

# CC 525

## BLOOD GAS • ELECTROLYTE • METABOLITE CO-OXIMETER (BAYER®) CONTROL

### INTENDED USE

RNA Medical® Brand **CC 525** Blood Gas • Electrolyte Metabolite • CO-Oximeter (Bayer) Control is an assayed quality control material used for monitoring the performance of blood gas, electrolyte, metabolite, and CO-Oximeter instrumentation. The unique formulation of this control makes it the ideal choice for Bayer 400 and 800 Series analyzers.

### PRODUCT DESCRIPTION

CC 525 is a buffered aqueous solution containing electrolytes, glucose, lactate, and dyes. It has been equilibrated with specific levels of oxygen, carbon dioxide, and nitrogen. This product contains no preservatives and no biological materials.

CC 525 is provided in convenient, ready-to-use ampuls containing 2.5 mL of solution. It is available in three (3) levels for monitoring pH,  $p\text{CO}_2$ ,  $p\text{O}_2$ ,  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Cl}^-$ ,  $\text{Ca}^{++}$ , glucose, lactate, total hemoglobin, and hemoglobin fractions at varying points within the clinical range. Ampuls are packaged in single level boxes (30 ampuls of the same level) or multi-level boxes (10 ampuls of each level).

### STORAGE AND SHELF LIFE

CC 525 has a shelf life of thirty-six (36) months from the date of manufacture when stored at 2-8 °C. It may be stored at room temperature (up to 25 °C) for twelve (12) months, not exceeding the stated expiration date. This product should be protected from freezing and exposure to temperatures greater than 30 °C.

### CONTROL VALUES AND ANALYTES

Lot specific values are provided with each box of controls. The typical values for CC 525 are as follows:

Analyte	Level 1	Level 2	Level 3
pH	7.15	7.40	7.60
$p\text{CO}_2$ (mmHg)	66	42	22
$p\text{O}_2$ (mmHg)	61	102	140
$\text{Na}^+$ (mmol/L)	116	135	154
$\text{K}^+$ (mmol/L)	2.9	4.8	6.9
$\text{Cl}^-$ (mmol/L)	117	97	78
$\text{Ca}^{++}$ (mmol/L)	1.60	1.18	0.64
Glucose (mg/dL)	45	100	184
Lactate (mmol/L)	12.0	3.5	0.5

#### Values for Bayer 800 Series CO-Oximeters

tHb (g/dL)	8.0	14.1	19.3
$\text{O}_2\text{Hb}$ (%)	59.5	84.8	77.0
COHb (%)	16.4	9.6	6.3
MetHb (%)	7.8	4.4	15.4
HHb (%)	16.3	2.0	1.4

### CC 525 SPECIFICATIONS

Packaging: 2.5 mL per ampul, 30 ampuls per box  
Storage: 2-8 °C (up to 12 months at room temperature)  
Shelf Life: 36 months from date of manufacture  
Matrix: Buffered aqueous solution  
Analytes: pH,  $p\text{CO}_2$ ,  $p\text{O}_2$ ,  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Cl}^-$ ,  $\text{Ca}^{++}$ , glucose, lactate, total hemoglobin, and hemoglobin fractions when measured on Bayer analyzers

### PEERQC STATISTICAL ANALYSIS

RNA has been providing peer statistics for over twenty years and, in 1999, was the first to introduce on-line data submission and reporting in real-time.

Specific features of PeerQC include:

- Data submission and reporting *on-line* via the RNA Medical website ([www.RNAMedical.com](http://www.RNAMedical.com))
- On-line and *real-time* access to monthly and peer comparison reports
- Patented error prevention technology to ensure peer group integrity
- Customized peer group options and reports
- Ability to add data not previously submitted or update prior submissions
- Reprinting and replacement of lost reports with data current to the date of submission

### ORDERING INFORMATION

RNA Medical can reserve a single lot of control for up to twelve (12) months. Pending availability and shelf life, additional sequestration may be possible. Automatic shipments may be arranged from a standing order on a predetermined frequency.

Please specify these catalog numbers when ordering RNA Medical CC 525 Controls.

**Catalog number:** CC 525-1 (Level 1)  
CC 525-2 (Level 2)  
CC 525-3 (Level 3)  
CC 525 (Multi-level)

### ADDITIONAL PRODUCTS

RNA Medical's broad line of products include blood gas controls, capillary blood collection tubes, and controls for various point-of-care tests. For further information about CC 525 or any other RNA Medical product, please call us or visit our website at [www.RNAMedical.com](http://www.RNAMedical.com).

RNA Medical is a registered trademark of Bionostics, Inc., Devens, MA, USA. Bayer is a registered trademark of Bayer AG, Leverkusen, Germany. The products and services described herein are covered by one or more of the following U.S. Patents and their foreign counterparts: 7,027,931; 5,558,985; 5,320,965; 5,304,491; 5,045,529; 5,013,666; 4,945,062.

# INSTRUMENT REFERENCE CHART

CC 525 Blood Gas • Electrolyte • Metabolite  
CO-Oximeter (Bayer) Control

# CC 525

## MANUFACTURER AND MODEL ANALYTES REPORTED BY INSTRUMENT IN CC 525

### BAYER

238	pH, pCO <sub>2</sub> , pO <sub>2</sub>
248	pH, pCO <sub>2</sub> , pO <sub>2</sub>
278	pH, pCO <sub>2</sub> , pO <sub>2</sub>
280	pH, pCO <sub>2</sub> , pO <sub>2</sub>
288	pH, pCO <sub>2</sub> , pO <sub>2</sub> , Na <sup>+</sup> , K <sup>+</sup> , Cl <sup>-</sup> , Ca <sup>++</sup>
348	pH, pCO <sub>2</sub> , pO <sub>2</sub> , Na <sup>+</sup> , K <sup>+</sup> , Ca <sup>++</sup>
400, 405	pH, pCO <sub>2</sub> , pO <sub>2</sub> , Na <sup>+</sup> , K <sup>+</sup> , Cl <sup>-</sup> , Ca <sup>++</sup> , Glucose, tHb and Hb fractions
840, 845, 850, 855, 860, 865	pH, pCO <sub>2</sub> , pO <sub>2</sub> , Na <sup>+</sup> , K <sup>+</sup> , Cl <sup>-</sup> , Ca <sup>++</sup> , Glucose, Lactate, tHb and Hb fractions
614, 634, 644	pH, Na <sup>+</sup> , K <sup>+</sup> , Cl <sup>-</sup> , Ca <sup>++</sup>

### IL

1304, 1306, 1312	pH, pCO <sub>2</sub> , pO <sub>2</sub>
BG3	pH, pCO <sub>2</sub> , pO <sub>2</sub>

### NOVA

Stat Profile® 3	pH, pCO <sub>2</sub> , pO <sub>2</sub>
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### RADIOMETER

ABL® 3, 30	pH, pCO <sub>2</sub> , pO <sub>2</sub>
ABL 300, 330	pH, pCO <sub>2</sub> , pO <sub>2</sub>
ABL 500	pH, pCO <sub>2</sub> , pO <sub>2</sub>

### ROCHE

AVL® 945, 947	pH, pCO <sub>2</sub> , pO <sub>2</sub>
AVL 990, 995	pH, pCO <sub>2</sub> , pO <sub>2</sub>

### YSI®

2300 Stat Plus	Glucose, Lactate
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Stat Profile is a registered trademark of Nova Biomedical Corporation, Waltham, MA, USA. ABL is a registered trademark of Radiometer A/S Corporation, Copenhagen, Denmark. AVL is a registered trademark of AVL GMBH, Graz, Austria. YSI is a registered trademark of YSI Incorporated, Yellow Springs, OH, USA.

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