



VARIANT™ II TURBO Link  
Hemoglobin Testing System

**TO USE AS AN AID IN  
THE DIAGNOSIS OF DIABETES**



# DEAD ZONE (Grey area)

Bio-Rad VARIANT II TURBO Link HbA1c  
CDM 5.2 Software

PATIENT REPORT  
V2TURBO\_STL

**Patient Data**

Sample ID:  
Patient ID:  
Name:  
Physician:  
Sex:  
DOB:

**Analysis Data**

Analysis Performed: 04/27/2017 10:06:12  
Injection Number: 36  
Run Number: 3  
Rack ID: 18  
Tube Number: 8  
Report Generated: 04/27/2017 10:06:12  
Operator ID:

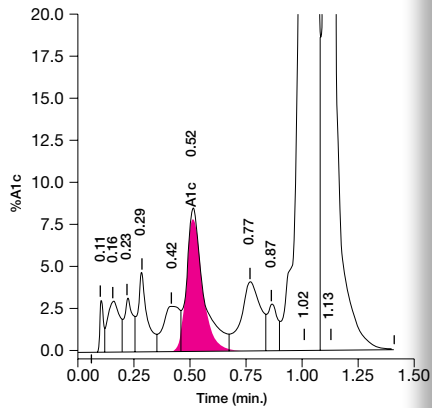
Comments:

| Peak Name             | IFCC mmol/mol | NGSP % | Area %      | Retention Time (min) |
|-----------------------|---------------|--------|-------------|----------------------|
| Unknown               | —             | —      | 0.4         | 0.106                |
| A1a                   | —             | —      | 1.1         | 0.163                |
| A1b                   | —             | —      | 0.9         | 0.225                |
| F                     | —             | —      | 1.3         | 0.287                |
| LA1c                  | —             | —      | 1.0         | 0.424                |
| A1c                   | 62*           | 7.8*   | —           | 0.519                |
| P3                    | —             | —      | 2.5         | 0.773                |
| P4                    | —             | —      | 0.9         | 0.869                |
| Ao                    | —             | —      | 49.3        | 1.018                |
| <b>Variant Window</b> | —             | —      | <b>38.7</b> | <b>1.126</b>         |

\*Values outside of expected range

Total Area

**HbA1c (IFCC) = 62\* mmol/mol**    HbA1c (NGSP) = 7.8\*



HbA1c reportable in the presence of hemoglobin S, C, D, and E traits\*

Bio-Rad VARIANT II TURBO Link HbA1c  
CDM 5.2 Software

PATIENT REPORT  
V2TURBO\_STL

**Patient Data**

Sample ID:  
Patient ID:  
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**Analysis Data**

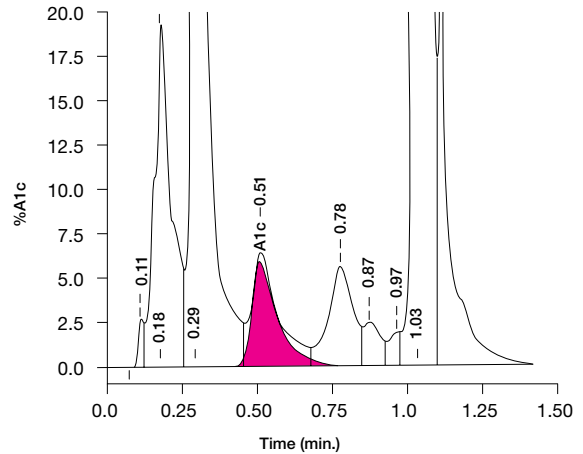
Analysis Performed: 02/14/2017 10:30:39  
Injection Number: 4513  
Run Number: 101  
Rack ID: 0011  
Tube Number: 1  
Report Generated: 02/14/2017 10:44:15  
Operator ID:

Comments:

| Peak Name | NGSP% | Area %      | Retention Time (min) | Peak Area     |
|-----------|-------|-------------|----------------------|---------------|
| Unknown   | —     | 0.4         | 0.112                | 9414          |
| A1a       | —     | 8.4         | 0.176                | 218589        |
| <b>F</b>  | —     | <b>23.9</b> | <b>0.292</b>         | <b>619799</b> |
| A1c       | 5.9   | —           | 0.510                | 98995         |
| P3        | —     | 3.6         | 0.777                | 93134         |
| P4        | —     | 1.0         | 0.875                | 26310         |
| Unknown   | —     | 0.5         | 0.967                | 13930         |
| Ao        | —     | 58.3        | 1.035                | 1507942       |

Total Area: 2,588,114

HbA1c (NGSP) = 5.9%



HbA1c reportable in the presence of HbF up to 25%\*

\* See VARIANT™ II TURBO HbA1c Kit - 2.0 Instructions for Use. (Catalog # 12000447)



# VARIANT™ II TURBO Link Hemoglobin Testing System

**Efficient**  
streamlined process  
**Powerful**  
integrated system  
**Automated**  
saves time and resources

With so many patients counting on your results each day, delivering the accuracy they need as quickly as possible is a top priority. We designed the VARIANT™ II TURBO Link Hemoglobin Testing System with your needs—and high standards—in mind.

The VARIANT II TURBO Link Hemoglobin Testing System integrates our proven HbA<sub>1c</sub> assay performance with the Sysmex® XN-9000 Automated Hematology System to handle over 90% of whole blood EDTA samples while delivering maximum flexibility and accuracy. Confidently report HbA<sub>1c</sub> results to aid physicians with diagnosing those who have diabetes, identifying those who may be at risk of developing the disease, or monitoring the progress of those living with diabetes.

Let the consolidated VARIANT II TURBO Link Hemoglobin Testing System help you see the full picture and make a difference in the lives of your patients.



## Turn greater efficiency into better patient care

With the VARIANT™ II TURBO Link Hemoglobin Testing System, we're combining Bio-Rad's decades of leadership in HbA<sub>1c</sub> with Sysmex's proven expertise in automation to improve your laboratory's workflow. The result is a fully-automated solution that helps you be the difference with timely, accurate results.

### Streamlined Process

- On-demand testing 24/7
- Sysmex Lavender Top Management®
- Workflow optimization
- Reduced sample handling errors and delays

### Save Time and Labor

- Specimen retrieval and archiving using a sorter
- Standardized automated sample data management using Sysmex WAM™
- Automated reflex and repeat testing using Sysmex WAM

## More than just an HbA1c Result

### Bio-Rad A1c provides clinically significant information by

- Detecting common hemoglobin variants
- Detecting potentially interfering substances
- Identifying those who may be at risk of developing diabetes
- Monitoring patients living with diabetes
- Aiding in the diagnosis of diabetes

### Powerful Fully-integrated Lavender Top Management® solution

- CBC testing
- Integrated slide maker/stainer
- HbA<sub>1c</sub> testing
- Automated sample sorting and archiving
- Sysmex WAM decision logic rules database

*Lavender Top Management is a registered trademark of Sysmex*

*Every Patient Deserves Quality Results. You Deserve **operational efficiency.***

# DEAD ZONE

(Grey area)

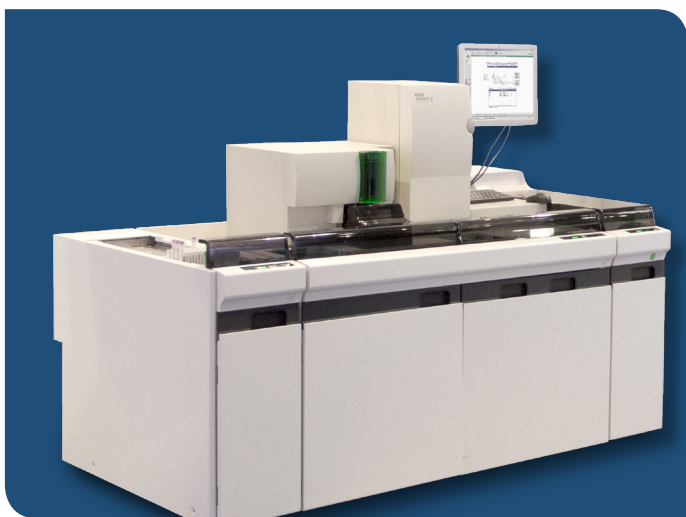


## Experience superior HbA<sub>1c</sub> quality, accuracy, and efficiency

- Gold standard ion-exchange High Performance Liquid Chromatography (HPLC) methodology
- No interference in the presence of:
  - Hemoglobin S, C, D, or E traits\*
  - Hemoglobin F (HbF) concentrations up to 25%\*
  - Carbamylated (CHb) and Labile A<sub>1c</sub> (LA1c)\*
  - Acetylated hemoglobin\*
- Anchored to the IFCC reference method
- NGSP certified and traceable to the Diabetes Control and Complications Trial (DCCT)
- Sample results in 97 seconds
- Cartridge lifetime of 2,500 injections
- Hemoglobin Capillary Collection System (HCCS) allows remote finger stick sample collection

\* See VARIANT™ II TURBO HbA<sub>1c</sub> Kit - 2.0 Instructions for Use (Catalog # 12000447)

# VARIANT™ II TURBO Link Hemoglobin Testing System



## Unparalleled Support

Bio-Rad's world class service and support team is backed by our decades-long leadership in the field of HbA<sub>1c</sub> testing. The VARIANT II TURBO Link Hemoglobin Testing System represents our continued commitment to helping you be the difference for the patients who count on you.

### Ordering Information

| Catalog # | Description   |               |
|-----------|---|---------------|
| 270-2700  | VARIANT™ II TURBO Link Hemoglobin Testing System (110/220V).....              | 1 unit        |
| 12000447  | VARIANT™ II TURBO HbA <sub>1c</sub> Kit – 2.0.....                            | 2500 tests    |
| 270-2730  | VARIANT™ II TURBO Hemoglobin A <sub>1c</sub> Wash/Diluent Set.....            | 4 x 2500 mL   |
| 740       | Lyphochek® Diabetes Control, Bilevel (3 each of 2 levels).....                | 6 x 0.5 mL    |
| 12000070  | Lyphochek® Hemoglobin A <sub>1c</sub> Linearity Set (1 each of 6 levels)..... | 6 x 0.5 mL    |
| BC80      | EQAS Hemoglobin Program (3 analytes).....                                     | 12 x 0.5 mL   |
| 171       | Liquichek™ Diabetes Control, Level 1.....                                     | 6 x 1 mL      |
| 172       | Liquichek™ Diabetes Control, Level 2.....                                     | 6 x 1 mL      |
| 173       | Liquichek™ Diabetes Control, Level 3.....                                     | 6 x 1 mL      |
| 196-2051  | Hemoglobin Capillary Collection System (HCCS).....                            | 5 tests       |
| 196-2052  | Hemoglobin Capillary Collection System (HCCS).....                            | 100 tests     |
| 196-2053  | Hemoglobin Capillary Collection System (HCCS).....                            | 5000 tests    |
| 196-2100  | Plastic Capillaries, 100 per dispenser.....                                   | 20 dispensers |

**BIO-RAD**

**Bio-Rad  
Laboratories**

For further information, please contact the Bio-Rad office nearest you or visit our website at [www.bio-rad.com/diagnostics](http://www.bio-rad.com/diagnostics)

Clinical  
Diagnostics Group

Website [www.bio-rad.com/diagnostics](http://www.bio-rad.com/diagnostics) U.S. 1-800-224-6723 Australia 61-2-9914-2800 Austria 43-1-877-8901 Belgium +32 (3)710-53-00 Brazil +55 (31)3689-6600  
Canada 1-514-334-4372 China 86-21-61698500 Czech Republic 420-241-430-532 Denmark +45-4452-1000 Finland 358-9-804-22-00 France 33-1-47-95-60-00  
Germany +49 (0)89-318-840 Greece 30-210-7774396 Hong Kong 852-2789-3300 Hungary +36-1-459-6100 India 1800-180-1224 Israel 972-3-9636050 Italy +39-02-216091  
Japan 81-3-6361-7070 Korea 82-2-3473-4460 Mexico +52 (55)5488-7670 The Netherlands +31-318-540666 New Zealand 64-9-415-2280 Norway +47-23-38-41-30  
Poland 48-22-3319999 Portugal 351-21-472-7700 Russia +7-495-721-1404 Singapore 65-6415-3170 South Africa 27-11-442-85-08 Spain 34-91-590-5200  
Sweden +46-8-555-127-00 Switzerland +41 (0)26-674-55-05/06 Taiwan 886-2-2578-7189 Thailand 662-651-8311 United Kingdom +44 (0)20-8328-2000