



Do Not Transfuse More Than a Single Unit to Relieve Symptoms of Anemia or to Return a Patient to a Safe Hemoglobin Range

As a rule, 7 – 8 g/dl hemoglobin is now widely accepted as an appropriate transfusion threshold for stable hospitalized patients. There is no strong evidence to support higher transfusion thresholds in the case of acute coronary syndrome or other symptomatic cardiovascular diseases. Transfusion to a hemoglobin level above 10 dg/L is not felt to be of any clinical benefit and should be discouraged in any clinical setting. This practice has challenged and replaced the old dogma that has been in use for decades “10/30” to maintain hemoglobin level by transfusion above 10 g/dl and hematocrit above 30 percent. These efforts to change practice are dating back to as far as 1980s toward minimizing economic burden on health system and decrease blood-born pathogen transmission.

Subsequently, a large body of evidence has been generated with an emphasis on potential harms of transfusion other than pathogen transmission. This has been translated into continuous release of many red cell transfusion practice guidelines. These are advocating for conservative approach to maintain balance between the benefit of transfusion with the need to avoid potential harm. Many of the controlled trials that implemented conservative transfusion threshold has safely implemented single unit dosing. By this, another dogma that has been challenged which is the use of two tandem red cell units as the minimum starting dose for transfusion. Single-unit dosing has become the standard practice and has been incorporated into many practice guidelines.

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Single Unit Transfusion, National Blood Authority, Australia.