

# QC 253

## FULL RANGE CO-OXIMETER CONTROL

### INTENDED USE

RNA Medical® Brand QC 253 Full Range CO-Oximeter Control is an assayed quality control material used for monitoring the measurements of total hemoglobin and hemoglobin fractions on CO-Oximeter instrumentation. QC 253 provides an alternative for those needing a control that parallels the human physiologic range for tHb, O<sub>2</sub>Hb, and COHb. It may be used on stand-alone CO-Oximometers or any of the blood gas testing systems measuring total hemoglobin and hemoglobin fractions listed on the back page.

### PRODUCT DESCRIPTION

QC 253 is a purified bovine hemoglobin solution that has been treated with compressed air and precise concentrations of carbon monoxide. This control contains no preservatives and no human-based materials. It is considered good laboratory practice to follow the recommended "Universal Precautions" when handling any blood product.

QC 253 is provided in convenient, ready-to-use ampuls containing 1.2 mL of solution. It is available in three (3) levels of total hemoglobin, oxyhemoglobin, and carboxyhemoglobin for monitoring CO-Oximeter performance at varying points within the clinical range; it also contains methemoglobin. 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

QC 253 has a shelf life of eighteen (18) months from the date of manufacture when stored at 2-8 °C. This product should be protected from freezing and exposure to temperatures greater than 8 °C.

### CONTROL VALUES AND ANALYTES

Lot specific values are provided with each box of controls. The typical target values for QC 253 are as follows:

Analyte	Level 1	Level 2	Level 3
tHb (g/dL)	8.0	13.5	17.0
O <sub>2</sub> Hb (%)	93.0	77.5	52.0
COHb (%)	6.0	20.0	49.0
MetHb (%)	0.5	0.5	0.5
Vol O <sub>2</sub> (%)	10.9	15.1	13.2
O <sub>2</sub> Ct (mL/dL)	11.4	15.6	14.2
RHb or HHb (%)	0.0	0.0	0.0

### QC 253 SPECIFICATIONS

Packaging: 1.2 mL per ampul, 30 ampuls per box

Storage: 2-8 °C

Shelf Life: 18 months from date of manufacture

Matrix: Bovine hemoglobin solution

Analytes: tHb, O<sub>2</sub>Hb, COHb, MetHb, Vol O<sub>2</sub> (O<sub>2</sub>Ct), and RHB (HHb)

### 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.

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 QC 253 Controls.

**Catalog number:** QC 253-1 (Level 1)  
QC 253-2 (Level 2)  
QC 253-3 (Level 3)  
QC 253 (Multi-level)

### ADDITIONAL PRODUCTS

RNA Medical offers a full line of blood gas and CO-Oximetry controls, calibration verification materials, capillary blood collection tubes, and quality control materials for various point-of-care tests. For further information about QC 253 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 registered service mark of Bionostics, Inc., Devens, MA, USA.

# INSTRUMENT REFERENCE CHART

## QC 253 Full Range CO-Oximeter Control

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### MANUFACTURER AND MODEL ANALYTES REPORTED BY INSTRUMENT IN CVC 253

#### IL®

482	tHb, O <sub>2</sub> Hb, COHb, MetHb, Vol O <sub>2</sub> , RHb
682	tHb, O <sub>2</sub> Hb, COHb, MetHb, Vol O <sub>2</sub> , RHb
Synthesis Series	tHb, O <sub>2</sub> Hb, COHb, MetHb
GEM OPL®	tHb, O <sub>2</sub> Hb, COHb, MetHb
GEM 4000	tHb, O <sub>2</sub> Hb, COHb, MetHb

#### ITC®

AVOXimeter® 1000E	tHb, O <sub>2</sub> Hb
AVOXimeter 4000	tHb, O <sub>2</sub> Hb, COHb, MetHb

#### NOVA

CCX	tHb, O <sub>2</sub> Hb, COHb, MetHb
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#### RADIOMETER®

OSM® 3	tHb, HbO <sub>2</sub> Sat (sO <sub>2</sub> ), HbO <sub>2</sub> , HbCO, MetHb, O <sub>2</sub> Ct
ABL® 500 Series	tHb, HbO <sub>2</sub> , HbCO, MetHb
ABL 600 Series	tHb, HbO <sub>2</sub> , HbCO, MetHb
ABL 700 Series	tHb, HbO <sub>2</sub> , HbCO, MetHb
ABL 80 Series	tHb, HbO <sub>2</sub> , HbCO, MetHb
ABL 800 Series	tHb, HbO <sub>2</sub> , HbCO, MetHb
NPT 7	tHb, HbO <sub>2</sub> , HbCO, MetHb

#### ROCHE®

Roche OMNI® Series	tHb, COHb, MetHb, O <sub>2</sub> Hb, RHb (HHb)
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#### SIEMENS® (BAYER)®

400 Series	tHb, O <sub>2</sub> Hb, COHb, MetHb
800 Series	tHb, O <sub>2</sub> Hb, COHb, MetHb, HHb
1200 Series	tHb, O <sub>2</sub> Hb, COHb, MetHb

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