# mindray

#### **Principles**

SF Cube\* method to count WBC, 6-part diff, NRBC, RET and PLT-O DC impedance method for RBC and PLT Cyanide free reagent for hemoglobin test \*S: Scatter; F: Fluorescence; Cube: 3D analysis

#### **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, NRBC#, NRBC%; PLT, MPV, PDW, PCT, P-LCR, P-LCC, RET%, RET#, RHE, IRF, LFR, MFR, HFR, IPF

29 Research parameters (whole blood): HFC#, HFC%, RBC-O, PLT-O, PLT-I, WBC-O, WBC-D, TNC-D, IME%, IME#, H-NR%, L-NR%, NLR, PLR, WBC-N, TNC-N, InR#, InR%, Micro#, Micro%, Macro#, Macro%, RPI, H-IPF, IPF#, MRV, FRC#, FRC%, PDW-SD

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

11 Research parameters (body fluid): Eos-BF#, Eos-BF%, Neu-BF#, Neu-BF%, HF-BF#, HF-BF%, RBC-BF, LY-BF#, LY-BF%, MO-BF#, MO-BF%

2 Histograms for RBC and PLT

3 Three-dimension scatter grams: DIFF, WNB, RET

5 Two-dimension scatter grams: DIFF, WNB, RET, RET-EXT, PLT-O

#### Mode

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

#### **Data storage capacity**

Up to 10,0000 results including numeric and graphical information  $\,$ 

#### **Operating environment**

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

#### Performance

Parameter	<b>Linearity Range</b>	Precision	Carryove
WBC	0-500×10 <sup>9</sup> /L	≤2.5% (≥4×10 <sup>9</sup> /L)	≤1.0%
RBC	0-8.60×10 <sup>12</sup> /L	≤1.5% (≥3.5×10 <sup>12</sup> /L)	≤1.0%
HGB	0-260g/L	≤1.0% (110-180g/L)	≤1.0%
HCT	0-75%	≤1.5% (30%-50%)	≤1.0%
PLT	0-5000×109/L	≤4.0% (≥100×10 <sup>9</sup> /L)	≤1.0%
RET#	0-0.8×10 <sup>12</sup> /L	≤15% (RBC≥3×10 <sup>12</sup> /L;	/
		1%≤RET%≤4%)	

#### Sample volume

Whole blood (Autoloader, Closed Tube)	
Capillary blood (Closed Tube)	35uL
Predilute (Closed Tube)	20uL
Body fluid (Closed Tube)	85uL

#### Throughput

Up to 110 samples per hour (CBC+DIFF) Up to 65 samples per hour (RET) Up to 40 samples per hour (Body fluid)

#### Loading capacity

Up to 50 sample tubes



# mindray healthcare within reach

## **BC-6200**

Auto Hematology Analyzer

# High Performance for ALL



#### www.mindray.com

Value

Operation

Cost

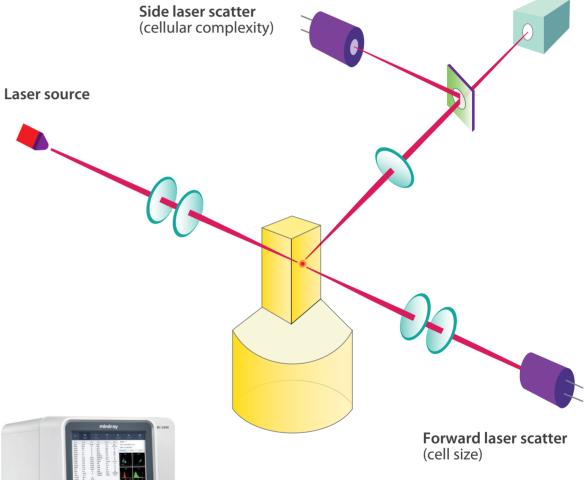
At Mindray, we seek to understand the needs of every customer, and deliver tailor-made solutions. Before designing any product, we listen to the Voice Of Customers and bear in mind the challenges they face. In today's laboratories, lab managers are looking for an analyzer with greater clinical values, such as higher flagging efficiency to reduce the ratio of microscopic examination, NRBC/RET/body fluid results generated in a small-footprint system, among others, all within limited budget.







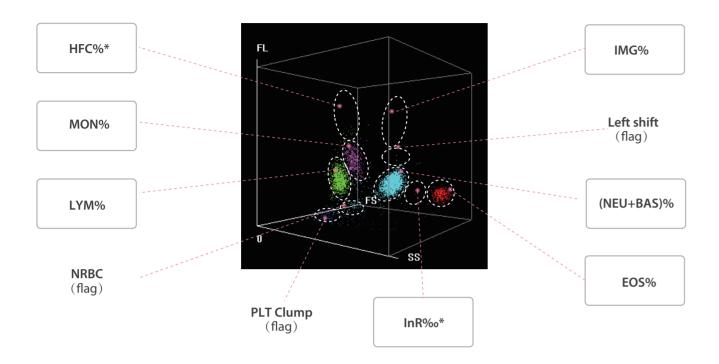






With the newly designed optics and reagent systems, the SF Cube technology can help doctors to better differentiate the clusters of cells, which is the key to revealing more abnormal cells.

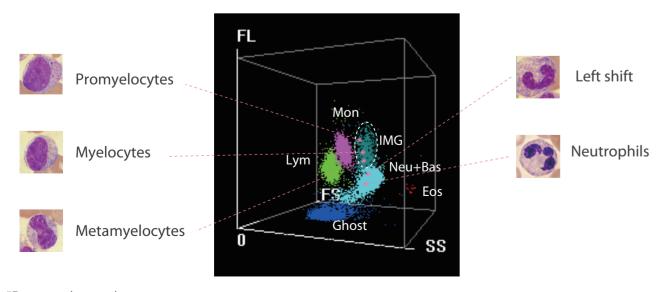
## **DIFF Channel**



In DIFF scattergram, BC-6200 not only gives WBC 6-part differential results (with immature granulocyte), but also brings research parameters such as HFC (Blast & Atypical Lymphocyte), InR (information about malaria) and flags for Band, NRBC, PLT clump and Atypical Lymphocyte.

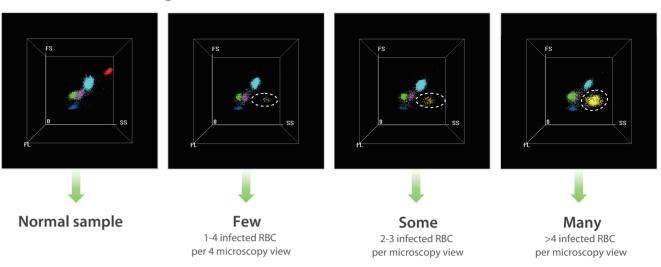
HFC\*(#, %) parameters represent high population of fluorescent cell, such as Blasts and Atypical Lymphocytes.

IMG(#, %) parameters provide information about immature granulocytes, including Promyelocytes, Myelocytes, Metamyelocytes, Immature Eosinophils and Immature Basophils.



<sup>\*</sup>For research use only

## Malaria screening

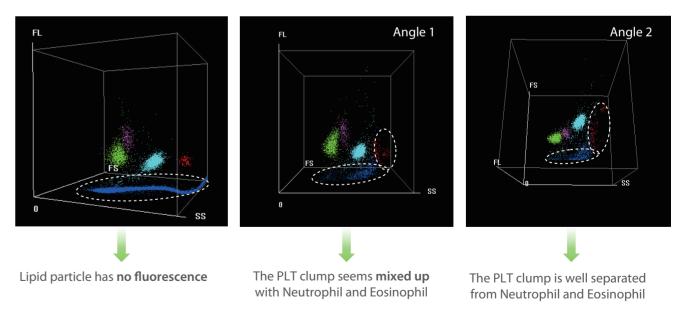


Note: The yellow scatters are just for highlight.

BC-6200 provides a dedicated flag called "infected RBC?", and "InR\*(#,%)" parameters to represent the number and ratio of the infected red blood cells in the sample respectively. BC-6200 users can obtain information about the possible presence of plasmodium parasite, the causative agent of malaria infection.

With the rising number of red blood cells with malaria parasites, the number of dots in the "InR" area increases proportionately. This creates the possibility to not only screen but also judge the severity of malaria infection.

## Interference prevention

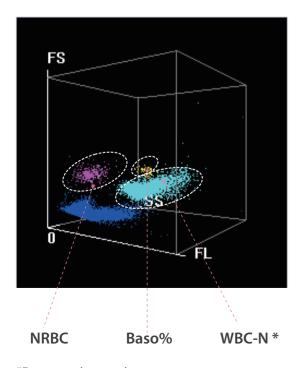


In DIFF scattergram, WBCs are dyed, but not lipid particles, by fluorescence, which prevents interference and ensures more accurate WBC results.

With information obtained through the 3D analysis, PLT clumps are well separated from each cluster of WBCs.



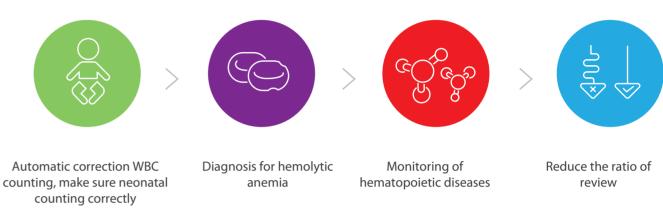
## **WNB Channel**



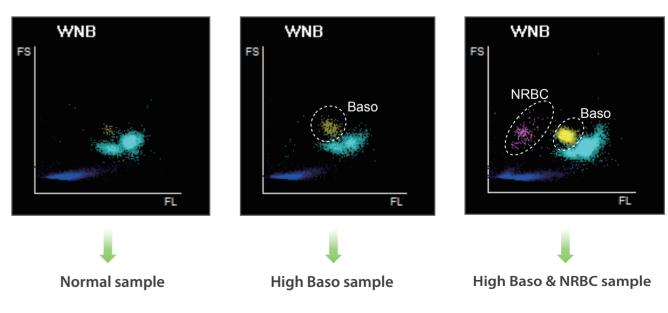
In WNB scattergram, BC-6200 provides NRBC, Basophils and WBC-N\* results. It means that the actual number of NRBCs can be measured in routine CBC, if they are present in the sample. Basophils are counted in this counting channel with NRBC results.

Basophil and NRBC results are generated on BC-6200 without extra reagent or cost.

# NRBC results in every CBC



NRBCs do not usually exist in the peripheral blood except that of newborn children. Detection of NRBCs is essential in diagnosing and monitoring the hematopoietic diseases.

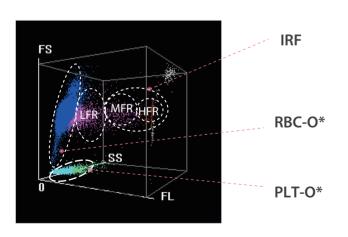


BC-6200 provides accurate results on samples even with high level of Basophils and NRBCs.

\*For research use only



## **RET Channel**

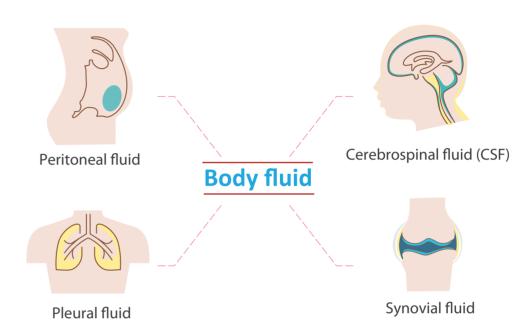


With the SF Cube cell analysis technology, Reticulocytes are differentiated from the other red cells by their reaction with fluorescent stain. Besides the traditional parameters such as RET# and RET%, BC-6200 provides data concerning immature reticulocytes (IRF), which can assist in early diagnosis of anemia and monitoring the bone marrow response to therapy.

\*For research use only

# Body fluid

Besides blood specimen, BC-6200 also has body fluid test function without requiring dedicated reagent. The various types of body fluids include Peritoneal fluid, Pleural fluid, Cerebrospinal fluid (CSF) and Synovial fluid.





## **Applicable to variety of tubes**

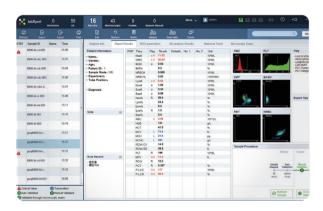
To cater to customer's diversified needs, different types of blood collection tubes can be used on BC-6200, including regular whole blood vacuum tube, capillary blood microtainer tube and Sarstedt tube.



## More Intuitive labXpert software

LabXpert is a standard configuration of BC-6200 for professional data analysis.

The labXpert software optimizes functions to simplify re-exam efficiency, auto-validation for normal samples; review and validate pathological samples.





Capillary blood

microtainer tube

labXpert

Whole blood vacuum tube Sarstedt tube







#### Less testing time

BC-6200 can load up to 50 samples at a time and offers a throughput of up to



## Low sample volume

BC-6200 requires less sample volume as well as reagent consumption. For a CBC+DIFF+RET test with NRBC result, BC-6200 only requires 80µL of whole blood and 35  $\mu$ L of capillary blood.



## **Easy maintenance**

The only maintenance for end user is daily shut down by probe cleanser or probe cleanser cleaning once per day (if not shut down). The "auto-protect" program reminds operators when maintenance is needed (if not shut down).



# 110 tests per hour.



your workflow for data analysis including improving it also provides more intuitive interface for you to

**Automatic Rerun & Reflex** 

Should the sample results trigger the

criteria, the autoloader of BC-6200 can

rerun or reflex check.

return the sample racks for an automatic