

**Chemistry Analyzer**  
**Hematology Analyzer**  
**Urine Analyzer**  
**Blood Coagulation Analyzer**  
**Elisa Reader、Elisa Washer**  
**Spectrophotometer**  
**Catalogue**

**Mr. Andrew**

**General Manager**

**China Shikang Medical Equipment Group Limited**

**Tel:0086-574-87489856, Fax:0086- 574- 87489856**

**Mobile: 0086-18657415186 0086-13685829586**

**Msn: [jiangxinggen1016@hotmail.com](mailto:jiangxinggen1016@hotmail.com)**

**Skype: [Andrew4531](https://www.skype.com/user/Andrew4531)**

**E-mail: [info@worldhealthmed.com](mailto:info@worldhealthmed.com)**

**Website:**

**<http://www.worldhealthmed.com>**

# Semi-auto Chemistry Analyzer

## 1. WH-D200A Type Semi-Auto Biochemistry Analyzer



- **Features:**

- ◆ Grating as dispersion element, with adjustable wavelength, long life span, without the trouble of changing filter.
- ◆ Full open programming, suitable for all kinds of reagents.
- ◆ Large screen, English and image display, report print in English.

**Main technical:**

- ◆ Wavelength range: arbitrary setup between 330-800nm
- ◆ Wavelength precisio:  $\pm 1\text{nm}$
- ◆ Absorbency testing range: -0.3-3.0Abs
- ◆ Absorbency resolution: 0.001Abs(display)0.0001Abs (inner)
- ◆ Stability:  $\leq 0.002\text{Abs/h}$
- ◆ Crossed contamination:  $< 1\%$
- ◆ Flow comparator cell: 10nm 32ul
- ◆ Temperature control: 25°C、30°C、37°C、room temperature
- ◆ Temperature accuracy:  $\pm 0.1^\circ\text{C}$
- ◆ Absorbing sample capacity one time: arbitrary set between 100ul and 2000ul
- ◆ Display Large screen, English liquid crystal display
- ◆ Printer build.in wide line high speed thermal sensihve printer, printing English report sheet, with the function of inspecting result and judge
- ◆ Power supply: 220V $\pm 15\%$  50Hz  $\pm 2\%$

## 2. WH-D500 Type Semi-Auto Biochemistry Analyzer



- **Features:**
  - ◆ Steady and reliable LED cold light source instead of Tungsten Halogen, lifetime is up to hundreds of thousand hours.
  - ◆ Unique graphic processing patent technology, assure excellent stability and reliability of the instrument.
  - ◆ High standard international universal power supply, making the instrument work all over the world.
  - ◆ Full-open program system, all kinds of reagents are available.

**Main technical:**

- ◆ Light source: LED-Cold Light Source
- ◆ Wavelength range: 340-850nm
- ◆ Absorbance range: -0.3-3.5Abs
- ◆ Absorbance resolution: 0.001Abs(display)0.0001Abs (inside)
- ◆ Stability:  $\leq 0.005\text{Abs}/20\text{min}$
- ◆ Cross contamination:  $< 0.5\%$
- ◆ Flowing colorimetric cell: 10mm 32ul
- ◆ Temperature control: 25°C、30°C、37°C、room temperature
- ◆ Once injection: 100ul-2000ul
- ◆ Display: 240×128 lattice LCD
- ◆ Printer: Build-in thermal sensitive printer, the width of print paper is 110mm
- ◆ Interface: Standard RS232 interface
- ◆ Power supply: 110V-220V $\pm 10\%$  50Hz-60Hz(auto transform)

### 3. WH-D600 Type Semi-Auto Biochemistry Analyzer



- **Features:**
  - ◆ High efficiency grating as dispersion element with successive and adjustable wavelength, long life-span without trouble of changing filter
  - ◆ Full open program, suitable for all kinds of reagent
  - ◆ Big screen, English image display, English report printing

**Main technical:**

- ◆ Wavelength range: arbitrary setup between 330-800nm
- ◆ Wavelength Accuracy:  $\pm 1\text{nm}$
- ◆ Absorbance testing range: -0.3-3.0Abs
- ◆ Absorbance resolution: 0.001Abs(display)0.0001Abs (inner)
- ◆ Stability:  $\leq 0.002\text{Abs}$
- ◆ Cross contamination:  $< 1\%$
- ◆ Quartz flowing cell: 10nm 32ul
- ◆ Temperature control: 25°C、30°C、37°C、room temperature
- ◆ Temperature precision:  $\pm 0.1^\circ\text{C}$
- ◆ one time sampling capacity: arbitrary set between 100ul and 2000ul
- ◆ Display: 10.4" color, liquid, crystal, Chinese display
- ◆ Printer: build-in 110mm wide line high-speed thermal sensitive printer, printing English report sheet, enjoying the function of detection of detecting results, enjoying the function of inspection and judge
- ◆ Power supply: 220V $\pm 15\%$  50Hz  $\pm 2\%$

#### 4. WH-D800 Type Semi-auto Biochemical Analyzers



- **Features:**
  - ◆ High-end configuration, easy operation
  - ◆ Mass storage
  - ◆ Real-time monitoring
  - ◆ Overall measuring method
  - ◆ Perfect printing mode
  - ◆ Multifunction

**Main technical:**

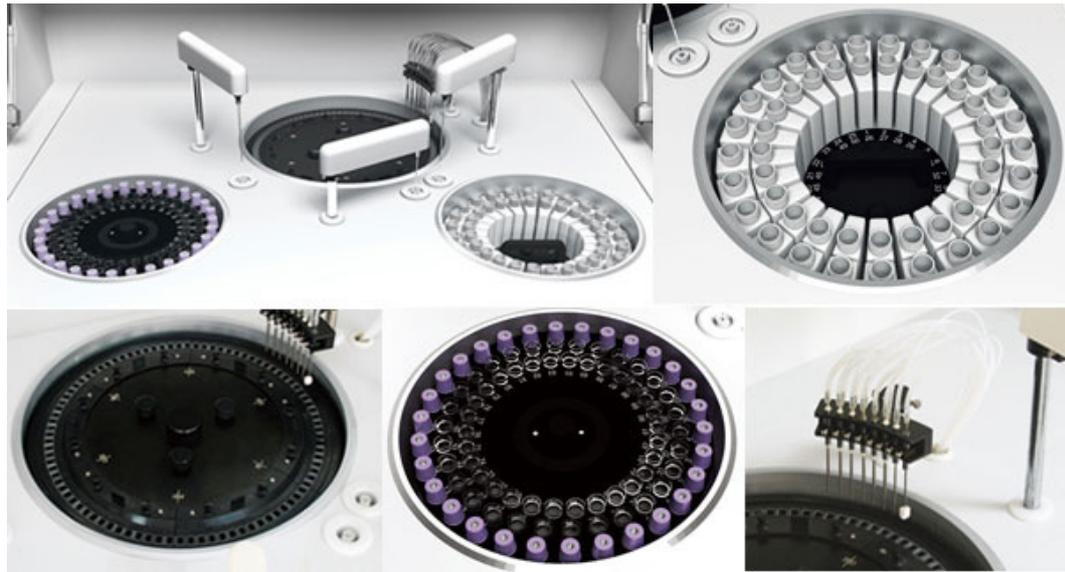
- ◆ Light source: 12V 20W halogen lamp
- ◆ Wavelength range: 330-800nm
- ◆ Wavelength choice: High-efficient holographic grating spectroscopy, good optical property, automatic wavelength scanning and random setting
- ◆ Wavelength Accuracy:  $\pm 1\text{nm}$
- ◆ Absorbance testing range: -0.3-3.0Abs
- ◆ Stability:  $\leq 0.002\text{Abs/h}$
- ◆ Cross contamination:  $< 1\%$
- ◆ Flowing cell: 10mm 32ul
- ◆ Temperature control: 25°C、30°C、37°C、room temperature
- ◆ Temperature precision:  $\pm 0.1^\circ\text{C}$
- ◆ one time sampling capacity: arbitrary set between at 100ul-2000ul
- ◆ Display: External LCD Display
- ◆ Printer: Build-in high speed thermal sensitive printer, also can connect outside printer.
- ◆ Interface: RS232 Bi-directional Communication Interface, Network Interface, External Connection to a PC
- ◆ Power supply: 220V $\pm 20\%$  50Hz  $\pm 2\%$

# Auto Chemistry Analyzer

1. WH-2288 Fully Auto Biochemistry Analyzer



- **Features:**



- ◆ Entire wavelength response cup auto blank detection, auto deduct cup blank, remove deviation among cups, makes the result more accurate.
- ◆ Convenient optional-like analysis pattern, batch input, item combination, STAT detect preferentially.
- ◆ Bubbling spring clean, sample needle with Telfion coating and reagent needle force flushing between in and out walls, make the pollution rate minimum.
- ◆ Real time display dynamic detection curve, entirely monitor reaction process. When surpass linearity or sample is wrong, the instrument guarantees the result accuracy and reliability through dilute or change sample automatically.
- ◆ Prefect QC management function, support High, Middle, Low QC, instant method statical processing, display and print STD, dynamic QC chart.
- ◆ Sample needle and reagent needle have anti-collision and liquid level detection fuctions, can track and remind reagent residual volume.
- ◆ Stirring needle made of special material is anti-corrosive, high efficiency agitation with no residual liquid.
- ◆ Imported compressor non-fluorine strengthening refrigeration, self-contained power make it refrigerate with 24 hour uninterrupted and make the temperature of reagent tray 2°C-8 °C adjustable.

**Main technical:**

- ◆ Light Source: Long life halogen lamp
- ◆ Test Speed: 330 test/h (constant speed)
- ◆ Sample Position: 90 sample positions (Including QC, STD)
- ◆ Reagent Position: 50 refrigerated reagent positions
- ◆ Wavelength Range: 300-700nm
- ◆ Wavelength Accuracy:  $\pm 2\text{nm}$
- ◆ Temperature Control:  $37^{\circ}\text{C} \pm 0.1^{\circ}\text{C}$
- ◆ Range of Absorbancy: 0-3.5A
- ◆ Sample Volume: 1-50ul 0.1ul step-by-step
- ◆ Reagent Volume: 1-500ul 1ul step-by-step
- ◆ Analysis Method: End Point, Kinetics, Two Points, Dual Wavelength Dual Reagent, Multi-Standard
- ◆ Alarm: Auto alarm when lack of water and full of the waste bottle.
- ◆ Water consumption: 1.5-2L/h
- ◆ Storage: Long time store lots of item programme parameters and patients material.
- ◆ Printer: outside printer, select several kinds of print model at will
- ◆ Power Supply: 220V 50Hz

## 2. WH-2280 Auto Biochemistry Analyzer



- **Features:**
  - ◆ It can automatically optimize testing order, reduce waiting time, improve testing speed.
  - ◆ Automatic stirring and mixing, makes the mixture of sample and reagent more even, reaction more perfect.
  - ◆ Stand-alone freon-free environmental protection refrigeration system, refrigerating for 24 hours without a break, guarantee the quality of the reagent.
  - ◆ Flexible and open reagent scheme, one reagent is available to many items.
  - ◆ Free set of calculation item of multi-item participation.
  - ◆ Completed quality-control scheme, different thickness of high, medium, low, support L-J and X-B quality control.

- ◆ Dynamic real-time reaction curve monitors the disabled reagent timely, prompt too high thickness and make automatic dilution of sample.
- ◆ Insert emergency at any time, and start emergency testing at first time.
- ◆ In running, the graphic guide-view system of reagent and sample tray makes it more easy to provide the user to look over and master testing information.
- ◆ Strong database storage technology, millions of results storage, with no influence to running speed.
- ◆ Complete setup to reference range as different sex and age provides convenience to clinical reference.

**Main technical:**

- ◆ Wavelength: 8 filters, 340、380、405、492、510、546、578、630nm, r match as user's demand
- ◆ Temperature control: 25°C、30°C、37°C、 $\pm 0.1^\circ\text{C}$
- ◆ Analysis method: end point, dynamic, fixed time, sample blank, reagent blank, absorbency, double-wavelength, etc.
- ◆ Testing speed: 200 samples/hour.
- ◆ Reagent capacity: 3 reagent tray, and 17 different reagents in each tray.
- ◆ Sample plate: put 45 samples on it each time.
- ◆ Crossed contamination: <1%
- ◆ Computer: Pentium computer chip.
- ◆ Monitor: big-screen color monitor.
- ◆ printer: outside high resolution printer.
- ◆ Keyboard: standard computer keyboard.
- ◆ Exterior interface: two-way RS-232. USB interface

# Auto Hematology Analyzer

## 1. WH-3000 23 Trisection Fully Auto Hematology Analyzer



- **Features:**

- ◆ Reliable and advanced technology.
- ◆ Safe and operated protection-environmental design.
- ◆ Computer and practical functions.
- ◆ Perfect calibration scheme of quality control.

**Main technical:**

- ◆ Working principle: count by resistance method, SFT method without cyanide.
- ◆ Testing parameter: trisection of WBC, 23 parameters (including color histogram of WBC,RBC, PLT)
- ◆ Sample dosage: anticoagulation whole blood of 9.6 ul, anticoagulation distal blood of 9.6 ul, pre-dilution distal blood of 20 ul.

- ◆ Working mode: Counting channel testing plus independent hemoglobin testing system, continuous turning-On of 24 hours, automatic dormancy and waking function.
- ◆ Micro hole aperture: WBC:100um. RBC/PLT: 80um
- ◆ Storage of result: automatic storage of all results of 12000 pieces including 3 histograms.
- ◆ Rate of crossed contamination: WBC、RBC、HGB<0.5%、PLT<1%
- ◆ Index:
 

precision value	linear range
WBC≤2.0%	0.0-99.9×10 <sup>9</sup> /L
RBC≤1.5%	0.00-9.99×10 <sup>12</sup> /L
HGB≤1.5%	0-300g/L
MCV≤0.4%	40-150fL
PLT≤4.0%	0-999×10 <sup>9</sup> /L
- ◆ Display screen: big-screen color liquid crystal display, 640x480 resolution.
- ◆ Interface: 1 parallel printing interface, 2 USB interface, 2 PS/2 interface, 2 RS232 interface ( support networking).
- ◆ Print report: build-in high effective thermal sensitive printer, 8 choices of English report format, optical to multiple outside printers.
- ◆ Working environment: temperature: 10℃-35℃, humidity 10%-90%, available in altiplano.
- ◆ Power: AC220V 50Hz

# Urine Analyzer

## 1. WH-U280 Type Urine Analyzer



- **Features:**

- ◆ Adopt high-luminosity, cold light source testing technology, with little power consumption, long life-span and low failure rate.
- ◆ Compatible with 8, 10 and 11 items of testing paper.
- ◆ Display all testing data, testing time numerical value with large screen, liquid crystal display in Chinese and English, and output full Chinese or English result according to requirement.
- ◆ Automatic identification to whether testing paper is placed and automatic feeding to testing paper.
- ◆ Autoprompting to preparing next sample and sample reaction time.

- ◆ Report way: alternative to report half-quantitative thickness or +/- grads system, alternative to legal measurement unit or traditional unit, available to indication of exceptional value.
- ◆ Enjoy the function of power-off protection self-check and automatic correction.
- ◆ Equipped with standard serial interface and standard RS232 interface can link with external computer and printer.
- ◆ Free choice to testing paper type produced by different factories.

**Main technical:**

- ◆ Testing items: GLU、BIL、SG、KET、BLD、PRO、URO、NIT、LEU、VC、PH value
- ◆ Testing wavelength: 550nm、620nm、720nm
- ◆ Testing speed: 144 pieces/hour
- ◆ Data storage: storage of no less than 3000 sample data, free query in term of testing data and sample number
- ◆ Reaction time: 25-30 seconds
- ◆ Printer: built-in high-speed, temperature sense printer
- ◆ Power supply: 220V±22V 50Hz ±1Hz

# Semi-auto Blood Coagulation Analyzer

## 1. WH-2000 Type Semi-auto Blood Coagulation Analyzer



- **Features:**

- ◆ Preheating counter:4 pieces (for double-channel), 1 piece (for single channel), prompt sound arriving time.
- ◆ Permanently store fixed standard curve.
- ◆ linkage adding sampler, automatic touching-off testing.
- ◆ LCD crystal, Chinese display, man-machine dialogue operation, easy to learn.
- ◆ Built-in temperature sensing printer, printing single sample, single item and universe report.
- ◆ Full open program, arbitrary choice for reagent.

- ◆ Relative movement of steel ball is not be influenced by original plasma viscosity.
- ◆ The tested plasma is not interfered by icterus, hemolysis, chle, turbidity, etc.

**Main technical:**

- ◆ Testing item(18 items): PT、APTT、FIB、TT、HEP、LMWH、albumen C、albumen S、SPA、ATIII、blood coagulation factor II、V、X、VIII、IX、XI、XII
- ◆ Measuring accuracy:  $\pm 3\%$
- ◆ Repeatability:  $\pm 3\%$
- ◆ Linearity precision:  $R \geq 0.99$
- ◆ Temperature control precision:  $37^{\circ}\text{C} \pm 0.3^{\circ}\text{C}$

# Elisa Reader、Elisa Washer

## 1. WH-M3000 Elisa Analyzer



- **Features:**

- ◆ Big screen LCD display, English graphical interface touch screen input choosing to equip outlay mouse and keyboard simple and easy for operation.
- ◆ The whole-new operation system, with integrated software of immunity analysis can make direct Chinese input of hospital management and patients' information.
- ◆ 8-channel optical fiber high speed scanning special center orientation for alisa hole leads to quick and correct measuring result.
- ◆ Single-board multi-item testing, even 12 kinds qualitative or measurable testing can be done simultaneously on the same board.

- ◆ Complete quality-control way, owning the function of LJ method X,S method and instant method and double quality-control function by multi-role can display, store print quality-control data and quality-control chart of each item
- ◆ Visible and flexible board collocation, freely setting of position and quantity of blank comparison standard and sample.
- ◆ The instruments can intelligently judge the state of blank comparison and standard according to the requirement of the program parameter.
- ◆ Strong database can store 500 program parameters 200 thousand testing results and more than 2 years of quality-control data and quality-control chart, and freely display and print as well.
- ◆ The CO value and standard curve of all items can be stored permanently and be called out and printed out momentarily.
- ◆ Automatic single/double wavelength examination support many kinds of qualitative or measurable analytical models.
- ◆ Support many kinds of built-in and outlay printers print the whole report, program report and quality-control and patient general report.
- ◆ With the function of all-scale query and statistics convenient for the management of sections.
- ◆ The intelligent resting protection function for prolonging the life-span of lamp.
- ◆ The elisa workstation software can be chosen to equip with as well.

**Main technical:**

- ◆ Sample form: 96 or 48 hole elisa board or strip.
- ◆ Calculation mode: absorbency, cut-off qualitative calculation.single-point scahng, polyline regression, more-point percenrage.linear regression, index regression, log regression, power regression, double-log regression and log-logit regression.
- ◆ Filter: standard configuration with 4 light filters of 405、450、492、630nm, can reach to 8 light filters ( or according to clients' requirement )
- ◆ Absorbance accuracy:  $\pm 0.01A$
- ◆ Absorbance repetition:  $\leq 0.5\%$
- ◆ Absorbance stablility :  $\pm 0.005A$

- ◆ Testing speed: 5 seconds/96 holes
- ◆ Linear error:  $\pm 0.5\%$
- ◆ Display: LCD
- ◆ Input way: touching screen and pen
- ◆ Interface: serial port RS232, parallel port with printer

## 2. WH-W3000 Microplate Washer



- **Features:**

- ◆ Direct-viewing touchscreen click, the plate freely pass in and out, easily get and put the board.
- ◆ Enclosed washes the board, making the washing process isolated from outside, avoiding the cross contamination.

**Main technical:**

- ◆ Injection Accuracy:  $\leq 2\%$
- ◆ Residual Volume:  $\leq 2\mu\text{l}/\text{well}$
- ◆ Channels: three channels, with the fluid induction device
- ◆ Wash T: 8 and 12
- ◆ Washing Mode: board, lath, random strips
- ◆ Washing Volume: 1-9999 $\mu\text{l}$  (1 $\mu\text{l}$  increasing)

- ◆ Washing times: 1-99
- ◆ Soaking Time: 0-99 hours 99 minutes (continuously adjust)
- ◆ Delay Time: 0-99 Seconds
- ◆ Injuctiong Time: 0.1-99.9 Seconds
- ◆ Washing mode: Storage 99 washing programmes
- ◆ Plate Mode: Storage 10 Plates
- ◆ Vibrate Function: Quick, Milldle, Slow selectable
- ◆ Vibrate Time: 0-99 minutes 99 seconds
- ◆ soaking needles time: 0-99 hours 99 minutes
- ◆ Auto Prcleaning interval time: 0-99 minutes

# Spectrophotometer

## 1. WH-721 Spectrophotometer



- **Features:**

- ◆ Adopt Plane holographic grating as dispersive element, with high wavelength accuracy, T, A digital direct display.
- ◆ Adopt advanced electronic circuit and elements, with high stability and sensitivity.

**Main technical:**

- ◆ Wavelength Range: 330-1000nm
- ◆ Wavelength Accuracy:  $\pm 2\text{nm}$
- ◆ Wavelength Repeatability:  $\leq 0.5\text{nm}$
- ◆ Spectral Bandwidth: 6nm
- ◆ Transmittance Accuracy:  $\pm 0.5\%$
- ◆ Transmittance Repeatability:  $\leq 0.3\%$
- ◆ Auto Adjust "0", "100"
- ◆ Power Supply: 90-260V、50-60Hz

## 2. WH721-2000 Type Spectrophotometer



- **Features:**

- ◆ Computer intelligentization
- ◆ Well reliability, good stability
- ◆ Sound optical performance
- ◆ Wide application range for power supply

**Main technical:**

- ◆ Wavelength range: 330-1000nm
- ◆ Wavelength precision:  $\pm 2$ nm
- ◆ Wavelength repeatability:  $\leq 1$ nm
- ◆ Action spectrum bandwidth: 6nm
- ◆ Transmittance accuracy:  $\pm 0.5\%$
- ◆ Transmittance repeatability:  $\leq 0.3\%$
- ◆ Stray light: 0.3% (340nm)
- ◆ Stability: 0.003A/h
- ◆ Measuring range: 0-125%T 0-1.999A
- ◆ Automatic adjustment to "0"、"100"
- ◆ Power supply: 80-264V、50-60Hz
- ◆ Weight: 5Kg

### 3. WH-722 Grating Spectrophotometer



- **Features:**



- Plane holographic grating, higher wavelength precision, display way of T, A, C digit direct read.



- Reasonable structure, good shape, easy operation, accurate test and stable performance.



- With international standard RS232 interface, attaching the data management system software, user can connect it with compute.

- **Main technical:**

- ◆ Wavelength range: 330-1000nm

- ◆ Wavelength precision:  $\pm 2\text{nm}$

- ◆ Wavelength repeatability:  $\leq 0.5\text{nm}$

- ◆ Action spectrum bandwidth: 6nm

- ◆ Transmittance accuracy:  $\pm 0.5\%$

- ◆ Transmittance repeatability:  $\leq 0.3\%$

- ◆ Automatic adjustment to "0"、"100"

- ◆ Power supply: 90-260V、50-60Hz

#### 4. WH722-2000 Type Spectrophotometer



- **Features:**

- ◆ Computer intelligentization
- ◆ Well reliability, good stability
- ◆ Sound optical performance
- ◆ Wide application range for power supply

**Main technical:**

- ◆ Wavelength range: 330-1000nm
- ◆ Wavelength accuracy:  $\pm 2$ nm
- ◆ Wavelength repeatability:  $\leq 1$ nm
- ◆ Action spectrum bandwidth: 6nm
- ◆ Transmittance reproducibility:  $\pm 0.5\%$
- ◆ Transmittance repeatability:  $\leq 0.3\%$
- ◆ Stray light: 0.3% (340nm)
- ◆ Stability: 0.003A/h
- ◆ Measurement range: 0-125%T 0-1.999A 0-1999C(0-19999F)
- ◆ Automatic adjust 0 and 100, standard RS-232 interface
- ◆ Power supply: 80-264V、50-60Hz
- ◆ Weight: 5Kg

## 5. WH-6400A Type Flame Photometer



- **Features:**

- ◆ Contemporary K、Na.
- ◆ Taking liquefied petroleum gas as fuel.
- ◆ Reliable ignition, special ignition air passage.
- ◆ Easy use and cheap price.
- ◆ Easy operation, quick analysis speed, and little sample volume.
- ◆ Good stability and repeatability.

**Main technical:**

- ◆ **Stability:**  
15 seconds of successive feeding with standard solution, instrument reading indication excursion  $\leq 2\%$ .
- ◆ **Repeatability:**  
7 times of repeated test with standard solution, instrument reading difference  $\leq 2.5\%$ .
- ◆ **Linear error:** Potassium between 0.02-0.07mmol/L, sodium between 1.1-1.6mmol/L  $\leq 5\%$ .