

Supplemental material 1:

Standard-issue allogeneic RBC characteristics.

- Mayo Clinic:
 - RBC type: 91% whole blood-derived, 9% apheresis.
 - Additive: 13% AS-1, 87% AS-3, <1% other (e.g., CPD, CPD-1)
 - Leukoreduction:
 - Apheresis: The Fenwal ALYX Component Collection System (Fenwal™) is used to collect double red blood cell product on eligible donors. All RBC units are leukocyte reduced during collection/processing via in-line filters.
 - Whole blood-derived: Whole blood is leukocyte reduced prior to further processing into RBCs, plasma, and cryoprecipitate utilizing the Pall filter, which is part of the Pall whole blood collection bag set with residual leukocyte content $< 5 \times 10^6$.
- Duke:
 - RBC type: 80% whole blood-derived, 20% apheresis.
 - Additive: 66% AS-1, 5% AS-3, and 29% other (e.g. CPDA).
 - Leukoreduction:
 - Apheresis: Apheresis units are leukoreduced intrinsically by the Trima Accel® (Teruma BCT, Inc.) apheresis system.
 - Whole blood-derived: Whole blood-derived RBCs are passed through a leukocyte reduction filter (Sepacell Flex-Excel for AS-1 and CPDA units; Haemonetics BPF4 for AS-3) after separation of whole blood into its components and after combination with the additive solution. They must have a residual leukocyte content $< 5 \times 10^6$.