

“Although the evidence-base for red cell transfusion practice is incomplete, randomised studies across a range of clinical settings, including surgery, consistently support the restrictive use of red cells, with no evidence of benefit for maintaining patients at higher haemoglobin thresholds (liberal strategy) Shah et al (2014).

Reference:

Shah, A., Stanworth, S.J. and McKechnie, S. (2015) Evidence and triggers for the transfusion of blood and blood products. 70(Supplement s1), p.10–e3. December 1st. .

Triggers for the transfusion of blood and blood products [@ivteam](http://ctt.ec/6u9Ne+) #ivteam

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Summary:

Allogeneic red cell transfusion is a commonly used treatment to improve the oxygen carrying capacity of blood during the peri-operative period. Increasing arterial oxygen content by increasing haemoglobin does not necessarily increase tissue oxygen delivery or uptake. Although the evidence-base for red cell transfusion practice is incomplete, randomised studies across a range of clinical settings, including surgery, consistently support the restrictive use of red cells, with no evidence of benefit for maintaining patients at higher haemoglobin thresholds (liberal strategy). A recent meta-analysis of 7593 patients concluded that a restrictive transfusion strategy was associated with a reduced risk of healthcare-associated infections (pneumonia, mediastinitis, wound infection, sepsis) when compared with a liberal transfusion strategy. The degree to which the optimal haemoglobin concentration or transfusion trigger should be modified for patients with additional specific risk factors (e.g. ischaemic heart disease), remains less clear and requires further research. Although most clinical practice guidelines recommend restrictive use of red cells, and many blood transfusion services have seen marked falls in overall usage of red cells, the use of other blood components such as fresh frozen plasma, platelets, and cryoprecipitate has risen. In clinical practice, administration of fresh frozen plasma is usually guided by laboratory tests of coagulation, mainly prothrombin time, international normalised ratio and activated partial thromboplastin time, but the predictive value of these tests to predict bleeding is poor.

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