



ENDORSEMENT: ICTMG Guidance on RBC Specifications for Patients with Hemoglobinopathies

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Sickle cell disease and beta-thalassemia are inherited red blood cell (RBC) disorders, where patients often require both acute and chronic RBC transfusion therapy, to treat and prevent life-threatening complications. However, alloimmunization and associated hemolytic transfusion reactions are well-documented challenges in this multiply transfused patient population. Prophylactically choosing matched RBCs for transfusion prevents alloimmunization and fresher units have been suggested to provide benefit, but there is no international consensus given the conflicting balance of incremental patient benefit and RBC availability. Therefore, the International Collaboration for Transfusion Medicine Guidelines (ICTMG) set to provide guidance through a comprehensive literature review by a multidisciplinary international team of experts.

ICTMG requested that the NAC review the guidelines for endorsement, where four transfusion medicine experts from the NAC independently utilized the AGREEII (Appraisal of Guidelines for Research and Evaluation) tool to assess the methodological rigour and quality in which the guideline was developed. The guideline achieved scores deemed acceptable by NAC membership, which was at least 50% in all Domains and a minimum score of 70% in the Domain of Rigour of Development (Domain 3). This review occurred before the formation of the Endorsement Subcommittee, though the standard used in this review is in line with the process detailed in the *NAC Guideline Endorsement Framework*.

The NAC endorses the ICTMG guidance on RBC specifications for patients with hemoglobinopathies. Although many subspecialty hemoglobinopathy clinics in Canada already practice to this standard, the information provided in this guideline will be notably useful in disseminating best practice to centres that do not regularly care for these patients.

Guideline Citation: Compennolle et al. (2018). Red blood cell specifications for patients with hemoglobinopathies: a systematic review and guideline. *Transfusion* 2018:1555-66.

ICTMG Webpage Link: <https://www.ictmg.org/hemoglobinopathies-1>