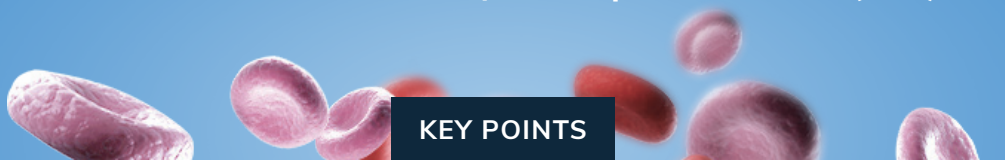
Challenge TDT

Transfusion Therapy

Chronic RBC Transfusions are Central to the Treatment of Transfusion-Dependent β-Thalassaemia (TDT)[1]



KEY POINTS

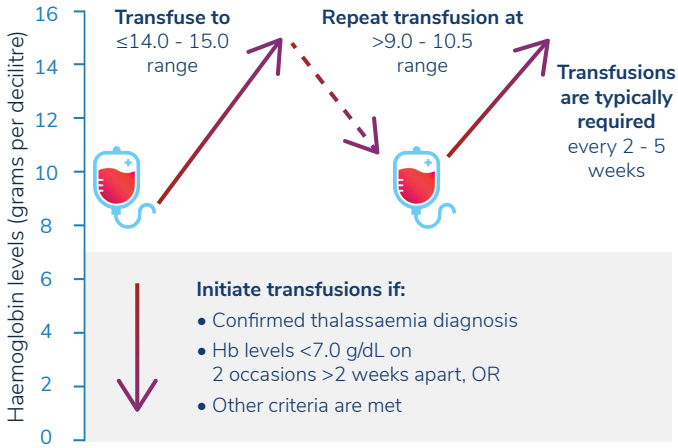
Thalassaemia International Federation (TIF) Guidelines recommend transfusions every two to five weeks to maintain a pre-transfusion haemoglobin level of 9-10.5 g/dL.[1]

Currently, chronic red blood cell (RBC) transfusions enable survival and are central to the treatment of TDT, but lead to iron overload and treatment-related complications.[1]

Patients receiving chronic RBC transfusions and chelation therapy continue to be at increased risk of early mortality compared with the general population.[2,3]

Allogeneic haematopoietic stem cell transplant (HSCT) is another treatment option, one that can potentially correct the genetic deficiency in TDT.[1,4,5]

TIF GUIDELINES FOR TRANSFUSION: Maintaining a Pre-transfusion Level of 9-10.5 g/dL[1]



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1. Guidelines for the Management of Transfusion Dependent Thalassaemia (TDT). 3rd ed. *Thalassaemia International Federation.* 2014. ISBN-13:978-9963-717-06-4. **2.** Ladis V, Chouliaras G, Berdoukas V, et al. Survival in a large cohort of Greek patients with transfusion-dependent beta thalassaemia and mortality ratios compared to the general population. *Eur J Haematol.* 2011;86(4):332-338. **3.** Aydinok Y, Porter JB, Piga A, et al. Prevalence and distribution of iron overload in patients with transfusion-dependent anemias differs across geographic regions: results from the CORDELIA study. *Eur J Haematol.* 2015;95(3):244-253. **4.** Lucarelli G, Isgro A, Sodani P, Gaziev J. Hematopoietic stem cell transplantation in thalassemia and sickle cell anemia. *Cold Spring Harb Perspect Med.* 2012. doi:10.1101/cshperspect.a011825. **5.** Angelucci E, Matthes-Martin S, Baronciani D, et al. Hematopoietic stem cell transplantation in thalassemia major and sickle cell disease: indications and management recommendations from an international expert panel. *Haemotologica.* 2014;99(5):811-820.

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