Our Vision
Better healthcare for all.

Our Mission
Advance medical technologies to make healthcare more accessible.

Mindray is a leading global designer, developer, and manufacturer of medical devices and solutions, dedicated to making better healthcare more accessible to humanity. Since its foundation in 1991, Mindray has been exclusively focused on the medical industry in the fields of Patient Monitoring & Life Support, In-Vitro Diagnostics, and Medical Imaging. Headquartered in Shenzhen China, Mindray is a multinational corporation with subsidiaries in 32 countries in North and South America, Europe, Africa, and the Asia-Pacific region. Its products and services are available in over 190 countries.
Mindray is a leading provider of diagnostic solutions encompassing a diverse range of IVD fields.

Our solutions are designed to give you accurate results quickly, efficiently and conveniently.
Smarter workstation, Simpler workflow

CAL 8000
New Generation Cellular Analysis Line

Simpler workflow with CAL 8000 makes a big difference. Onboard management software together with optimized DMU software help users organize their workflow better.

Adaptive Solutions
Various configurations of CAL 8000 from 1+1 to 4+2 can fit different types of customers from 125 tests per hour to 500 tests per hour throughput requirements.

Less Blood Smears
BC-6800 utilizes the Mindray’s unique SF Cube to analyze blood cells, which can construct a 3D scattergram making bigger distance between each cluster of blood cells to ensure a more accurate flags for pathological samples. It means, less false positive and false negative rates resulting in less blood smears.
Dynamic Automation, High Quality Blood Smear

SC-120 Slide Maker & Stainer

Dynamic
SC-120 is a stand-alone unit and it could also be integrated into the Mindray CAL 8000 cellular analysis line.

Automated
The cassette, which is used for carrying glass slides could be easily loaded from the front of SC-120, and be automatically transported inside by the track. The STAT position ensures a faster blood smear preparation.

High Quality
The blood spreader(or pusher) blade is made of highly durable sapphire glass. Each staining cassette holds single slide for staining, this eliminates the problem of stain evaporation and these cassettes could be cleaned automatically without any manual interventions. All slides are heat dried before and after staining. This optimizes staining quality and reduces contamination risk for the users.
The BC-6000 Series, including the Auto Hematology Analyzers BC-6000, BC-6200, and BC-6800Plus, as well as the Cellular Analysis Line CAL 6000, are developed to address real challenges in frontline clinical settings. The BC-6000 Series delivers more than expected in terms of Value, Operation and Cost performance.

New SF cube technology

Inheriting from Mindray’s high-end hematology platforms, the SF cube cellular analysis technology is upgraded with newly designed optics and reagent systems. It can help doctors to better differentiate the clusters of cells, thus revealing more abnormal cells.

Body fluid tests

Besides blood samples, the BC-6000 Series can analyze body fluid – including peritoneal fluid, pleural fluid, cerebrospinal fluid (CSF) and synovial fluid – without requiring dedicated reagents.

NRBC result in every CBC

In the WNB channel, Mindray BC-6000 Series Hematology Analyzers produce NRBCs, Basophils and WBCs results without extra reagent or cost. NRBCs can be well differentiated from Basophils and WBCs on the systems, ensuring more accurate WBC counting and helping doctors to diagnose hemolytic anemia and monitor hematopoietic diseases.
More intuitive labXpert software

The labXpert software is a standard configuration of the BC-6000 Series for professional data analysis. The upgraded software optimizes data analysis with auto-validation and auto onboard "re-exam" functions. It also has more intuitive interface, with all necessary information shown on one screen for easier review and manual validation.

Auto rerun and reflex

Auto rerun and reflex is another innovative feature of the BC-6000 Series to optimize operation process. Should the sample results trigger the pre-set criteria, the autoloader of the systems automatically returns the sample racks backwards for a rerun or reflex check.

Less reagents for routine tests

Compared to the last of similar model, the BC-6000 Series uses less reagents for CBC+DIFF+NRBC tests.
SF Cube
Using 3D scattergram, clusters are well separated which helps in detecting abnormal cells, if any. DIFF scattergram of BC-6800 differentiates 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.

Advanced Cells Screening
Dedicated flags called “infected RBC?” and “InR*(#,‰)” parameters can be provided as the possible presence of plasmodium parasite, the causative agent of malaria infection.

Other advanced features like lipid particle interference prevention, low WBC value with extended count time, 4 counting channels to assure WBC numbers, Body fluid analysis and etc.
Proven Technology
Tri-angle laser scatter + focused flow + chemical dye, creating the possibility for a better 5-part WBC differentiation even on samples with high Eosinophil.

Compact Power
BC-5150/5000 is a dedicated 5-part hematology analyzer with the state of the art technology, simple operations, fewer reagents, all in a smaller more affordable package that will fit any clinicians budget and space.
BC-5800
Auto Hematology Analyzer

Up to 90 samples

With proven technology, enhanced structure and components, bigger capacity of autoloader and more user-friendly software, BC-5800 is your good partner and best option for high sample volume clinics.

- **Pre-heater**: Heat the reagents to proper temperature, maintain all cells in the original physiological status, maximize reaction process.
- **Close structure**: Shield from interference: EMI, dust, etc.
- **Internal barcode scanner**: Maximize reading capability, preventing errors and reducing misreads.
- **Semiconductor laser with heater**: Reliable, durable. Heater makes the laser more stable.
- **Autoloader with 50 tube positions**: Save time with continuous loading, random access.
- **STAT**: Provide STAT results quickly.
- **Pre-heater**: Minimal interruption to routine work.
- **10.4 inch touch screen**: High resolution, user-friendly software.
- **Sample Rotatory Valve (SRV)**: High precision, easy maintenance, blood sensor monitors aspiration volume.
- **Internal barcode scanner**: Maximize reading capability, preventing errors and reducing misreads.
- **BC-5800 Auto Hematology Analyzer**
BC-5300/5380
Auto Hematology Analyzer

Flexible Configuration
Similar features and specification with flexible configurations allows you for different assembly.

Proven Technology
Semi-conductor laser scatter combined with chemical dye method and advanced flow cytometry ensure you accurate results.
1 tube solution for CBC+DIFF and CRP

BC-5390 CRP
Automated Hematology Analyzer

Convenient
- Capillary whole blood mode
- Thermostat storage and RF technology
- Individual CRP mode

Rapid
- Dual CRP Analysis Channels for High Throughput

Precise
- Latex Immunoturbidimetric Technology

Lysed RBCs eliminate interference
Antibody–antigen interaction
Dual channel turbidimetric measurement
Calculation and modification

IVD Product Catalog.17 IVD Product Catalog.18
Minimum Size, Maximum Capability

BC-30s/20s Auto Hematology Analyzer

What a 3-part should be
At Mindray we pride ourselves in our dedication and experience in developing better solutions for small labs. Our new line of 3-part hematology analyzers is the culmination of that effort. Compact yet powerful, full featured yet affordable, the BC-30s/20s is what a 3-part analyzer should be.

Advanced Usability Features
The high-resolution 10.4/8.4 inch TFT touch screen display offers better visual for sample review. Optimized usability such as USB connection, WIFI capability, providing detailed flag information ensures you pleasant operation experience.
Minimum Size, Maximum Capability

BC-10/20/30
Auto Hematology Analyzer

More confidence in results
Advanced detailed flag information provides warning in case of abnormal cell results. High quality original reagent calibrator and quality controls maintain your work at a high level. We integrate technologies into our products to fulfill your clinical needs.

Saving more time
Smart and intuitive software bring your productivity up to a new level. The TFT touch screen makes operations easy and flexible, maximizing your efficiency. The large 400,000 storage capacity gives you an optimized solution to managing previous patients’ data. The smart software can detect and remove operational errors, as well as run automatic maintenance with a single click.

Less downtime
Quality and user experience are top priorities for Mindray. We design and manage our manufacturing processes in compliance with FDA, ISO and CE. Complete quality control systems in Mindray’s manufacturing centers ensure we exceed the most stringent criteria and traceability throughout the entire process. Our professional and responsive support team makes sure your systems are kept at full capability.
Advanced and Robust 3-Part

BC-3600
Auto Hematology Analyzer

Intuitive and Powerful Software
The well organized software interface eases your operation and gives you easy control of sample results, patient records, and report customizations.

Complete Data Communication
Integrated HL7 communication protocol makes your LIS connection easier. A wide selection of interface options are available including RS232 for computer connection, USB for QC assay values upload, barcode scanner, and keyboard connection.

Intuitive and Efficient
Efficient ZAP and flush method removes clog completely. For closed sampling mode, 3 types of tube adaptors are provided to satisfy individual laboratory needs. With the on-line reminder function, users can conveniently monitor the reagent residual volumes through the software.
3-part series hematology analyzer
Your reliable partner for 3-part analysis

**BC-2300**
Hematology Analyzer

**Specifications:**
Semi auto with built-in dilutor
19 parameters + 3 histograms
2 counting modes
10,000 sample results including histograms can be saved.

**BC-2800**
Auto Hematology Analyzer

**Specifications:**
Open vial
19 parameters + 3 histograms
6 counting modes
10,000 sample results including histograms can be saved.

**BC-3000Plus**
Auto Hematology Analyzer

**Specifications:**
Open vial
19 parameters + 3 histograms
2 counting modes
35,000 sample results including histograms can be saved.
Animals Species
16 animal types including Dog, Cat, Horse, Monkey, Rat, Mouse, Rabbit, Pig, Panda, Red panda, Cow, Llama, Goat, Sheep, Ferret, and Camel. + 20 self-programmed animals. (*coming soon)

“CUTE” Solution
CUTE stands for Compact, Utility, Technology, and Efficiency. BC-5000Vet is a dedicated veterinary 5-part hematology analyzer with the state-of-the-art technology, simple operations, fewer reagents, all in a smaller and more affordable package that will fit any veterinarian's budget and space.

BC-5000Vet
Auto Hematology Analyzer

Throughput
60 per hour
Up to 60 samples

MAS
LAS
WAS

MAS shows cellular complexity
LAS shows cellular volume
WAS shows cellular granularity

Up to 60 samples
Animals Species
13 animal types including Dog, Cat, Horse, Rat, Mouse, Rabbit, Monkey, Cow, Pig, Buffalo, Sheep, Camel and Goat.

Compact Structure
The compact BC-2800Vet is less than 23kgs with small footprint. It will fit any small clinic’s requirement with limited space.

Reliable Performance
Independent counting system for each species to ensure high accuracy as well as fully integrated calibration and quality control programs.
H50
Automated HPLC Analyzer
Gold standard for HbA1c analysis

- Hemoglobin System
- 8.4 inch screen
  - High resolution
- User-friendly software
- Sample mixing
  - Better mixing by inversion
  - More accurate results
- Sample tubes
  - STAT sample
  - Cap-piercing
- Closed tube
- Auto loader
  - 40 tube load capacity
  - Intelligent RF identification
- Reagents
  - 3 built-in reagents
  - RF detection
  - Reagents saving
- HPLC column
  - Easy to replace
  - 3,000 tests at least
- Hemoglobin System
- 8.4 inch screen
  - High resolution
- User-friendly software
- Sample mixing
  - Better mixing by inversion
  - More accurate results
- Sample tubes
  - STAT sample
  - Cap-piercing
- Closed tube
- Auto loader
  - 40 tube load capacity
  - Intelligent RF identification
- Reagents
  - 3 built-in reagents
  - RF detection
  - Reagents saving
- HPLC column
  - Easy to replace
  - 3,000 tests at least
BriCyte E6 is equipped with dual-laser based optics. A red diode laser and a blue diode laser are used for 4 to 6 colors of fluorescence lights. The optics are designed with state-of-the-art technology to ensure higher sensitivity for better identification of cellular populations.

Easy
BriCyte E6 has open vial mode which suits the labs which have less number of samples, the micro sample tubes are supported as well. The carousel mode is yet another option which can handle 40 sample tubes at one time.
Consistent user-friendly interface among CL-2000i, BS-2000M series, BS-800M series, BS-480 and future systems. Intuitive operation commands greatly reduce operator training time.
BS-2000
Modular System

2000 tests per hour, up to 2200 tests per hour with ISE (1 unit)
Permanent glass cuvettes with 8-stage automatic Washing
Minimum reaction volume is 80ul
Could be extended to SAL8000 system
BS-800M1
Modular System

Throughput: 800/1200T/H
Sample capacity: 440
Reagent capacity: 68

Onboard hemolysis for HbA1c

Accurate
- High sampling precision
- Water circulation reagent cooling
- Direct solid-heating system

Innovative
- Coaxial reagent disk
- Reagent bubble detection
- Dot light source

Cost-efficient
- Large capacity
- Low reagent consumption
- One key STAT
CL-2000i
Chemiluminescence Immunoassay System

**High Throughput**
Up to 240 tests/hour

**Large Capacity**
300 samples in one batch
Support continuous loading
36 onboard capacity for reagent cartridges
1134 cuvettes loaded in one batch

**Easy Operation**
Intuitive interface for software
Real-time indication of cuvettes, waste and wash buffer status
Step-by-step maintenance guide

**Flexible Scalability**
Flexible connection with BS-800M and BS-2000M series as well as lab automation in the future*

**Enhanced Reaction System**

**Stable Reagent Cartridges Utility**

**Efficient Washing System**

<table>
<thead>
<tr>
<th>Thyroid</th>
<th>Metabolic</th>
<th>Tumor Marker</th>
<th>Infectious Disease</th>
<th>Growth hormone</th>
<th>Others</th>
<th>Cardiac</th>
<th>Liver fibrosis</th>
<th>Inflammation</th>
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<td>FT3, FT4, T3, T4, TSH, Anti-TG, Anti-TPO, Thyroglobulin (TG), TRAB, rT3</td>
<td>Intact PTH, Calcitonin, Vitamin D total, Fermin, Vitamin B12, Folate, RBC Folate</td>
<td>CEA, AFP, CA125, CA15-3, CA19-9, FPSA, TPSA, NSE, CYFRA 21-1, CA72-4, ProGRP, PG I, PG II, SCCA, HE4, CA242, CA50</td>
<td>HBsAg, Anti-HBs, HBcAg, Anti-HBe, Anti-HBc, HIV combo, Anti-HCV, Anti-TP, Anti-HBe IgM, HBcAg quantitative</td>
<td>hGH, IGF-1, AMH</td>
<td>ACTH, DHEA-S, Cortisol</td>
<td>CK-MB, Myoglobin, Troponin I, BNP, Angiotensin I, Angiotensin II, Renin, Aldosterone</td>
<td>LN, PIII, PiII, PiIV</td>
<td>PCT</td>
</tr>
</tbody>
</table>

*In development

* To be launched

CE pending.
CL-1000i/CL-1200i
Chemiluminescence Immunoassay System

Throughput: 120T/H 180T/H
Large onboard capacity of 25 reagents
6 sample racks for loading; STAT priority
Non-stop replace of reagents and consumables during testing
Touch screen monitor with swing arm

A fully capable and robust immunoassay analyzer with performance consistent with CL-2000i, in a smaller benchtop package better suited for mid-to-small-sized labs. The system features a large reagent and sample capacity, robust performance and simple-to-use operation interface.
BS-600
Clinical Chemistry Analyzer

Throughput: 600 T/H (770 T/H with ISE)
Minimum Reaction volume: 100 µL
12 wavelengths
Two reagent probes

Accurate
- Complete metrological traceability
- Highly precise sampling
- Reagent bubble detection

Economical
- Light-spot staining optical system
  - Lower the reaction volume to 100 µL
- Minimum sample volume: 1.5 µL

Intelligent
- Whole blood HbA1C testing
- Advanced software
- Easy maintenance

Cost-effective

Lower carry over

User-friendly interface

Easy maintenance

Reagent bubble detection
BS-480
Clinical Chemistry Analyzer

Throughput: 400 T/H (560 T/H with ISE)
Minimum Reaction volume: 120 µl
12 wavelengths
Sample probe: Liquid level detection, clot detection and collision protection
Stand-alone Analyzers

BS-380
Clinical Chemistry Analyzer

- Constant 300 tests per hour, up to 450 tests per hour with ISE
- Up to 58 onboard chemistries and 3 ions
- On board capacity of 75 sample positions
- Automatic probe cleaning, liquid level detection and collision protection
- 12 wavelengths
- Auto washing system

Auto washing station
Solid direct heating bath without maintenance
Independent mixing bar
Monitoring of real-time statues
Editable report form
Refrigerated reagent disk
BS-240Pro
BS-360E
Chemistry Analyzer

Compact yet Robust

High throughput
Intelligent probe with optional clog detection
Waterfall probe cleaning
Independent mixing bar

Optimized washing station

Large and flexible capacity
- Up to 100 sample positions
- Up to 100 reagent positions
(50 fixed + 50 interchangeable)

Gratings photometer
- 100 µL minimum reaction volume

HbA1c smart-sampling function
- Onboard hemolysis

Considerate design
- Easy loading and unloading for samples
- One key calibrator import

Intuitive software with more functionalities
- Built-in barcode reader

Optional ISE module easy to access

Integrated mixing bar

IVD Product Catalog 51

IVD Product Catalog 52
BS-240 Clinical Chemistry Analyzer

“CUTE” Chemistry Solution

Technology: Smart-sampling technology enables automatic hemolyte-safe preparation for HbA1c test. Pretreatment-free operation guarantees high productivity.

Utility: Step-by-step maintenance guide for easy operation; Upgraded auto-washing system ensures low carryover and low water consumption.

Efficient: A minimum of 100μl reaction volume for reagent saving.

Compact: One of the smallest 200 T/H chemistry analyzers in the market, achieving maximum space saving.

-37% Smaller than BS-240E

Large capacity of 80 reagent positions and 40 sample positions extendable to 80.

Built-in barcode reader

Step-by-step maintenance guide

Independent mixing bar

Intelligent software with user-friendly interface

Waterfall probe cleaning

Compact Size with Robust Functions
BS-230
Clinical Chemistry Analyzer

BS-230 is a multi-functional benchtop clinical chemistry analyzer with a throughput at 200 T/H. Though with a compact size, it has achieved a host of advanced functions never before found on a like product in the market, making it an optimal chemistry solution for small laboratories and a back-up tool for mid-to-high end laboratories.
**BS-200E**
Clinical Chemistry Analyzer

**Smart, Versatile, Easy**

**Intelligent collision protection**
- Vertical & horizontal collision
- Audible alarm
- Ensure operator safety

**Smart probe function**
- Effective liquid level detection
- Liquid level tracking
- Prevent short sampling

**Semi-permanent cuvettes**
- Lower consumable cost
- Easy replacement
- Durable material, long lasting

**Reagent and sample cooling compartment**
- 2~12°C continuous cooling
- Enhance reagent and sample stability

**Highly compatible reagent system**
- Reagents, QC and CAL
- Metrological traceability

**Grating optic system**
- 12 Wavelengths; up to 800nm
- Reversed optics
- Accomodate most chemistry assays

**8-step washing station**
- Enable lengthy operator walk-away time
- High quality cuvette washing
- Ensure optimal cleanliness with pre-heated detergent and water

**Standalone mixing bar**
- Effectively minimizes potential carry-over
- Innovative design
- Minimal maintenance; simple installation

**150 µl minimum reaction volume**
- Lower reagent consumption
- Long term saving on reagent cost

**3-channel integrated ISE module**
- Na+, K+, Cl- electrodes
- Durable assemble
- Highly efficient electrolytes analysis
**BS-120**
Clinical Chemistry Analyzer

100 T/H throughput
Independent mixing bar
Flexible configuration for sample/reagent positions
External bar code reader (optional)
Disposable cuvette

**BS-200**
Clinical Chemistry Analyzer

200 T/H throughput
Independent mixing bar
40 positions for sample and reagent respectively
Disposable cuvette
8 wavelengths
Liquid level detection & collision protection, automated probe clean

Common Features for BS-120/200
- ISE optional
- Refrigerated sample/reagent disk
- Disposable cuvette
- Independent mixing bar
<table>
<thead>
<tr>
<th><strong>MR-12A</strong> Microplate Washer</th>
<th><strong>MR-96A</strong> Microplate Reader</th>
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<tbody>
<tr>
<td>Wash programs</td>
<td>Detection method</td>
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<tr>
<td>Wash cycles</td>
<td>Absorbance</td>
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<td>Dispensing volume</td>
<td>Microplate types</td>
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<td>Bottom collision protection</td>
<td>96/48-well plate</td>
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<tr>
<td>Residual volume per well</td>
<td>Reading speed</td>
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<td>Soaking time</td>
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<td>Shaking time</td>
<td>Wavelength range</td>
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<td>Multiple options</td>
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<tr>
<td>Standard bottle set</td>
<td>Measurement system</td>
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<td>Power supply</td>
<td>8-channel optical system</td>
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<td>Temperature</td>
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<td>Measurement range</td>
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<td>0.0001 – 2.500 Abs</td>
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<td>Photometric accuracy</td>
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<td>±0.2 A, 0.001 Abs</td>
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<td>Wavelength accuracy</td>
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<td>Repeatability</td>
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<td>Stability</td>
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<td>&lt; 0.005 Abs / 10 min</td>
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<td>Display</td>
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<td>Large color LCD display</td>
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<td>Weight</td>
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<td>8.5 Kg</td>
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Semi-auto and Bench-top Analyzers

BA-88A
Semi-Auto Chemistry Analyzer

Endpoint, Fixed-time, Kinetics and Absorbance
Wavelengths range 340 to 670nm
7.0" TFT touch screen & popup keypad
External keyboard and mouse support via USB
Up to 200 tests can be programmed
Testing modes: flowcell and cuvette
User-friendly interface
Power-failure protection
Universal power supply
### Modular System

<table>
<thead>
<tr>
<th>Hepatic</th>
<th>Renal</th>
<th>Cardiac</th>
<th>Inorganic &amp; Anemia</th>
<th>Lipid</th>
<th>Immune Protein</th>
<th>Diabetes</th>
<th>Rheumatism</th>
<th>Pancreatitis</th>
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<td>ALT</td>
<td>CREA</td>
<td>CK</td>
<td>Mg</td>
<td>TC</td>
<td>C3</td>
<td>Glu</td>
<td>RF</td>
<td>AMY</td>
<td>ADA</td>
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<td>AST</td>
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<td>CK-MB</td>
<td>P</td>
<td>TG</td>
<td>C4</td>
<td>HbA1C</td>
<td>ASO</td>
<td>LIP</td>
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<td>a-HBDH</td>
<td>Ca</td>
<td>HDL-C</td>
<td>IgA</td>
<td>β-HB</td>
<td>CRP</td>
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<td>CO2</td>
<td>LDH</td>
<td>FER</td>
<td>LDL-C</td>
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<td>Cys-C</td>
<td>HS-CRP</td>
<td>Fe</td>
<td>Apo-A1</td>
<td>IgM</td>
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<td>β2-MG</td>
<td>MYO</td>
<td>UBC</td>
<td>Apo-B</td>
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<td>RBP</td>
<td>D-Dimer</td>
<td>TRF</td>
<td>Lp(a)</td>
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**Immunoglobulins:**
- IgA
- IgG
- IgM
- IgE

**Other:**
- CA2
- Ca
- Fe
- Mg

**Other:**
- Triglyceride (TG)
- Cholesterol (TC)

**Others:**
- Hba1c
- HbA1c
- MYO
- D-Dimer
- Apo-A1
- Apo-B
- Lp(a)
- Fe
- Mg
- UBC
- TRF
- GoPD
- HDL-C
- LDL-C
- IgA
- IgG
- IgM
- IgE
- CA2
HbA1C
ADA (American Diabetes Association) Endorses HbA1c for Diabetes Diagnosis

Advantages
- Enzymatic method
- Wide measuring range: 3~16%
- Excellent sensitivity: Hb (15 μmol/L), HbA1C (3 μmol/L)
- Excellent precision with intra CV value < 2.0%
- Traceability to IFCC/NGSP/JCCL reference methods

Precision Contrast

Enzymatic HbA1c method

Method comparison

Another brand HPLC method

International standardization
International standardization certificates of HbA1c from NGSP.
More information refers to website. (http://www.cdc.gov)
NGSP/National Glycohemoglobin Standardization Program
β-HB (β-Hydroxybutyrate)

ADA (American Diabetes Association)
Endorses β-HB for diagnosing and monitoring ketoacidosis

Traditional diagnostic method

Sodium nitroprusside reaction (urine strip or tablet)

- Qualitative result
- False-positive results (Sulfhydryl drugs, including the ACE inhibitor captopril), false-negative results (high dosage of Vitamin C)
- Not early period diabetic ketoacidosis diagnosis, for not testing β-HB
- Misleads doctors for the increasing acetoacetate during treatment (β-HB oxidized into acetoacetate)

Enzymatic Colorimetric Method

- Liquid ready-to-use reagent
- Enzymatic Colorimetric Method for the measurement of β-Hydroxybutyrate, making automation easier
- Wide measuring range with 0.03~5.5 mmol/L
- Excellent sensitivity with minimal detection level as 0.03mmol/L
- To test β-Hydroxybutyrate – the major ketone in the blood, making it a very reliable test
- Measurement of ketones in serum rather than in urine helps eliminate the risk of false negatives due to insensitivity and false positives due to drug interference

Advantages

- High sensitivity: Measured Low limit of detection 1U/L
- Wide linearity range: Measured 1~200 U/L
- Excellent precision with low CV value.
- Strong anti-interfering ability for lipoaemia, bilirubin, hemaglobin and ascorbic acid
- Good correlation to reference method
- Calibrators standardized to International Reference Material ERM-AD455/IFCC

Comparison ADA assay with prevalent method

Interferon-γ Release Assays

- Manual Operation
- 16-24 hours (longer if run in batches) to get results

Adenosine deaminase Assay

- Automatic chemistry method
- Rapid test
- Cost effective
- Simple operation

Polymerase Chain Reaction (PCR)

- Very expensive
- Complicated operation

Notes:
- Mix tubes thoroughly after blood collection
- Add 50 μL of working conjugate to each well and standard incubate for 30 minutes at room temperature
- Add substrate solution and incubate at 450nm
- Calculate results using Analysis software
- incubate tubes upright at 37°C for 15 minutes
- Centrifuge tubes at 2000~3000g for 10 minutes
- Add fluorescent labeled at 200~1000ng (PCR) for 10 minutes
G6PD (Glucose-6-phosphate Dehydrogenase) 
An important parameter for G6PD deficiency screening

Advantages
- Liquid reagent, ready to use
- Wide linearity range: 0~3000 U/L.
- Excellent precision.
- Excellent on-board stability: 21 days.
- Long shelf life: 15 months.
- The sample type is the backlog red blood cells.
- There is no interfering for lipemia, bilirubin, drugs and so on.

AFU (α-L-fucosidase)
A sensitive marker for diagnosing hepatocellular carcinoma (HCC)

Advantages
- Liquid reagent, ready to use
- High sensitivity and wide linearity range
- Excellent precision with CV < 2%
- Excellent stability
- Strong anti-interfering ability of ascorbic acid and intra-lipid.
- Calibrators standardized to International Reference Material ERM-AD455/IFCC.

The combination test of AFU and alpha-fetoprotein (AFP) is better than AFP individual detection
- The combination test of AFP & AFU enzyme increases the diagnostic accuracy to 90% inspite of AFP alone.
- About 58% patients with HCC negative for AFP could be diagnosed.
- In the HCC patients with tumor size < 3 cm, the concentration of AFP is very low and some of the results were negative. AFU is a good marker than AFP in the detection of early HCC.

The comparison with prevalent methods

<table>
<thead>
<tr>
<th>Prevalent Diagnostic Method</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methemoglobin Reduction Test</td>
<td>Manual or semi-automatic operation</td>
</tr>
<tr>
<td>Fluorescent Spot Test</td>
<td>Long time to get results (&gt;3h)</td>
</tr>
<tr>
<td>ELISA Method</td>
<td>Short reagent stability (1 week ~ 1 month)</td>
</tr>
</tbody>
</table>

M mindray G6PD reagent

<table>
<thead>
<tr>
<th>Advantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>UV Enzymatic Method</td>
</tr>
<tr>
<td>Full-automatic</td>
</tr>
<tr>
<td>Quantitative</td>
</tr>
<tr>
<td>Fast Accurate</td>
</tr>
<tr>
<td>Long stability</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sensitivity</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFP</td>
<td>52%</td>
</tr>
<tr>
<td>AFU</td>
<td>70%</td>
</tr>
<tr>
<td>AFP+AFU</td>
<td>80%</td>
</tr>
</tbody>
</table>
Microorganism analysis systems
Combo test cards offer much easier test for identification and susceptibility testing
Identification range
10 categories of test cards covering Enterobacteriaceae, Micrococccaceae, Streptococcus,
Yeast-like fungi, Vibrionaceae, Non-fermentative bacteria, Bacillus, Coryneform bacteria,
Neisseria, Haemophilus and other fastidious bacteria, Anaerobes etc
Test cards
Combo ID+AST 96 wells; AST only 96 wells
Principles
Identification: colorimetry
Antimicrobial susceptibility testing: turbidimetry
Printer
External printer
Interface
RS-232, support LIS/HIS
Self-definable susceptibility test card
Advanced expert system and simple WHONET exporting function.
Turbidimeter and automated inoculator are optional
TDR-X series
Automated Blood Culture Systems

Sample position: 120, 60, 20
Principle: colorimetry
Sensitivity: ≤10 CFU/ml
Culture type: TDR Resin Aerobic;
TDR Resin Peds; TDR Resin Anaerobic
Extendable Function: Maximally extend to 600 position
Powerful statistics: Export results including bacteria growth curve
Full automation: Automatic surveillance and report (negative and positive results)
Temperature controlling system: Dual heating systems (solid heating bath and air heating bath)
C2000-2/4
Semi-Auto Coagulation Analyzer

Testing principle: mechanical
Testing items: PT, APTT, FIB, TT etc clotting items
Reportable unit of PT: sec, Ratio, INR, %, %-INR
Reagent position: 3/4
Incubation position: 6/16
Measuring channel: 2/4
Built-in printer (C2000-2/4)
Electronic Start-Pipette
**C3100**  
Auto Coagulation Analyzer

Testing principle: mechanical  
Testing items: PT, APTT, FIB, TT etc clotting items; D-D, FDP etc immunoturbidimetric items  
Throughput: up to 200 tests/hour  
11 Reagent positions (2 with stirring function)  
61 Sample positions  
12 Incubation channels  
4 mechanical testing channels + 1 optical channels (575nm)  
Cuvettes loading: 1,000 cuvettes autoloading  
Automatic sample dilution, auto rerun.

**C3510**  
Auto Coagulation Analyzer

Testing principle: mechanical  
Testing items: PT, APTT, FIB, TT etc clotting items; D-D, FDP etc immunoturbidimetric assay; AT etc (chromogenic substrate assay)  
Throughput: 300 tests/hour  
Reagent position: 28  
Sample position: 80  
Incubation channel: 16  
Testing channel: 4 mechanical + 6 optical channels (5 at 575nm, 1 at 405nm)  
Cuvettes loading: 1,000 cuvettes autoloading  
Automatic sample dilution, auto rerun.
Urinalysis

**EH-2080B/C**  
Fully Automated Urine Sediment Analysis System

- Classical morphology detection, provide whole view field microscopic image
- Machine vision (MV) applied with DIF and CPTR technology
- Reportable Parameters including different types of formed elements in urinary sample
- Both native urine sample and sediment sample can be tested
- Throughput up to 80T/H (EH-2080B) or 100T/H (EH-2080C)
- Walk-away automation, 100 samples constant random access with barcode scan
- Efficient self-maintenance system including automatic counting chamber cleaning and probe washing

**EH-2050B Plus**  
Fully Automated Urine Sediment Analysis System

- Classical morphology detection, provide whole view field microscopic image
- Machine vision (MV) applied with DIF and CPTR technology
- Reportable Parameters including different types of formed elements in urinary sample
- Native urine sample
- Throughput up to 80T/H (EH-2050B Plus)
- Walk-away automation, 20 samples alternate loading
- Efficient self-maintenance system including automatic counting chamber cleaning and probe washing
**EH-2030**
Fully Automated Urine Sediment Analysis System

- Classical morphology detection, provide whole field microscopic image
- Machine vision (MV) applied with DIF and CPTIR technology
- Reportable parameters including different types of formed elements in urinary sample
- Native urine sample
- Throughput: 40T/H on average
- Open vial and efficient self-maintenance system

**UA-600**
Urine Analyzer

- 600 strips per hour
- Cold light source with luminosity
- Automatic detection of strip placing and testing
- Automatic used strip collection
- Built-in thermal printer and interface for external printer
- Storage of 2000 test results

**UA-66**
Urine Analyzer

- Cold light source with high luminosity, long shelf life
- Innovative light sensor, high sensitivity
- Automatic calibration improves accuracy
- Standard RS-232 interface for connection with external computer
- Storage of 1000 test results
- Built-in thermal printer

**U-11**
Urinalysis Strips

- Urobilinogen, Bilirubin, Ketone, Blood, Protein, Nitrite, Leukocytes, Glucose, Specific Gravity, Ascorbic Acid, PH

**UA-600T**
Urine Analyzer

- 600 strips per hour
- Touch screen interface
- Cold light source with luminosity
- Automatic detection of strip placing and testing
- Automatic used strip collection
- Built-in thermal printer and interface for external printer
- Storage of 2000 test results