UK NEQAS

Leucocyte Immunophenotyping

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Performance Scoring for the Redesigned Leukaemia Immunophenotyping Programme

Outline

The Leukaemia Immunophenotyping Programme is designed to assess a laboratory's ability to immunophenotype a leukaemia sample using flow cytometry and immunocytochemistry (where applicable) and to compare this to the consensus overall immunophenotype for the malignant population. Stabilised blood obtained from consenting patients will be issued; this material can be readily analysed using whole blood lysis techniques.

Sample Frequency

One sample is issued at each trial (send out) bimonthly (minimum 4 times and maximum 6 times per annum).

Scoring System Description

The scoring system is based upon the comparison of the overall immunophenotype of the malignant population of a participant to the consensus immunophenotype derived from all participants returns.

Scoring System Operation

Participants will receive 2 performance classifications which will be used to derive the Overall Performance Classification used for performance monitoring.

The first is the Panel Design Performance Classification which is based on a participant's panel design and the number of antigens tested by the participant matching the 10 most commonly tested antigens. 50% and above is considered satisfactory.

Number of antigens in top ten	Panel Design Performance Grade	Panel Design Performance Classification
10	A	Satisfactory
9		
8	B	
7		
6	C	
5		
4	D	Critical
3		
2	E	
1		
0	F	

The second is the Antigen Testing Performance Classification which is based on a participant's panel design and the number of antigens tested that are in/out of consensus with the 10 most commonly tested antigens.

Number of antigens in top ten	Antigen Results Within Consensus	Antigen Testing Performance Classification
10	≥7	Satisfactory
9	≥6	
8	≥6	
7	≥5	
6	≤4	Critical
5	≤3	
4	N/A	Critical
3		
2		
1		
0		

Both performance classifications will be used to derive the Overall Performance Classification which will be used for performance monitoring.

Where the number of antigens matching the top 10 is <50%, a participant's Overall Performance Classification will be automatically classed as Critical.

Panel Design Performance Classification	Antigen Testing Performance Classification	Overall Performance Classification
Satisfactory	Satisfactory	**Satisfactory**
Critical	Critical	**Critical**
Satisfactory	Critical	**Critical**

Any laboratory who fails to return a result by the closing date will be regarded as critical for that exercise.

Unsatisfactory performance in this programme is defined as any occurrence of critical performance and this will initially be communicated to participants on their trial report. This will be followed up with a letter on each occurrence of unsatisfactory performance highlighting that performance on the last sample was out of consensus and offering support and guidance to assist in returning to satisfactory performance. This may take the form of repeat/additional samples, communications by email, telephone conversations or face to face communications.

If a participant's status is elevated to persistent unsatisfactory performance (defined as a critical classification on 2 or more occasions within a 12-month period) then a further letter will be issued, and the Haematology National Quality Assurance Advisory Panel informed (for UK participants only). As with all scoring systems it is important that to note that the limits will be constantly reviewed to determine whether they are providing the information required. The management of the programme retain the right to determine if an individual trial should not be scored.