

CELL COUNT DIFFERENTIALS BY CYTOMORPHOLOGY AND NEXT-GENERATION FLOW CYTOMETRY IN BONE MARROW ASPIRATE: AN EVIDENCE-BASED APPROACH

SUPPLEMENTARY MATERIAL

Table S1. Monoclonal antibodies reagents used for the immunophenotypic characterization.

| Mab | Conjugates |
|------------|-------------------|
| CD2 | FITC |
| HLA-DR | FITC |
| CD11b | FITC |
| CD14 | PE |
| CD34 | PE |
| CD13PE | PE |
| CD4 | PerCP-Cy5.5 |
| CD10 | PerCP-Cy5.5 |
| HLA-DR | PerCP-Cy5.5 |
| CD7 | APC |
| CD33 | APC |
| CD34 | APC |
| CD56 | PE-CY7 |
| CD19 | PE-CY7 |
| CD117 | PE-CY7 |
| CD8 | APC-H7 |
| CD38 | APC-H7 |
| CD71 | APC-H7 |
| CD3 | V450 |
| CD20 | V450 |

| | |
|------|------|
| CD15 | V450 |
| CD45 | V500 |

Abbreviations: AF: alexa fluor; APC: allophycocyanin; BB: brilliant blue 515; BV: brilliant violet, FITC: fluorescein isothiocyanate; Mab: monoclonal antibodies; PE: phycoerythrin; PerCP-Cy5.5: peridinin chlorophyll protein-cyanine 5.5.

Table S2. Final diagnosis in the complete set and the control group, %.

| DISEASE | COMPLETE SET n=660 | CONTROL GROUP n=122 |
|---------|-----------------------|------------------------|
| AML | 17.6 | 25.4 |
| MM | 15.6 | 24.6* |
| MDS | 15.5 | 4.1 |
| LYM | 14.2 | 16.4 |
| MGUS | 10.5 | * |
| ALL | 7.6 | 5.7 |
| CMPD | 4.5 | 7.4 |
| OTHER | 14.5 | 16.4 |

Abbreviations: ALL: acute myeloid leukemia; AML: acute myeloid leukemia; CMPD: chronic myeloproliferative disease; LYM: lymphomas; MGUS: monoclonal gammopathy of uncertain significance; MM: multiple myeloma. *this percentage is presented together with MM in the control group.

Table S3. Comparison by Regression Linear analysis between BMCS 200-cell and 500-cell DCC versus IP FDC results for the complete set according to cell type*

| CELL TYPE | n | R ² | Slope | Intercept |
|------------------|-----|----------------|-------|-----------|
| Blast 200 | 424 | 0.863 | 0,939 | -,051 |
| Blast 500 | 424 | 0.897 | 0,960 | -,033 |
| Promyelocyte 200 | 102 | 0.955 | 1,007 | -,763 |
| Promyelocyte 500 | 102 | 0.966 | 1,006 | -,675 |
| Erythroblast 200 | 189 | 0.453 | 1,221 | 12,401 |
| Erythroblast 500 | 189 | 0.465 | 1,201 | 13,774 |
| Lymphocyte 200 | 235 | 0.590 | 0,628 | ,895 |
| Lymphocyte 500 | 235 | 0.650 | 0,726 | -,093 |
| Plasma cell 200 | 343 | 0.921 | 1,436 | -,026 |
| Plasma cell 500 | 343 | 0.917 | 1,427 | -,002 |
| Monocyte 200 | 390 | 0.662 | 1,081 | -,063 |
| Monocyte 500 | 390 | 0.683 | 1,115 | -,471 |

*All associates p values are significant at <.000

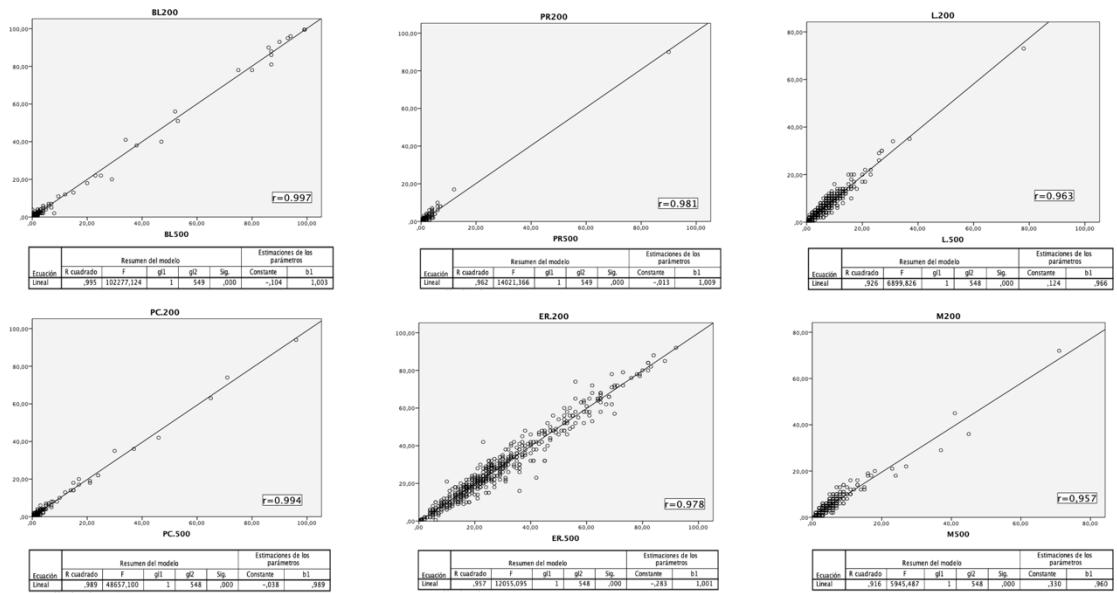


Figure S1. Linear Regression analysis for the complete set, 200-cell vs 500-cell DCC

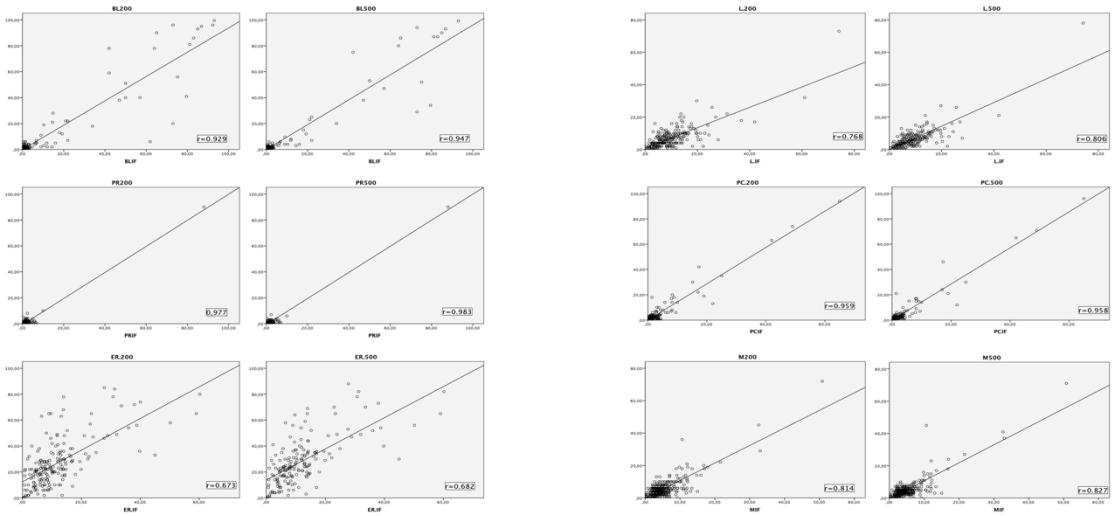


Figure S2. Linear Regression analysis for the complete set comparison between 200-cell and 500-cell DCC and immunophenotype