

# HAEMOGLOBIN THRESHOLD TABLE

- ▶ Transfusion should be **dictated by clinical status**<sup>1</sup> and **NOT** by Hb alone.
- ▶ Transfusion may not be required in well-compensated patients or where other specific therapy<sup>2</sup> is available.
- ▶ **Single unit transfusion** followed by clinical reassessment to determine need for further transfusion is current best practice.
- ▶ Transfusion is not without risk; **patient blood management** principles should always be considered.

Hb g/L	70	80	90	100
<b>Postoperative with acute myocardial ischaemia (AMI) or cerebrovascular ischaemia (CVI)</b>	● Transfusion is appropriate.			● Transfusion is usually inappropriate.
<b>Postoperative without acute myocardial ischaemia (AMI) or cerebrovascular ischaemia (CVI)</b>	● Transfusion may be appropriate.	● Transfusion may be inappropriate.		● Transfusion is usually inappropriate.
<b>Acute coronary syndrome</b>	● Transfusion likely to be appropriate. <sup>3</sup>	● Transfusion may be associated with an increased risk of recurrence of AMI.		● Transfusion is usually inappropriate. <sup>4</sup>
<b>General medical and surgical unless otherwise specified (includes heart failure; cancer; chronic kidney disease; chemotherapy; haematopoietic stem cell transplant)</b>	● Transfusion likely to be appropriate. <sup>3</sup>	● Transfusion may not be required. <sup>5</sup>		● Transfusion is usually inappropriate.
<b>Acute upper GI bleed<sup>6</sup></b>	● Transfusion is appropriate.	● Transfusion likely to be unnecessary.	● Transfusion is usually inappropriate. <sup>7</sup>	
<b>Critically ill<sup>8</sup></b>	● Transfusion is likely to be appropriate.	● Transfusion may not be required. <sup>5</sup>		● Transfusion is usually inappropriate.
<b>Obstetrics</b>	● Transfusion may be appropriate. <sup>3</sup>	● Transfusion may not be required. <sup>5</sup>		● Transfusion is usually inappropriate.
<b>Paediatrics (excluding neonates)</b>	● Transfusion is often appropriate.	● Transfusion may not be required.		● Transfusion is often unnecessary and usually inappropriate.
<b>Thalassaemia</b>	● Patients transfused at regular e.g. monthly intervals to maintain pretransfusion Hb 90–100 g/L. Generally managed by a thalassaemia specialist, often as outpatient. May be prescribed a predetermined number of units.			● A pretransfusion Hb threshold > 100 g/L may be appropriate in some patients.
<b>Myelodysplasia</b>	● Decision around appropriate Hb thresholds and frequency of transfusion should be personalised and guided by patient's anaemia-related symptoms, functional or performance status, and response to previous transfusions.			

## Notes

This table may not be relevant to patients undergoing active resuscitation.

<sup>1</sup> Symptomatic anaemia e.g. reduced exercise tolerance, organ or tissue compromise.

<sup>2</sup> E.g. iron therapy.

<sup>3</sup> RBC transfusion may be associated with reduced mortality.

<sup>4</sup> RBC transfusion is associated with increased mortality.

<sup>5</sup> RBC transfusion is not associated with reduced mortality.

<sup>6</sup> Villanueva C, Colomo A, Bosch A, Concepción M, Hernandez-Gea V, Aracil C et al. Transfusion Strategies for Acute Upper Gastrointestinal Bleeding. NEJM 2013;368:11-21.

<sup>7</sup> A restrictive transfusion strategy (Hb < 70 g/L) results in improved morbidity and mortality compared to a liberal transfusion strategy (Hb < 90 g/L).

<sup>8</sup> Critically ill refers to patients who are physiologically unstable and at risk of significant morbidity and/or mortality. They require treatment in an intensive care unit.

## References

This work is based on/includes the National Blood Authority's Patient Blood Management Guidelines: Modules 2, 3, 4, 5 and 6 which are licensed under the Creative Commons Attribution-Non Commercial Share Alike 3.0 Australia licence.