## **BC-6800**

### **Auto Hematology Analyzer**

### **Technical Specifications:**

#### Principles

SF Cube cell analysis technology for WBC, 5-Part dif, NRBC, RET and PLT-O Focusing Flow-DC method for RBC and PLT Cyanide free hemoglobin measurement

#### Parameters

37 reportable parameters (whole blood): WBC, Lym%, Mon%, Neu%, Bas%, Eos%, IMG%, Lym#, Mon#, Neu#, Eos#, Bas#, IMG#; RBC, HGB, HCT, MCV, MCH, MCHC, RDW-CV, RDW-SD, RET%, RET#, IRF, LFR, MFR, HFR, RHE, NRBC#, NRBC%; PLT(Impedance and Fluorescent Optical), MPV, PDW, PCT, P-LCR, P-LCC, IPF

7 reportable parameters (body fuid): WBC-BF, TC-BF#, MN#, MN%, PMN#, PMN%, RBC-BF

#### 2 histograms for RBC and PLT

3 scattergrams (3D) for DIFF, NRBC and RET

6 scattergrams (2D) for DIFF, BASO, NRBC, RET, RET-EXT, PLT-O

#### Performance

Parameter	Linearity Range	Precision	Carryover
WBC	0-500×109/L	≤2.5% (≥4×109/L)	≤1.0
RBC	0-8×1012/L	≤1.5% (≥3.5×1012/L)	≤1.0
HGB	0-250g/L	≤1.0% (110-180g/L)	≤1.0
HCT	0-75%	≤1.5% (30%-50%)	≤1.0
PLT	0-5000×109/L	≤4.0% (≥100×109/L)	≤1.0
RET#	0-0.8×1012/L	≤15% (RBC≥3×1012/L;	/
		1%≤RET%≤4%)	

#### Sample Volume

 $\begin{array}{ll} \mbox{Predilute mode (capillary blood), Open vial} & 40 \mu \mbox{L} \\ \mbox{Manual mode (whole blood), Open vial} & 150 \mu \mbox{L} \\ \mbox{Autoloader mode (whole blood), Closed vial} & 200 \mu \mbox{L} \\ \mbox{Manual mode (body fuid), Open vial} & 150 \mu \mbox{L} \\ \end{array}$ 

#### Throughpu<sup>1</sup>

Up to 125 samples per hour (CBC+DIFF)
Up to 90 samples per hour (CBC+DIFF+RET)
Up to 40 samples per hour (body fuid)

#### Loading capacity

Up to 100 sample tubes

#### Mode

CBC, CBC+DIFF, CBC+RET, CBC+NRBC, CBC+DIFF+RET, CBC+DIFF+NRBC, CBC+DIFF+RET+NRBC, RET

#### Data storage capacity

Up to 100,000 patient results including all numeric and graphical information

#### Printout

Various printout formats and user-defined formats available

#### Operating environment

Temperature: 15°C~32°C Humidity: 30%~85%



Weight (kg)≤125



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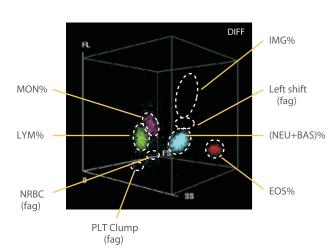
**BC-6800**Auto Hematology Analyzer

Small Cube, Big Diference



# Small Cube, Big Difference

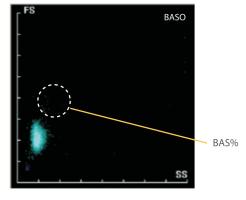




DIFF scattergram of BC-6800 diferentiates WBCs into 4 parts and also provides valuable parameters like HFC, IMG InR and Abnormal Flags such as Left shift, NRBC, PLT Clump, Atypical Lymphocyte.

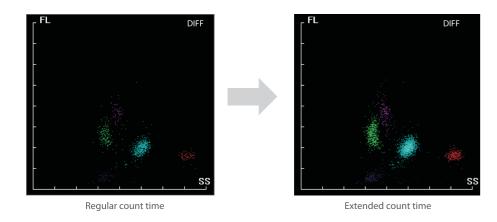
IMG(#, %) provide information about the presence of immature granulocytes, if any, including promyelocytes, myelocytes, metamyelocytes, immature eosinophils and immature basophils. BC-6800 extends WBC dif to 6-part, on every sample, by including immature granulocyte.

HFC(#, %) parameters alert the user of the presence of high fuorescent cell population, if any, such as blasts and atypical lymphocytes.



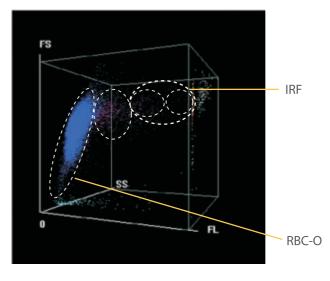
Basophils are counted in a dedicated channel that detects information about cell volume and cellular complexity. This provides more accurate and reliable basophil results.

### **Extended count time**

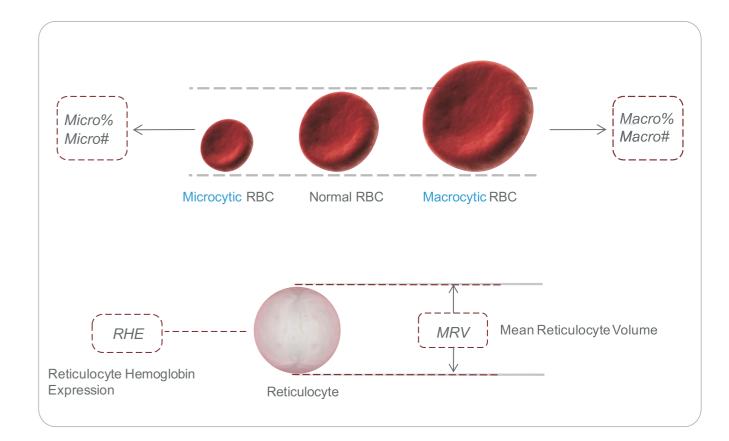


For leucopenic samples (WBC<1.5  $\times$  10<sup>9</sup>/L) or capillary blood samples, BC-6800 is designed to automatically extend count time to 3 folds. This increases the number of cells counted and signif-cantly improves the accuracy and reliability of WBC counts and WBC 5-part differential results.

# **Reticulocyte detection**



RBC analysis with SF Cube technology helps diferentiation of Reticulocytes from mature red cells by their reaction with fuorescent stain. Besides the conventional parameters such as RET# and RET%, BC-6800 also provides additional data concerning immature reticulocytes (IRF), which assists in early diagnosis of anemia and monitoring the bone marrow response to hematinic therapy.



Micro (#, %) parameters point to number & % of microcytic (small) RBCs while Macro (#, %) parameters refect the number & % of macrocytic (large) RBCs. MRV parameter represents the mean volume of reticulocyte while RHE parameter indicates the hemoglobin content for reticulocytes.

These parameters provide clues and more clinical information on anemia type, especially while differentiating iron defciency from other causes of anemia.