

# Auto Hematology Analyzer

## Principles

SF Cube\* method to count WBC, 5-Part diff and NRBC

DC impedance method for RBC and PLT

Cyanide free reagent for hemoglobin test

\*S: Scatter; F: Fluorescence; Cube: 3D analysis

### Parameters

29 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

20 Research parameters (whole blood): HFC#, HFC%, WBC-D, TNC-D, IME#, IME%, H-NR%, L-NR%, NLR, PLR, WBC-N, TNC-N, InR#, InR%, Micro#, Micro%, Macro#, Macro%, PDW-SD, PLT-I  
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

2 Three-dimension scatter grams: DIFF, WNB

## 2 Two-dimension scatter grams: DIFF, WNB

## Mode

CBC, CBC+DIFF

### Data storage capacity

Up to 10,000 results including numeric and graphical information

### Operating environment

Temperature: 15 °C~32 °C

Humidity: 30%~85%

## Performance

Parameter	Linearity Range	Precision	Carryover
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	0-5000×10 <sup>9</sup> /L	≤4.0% (≥100×10 <sup>9</sup> /L)	≤1.0%

### Sample volume

Whole blood (Autoloader, Closed Tube)	80uL
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 40 samples per hour (Body fluid)

### Loading capacity

Up to 50 sample tubes



# BC-6000

## Auto Hematology Analyzer

## High Performance for ALL

Mindray Building, Keji 12th Road South,  
High-tech Industrial Park, Nanshan, Shenzhen 518057, P.R. China  
Tel: +86 755 8188 8998 Fax: +86 755 26582680  
E-mail: [intl-market@mindray.com](mailto:intl-market@mindray.com) [www.mindray.com](http://www.mindray.com)

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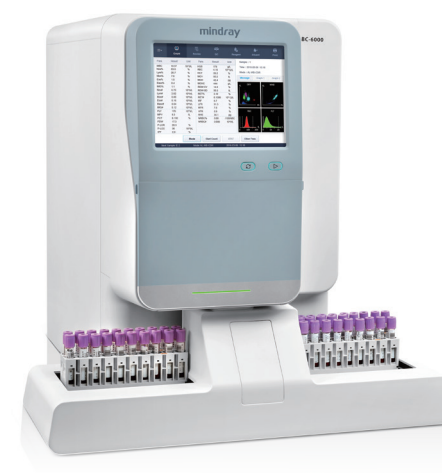
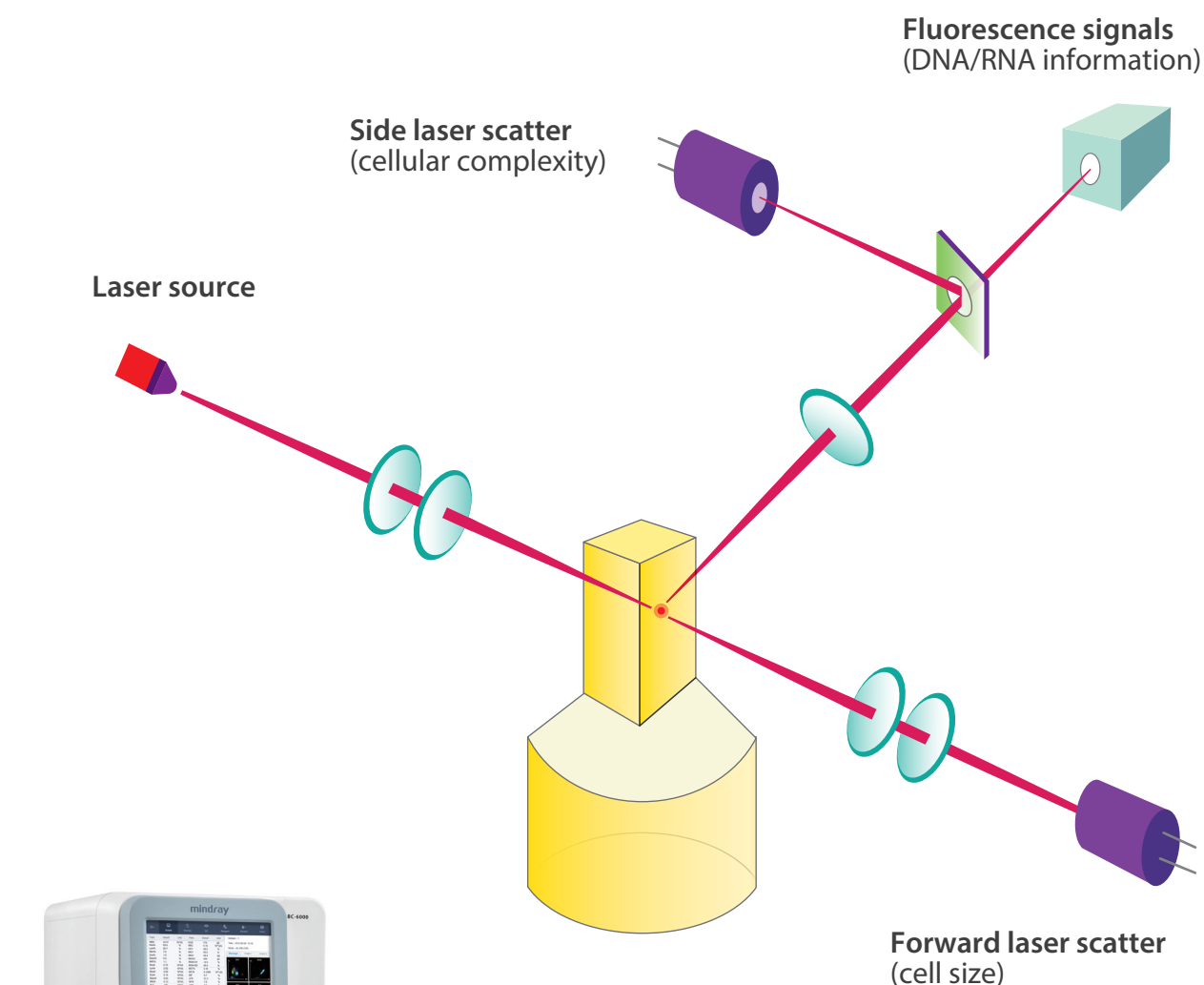
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healthcare within reach



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/body fluid results generated in a small-footprint system, among others, all within limited budget.

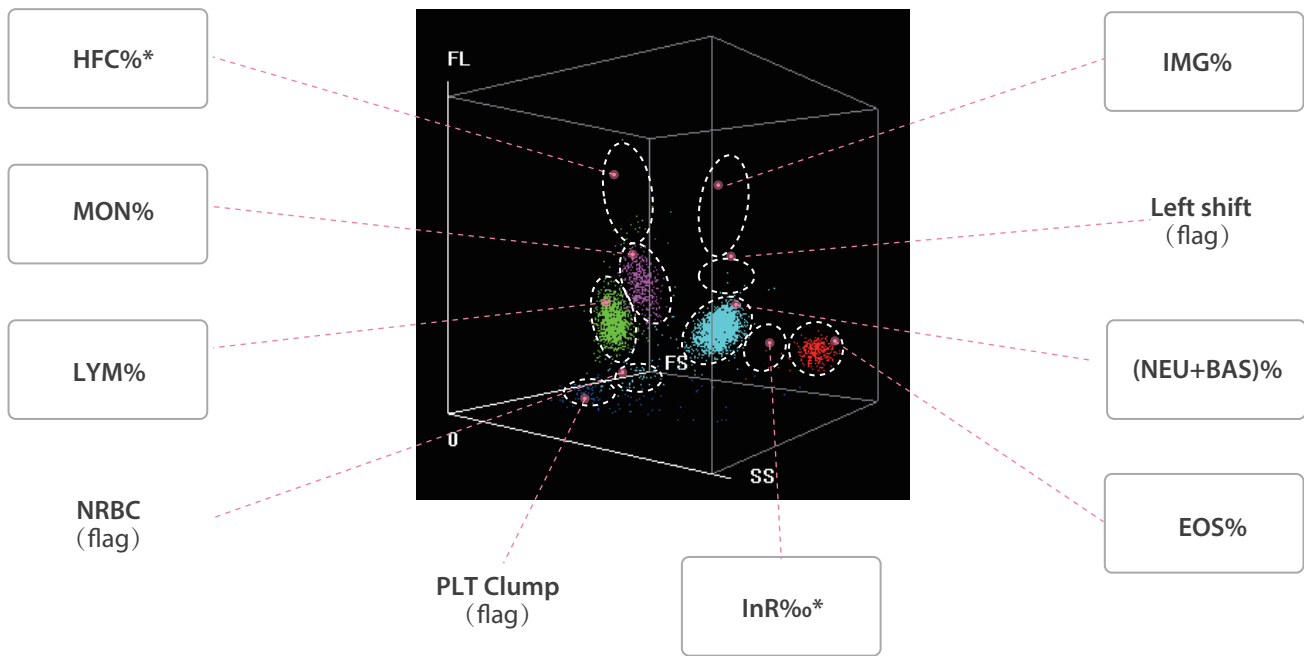
Mindray BC-6000 fulfills all these requirements and exceeds your expectations with so much more in terms of **Value**, **Operation** and **Cost**.



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.



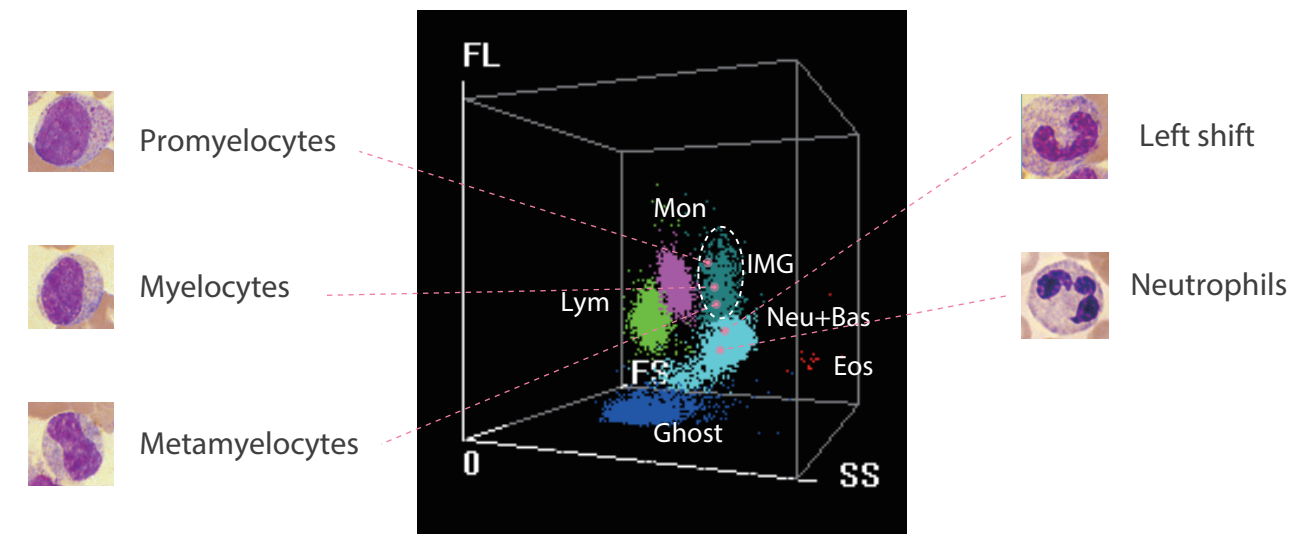
# DIFF Channel



In DIFF scattergram, BC-6000 not only gives WBC 5-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.

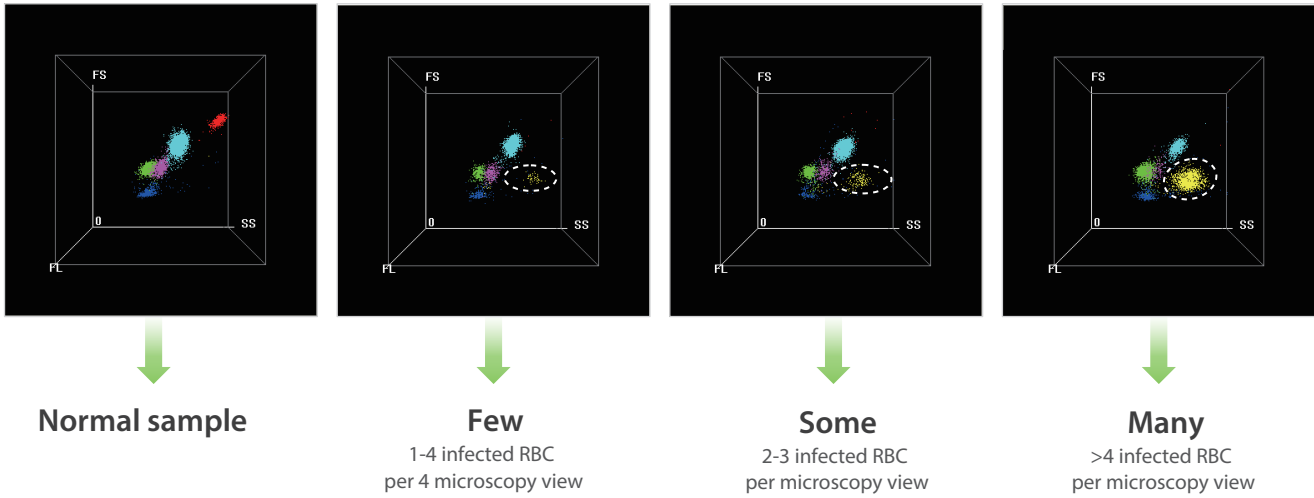
HFC\*(#, %) parameters represent high population of fluorescent cell, such as Blasts and Atypical Lymphocytes.

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



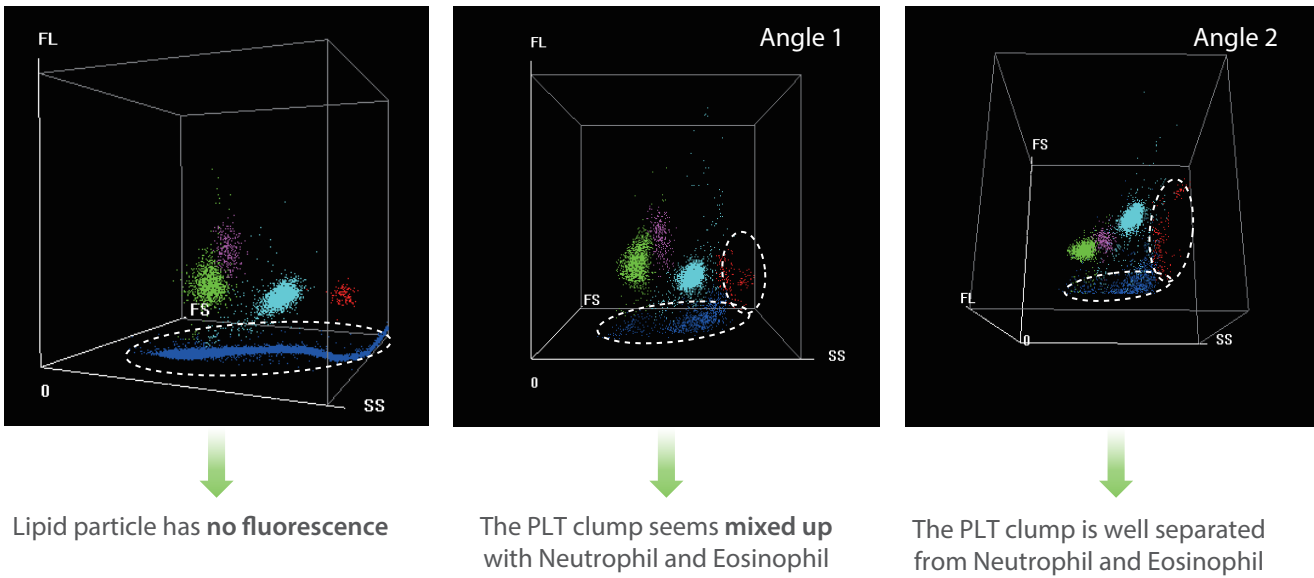
\*For research use only

## Malaria screening



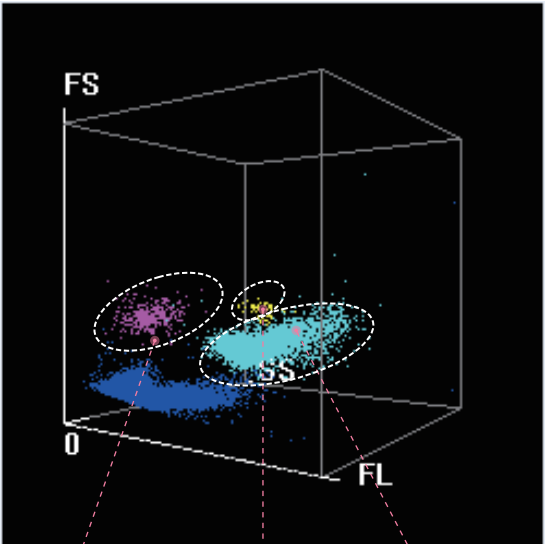
BC-6000 provides a dedicated flag called “infected RBC?”, and “InR\*(#,%)” parameters to represent the number and ratio of the infected red blood cells in the sample respectively. BC-6000 users can obtain information about the possible presence of plasmodium parasite, the causative agent of malaria infection. 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



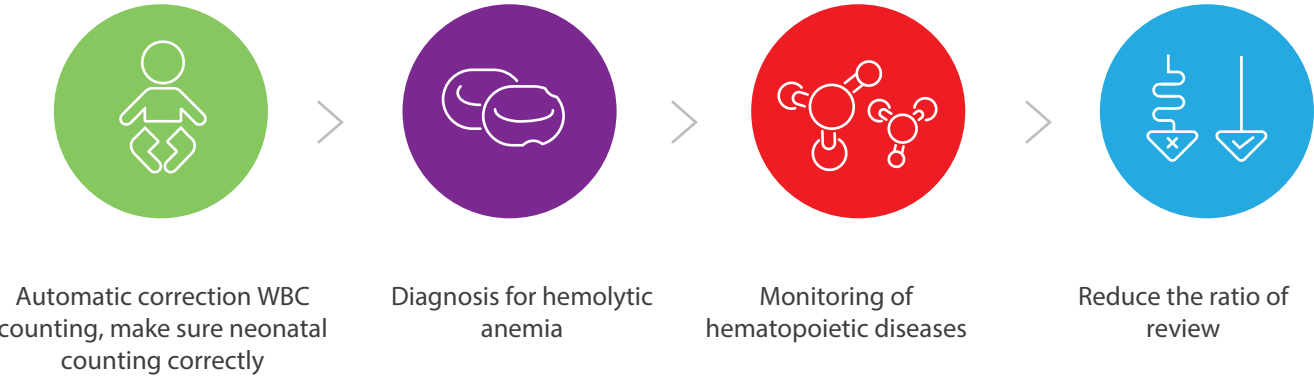
In WNB scattergram, BC-6000 provides NRBC, Basophils and WBC-N\* results. It means that the actual number of NRBCs can be measured in routine CBC, if they are present in the sample. Basophils are counted in this counting channel with NRBC results.

Basophil and NRBC results are generated on BC-6000 without extra reagent or cost.

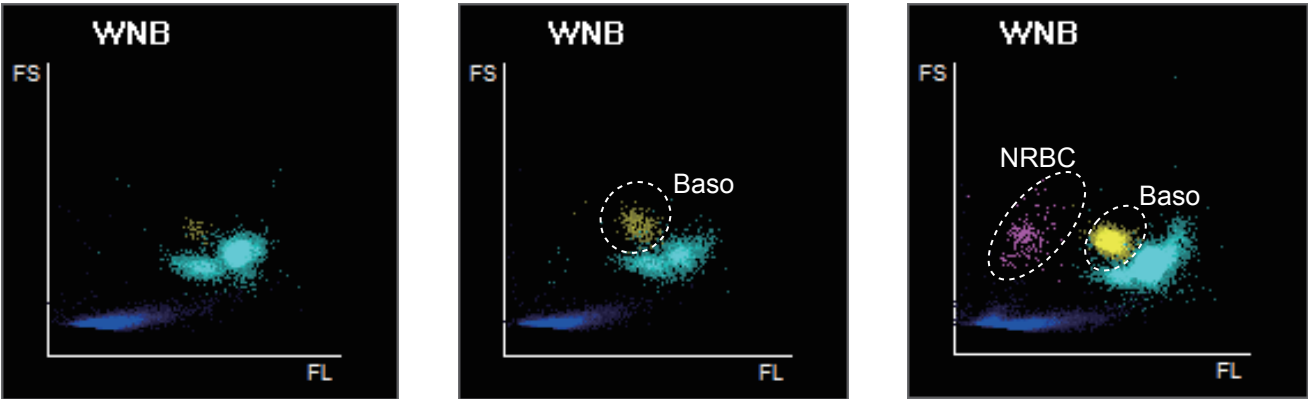
NRBC Baso% WBC-N \*

*\*For research use only*

## 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.



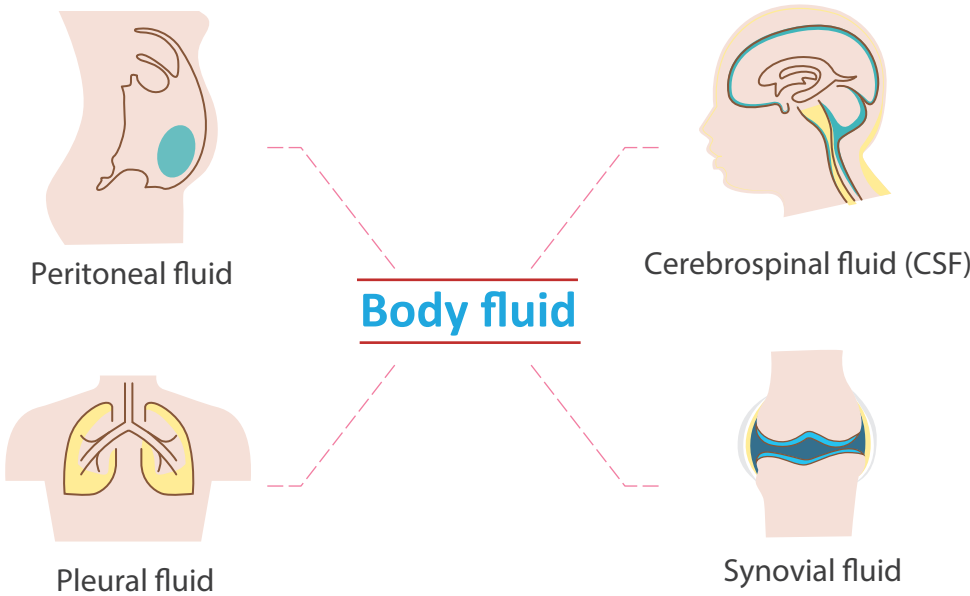
Normal sample

High Baso sample

High Baso & NRBC sample

BC-6000 provides accurate results on samples even with high level of Basophils and NRBCs.

# Body fluid



Besides blood specimen, BC-6000 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.

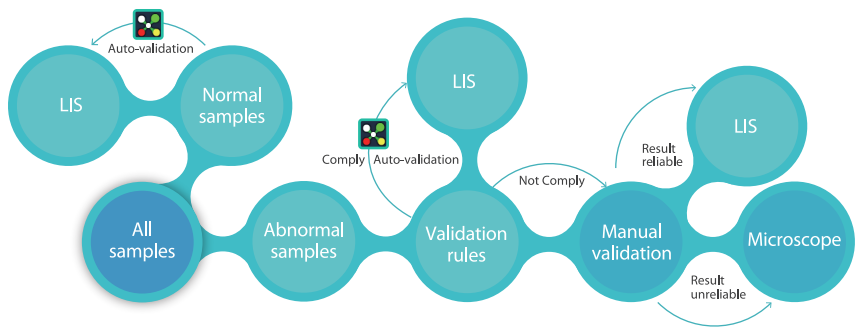
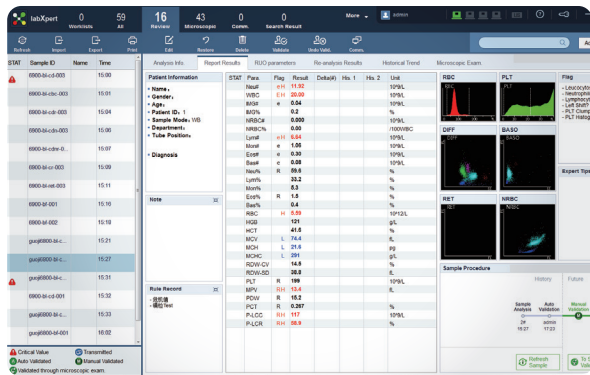
# Applicable to variety of tubes

To cater to customer's diversified needs, different types of blood collection tubes can be used on BC-6000 , including regular whole blood vacuum tube, capillary blood microtainer tube and Sarstedt tube.



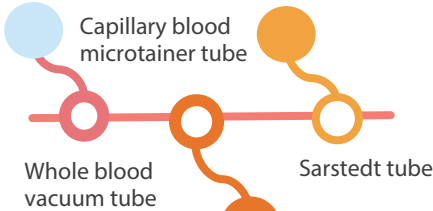
# More Intuitive labXpert software

LabXpert is a standard configuration of BC-6000 for professional data analysis. The labXpert software optimizes functions to simplify your workflow for data analysis including improving re-exam efficiency, auto-validation for normal samples; it also provides more intuitive interface for you to review and validate pathological samples.



Operation

Cost



# Less testing time

BC-6000 can load up to 50 samples at a time and offers a throughput of up to 110 tests per hour.



# Low sample volume

BC-6000 requires less sample volume as well as reagent consumption. For a CBC+DIFF test with NRBC result, BC-6000 only requires 80μL of whole blood and 35 μL 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).

# Automatic Rerun & Reflex

Should the sample results trigger the criteria, the autoloader of BC-6000 can return the sample racks for an automatic rerun or reflex check.

