Supplemental Methods

Supplemental Table 1 provides additional details regarding cryomix, cryopreservation method and thawing of products according to participating laboratory. All centres used United States phamacopeia (USP) grade dimethyl sulfoxide (DMSO) at a final concentration of 10%. However, other components of the cryomix differed between centres. While controlled rate freezer was used by all centres, few compensated for the eutectic point during freezing. All samples were stored over liquid nitrogen in vapour phase. Most centres thawed samples and products using a water bath at 37° Celsius. Some centres eliminated the red cell lysis step for thawed samples prior to enumeration. CD34+ enumeration was performed using single platform techniques and viability assessed using 7-aminoactinomycin D (7-AAD) binding by all centres. Centres had previously participated in a national external quality assurance programme for CD34+ cell enumeration using stabilised samples.

Supplemental Table 1.

Centre	**Cryomix**	**Compensation for eutectic point**	**Thaw method**		
			Water bath	**Dry thawer**	**RBC lysis**
1	DMSO, concurrent plasma, saline	yes	yes	no	no
2	DMSO, concurrent plasma, saline	no	yes	no	no
3	DMSO, albumin	no	yes	no	no
4	DMSO alone	no	no	yes	no
5	DMSO, concurrent plasma	yes	yes	no	yes
6	DMSO, concurrent plasma (related donors), albumin (unrelated donors)	no	yes	no	yes
7	DMSO, saline	no	yes	no	no
8	DMSO, concurrent albumin, saline	no	yes	no	yes
9	DMSO, concurrent plasma, saline	no	yes	no	no