



**NAC ENDORSEMENT WITH CAVEATS:**

**International guidelines regarding the role of IVIG in the management of Rh-  
and ABO-mediated haemolytic disease of the newborn**



## ENDORSEMENT SUBCOMMITTEE

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## **ENDORSEMENT WITH CAVEATS: INTERNATIONAL GUIDELINES REGARDING THE ROLE OF IVIG IN THE MANAGEMENT OF RH- AND ABO-MEDIATED HAEMOLYTIC DISEASE OF THE NEWBORN**

Haemolytic disease of the newborn (HDN) occurs when maternal antibodies reactive to paternal blood group antigens cross the placenta to cause hemolysis of fetal red blood cells. This causes jaundice and when severe, HDN is associated with significant morbidity. This includes neurocognitive deficits and mortality. First-line treatment is intensive phototherapy to treat hyperbilirubinemia from hemolysis. If hyperbilirubinemia is non-responsive to phototherapy, exchange transfusion is recommended. However, intravenous immunoglobulin (IVIG) is used to delay or avoid exchange transfusion in some guidelines. Thus, the International Collaborative for Transfusion Medicine Guidelines (ICTMG) sought to develop recommendations on when IVIG should be used, **where they determined that routine IVIG should not be used for the management of Rh- and ABO-mediated HDN.**

Three transfusion medicine experts from the National Advisory Committee on Blood and Blood Products (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, in accordance with the process detailed in the [NAC Guideline Endorsement Framework](#). The guideline achieved scores deemed acceptable by NAC membership. It achieved at least 50% in all Domains and a minimum score of 70% in the Domain of Rigour of Development (Domain 3), except for the Applicability Domain.

**NAC endorses the ICTMG HDN Guidelines for evidence-based practice with caveats.** The reviewers agreed with the recommendations, which are challenged by the lack of literature as well as the heterogeneous nature of the patients studied (such as including patients with low severity hyperbilirubinemia and patients who received intrauterine transfusion)<sup>1</sup>. The ICTMG HDN guidelines demonstrated deficiencies in the Applicability Domain on some aspects of applicability, including facilitators/barriers, resource implications, and auditing criteria. Though the ICTMG HDN guidelines were limited in this regard, the experts above unanimously recommended this guideline for endorsement independently given its methodological rigour, which was also affirmed with the NAC membership.

**Guideline Citation:** Lieberman L, Lopriore E, Baker JM, et al. International guidelines regarding the role of IVIG in the management of Rh- and ABO-mediated haemolytic disease of the newborn. *Br J Haematol.* 2022;198(1):183–195. doi: 10.1111/bjh.18170.

### **Reference:**

1. Hansen TWR, Akkøk CA, Watchko JF. International guidelines regarding the role of intravenous immunoglobulin in the management of RhD- and ABO-mediated haemolytic disease of the newborn-reconsidering the recommendations. *Br J Haematol.* 2022 Nov;199(3):452-453. doi: 10.1111/bjh.18421. Epub 2022 Aug 22. PMID: 35993219.

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