

# CC 527

## BLOOD GAS • ELECTROLYTE • CO-OXIMETER (ITC® AVOXIMETER®) CONTROL

### INTENDED USE

RNA Medical® Brand CC 527 Blood Gas • Electrolyte • CO-Oximeter (ITC AVOXimeter) Control is an assayed quality control material used for monitoring the performance of blood gas, electrolyte, and CO-Oximeter instrumentation. The unique formulation of this control makes it the ideal choice for ITC AVOXimeter 4000 and 1000E CO-Oximeters. It may also be used on ITC IRMA TRUpoint® analyzers as an alternative to clear control solutions. The red color of CC 527 can assist with sample introduction and observation as the control is injected into the cartridge.

### PRODUCT DESCRIPTION

CC 527 is a buffered aqueous solution containing electrolytes 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 527 is provided in convenient, ready-to-use ampuls containing 2.5 mL of solution. It is available in three (3) levels for monitoring pH,  $p\text{CO}_2$ ,  $p\text{O}_2$ ,  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Cl}^-$ ,  $\text{Ca}^{++}$ , 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 527 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 527 are as follows:

Analyte	Level 1	Level 2	Level 3
pH	7.15	7.40	7.60
$p\text{CO}_2$ (mmHg)	66	42	24
$p\text{O}_2$ (mmHg)	61	104	150
$\text{Na}^+$ (mmol/L)	116	135	154
$\text{K}^+$ (mmol/L)	2.9	4.8	6.9
$\text{Cl}^-$ (mmol/L)	76	97	116
$\text{Ca}^{++}$ (mmol/L)	1.58	1.18	0.64

#### Values for AVOXimeter 4000 CO-Oximeters

tHb (g/dL)	6.8	11.6	18.5
$\text{O}_2\text{Hb}$ (%)	80.9	86.9	94.1
COHb (%)	14.6	8.3	1.0
MetHb (%)	1.8	2.6	4.0

### CC 527 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,  $p\text{CO}_2$ ,  $p\text{O}_2$ ,  $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{Cl}^-$ ,  $\text{Ca}^{++}$ , total hemoglobin, and hemoglobin fractions (when measured on AVOXimeter CO-Oximeters)

### PEERQC<sup>SM</sup> 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.

PeerQC is provided free of charge for use with RNA quality control products and features:

- Data submission and reporting via the RNA Medical website ([www.RNAMEDICAL.com](http://www.RNAMEDICAL.com))
- Real-time generation of monthly and peer comparison reports
- Patented error prevention technology to ensure peer group integrity
- Ability to add, edit, or print data submitted in prior months
- Automatic unit conversion for alternate unit submittals
- Web interface supporting multiple languages

### 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 527 Controls.

**Catalog number:** CC 527-1 (Level 1)  
CC 527-2 (Level 2)  
CC 527-3 (Level 3)  
CC 527 (Multi-level)

### ADDITIONAL PRODUCTS

RNA Medical offers a full line of blood gas controls, calibration verification materials, capillary blood collection tubes, and controls for various point-of-care tests (including rapid HIV kits). For further information about CC 527 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 and PeerQC is a service mark of Bionostics, Inc., Devens, MA, USA. ITC, AVOXimeter, and IRMA TRUpoint are registered trademarks of International Technidyne Corporation, Edison, NJ, USA. 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 527 Blood Gas • Electrolyte • CO-Oximeter  
(ITC AVOXimeter) Control

# CC 527

## MANUFACTURER AND MODEL

## ANALYTES REPORTED BY INSTRUMENT IN CC 527

### BAYER®

238	pH, pCO <sub>2</sub> , pO <sub>2</sub>
248	pH, pCO <sub>2</sub> , pO <sub>2</sub>
840, 850	pH, pCO <sub>2</sub> , pO <sub>2</sub> , Na <sup>+</sup> , K <sup>+</sup> , Cl <sup>-</sup> , Ca <sup>++</sup>
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>

### ITC

IRMA and IRMA TRUpoint	pH, pCO <sub>2</sub> , pO <sub>2</sub> , Na <sup>+</sup> , K <sup>+</sup> , Ca <sup>++</sup>
AVOXimeter 4000	tHb, O <sub>2</sub> Hb, COHb, MetHb
AVOXimeter 1000E	tHb, O <sub>2</sub> Hb

### 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>

Bayer is a registered trademark of Bayer AG, Leverkusen, Germany. 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.

BIOMKT-0005, Rev. B