

Trauma Center Practice Management Guideline

Iowa Methodist Medical Center — Des Moines

Blank Children's Hospital – Des Moines

<i>Trauma Resuscitation Whole Blood Administration</i>	
ADULTS Practice Management Guideline	Effective: 04/2021
Contact: Trauma Medical Director/Trauma Program Manager	Last Reviewed: 04/2024

PURPOSE

This procedure provides instructions for obtaining and administering Whole Blood for trauma patients.

BACKGROUND

Whole blood is defined as Low Titer Group O Whole Blood (LTOWB). The benefit is rapid availability of red cells, plasma, and platelets in one donor component. The use of LTOWB is desirable when major injury has occurred, and traumatic hemorrhage is suspected. Whole blood delivers all components in a single product replacing both oxygen carrying capacity and coagulation factors, while minimizing donor exposure to the patient.

PROCEDURE STATEMENTS

1. The use of LTOWB is restricted to Iowa Methodist Medical Center with limited use under the medical direction of the trauma surgeons and pathologists, for emergency use for trauma patients only.
2. The goal is to administer no more than two LTOWB to any one patient.
3. Inclusion Criteria:
 - a. Patients requiring a trauma activation based on physiologic and anatomic criteria according to Trauma Services Policy #4 Adult Trauma Team Activation.
Male patients 12 years of age and over, females 51 years of age and older.
4. The pool of available Whole Blood donors remains limited and LTOWB may not be available to all patients that meet inclusion criteria for the use of LTOWB.

PROCEDURE

1. If patient meets inclusion criteria, 2 units of LTOWB Trauma Pack may be requested (if available) by the charge nurse as soon as the Trauma Activation is called.
2. Crossmatch will be obtained prior to any blood product administration (must be collected if trauma pack issued and not administered).
3. ROTEM will be obtained prior to any blood product administration.
4. ROTEM will be obtained after LTOWB transfusion is completed.
5. If LTOWB is not available or the patient does not meet LTOWB transfusion inclusion criteria, the PRBC / FFP Trauma Pack will be requested per Trauma Activation Guideline.

6. If patient continues to require blood products transfusion after either 2 units of LTOWB or PRBC / FFP Trauma Pack, consider initiating Massive Transfusion Protocol (MTP) guideline.
7. Additional coagulation and laboratory studies will be obtained per trauma surgeon clinical judgement.

PERFORMANCE IMPROVEMENT

All LTOWB transfusions will be monitor by the trauma program, and compliance with guideline, adverse events and opportunities for improvement will be reviewed and discussed at PIPS meetings.