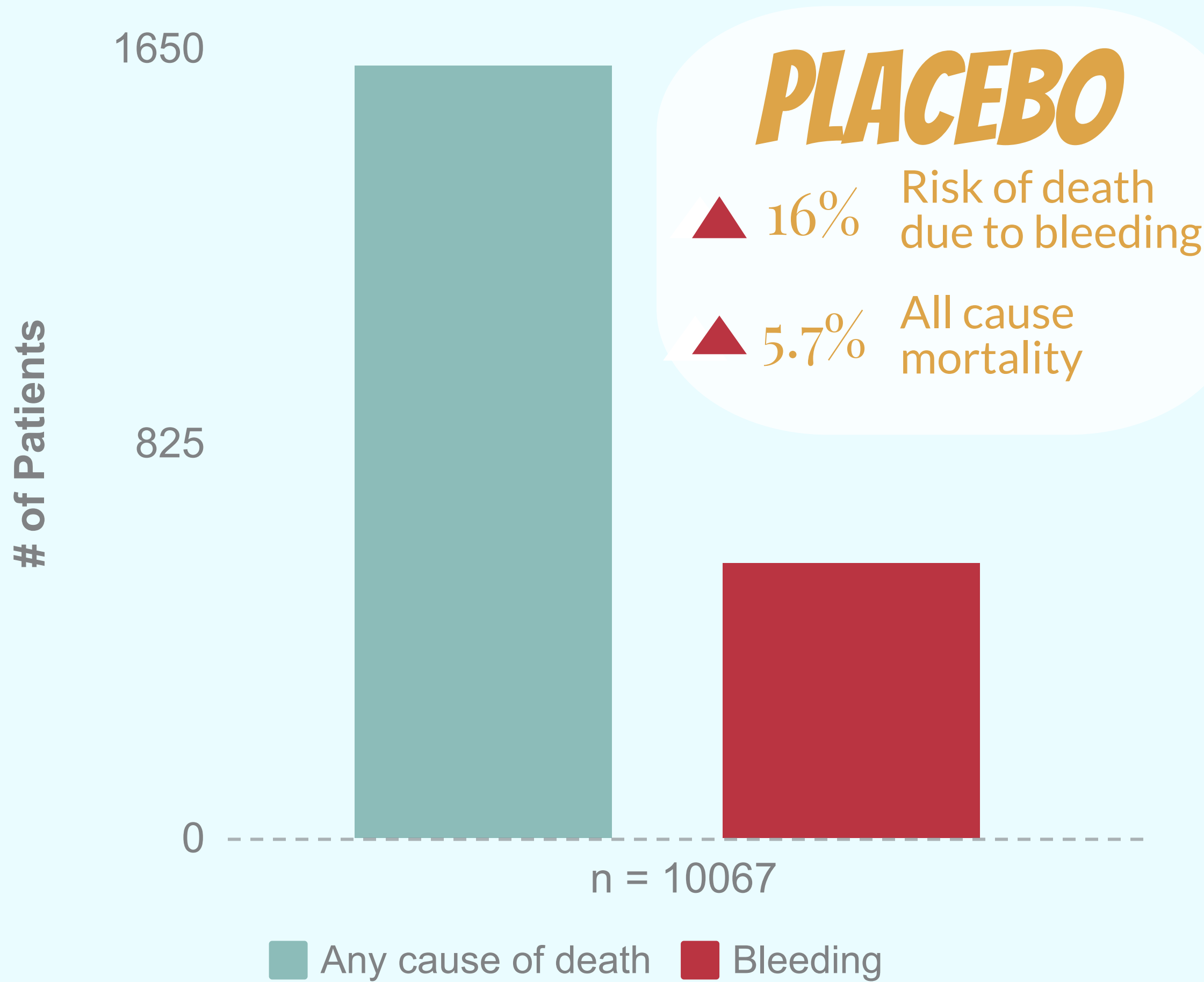
PROCEDURE

1 g of TXA infused over 10 min.

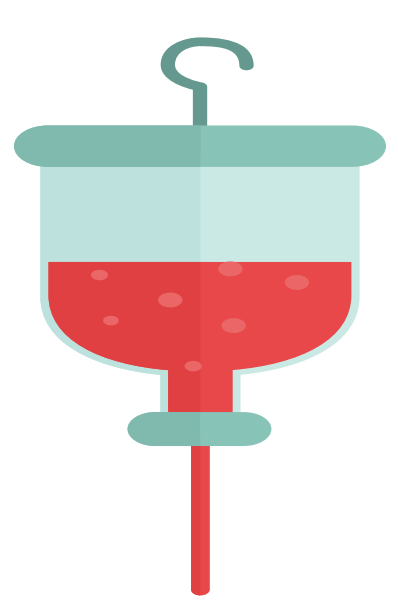


1 g of TXA over 8 hrs

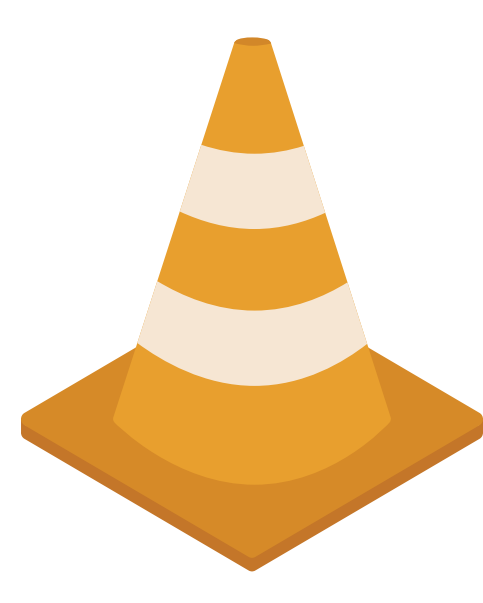
RESULTS



DISCUSSION



TXA did not significantly reduce the need for blood transfusions



TXA does not increase risk of vascular occlusive events



Early TXA can reduce the risk of death from hemorrhage



TXA significantly reduces all cause mortality

LIMITATIONS

- Limited insight into mechanism of action of TXA in the bleeding trauma patient
- Most blood loss occurs pre-hospital & is difficult to measure
- Competing risk - patients that survived have a greater opportunity to receive a blood transfusion
- Some patients may have not been bleeding at time of randomization

BOTTOM LINE

TXA can safely **reduce the risk of death** in bleeding trauma patients and should be considered

REFERENCES:

Crash-2 Trial Collaborators. (2010). Effects of TXA on death, vascular occlusive events, and blood transfusions in trauma patients with significant haemorrhage (CRASH02): a randomized, placebo-controlled trial. *Lancet*, 376, 23-32.

This infographic was created by Alixe Dick and edited by Alvin Chin

