

## Measurable Residual Disease for ALL by Flow Cytometry (MRD-ALL) Data Entry Redesign Guide

Participants can access an exercise by logging into their account on the participant hub and selecting the Measurable Residual Disease for ALL by Flow Cytometry programme. Participants can then select the current live exercise where they will see that some of the data entry fields have changed slightly.

This section remains the same as before.

### Flow Cytometer

Flow Cytometer:	BD-FACSCanto II
Flow MRD Group Affiliation:	Non-Affiliated
Panel set up (x-colour):	4
No. of tubes processed:	3
Nuclear dye correction used (syto):	Yes

The results section now has two additional fields where participants are required to enter the Total Number of denominator events and a field where an interpretation of the results is required. The dropdown presents the option of MRD Absent, MRD Present and MRD Detected Below Quantifiable Limits.

### Result

Total Events Acquired:	167515
Total Denominator Events:	164515
Total Number of MRD Events:	58
Percentage MRD (among denominator events):	0.035
Interpretation:	MRD Present
Total no of syto events:	155515

A new methodology section has been introduced for participants to enter more information in relation to their assay technique. In this section you can enter information relating to lysing method, whether doublets are excluded from the analysis, the denominator used, the number of events used in your assay to define an MRD population and the stated Limit of Detection (LOD) of your assay.

### Methodology

Lysing Method:	Lyse Stain Wash
Doublet Exclusion:	No
Denominator:	All BM Nucleated Cells
Number of MRD Events to Define a Population:	20
Stated Limit of Detection (LOD) of Assay (%):	0.01

There have been changes to the antigen section. Where we previously asked for antibody used, antibody manufacturer and fluorochrome, we now also require input of antibody clone, staining intensity and interpretation of the staining observed.

Antibody Used	Antibody Manufacturer	Fluorochrome	Clone	Intensity	Result
CD10	Dako	FITC	123abc	Strong	Positive
CD15	BD Biosciences	PerCP	AD-1	Absent	Negative
CD19	Beckman Coulter	PerCP-CY5	104D2	Strong	Positive
CD34	Seralab	APC	*23d-1	Strong	Positive
CD45	In House	Chrome Orange	2D1	Weak	Positive
-- Select an Antigen --	-- Select a Manufactu	-- Select a Fluorochrc		-- Select an Intensity	-- Select --

Column 1 is **Antibody Used** – use the drop down to select this and if your antigen is not visible, please contact UK NEQAS LI to make the necessary amendments.

Column 2 is **Antibody Manufacturer** – select the manufacturer from the dropdown list.

Column 3 is **Fluorochrome** – use the dropdown to select the fluorochrome used for the antibody.

Column 4 is **Clone**- Please enter the clone for the antibody used. This information is useful during data analysis, especially where there are discrepancies in the same antibody from different manufacturers. This is currently a free text box but for future exercises it is hoped that there will be a drop-down list as we build a collection of clones on our database.

Column 5 is **Intensity**- use the dropdown to select from a list of Absent, Weak and Strong.

Column 6 is **Result**- Use the dropdown to select whether your results are positive or negative for the selected antigen.

Once a panel has been saved down you will be able to select the same panel again for future exercises removing the need to enter all the information again. Simply select the panel from the previous exercise from the dropdown and hit 'Copy'. The panel may then be amended as required and saved.

Copy Antigens from previous panel: