



Cord Blood Testing Algorithm

Definitions:

IgG DAT	Direct Antiglobulin Test which detects IgG antibody coating red cells
RhD IND	RhD Indeterminate

Scenario	Testing performed on Cord Blood
1. Maternal Factors	
Rh negative (or has a Rh variant that would have ability to form an alloimmune anti-D)	a) RhD typing (may or may not include ABO depending on method of testing used) b) IgG DAT- if the maternal RhD typing is Weak D/Rh IND
Current or historical positive Antibody Screen with an alloantibody capable of causing Hemolytic Disease of the Newborn (HDN).	a) ABO b) RhD typing c) IgG DAT
No transfusion related prenatal testing during this pregnancy and a sample cannot be collected for submission with the cord specimen.	a) RhD typing (may or may not include ABO depending on method of testing used) b) IgG DAT
2. Cord/Neonate Factors	
Stillbirth	a) ABO b) RhD typing c) IgG DAT
Specific clinical rationale for testing as part of the initial clinician's order submitted with the cord. <ul style="list-style-type: none"> Eg. evidence of fetal anemia or fetal hemolysis. Clinical indication must be provided with the order via the requisition or comments within the EMR order. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">  Testing will not be approved if sole indication is maternal blood group O status. </div>	a) ABO b) RhD typing c) IgG DAT
Cord is associated with a neonate who subsequently develops clinical or laboratory evidence of jaundice, anemia or hemolysis. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">  Clinical team must submit add-on request ** </div>	a) ABO b) RhD typing c) IgG DAT
If Cord DAT is positive in any of the above scenarios, no additional orders need to be submitted. The cord will be reflex tested for: <ul style="list-style-type: none"> a) Appropriate antigen phenotype (if not already performed) b) Eluate, if more than one potential antibody coating the red cells or maternal antibody was an inconclusive antibody. 	

****Note:** Cord blood samples are available for add-on testing for 7 days post-delivery. After 7 days, a venipuncture specimen is required.

Contact Information

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