

THE NEW AND IMPROVED

# AUTOREAD<sup>+</sup>Plus



## DELIVERS BETTER PATIENT CARE AT THE POINT-OF-CARE

### New For 2009

- L.I.S. Communication Capability
- Bar Code Scanners & Keypad for Data Entry & Positive Patient I.D.
- Improved Optics for Greater Precision
- Quieter Operation
- Expanded Printer Capability Via USB Port Capability

Thousands of practitioners already depend on the QBC AUTOREAD<sup>™</sup> Plus System for reliable hematology results from a very simple dry procedure.

### AUTOREAD<sup>™</sup> PLUS SYSTEM PROVIDES

- Rapid CBC Testing
- Dry Hematology Methodology
- Low Maintenance
- No Clean-up or Liquid Waste Disposal
- 7 Minute Results

**GIVING YOU THE TOOLS** to optimize medical and economic benefits; the improved QBC<sup>®</sup> AUTOREAD<sup>™</sup> PLUS System with the QBC AccuTube offers the most cost-effective means to achieve excellence in point-of-care hematology testing:

**Better Outcomes** from rapid and accurate, quantitative CBC results, speeding diagnosis and promoting earlier, more effective treatment & therapy.

**Increased Patient Satisfaction** from speedy resolutions of clinical presentations, reducing patient anxiety and promoting better compliance with treatment or therapy.

**Increased Physician Efficiency** because rapid results enhance the differential diagnosis of clinical problems, and accelerate medical decision-making — achieving optimal use of valuable physician time!

**Attractive Economics** with low capital investment and low cost in use.



**The QBC<sup>®</sup> AUTOREAD<sup>™</sup> PLUS System** leading the way in point-of-care hematology.

 **QBC<sup>®</sup> Europe**  
A Division of Woodley Equipment Company Ltd



# THE BENEFITS OF THE WORLD'S ONLY DRY HEMATOLOGY SYSTEM!

## Data analysis

Data processing incorporates various digital filters, pattern recognition and data conversion algorithms. Computations are based on the fact that each QBC Tube exhibits a characteristic signature that must fall within prescribed tolerances. Test results are displayed only when data analysis confirms valid band lengths in at least five of the eight sets of scanning measurements. Validity checks include:

- verification of fill lines and tube identification line
- float position
- meniscus location and detecting of bubbles around meniscus and float
- evaluation of the strength of green and red fluorescence emission for granulocytes, lymphocytes/monocytes and platelets
- determination of interfaces by evaluating rate of change of fluorescence with minimum acceptable values
- algorithmic ratios to test for quality of granulocyte-red cell interface

## Operating Ranges

Hematology parameters measured with AccuTubes by the QBC® AUTOREAD™ PLUS analyzer are valid over the following range of values:

Hematocrit	15-65%
Hemoglobin	5.0-20.0g/dL
Platelet Count	20-999×10 <sup>9</sup> /L
WBC Count	1.6-99.9×10 <sup>9</sup> /L
Granulocyte Count	0.8-70.0×10 <sup>9</sup> /L
Lymph/Mono Count	0.8-99.9×10 <sup>9</sup> /L

Results that fall outside these ranges will flash on the AUTOREAD Plus display and will be preceded by an asterisk on the printout

**Table 1**

Accuracy Comparison Between The QBC® AUTOREAD™ Plus System With AccuTubes And Coulter® Hematology Analyzers (S Plus, S Plus IV, STKS, STKR)\*

Parameter	Correlation Coefficient	Slope	Intercept	Range of Values	Number of Samples	QBC Mean	Cell Counter Mean
Hematocrit (%)	0.993	0.96	2.587	13.8-60.2	294	35.7	34.5
Hemoglobin (g/dL)	0.994	0.992	0.05	5.5-19.0	293	11.7	11.7
Platelet (x10 <sup>9</sup> /L)	0.931	0.926	16.463	29-843	278	267	271
WBC (x10 <sup>9</sup> /L)	0.978	1.045	-0.239	2.1-81.5	282	10.8	10.5
Granulocyte (x10 <sup>9</sup> /L)	0.985	1.071	-0.458	0.7-71.0	277	7.9	7.8
Lymph/Mono (x10 <sup>9</sup> /L)	0.957	0.826	0.614	0.2-76.9	280	2.9	2.8

\* Products of Coulter Electronics, Hialeah, FL

**Table 2**

Accuracy Comparison Between The QBC® Autoread™ Plus System With AccuTubes And The International Microhematocrit Reference Method

Parameter	Correlation Coefficient	Slope	Intercept	Range of Values	Number of Samples	QBC Mean	Cell Counter Mean
Hematocrit (%)	0.996	1.003	-0.111	17.5-53.1	120	34.4	34.4

**Table 3**

Precision Comparing Typical Within-run Precision Tests On The QBC® AUTOREAD™ Plus Analyzer With Ten Accutubes For Each Of Ten Whole Blood Specimens

Parameter	Mean Value	Mean C.V.
Hematocrit (%)	44.4	0.6%
Hemoglobin (g/dL)	13.3	0.6%
Platelet (x10 <sup>9</sup> /L)	287	4.4%
WBC (x10 <sup>9</sup> /L)	8.1	6.3%
	Range	S.D.
Granulocyte (%)	40 - 80	< 3.3 <sup>†</sup>
Lymph/Mono (%)	20 - 55	< 3.3 <sup>†</sup>

<sup>†</sup>Reported as Standard Deviation



## Item

## Catalog No.

### QBC® AUTOREAD™ Plus Centrifugal Hematology System

428605

(Includes analyzer, centrifuge and printer, plus 20 test AccuTube Starter Kits, CLIA Compliance Assistance Manual and other testing accessories)

### QBC® AccuTube 100 Test Kit

423406

### External Laser Printer

422932

For more information, contact your local distributor or call 877-231-3115 or visit our web site at [www.qbcdiagnostics.com](http://www.qbcdiagnostics.com)