### MASSIVE TRANSFUSION / MASSIVE HAEMORRHAGE PROTOCOL

**Trauma team leader**
- Phone blood bank and initiate MTP
- Confirm blood cross-match and submission to blood bank
- Ensure clotting profile workup
- Stop MTP once no longer required

**Blood bank**
- Prepare 6PRBC, 6FFP, and 1 pooled platelets per package issued & prepare for the next package
- Initially O negative/positive blood until cross match done
- Deliver to the appropriate site
- Terminate only when informed by team leader

- Initiate MTP with blood bank
  - Establish good IVI access
  - Transfuse 1:1:1 for packed cells: FFP: Platelets
  - Take blood for cross match, ABG, FBC, PI PTT, TEG if available (others U+E/CMP)
  - Control bleeding (Emergency Room + theatre as necessary)

Continue on clinical grounds if patient unstable with evidence of ongoing bleeding
- Aim for Platelets>100 000 with active bleeding, INR<1.5, Hb >9g/dl, Fibrinogen >1 g/L
- Modify requirements based on TEG (if available)
- Continue observation and supportive care in ICU
- Once stable modify according to clotting profile + Hb

**NB Complications of Transfusions**
- Transfusion reactions
- Inflammatory complications
- Immuno-modulatory effects
- Infection transmissions
- Metabolic effects

**Ongoing haemorrhagic shock despite resuscitation**
- Ongoing attempts to stop the bleeding
- Already 2 units of packed cells utilized
- Anticipated massive transfusion requirements (>50%blood volume to be transfused in 3hrs/ >total volume transfusion in 24hrs)
- Coagulopathy in trauma