THREE PILLARS OF PATIENT BLOOD MANAGEMENT

	PILLAR ONE Optimise RBC Mass	PILLAR TWO Minimise Blood Loss	PILLAR THREE Manage Anaemia
PREOPERATIVE	> detect/treat anaemia & iron deficiency > treat underlying causes > optimise haemoglobin > cease medications	> identify, manage & treat bleeding/bleeding risk > minimise phlebotomy > plan/rehearse procedure	> patient's bleeding history & develop management plan > estimate the patient's tolerance for blood loss > optimise cardiopulmonary function
INTRAOPERATIVE	> time surgery with optimisation of erythropoiesis & red blood cell mass	> meticulous haemostasis/ surgical/anaesthetic techniques > cell salvage techniques > avoid coagulopathy > patient positioning/warming > pharmacological agents	> optimise cardiopulmonary function > optimise ventilation & oxygenation > restrictive transfusion strategies
POSTOPERATIVE	> manage anaemia & iron deficiency > manage medications & potential interactions	> monitor & manage post op bleeding > keep patient warm > minimise phlebotomy > awareness of drug interactions & adverse events > treat infections promptly	> maximise oxygen delivery > minimise oxygen use > treat infections promptly > tolerance of anaemia > restrictive transfusion strategies

Adapted from Spahn DR. Goodnough LT. *Alternatives to Blood Transfusion*. Lancet 2013; 381:1855-65; Hofman A. Farmer S. Towler SC. *Strategies to preempt and reduce the use of blood products: an Australian perspective*. Curr Opin Anaesthesiol. 2012; 25:66-73; Isbister JP. *The three-pillar matrix of patient blood management – an overview*. Best Pract Res Clin Anaesthesiol. 2013; 27:69-84.