Appendix 1

Calculation of postoperative blood loss on the basis of hemoglobin (Hb) balance according to equations described by Good et al.[7] and Nadler et al.[23]

$$Hb_{loss} = BV \times (Hb_i - Hb_e) \times 0.001 + Hb_t$$

$$\text{Blood loss} = 1000 \times Hb_{loss}/Hb_i$$

, where Hb_{loss} is the amount (g) of hemoglobin lost, Hb_i is the hemoglobin level (g/L) before surgery, Hb_e is either the lowest postoperative recording of the hemoglobin level (g/L) or the hemoglobin level (g/L) recorded right before any transfusion, and Hb_t is the total amount (g) of allogeneic or autologous hemoglobin transfused. A unit of banked allogeneic blood is considered to contain 52 g of hemoglobin according to Canadian Blood Services.

Predicted blood volume is estimated for each patient according to Nadler's method:

$$PBV_{male} = (0.3669 \times Ht^3\,(M)) + (0.03219 \times Wt\,(Kg)) + 0.6041$$

$$PBV_{female} = (0.3561 \times Ht^3\,(M)) + (0.03308 \times Wt\,(Kg)) + 0.1833$$

, where PBV is predicted blood volume (mL), Ht = height (m), and Wt = weight (kg).