# Merilyzer | CelQuant 5 Plus™

Automatic Hematology Analyzer



Diagnostics



# Complete a Test with

# One Click, One Drop of Blood, in One Single Minute



#### **CRP Clinical Significance**

C-reactive protein (CRP) is an important diagnostic parameter for detecting infection, monitoring the progress and therapeutic effect. The combination of CRP and WBC parameter information helps to identify the differentiation of bacterial infections from viral infections, with high clinical diagnostic and reference value.

 Mainly proving useful in detecting inflammation and bacterial infections, determined disease progress or the effectiveness of treatments

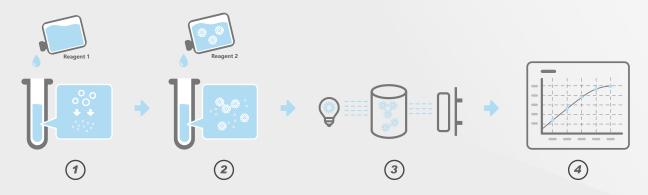


 Increasing analysis CRP range, improving CRP sensitivity

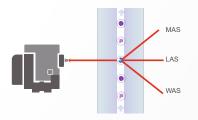
 Mainly proving useful in evaluate risk of cardiovascuardisease (CVD)

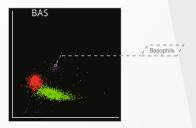
#### **CRP Measurement Principle**

- React with hemocyte remove disturbance
- Agglutination reaction of antibody-antigen
- Latex Immunoturbidimetric analysis
- FR-CRP Resulting after calibrated



# **Advanced Principle**





- Tri-angle laser scatter + flow cytometry+ cytochemical staining, achieving a betterment of 5-part WBC differentiation
- Basophils are counted by laser scatter that detects information about cell volume and cellular complexity & granularity



# **Unique Comprehensive Clinical Information**

- 5-Part WBC differentiation + CRP, 37 parameters
- 2 scattergrams, 2 histograms
- FR-CRP with linearity of 0.2-320mg/L



# **Excellent Performance**

- 60 Test/Hour
- Only 30 μl sample volume for CBC + DIFF +CRP measurement
- Individual CRP mode
- The CRP reagent is stored on-board at a constant temperature of 2-8°C, even after equipment shutdown, in order to guarantee result stability

#### **User-friendly Design**

- Compact design
- High resolution 10.4 inch touch screen
- Multi-language operating interface
- Large storage capacity up to 200,000 samples
- Closed tube for STAT samples
- Rotate the tube automatically, avoid barcode scanning error
- Reagents could be stored in the instrument to save space





#### Flexible Option

 Auto-loader and CRP module are optiona

After years of technological accumulation in Hematology analysis field, we develop an instrument named CelQuant 5 Plus CRP which is reliable for your choice.

CelQuant 5 Plus CRP is a very compact 5 part DIFF instrument with CRP measurement. Ensuring efficiency and accuracy, guaranteeing reliability and robustness, CeQuant 5 Plus CRP becomes the indispensable hematology analyzer for your laboratory.

## **Technical Specifications**

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27 reportable parameters: WBC, BASO#, NEUT#, EOS#, LYM#, MON#, BASO%, NEUT%, EOS%, LYM%, MON%, RBC, HGB, MCV, MCH, MCHC, RDW-CV, RDW-SD, HCT, PLT, MPV, PDW, PCT,

P-LCR, P-LCC, HS-CRP, FR-CRP

10 research parameters: Blast#, Blast%, ALM#, ALM%, IMM#, IMM%, Left#, Left%, NRBC#, NRBC%

2 scattergrams, 2 histograms

#### **Test Principle**

Semiconductor laser flow cytometry+Cytochemical staining+Impedance method for WBC differential

Cyanide-free colorimetry for hemoglobin test Impedance method for RBC and PLT counting Latex Immunoturbidimetric Method for CRP test

#### **Throughput**

CBC+DIFF: 60 samples per hour

CBC+DIFF + CRP: 60 samples per hour

CRP: 60 samples per hourt

#### Sample Mode

Whole blood mode Micro-WB mode Pre-dilute mode

#### Sampling type

Manual or automated sampling (Auto-loader is optional)

# **Data Storage** Capacity

At least 200,000 results

#### **Data System**

Rj45 network interface, USB interface, Support bi-directional LIS

## **Power** Consumption

260VA

## **Dimension** (D×W×H)

681mm×556mm×532mm (with auto-loader), 520mm×380mm×532mm (without auto-loader)

#### Linearity (CV%)

CelQuant 5 Plus: 48kg (with auto-loader), 40kg (without auto-loader)

CelQuant 5 Plus CRP: 51kg (with auto-loader), 43kg (without auto-loader)

WBC  $(1.0-10.0)\times10^3/\mu$ l Less than  $\pm0.3\times10^3/\mu$ l

WBC  $(10.1-99.9)\times10^3/\mu$ l Less than ±5%

WBC (100.1-500.0)×10 $^{3}$ /µl Less than ±10%

RBC  $(0-1.00)\times10^6/\mu$ l Less than  $\pm0.03\times10^6/\mu$ l

RBC  $(1.01-8.00)\times10^6/\mu$ l Less than  $\pm3.0\%$ 

HGB(0.2-7.0) g/dl Less than  $\pm 0.2$ g/dl

HGB(7.1-24.0) g/dl Less than  $\pm 2\%$ 

PLT  $(0-100)\times10^3/\mu$ l Less than  $\pm10\times10^3/\mu$ l

PLT  $(101-1000)\times10^{3}$  | Less than ±5%

PLT (1001-5000)×10^3/µl Less than ±10%

