

[REDACTED]

Total Volume: Not Provided

Fasting: No

**Ordered Items**

Pneumococcal Ab (23 Serotype); Written Authorization

| TESTS                                | RESULT | FLAG | UNITS | REFERENCE INTERVAL | LAB |
|--------------------------------------|--------|------|-------|--------------------|-----|
| <b>Pneumococcal Ab (23 Serotype)</b> |        |      |       |                    |     |
| Pneumo Ab Type 1*                    | 0.2    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 3*                    | 0.6    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 4*                    | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 8*                    | 0.5    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 9 (9N)*               | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 12 (12F)*             | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 14*                   | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 17 (17F)*             | 0.7    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 19 (19F)*             | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 2*                    | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 20*                   | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 22 (22F)*             | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 23 (23F)*             | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 26 (6B)*              | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 34 (10A)*             | 0.1    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 43 (11A)*             | 0.2    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 5*                    | 0.8    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 51 (7F)*              | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 54 (15B)*             | 0.1    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 56 (18C)*             | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 57 (19A)*             | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 68 (9V)*              | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 70 (33F)*             | 0.3    | Low  | ug/mL | >1.3               | 01  |

\*This test was developed and its performance characteristics determined by [REDACTED]. It has not been cleared or approved by the U.S. Food and Drug Administration.

[REDACTED]

[REDACTED]

Tests Ordered

Pneumococcal Ab (23 serotype); Venipuncture

| TESTS                                | RESULT | FLAG | UNITS | REFERENCE INTERVAL | LAB |
|--------------------------------------|--------|------|-------|--------------------|-----|
| <b>Pneumococcal Ab (23 Serotype)</b> |        |      |       |                    |     |
| Pneumo Ab Type 1*                    | 39.1   | ---  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 3*                    | 2.0    | ---  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 4*                    | 0.4    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 8*                    | >27.2  | ---  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 9 (9N)*               | 2.5    | ---  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 12 (12F)*             | 0.2    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 14*                   | 1.2    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 17 (17F)*             | 27.3   | ---  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 19 (19F)*             | 0.6    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 2*                    | >20.6  | ---  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 20*                   | 1.3    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 22 (22F)*             | 7.0    | ---  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 23 (23F)*             | <0.1   | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 26 (6B)*              | 0.2    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 34 (10A)*             | 7.8    | ---  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 43 (11A)*             | 13.5   | ---  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 5*                    | >60.0  | ---  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 51 (7F)*              | 4.1    | ---  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 54 (15B)*             | 1.1    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 56 (18C)*             | 0.3    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 57 (19A)*             | 1.0    | Low  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 68 (9V)*              | 6.2    | ---  | ug/mL | >1.3               | 01  |
| Pneumo Ab Type 70 (33F)*             | 1.7    | ---  | ug/mL | >1.3               | 01  |

\*This test was developed and its performance characteristics determined by Viracor-IBT Laboratories. It has not been cleared or approved by the U.S. Food and Drug Administration.

01 NEWXW Viracor IBT Laboratories Inc Dir: Michelle Altrich, PhD  
 1001 NW Technology Drive, Lees Summit, MO 64086-5603  
 For inquiries, the physician may contact Branch: 800-859-0391 Lab: 800-762-4344

**Ordered Items**

IgG, Subclasses(1-4); Tetanus Antitoxoid IgG Ab; Haemophilus influenzae B Ag; Venipuncture

| TESTS                            | RESULT | FLAG | UNITS | REFERENCE INTERVAL | LAB |
|----------------------------------|--------|------|-------|--------------------|-----|
| <b>IgG, Subclasses (1-4)</b>     |        |      |       |                    |     |
| Immunoglobulin G, Qn, Serum      | 566    | Low  | mg/dL | 700 1600           | 01  |
| IgG, Subclass 1                  | 255    | Low  | mg/dL | 422 1292           | 01  |
| IgG, Subclass 2                  | 181    |      | mg/dL | 117 747            | 01  |
| IgG, Subclass 3                  | 21     | Low  | mg/dL | 41 129             | 01  |
| IgG, Subclass 4                  | 10     |      | mg/dL | 1 291              | 01  |
| <b>Tetanus Antitoxoid IgG Ab</b> | 1.59   |      | IU/mL | <0.10              | 01  |

Interpretation:  
Non Protective <0.10  
Protective >=0.10

Results for this test are for research purposes only by the assay's manufacturer. The performance characteristics of this product have not been established. Results should not be used as a diagnostic procedure without confirmation of the diagnosis by another medically established diagnostic product or procedure.

**Haemophilus influenzae B Ag**

Negative

Negative

01

**General Comments & Additional Information**

**Total Volume:** Not Provided

**Fasting:** No

**Ordered Items**

Natural Killer Cell Surface Ag; Isohemagglutinin Titer; B-Cell CD20 Expression; Immunoglobulins A/G/M, Qn, Ser; Venipuncture

| TESTS                                 | RESULT | FLAG | UNITS    | REFERENCE INTERVAL | LAB |
|---------------------------------------|--------|------|----------|--------------------|-----|
| <b>Natural Killer Cell Surface Ag</b> |        |      |          |                    |     |
| Ab NK (CD56/16)                       | 153    |      | /uL      | 24 406             |     |
| % NK (CD56/16)                        | 5.9    |      | %        | 1.4 19.4           | 01  |
| WBC                                   | 7.4    |      | x10E3/uL | 3.4 10.8           | 01  |
| RBC                                   | 5.05   |      | x10E6/uL | 4.14 5.80          | 01  |
| Hemoglobin                            | 15.8   |      | g/dL     | 12.6 17.7          | 01  |
| Hematocrit                            | 45.8   |      | %        | 37.5 51.0          | 01  |
| MCV                                   | 91     |      | fL       | 79 97              | 01  |
| MCH                                   | 31.3   |      | pg       | 26.6 33.0          | 01  |
| MCHC                                  | 34.5   |      | g/dL     | 31.5 35.7          | 01  |
| RDW                                   | 13.4   |      | %        | 12.3 15.4          | 01  |
| Platelets                             | 196    |      | x10E3/uL | 150 379            | 01  |
| Neutrophils                           | 54     |      | %        |                    | 01  |
| Lymphs                                | 35     |      | %        |                    | 01  |
| Monocytes                             | 10     |      | %        |                    | 01  |
| Eos                                   | 1      |      | %        |                    | 01  |
| Basos                                 | 0      |      | %        |                    | 01  |
| Neutrophils (Absolute)                | 4.0    |      | x10E3/uL | 1.4 7.0            | 01  |
| Lymphs (Absolute)                     | 2.6    |      | x10E3/uL | 0.7 3.1            | 01  |
| Monocytes (Absolute)                  | 0.7    |      | x10E3/uL | 0.1 0.9            | 01  |
| Eos (Absolute)                        | 0.1    |      | x10E3/uL | 0.0 0.4            | 01  |
| Baso (Absolute)                       | 0.0    |      | x10E3/uL | 0.0 0.2            | 01  |
| Immature Granulocytes                 | 0      |      | %        |                    | 01  |
| Immature Grans (Abs)                  | 0.0    |      | x10E3/uL | 0.0 0.1            | 01  |

**Isohemagglutinin Titer**

|                 |          |    |
|-----------------|----------|----|
| Antibody Screen | Negative | 01 |
| Blood Grouping  | A        | 01 |

Note: In children beyond the age of 6 months and normal adults, isohemagglutinins will be present which correspond to the absence of A or B antigens on red blood cells.

Blood Group: Expected Isohemagglutinins:

|   |                |
|---|----------------|
| O | anti A, anti B |
| A | anti B         |
| B | anti A         |

**FINAL REPORT**

| TESTS   | RESULT | FLAG | UNITS | REFERENCE INTERVAL | LAB |
|---------|--------|------|-------|--------------------|-----|
| AB      | none   |      |       |                    |     |
| A Titer | NI     |      |       |                    | 01  |
| B Titer | 1:64   |      |       |                    | 01  |

The normal titer of anti A and/or anti B may vary considerably between different individuals and seasonal variations are common. Normal titers will generally not exceed 1:128. Very elevated titers have been reported in a variety of situations including Toxocara infection in children. Absence of the expected isohemagglutinin(s) in individuals past the age of 6 months is considered abnormal.

**B-Cell CD20 Expression**

Interpretation See Note 02  
 Flow cytometric analysis of the whole blood specimen for CD20 expression on B cells indicates that essentially all of the CD19 positive B cells express CD20 and represent 12% of the lymphocytes. The viability of the specimen is 93%. Please correlate the results from this study morphologically and clinically.

These results have been reviewed and approved by Ronald L. Weiss, MD.

06/28/2015 13:07 MDT

Test developed and characteristics determined by ARUP Laboratories. See Compliance Statement A: aruplab.com/CS

|        |    |  |   |  |    |
|--------|----|--|---|--|----|
| % CD19 | 12 |  | % |  | 02 |
| % CD20 | 12 |  | % |  | 02 |

**Immunoglobulins A/G/M, Qn, Ser**

|                                    |            |            |       |          |    |
|------------------------------------|------------|------------|-------|----------|----|
| <b>Immunoglobulin G, Qn, Serum</b> | <b>552</b> | <b>Low</b> | mg/dL | 700 1600 | 01 |
| Immunoglobulin A, Qn, Serum        | 207        |            | mg/dL | 91 414   | 01 |
| Immunoglobulin M, Qn, Serum        | 148        |            | mg/dL | 40 230   | 01 |

|    |    |   |                       |
|----|----|---|-----------------------|
| 01 | BN | LabCorp Burlington<br>1447 York Court, Burlington, NC 27215-3361        | William F Hancock, MD |
| 02 | Y8 | ARUP Laboratories Inc<br>500 Chipeta Way, Salt Lake City, UT 84108-1221 | Jerry Hussong,        |

For inquiries, the physician may contact **Branch: 800-859-0391 Lab: 800-762-4344**

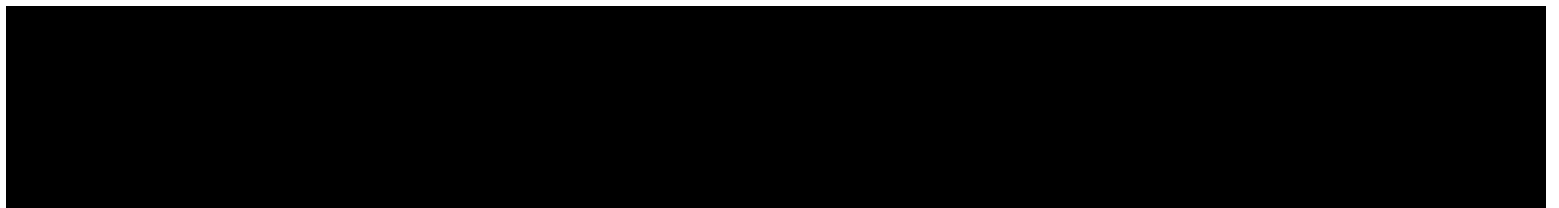
**General Comments & Additional Information**

Clinical Info: SRC:BD

**Ordered Items**

Protein Electro.,S; Vitamin E, Serum; LDH; Antinuclear Antibodies Direct; Sedimentation Rate-Westergren; Creatine Kinase,Total,Serum; C-Reactive Protein, Quant; Fungus (Mycology) Culture; Venipuncture

| TESTS   | RESULT       | FLAG | UNITS | REFERENCE INTERVAL | LAB |
|---|--------------|------|-------|--------------------|-----|
| <b>Protein Electro.,S</b>   |              |      |       |                    |     |
| Protein, Total, Serum   | 7.0          |      | g/dL  | 6.0 8.5            | 01  |
| Albumin   | 4.5          |      | g/dL  | 3.2 5.6            | 01  |
| Alpha 1 Globulin  | 0.2          |      | g/dL  | 0.1 0.4            | 01  |
| Alpha 2 Globulin  | 0.6          |      | g/dL  | 0.4 1.2            | 01  |
| Beta Globulin   | 1.1          |      | g/dL  | 0.6 1.3            | 01  |
| Gamma Globulin  | 0.6          |      | g/dL  | 0.5 1.6            | 01  |
| M Spike   | Not Observed |      | g/dL  | Not Observed       | 01  |
| Globulin, Total   | 2.5          |      | g/dL  | 2.0 4.5            |     |
| A/G Ratio   | 1.8          |      |       | 0.7 2.0            |     |
| Please note:  |              |      |       |                    |     |
| Protein electrophoresis scan will follow via computer, mail, or courier delivery. |              |      |       |                    |     |
| <b>Vitamin E, Serum</b>   |              |      |       |                    |     |
| Vitamin E (Alpha Tocopherol)  | 24.2         | High | mg/L  | 4.6 17.8           | 01  |
| <b>LDH</b>  | 115          |      | IU/L  | 0 225              | 01  |
| <b>Antinuclear Antibodies Direct</b>  |              |      |       |                    |     |
| ANA Direct  | Negative     |      |       | Negative           | 01  |
| <b>Sedimentation Rate-Westergren</b>  |              |      |       |                    |     |
|   | 2            |      | mm/hr | 0 15               | 01  |
| <b>Creatine Kinase,Total,Serum</b>  | 96           |      | U/L   | 24 204             | 01  |
| <b>C-Reactive Protein, Quant</b>  | 0.5          |      | mg/L  | 0.0 4.9            | 01  |
| <b>Fungus (Mycology) Culture</b>  |              |      |       |                    |     |
| Fungus (Mycology) Culture   | Final Report |      |       |                    | 01  |
| Result 1  |              |      |       |                    | 01  |
| No yeast or mold isolated after 4 weeks.  |              |      |       |                    |     |

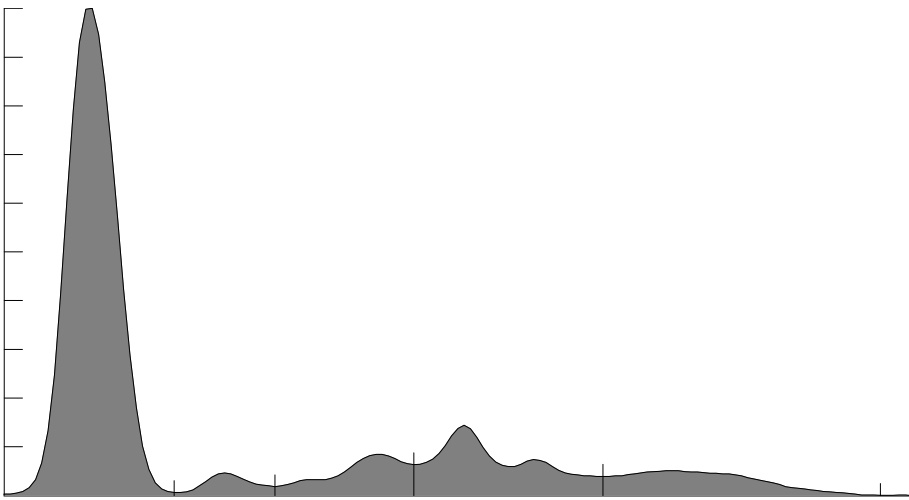


# Serum Protein Electrophoresis

Total Protein: 7.0



Serum Protein SPE Sample 53 08-12-2014 22:01:58:52



Status: OkEdited

| Fraction      | %    | g/dl | g/dl | Range |
|---------------|------|------|------|-------|
| Albumin       | 64.9 | 4.5  | 3.2  | 5.6   |
| Alpha 1       | 2.9  | 0.2  | 0.1  | 0.4   |
| Alpha 2       | 7.9  | 0.6  | 0.4  | 1.2   |
| Beta          | 15.3 | 1.1  | 0.6  | 1.3   |
| Gamma         | 8.9  | 0.6  | 0.5  | 1.6   |
| Total Protein |      | 7.0  | 6.0  | 8.5   |

Comment



**General Comments & Additional Information**

**Total Volume:** Not Provided

**Fasting:** No

**Ordered Items**

Celiac Disease Comprehensive; HLA DRB1,3,4,5,DQB1 (IR); Lipid Panel; Vitamin B12 and Folate; Human Trans.Growth Fact.beta 1; Cortisol; Complement C4a; ACTH, Plasma; VIP, Plasma; VEGF, Plasma; Homocyst(e)ine, Plasma; Ferritin, Serum; Venipuncture

| TESTS                               | RESULT  | FLAG | UNITS | REFERENCE INTERVAL | LAB |
|-------------------------------------|---|------|-------|--------------------|-----|
| <b>Celiac Disease Comprehensive</b> |   |      |       |                    |     |
| Deamidated Gliadin Abs, IgA         | <1  |      | units | 0 19               | 01  |
|                                     | Negative  |      |       | 0 19               |     |
|                                     | Weak Positive   |      |       | 20 30              |     |
|                                     | Moderate to Strong Positive   |      |       | >30                |     |
| Deamidated Gliadin Abs, IgG         | <1  |      | units | 0 19               | 01  |
|                                     | Negative  |      |       | 0 19               |     |
|                                     | Weak Positive   |      |       | 20 30              |     |
|                                     | Moderate to Strong Positive   |      |       | >30                |     |
| t Transglutaminase (tTG) IgA        | <2  |      | U/mL  | 0 3                | 01  |
|                                     | Negative  |      |       | 0 3                |     |
|                                     | Weak Positive   |      |       | 4 10               |     |
|                                     | Positive  |      |       | >10                |     |
|                                     | Tissue Transglutaminase (tTG) has been identified as the endomysial antigen. Studies have demonstrated that endomysial IgA antibodies have over 99% specificity for gluten sensitive enteropathy. |      |       |                    |     |
| t Transglutaminase (tTG) IgG        | 2   |      | U/mL  | 0 5                | 01  |
|                                     | Negative  |      |       | 0 5                |     |
|                                     | Weak Positive   |      |       | 6 9                |     |
|                                     | Positive  |      |       | >9                 |     |
| Endomysial Antibody IgA             | Negative  |      |       | Negative           | 01  |
| Immunoglobulin A, Qn, Serum         | 232   |      | mg/dL | 91 414             | 01  |
| <b>HLA DRB1,3,4,5,DQB1 (IR)</b>     |   |      |       |                    |     |
| DRB1                                |   |      |       |                    | 02  |
|                                     | DRB1*07:AEK   |      |       |                    |     |
| DRB1                                |   |      |       |                    | 02  |
|                                     | 15:UZTD   |      |       |                    |     |
|                                     | Code Translation:   |      |       |                    |     |
|                                     | AEK 01/22   |      |       |                    |     |
|                                     | UZTD 01/32/36/37/41/42/43/51/52/55/56/61/64/67/75/76  |      |       |                    |     |
| DRB3                                |   |      |       |                    | 02  |
|                                     | DRB3*   |      |       |                    |     |
| DRB3                                |   |      |       |                    | 02  |

| TESTS                                 | RESULT  | FLAG        | UNITS | REFERENCE INTERVAL | LAB |
|---------------------------------------|---|-------------|-------|--------------------|-----|
| DRB4                                  |   |             |       |                    | 02  |
|                                       | DRB4*01:FVUU  |             |       |                    |     |
| DRB4                                  |   |             |       |                    | 02  |
|                                       | Code Translation:   |             |       |                    |     |
|                                       | FVUU 01:01/01:02/01:03/01:03N/01:04/01:05/01:06/01:07                 |             |       |                    |     |
|                                       | /01:08/02:01N/03:01N  |             |       |                    |     |
| DRB5                                  |   |             |       |                    | 02  |
|                                       | DRB5*01:01  |             |       |                    |     |
| DRB5                                  |   |             |       |                    | 02  |
| DQB1 Allele 1                         |   |             |       |                    | 02  |
|                                       | DQB1*03:VBEK  |             |       |                    |     |
| DQB1 Allele 2                         |   |             |       |                    | 02  |
|                                       | 06:VTYN   |             |       |                    |     |
|                                       | Code Translation:   |             |       |                    |     |
|                                       | VBEK 03/06/10/12/15/20/30/31/33/34/39/40/41/43                        |             |       |                    |     |
|                                       | VTYN 06:02/06:11/06:16/06:19/06:26N/06:33/06:37/06:40                 |             |       |                    |     |
|                                       | /06:47/06:48/06:49/06:50  |             |       |                    |     |
|                                       | HLA allele interpretation for all loci based on IMGT/HLA              |             |       |                    |     |
|                                       | database version 3.9  |             |       |                    |     |
|                                       | HLA Lab CLIA ID Number 34D0954530                                     |             |       |                    |     |
| HLA Methodology                       |   |             |       |                    | 02  |
|                                       | HLA results were obtained using sequence based typing (SBT),          |             |       |                    |     |
|                                       | sequence specific oligonucleotide probes (SSOP), and/or sequence      |             |       |                    |     |
|                                       | specific primers (SSP) as needed to obtain the required resolution.   |             |       |                    |     |
|                                       | Please contact HLA Customer Service at 1 800 533 1037 if you have any |             |       |                    |     |
|                                       | questions.  |             |       |                    |     |
|                                       | Director of HLA Laboratory  |             |       |                    |     |
|                                       | Dr George C Maha, PhD   |             |       |                    |     |
| <b>Lipid Panel</b>                    |   |             |       |                    |     |
| <b>Cholesterol, Total</b>             | <b>224</b>  | <b>High</b> | mg/dL | 100 199            | 01  |
| Triglycerides                         | 134   |             | mg/dL | 0 149              | 01  |
| HDL Cholesterol                       | 48  |             | mg/dL | >39                | 01  |
| Comment                               |   |             |       |                    | 01  |
|                                       | According to ATP III Guidelines, HDL C >59 mg/dL is considered a      |             |       |                    |     |
|                                       | negative risk factor for CHD.   |             |       |                    |     |
| VLDL Cholesterol Cal                  | 27  |             | mg/dL | 5 40               |     |
| <b>LDL Cholesterol Calc</b>           | <b>149</b>  | <b>High</b> | mg/dL | 0 99               |     |
| <b>Vitamin B12 and Folate</b>         |   |             |       |                    |     |
| <b>Vitamin B12</b>                    | <b>&gt;1999</b>   | <b>High</b> | pg/mL | 211 946            | 01  |
| Folate (Folic Acid), Serum            | >19.9   |             | ng/mL | >3.0               | 01  |
| Note:                                 |   |             |       |                    | 01  |
|                                       | A serum folate concentration of less than 3.1 ng/mL is                |             |       |                    |     |
|                                       | considered to represent clinical deficiency.                          |             |       |                    |     |
| <b>Human Trans.Growth Fact.beta 1</b> |   |             |       |                    |     |
| <b>TGF-b1</b>                         | <b>4260</b>   | <b>High</b> | pg/mL | 344 2382           | 03  |
|                                       | The performance characteristics of the listed assay was               |             |       |                    |     |
|                                       | validated by Cambridge Biomedical Inc. The US FDA has not             |             |       |                    |     |

| TESTS  | RESULT | FLAG | UNITS       | REFERENCE INTERVAL | LAB |
|--|--------|------|-------------|--------------------|-----|
| <p>approved or cleared this test. The results of this assay can be used for clinical diagnosis without FDA approval. Cambridge Biomedical Inc. is a CLIA certified, CAP accredited laboratory for performing high complexity assays such as this one.</p>  |        |      |             |                    |     |
| <b>Cortisol</b>  | 13.3   |      | ug/dL       | 2.3 19.4           | 01  |
|  |        |      | Cortisol AM | 6.2 19.4           |     |
|  |        |      | Cortisol PM | 2.3 11.9           |     |
| <b>Complement C4a</b>  | 647.6  |      | ng/mL       | 0.0 650.0          | 01  |
| <p>Results for this test are for research purposes only by the assay's manufacturer. The performance characteristics of this product have not been established. Results should not be used as a diagnostic procedure without confirmation of the diagnosis by another medically established diagnostic product or procedure.</p> |        |      |             |                    |     |
| <b>ACTH, Plasma</b>  | 10.5   |      | pg/mL       | 7.2 63.3           | 01  |
| <p>ACTH reference interval for samples collected between 7 and 10 AM.</p>  |        |      |             |                    |     |
| <b>VIP, Plasma</b>   | 49.2   |      | pg/mL       | 0.0 58.8           | 01  |
| <p>Results for this test are for research purposes only by the assay's manufacturer. The performance characteristics of this product have not been established. Results should not be used as a diagnostic procedure without confirmation of the diagnosis by another medically established diagnostic product or procedure.</p> |        |      |             |                    |     |
| <b>VEGF, Plasma</b>  | 22     |      | pg/mL       | 0 115              | 01  |
| <p>Results for this test are for research purposes only by the assay's manufacturer. The performance characteristics of this product have not been established. Results should not be used as a diagnostic procedure without confirmation of the diagnosis by another medically established diagnostic product or procedure.</p> |        |      |             |                    |     |
| <b>Homocyst(e)ine, Plasma</b>  | 8.3    |      | umol/L      | 0.0 15.0           | 01  |
| <b>Ferritin, Serum</b>   | 115    |      | ng/mL       | 30 400             | 01  |

|    |    |   |                       |
|----|----|---|-----------------------|
| 01 | BN | LabCorp Burlington<br>1447 York Court, Burlington, NC 27215-3361              | William F Hancock, MD |
| 02 | 2Q | LabCorp Burlington DNA<br>1440 York Court, Burlington, NC 27215-3361          | George Maha, PhD      |
| 03 | E= | Cambridge Biomedical Inc<br>1320 Soldiers Field Road, Brighton, MA 02135-1020 | Patricia Devine,      |

For inquiries, the physician may contact **Branch: 800-859-0391 Lab: 800-762-4344**

**Ordered Items**

Testosterone,Free+Weakly Bound; Thyroxine (T4) Free, Direct, S; TSH; Luteinizing Hormone(LH), S; FSH, Serum; Venipuncture

| TESTS  | RESULT      | FLAG       | UNITS  | REFERENCE | INTERVAL | LAB |
|--|-------------|------------|--------|-----------|----------|-----|
| <b>Testosterone,Free+Weakly Bound</b>  |             |            |        |           |          |     |
| <b>Testosterone, Serum</b>   | <b>235</b>  | <b>Low</b> | ng/dL  | 348       | 1197     | 01  |
| Comment:   |             |            |        |           |          |     |
| Adult male reference interval is based on a population of lean males up to 40 years old. |             |            |        |           |          |     |
| Testost., % Free+Weakly Bound  | 16.8        |            | %      | 9.0       | 46.0     | 01  |
| <b>Testost., F+W Bound</b>   | <b>39.5</b> | <b>Low</b> | ng/dL  | 40.0      | 250.0    |     |
| <b>Thyroxine (T4) Free, Direct, S</b>  |             |            |        |           |          |     |
| T4,Free (Direct)   | 1.27        |            | ng/dL  | 0.82      | 1.77     | 01  |
| <b>TSH</b>   | 1.280       |            | uIU/mL | 0.450     | 4.500    | 01  |
| <b>Luteinizing Hormone(LH), S</b>  |             |            |        |           |          |     |
| LH   | 3.0         |            | mIU/mL | 1.7       | 8.6      | 01  |
| <b>FSH, Serum</b>  |             |            |        |           |          |     |
| FSH  | 2.3         |            | mIU/mL | 1.5       | 12.4     | 01  |

|    |    |  |                       |
|----|----|--|-----------------------|
| 01 | BN | LabCorp Burlington<br>1447 York Court, Burlington, NC 27215-3361 | William F Hancock, MD |
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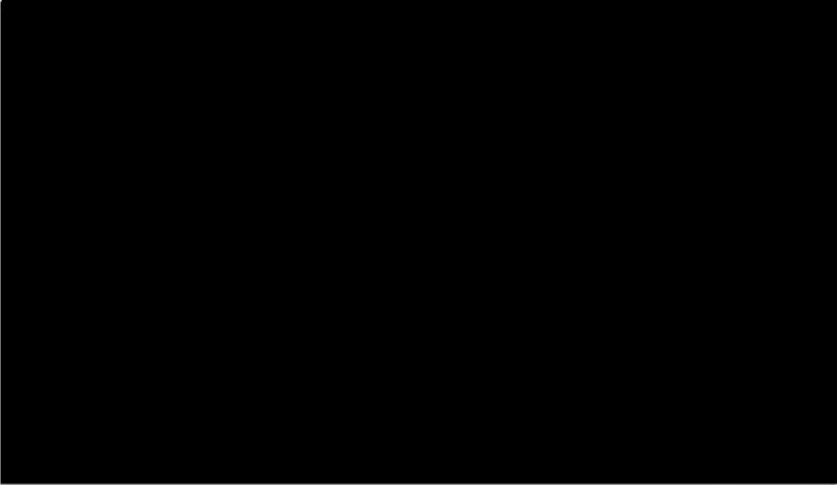
For inquiries, the physician may contact **Branch: 800-631-5250 Lab: 800-762-4344**



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## Electroencephalogram Report

Date of Report:  2014



**Technical Description, Eyes Closed:** This is a 19-channel, conventional EEG (95816) recording of satisfactory technical quality. Posterior dominant 9.5-10.5 Hz alpha activity, of persistent quantity, rhythmic character, of poorly sustained 25-50 uV amplitude when recorded with reference to electrode Cz. It is symmetrical. There is generalized 18-22Hz beta activity of 0-20uv amplitude. Spike discharges of 20-50 uV amplitude and positive polarity arise in the left and right temporal as well as right occipital regions (12:22:02, 12:26:14).

**Interpretation:**

This patient's EEG shows spike activity of positive polarity arising in multiple cortical regions, suggesting the presence of irritative and epileptogenic lesions in these areas. Background activity was within normal variation for age.

