Supplementary

Appendix 1

The specific operating procedures of blood specimens containing a series of concentration gradients of blast cells

(I) Whole blood samples containing a high concentration of blasts were centrifuged to obtain white blood cells as the 100% concentration point.
(II) Mix it with the DS diluent to obtain a 50% concentration point, and follow the above steps to prepare the white blood cell suspension with 10 concentration gradients;
(III) Ten leukocyte suspensions (50 μL) with different concentration gradients was added to 10 healthy controls (950 μL) of the same blood grouping to obtain 10 specimens with different blast cell concentration gradients (test pool #1–10, 1 mL/specimen);
(IV) Ten test pools were tested twice in the full channel mode of the Mindray BC-7500CRP and Sysmex XN-1000;
(V) The "Blast" flags (including Blast? and Abn Lympho/Blast?) of the 2 instruments were compared and recorded. Mindray SC-120 micro mode was used to prepare a blood smear (Wright-Giemsa staining) with 100% concentration point specimens. Two senior experimenters reviewed the blood smears above and calculated the absolute value of blast cells in a series of concentrations of the specimens (halved in succession) according to the microscopic examination results of the Blast% and leukocyte counts of the test pool #1 specimens;
(VI) Another 15 specimens with high concentrations of blast cells were selected to repeat steps (I–VI) to obtain a total of 16 groups of experimental data;
(VII) The minimum blast cell percentage (Blast%) and the minimum blast cell count (Blast#) corresponding to the "blast" flags of the 2 instruments were counted.

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