



Alberta Laboratory Quality Enhancement Program

Transfusion Medicine Program Result Assessment & Performance Follow-up

Verification of Expected Results:

Levels A, B1, B2, C:

Results from six (two Alberta, two British Columbia, one Manitoba and one Saskatchewan) referee laboratories are assessed prior to evaluation of participant responses to ensure that sample quality has not deteriorated during shipping and test results are consistent with the expected results. The six Level A laboratories also act as a referee for the Level B1, B2 and C samples.

Confirmation of the test result is required by 80% (5 / 6) of referees OR 95% of participants to grade testing of analytes. The ALQEP Transfusion Medicine Committee will review minor errors to determine if they should be considered in the determination of consensus. Participant errors that do not reflect discrepancies in the actual test are not included in consensus determination (e.g., interpretation errors, clerical / transcription errors, incorrect processes). Assessment of non-testing analytes (e.g., pre-analytic and post-analytic processes) will not require consensus if based on a requirement of standards.

Level D

An expert working group collaborates to produce the survey challenge and expected responses.

Performance Assessment:

Levels A, B1, B2, C:

Participant responses are evaluated on the basis of:

- test results
- interpretation of results
- use of appropriate procedures
- clerical accuracy

The following analytes are assessed:

- pre-analytic analysis
- ABO typing
- Rh(D) typing
- phenotyping, if applicable
- antibody screen
- antibody identification, if applicable
- compatibility testing
- donor unit suitability

Analytes assessed may vary depending on type of challenge (e.g., Direct Antiglobulin Test Challenge)

A significant error is assigned where test performance or interpretation would result in an adverse patient outcome. Minor errors indicate a decreased level of performance within the laboratory without a specific negative consequence for the patient. Errors are further categorized as testing, interpretation, procedural

Assessment Grades

Acceptable Results	
Grade	Description
A	Acceptable result
A-R	Acceptable result, with recommendation (refer to comment included on report)

Unacceptable Results	
Grade	Description
U-S	Significant (major) error
U-M	Minor error

Error Categories	
Grade	Description
1	Testing error
2	Interpretation error
3	Procedural error
4	Clerical error
5	Other error

Other Grades	
NT	Not tested
NG	Not graded
NA	Not applicable
NR	No response submitted

Laboratories are notified of both significant and minor errors. In the case of a significant error, the ALQEP program requires Alberta laboratories to submit a reply outlining corrective action within two weeks.

Level D:

The Level D program has been developed with an educational focus and while results are assessed upon submission, a performance grade is not assigned.

Participant responses are evaluated on the basis of:

- acceptable evaluation and follow-up of situations presented
- use of appropriate process and procedures
- appropriate documentation
- clerical accuracy

If a facility response indicates practice that may impact patient or staff safety, or if a series of responses indicates a trend of suboptimal performance, notification is sent to the laboratory medical director (Alberta participants) or the provincial accrediting organization (out-of-province participants). The ALQEP program requires Alberta laboratories to submit a reply outlining corrective action within two weeks.