Minimal Residual Disease - ALL Programme

All Participant Report

Distribution - 161704
Date Issued - 24 January 2017
Closing Date - 13 February 2017
Machine Used - Facs Canto II

Participant ID - 4XXXX

Trial Comments
This trial was issued to 110 participants
Please note that from this trial onwards, the z score limits have been altered to 2.5 and 3.5.

Sample Comments
The sample was manufactured by UK NEQAS using a B-ALL patient sample and a stabilised whole blood unit.

Results and Performance

<table>
<thead>
<tr>
<th>Percentage MRD Population (%)</th>
<th>Your Results (%)</th>
<th>Robust Mean (%)</th>
<th>Robust SD (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.4015</td>
<td>0.1646</td>
<td>0.0245</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage MRD Population</th>
<th>z Score*</th>
<th>Performance Status for this Sample</th>
<th>Performance Status Classification Over 12 Sample Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9.67</td>
<td>Critical</td>
<td>8</td>
</tr>
</tbody>
</table>

*z Score Limits Definitions
Please note the scale below is applicable to the tables above and to the z score histograms and Shewhart control charts that follow. It is not applicable to the Cusum control charts.

Histograms of Participant z Scores

Please note ▼ denotes your result.
Shewhart Control Charts
(Please note each data point represents a single sample)
Values (Percentage MRD Population)

Cusum Control Charts
(Please note each data point represents the sum of the z scores of the current sample and the two previous samples)
Values (Percentage MRD Population)
### Flow Cytometer Specific Statistics

(Please note only groups of >10 returns are displayed)

<table>
<thead>
<tr>
<th>Method</th>
<th>Returns</th>
<th>Robust Mean</th>
<th>Robust SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facs Canto II</td>
<td>64</td>
<td>0.1594</td>
<td>0.0232</td>
</tr>
<tr>
<td>Navios</td>
<td>22</td>
<td>0.1705</td>
<td>0.0187</td>
</tr>
</tbody>
</table>

### MRD Group Specific Statistics

(Please note only groups of >10 returns are displayed)

<table>
<thead>
<tr>
<th>Method</th>
<th>Returns</th>
<th>Robust Mean</th>
<th>Robust SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBFM</td>
<td>28</td>
<td>0.1691</td>
<td>0.0158</td>
</tr>
<tr>
<td>Non-Affiliated</td>
<td>47</td>
<td>0.1629</td>
<td>0.0221</td>
</tr>
</tbody>
</table>
Minimal Residual Disease - ALL Programme

Sample - 079

Distribution - 161704
Date Issued - 24 January 2017
Closing Date - 13 February 2017
Machine Used - Facs Canto II

Trial Comments
This trial was issued to 110 participants
Please note that from this trial onwards, the z score limits have been altered to 2.5 and 3.5.

Sample Comments
The sample was manufactured by UK NEQAS using a B-ALL patient sample and a stabilised whole blood unit

Results and Performance

<table>
<thead>
<tr>
<th>Percentage MRD Population</th>
<th>Your Results (%)</th>
<th>Robust Mean (%)</th>
<th>Robust SD (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.1376</td>
<td>0.0509</td>
<td>0.0091</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Percentage MRD Population</th>
<th>z Score*</th>
<th>Performance Status for this Sample</th>
<th>Performance Status Classification Over 12 Sample Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9.53</td>
<td>Critical</td>
<td>Satisfactory</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>7</td>
</tr>
</tbody>
</table>

*z Score Limits Definitions
Please note the scale below is applicable to the tables above and to the z score histograms and Shewhart control charts that follow. It is not applicable to the Cusum control charts.

Histograms of Participant z Scores

Percentage MRD Population -
Please note ▼ denotes your result.
Minimal Residual Disease - ALL Programme

**Shewhart Control Charts**
(Please note each data point represents a single sample)
Values (Percentage MRD Population)

![Shewhart Control Chart](image)

**Cusum Control Charts**
(Please note each data point represents the sum of the z scores of the current sample and the two previous samples)
Values (Percentage MRD Population)

![Cusum Control Chart](image)
### Minimal Residual Disease - ALL Programme

**Flow Cytometer Specific Statistics**
(Please note only groups of >10 returns are displayed)

<table>
<thead>
<tr>
<th>Method</th>
<th>Returns</th>
<th>Robust Mean</th>
<th>Robust SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facs Canto II</td>
<td>64</td>
<td>0.0502</td>
<td>0.0093</td>
</tr>
<tr>
<td>Navios</td>
<td>22</td>
<td>0.0501</td>
<td>0.0069</td>
</tr>
</tbody>
</table>

### MRD Group Specific Statistics
(Please note only groups of >10 returns are displayed)

<table>
<thead>
<tr>
<th>Method</th>
<th>Returns</th>
<th>Robust Mean</th>
<th>Robust SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>IBFM</td>
<td>28</td>
<td>0.0528</td>
<td>0.0068</td>
</tr>
<tr>
<td>Non-Affiliated</td>
<td>47</td>
<td>0.0495</td>
<td>0.0093</td>
</tr>
</tbody>
</table>
4.8.2 a) The proficiency testing provider for this programme is:
UK NEQAS for Leucocyte Immunophenotyping
Pegasus House, 4th Floor Suite
463A Glossop Road
Sheffield, S10 2QD
United Kingdom
Tel: +44 (0) 114 267 3600, Fax: +44 (0) 114 267 3601
e-mail: nicola.rose@ukneqasli.co.uk

4.8.2 b) The coordinators of UK NEQAS LI programmes are Prof David Barnett and Mr Liam Whitby.

4.8.2 c) Person(s) authorizing this report:
Prof David Barnett, Director or Mr Liam Whitby, Operations Manager of UK NEQAS LI

4.8.2 d) No activities in relation to this EQA exercise were subcontracted.

4.8.2 g) The UK NEQAS LI Confidentiality Policy can be found in the Quality Manual which is available
by contacting the UK NEQAS LI office. Participant details, their results and their performance data
remain confidential unless revealed to the relevant NQAAP when a UK participant is identified as
having performance issues.

4.8.2 i) All EQA samples are prepared in accordance with strict Standard Operational Procedures by
trained personnel proven to ensure homogeneity and stability. Where appropriate/possible EQA
samples are tested prior to issue. Where the sample(s) issued is stabilised blood or platelets, pre and
post stability testing will have proved sample suitability prior to issue.

4.8.2 l), n), o), r) & s) Please refer to the UK NEQAS LI website at www.ukneqasli.co.uk for detailed
information on each programme including the scoring systems applied to assess performance (for BS
EN ISO/IEC 17043:2010 accredited programmes only). Where a scoring system refers to the
‘consensus result’ this means the result reported by the majority of participants for that trial issue.
Advice on the interpretation of statistical analyses and the criteria on which performance is measured is
also given. Please note that where different methods/procedures are used by different groups of
participants these may be displayed within your report, but the same scoring system is applied to all
participants irrespective of method/procedure used.

4.8.2 m) We do not assign values against reference materials or calibrants.

4.8.2 q) Details of the programme designs as authorized by The Steering Committee and Specialist
Advisory Group can be found on our website at www.ukneqasli.co.uk. The proposed trial issue
schedule for each programme is also available.

4.8.2 t) If you would like to discuss the outcomes of this trial issue, please contact UK NEQAS LI using
the contact details provided. Alternatively, if you are unhappy with your performance classification for
this trial, please find the appeals procedure at www.ukneqasli.co.uk/contact-us/appeals-and-
complaints/