

| Laboratory Test                      |  | Notes | High Risk | Intermediate Risk | Optimal | High Risk Range   | Intermediate Risk Range | Optimal Range | Previous Results  |
|--------------------------------------|--|-------|-----------|-------------------|---------|-------------------|-------------------------|---------------|-------------------|
| Inflammation/<br>Oxidation           | Fibrinogen (mg/dL) <sup>v</sup>                                      |       |           |                   | 373     | < 126 or > 517    | 438 - 517               | 126 - 437     | 5/9/2017<br>373   |
|                                      | hs-CRP (mg/L) <sup>v</sup>   |       |           |                   | 0.4     | > 2.9             | 1.0 - 2.9               | < 1.0         | 5/9/2017<br>< 0.3 |
|                                      | Lp-PLA <sub>2</sub> Activity (nmol/min/mL) <sup>v</sup>              |       |           |                   | 161     | ≥ 225             | 197 - 224               | ≤ 196         |                   |
|                                      | Myeloperoxidase (pmol/L) <sup>sv</sup>                               |       |           |                   | 141     | ≥ 332             | 256 - 331               | ≤ 255         | 5/9/2017<br>156   |
|                                      | Oxidized LDL (U/L) <sup>sv</sup>                                     |       |           | 65                |         | > 70              | 60 - 70                 | < 60          | 5/9/2017<br>69    |
| Endothelial Function                 | Asymmetric Dimethylarginine (ng/mL) <sup>sv</sup>                    |       |           |                   | 93      | > 108             | 97 - 108                | < 97          | 5/9/2017<br>104   |
|                                      | Symmetric Dimethylarginine (ng/mL) <sup>sv</sup>                     |       |           |                   | 76      | > 104             | 88 - 104                | < 88          | 5/9/2017<br>73    |
|                                      | L-arginine (ng/mL) <sup>sv</sup>                                     |       |           |                   | 15214   | < 4500 or > 22500 |                         | 4500 - 22500  | 5/9/2017<br>14217 |
|                                      | Asymmetric Dimethylarginine/Arginine Ratio (calculated) <sup>v</sup> |       |           |                   | 6.1     | > 9.8             | 7.8 - 9.8               | < 7.8         | 5/9/2017<br>7.3   |
| Myocardial Structure/Stress/Function | Galectin-3 (ng/mL) <sup>v</sup>                                      |       |           |                   | 11.9    | > 25.9            | 17.9 - 25.9             | < 17.9        | 5/9/2017<br>13.4  |
| Metabolic                            | 25-hydroxy-Vitamin D (ng/mL) <sup>v</sup>                            |       |           |                   | 70      | < 20              | 20 - 29                 | 30 - 100      | 5/9/2017<br>57    |
|                                      | TSH (μIU/mL) <sup>v</sup>  |       |           |                   | 1.52    | < 0.27 or > 4.20  |                         | 0.27 - 4.20   | 5/9/2017<br>1.38  |

Lab Notes:

Provider Notes:

[www.truehealthdiag.com](http://www.truehealthdiag.com)


| Laboratory Test  |   | Notes | High Risk | Intermediate Risk | Optimal | High Risk Range   | Intermediate Risk Range | Optimal Range | Previous Results |
|--|---|-------|-----------|-------------------|---------|---|-------------------------|---------------|------------------|
| Metabolic  | Homocysteine (μmol/L) <sup>v</sup>            |       |           |                   | 6       | > 13  | 11 - 13                 | < 11          | 5/9/2017<br>8    |
|  | Vitamin B <sub>12</sub> (pg/mL) <sup>v</sup>  |       |           |                   | > 2000  | < 232   | 232 - 400               | > 400         |                  |
|  | Vitamin E (α-Tocopherol) (mg/L) <sup>sv</sup> |       |           |                   | 15.3    | < 6.0   | > 21.8                  | 6.0 - 21.8    | 5/9/2017<br>19.5 |
|  | CoQ10 (μg/mL) <sup>sv</sup>                   |       |           |                   | 1.16    | < 0.51  | 0.51 - 0.73             | > 0.73        |                  |
| TSH is analyzed using reagents from Roche Diagnostics by electrochemiluminescence immunoassay. These values should not be used in conjunction with values from other reagent manufacturers or methodologies. |   |       |           |                   |         |   |                         |               |                  |
| Metabolic  | Cortisol (μg/dL) <sup>v</sup>                 |       |           |                   | 6.5     | Morning hours 6-10 a.m.: 5.5-19.8<br>Afternoon hours 4-8 p.m.: 2.7-10.5<br>Other or unknown collection time: 2.7-19.8 |                         |               | 5/9/2017<br>8.1  |
| Renal  | Creatinine, serum (mg/dL) <sup>v</sup>        |       |           |                   | 0.8     | > 0.9   |                         | 0.5 - 0.9     | 5/9/2017<br>0.8  |

Lab Notes:



| Laboratory Test    |   | Notes | High Risk | Intermediate Risk | Optimal | High Risk Range | Intermediate Risk Range | Optimal Range | Previous Results  |
|--------------------|---|-------|-----------|-------------------|---------|-----------------|-------------------------|---------------|-------------------|
| Glycemic Control   | Glucose (mg/dL) <sup>v</sup>                                |       |           |                   | 97      | > 125           | 100-125                 | 70 - 99       | 5/9/2017<br>95    |
|                    | HbA1c (%) <sup>v</sup>                                      |       |           |                   | 5.5     | ≥ 6.5           | 5.7 - 6.4               | ≤ 5.6         | 5/9/2017<br>5.2   |
|                    | Estimated Average Glucose (mg/dL) (calculated) <sup>v</sup> |       |           |                   | 111.2   | ≥ 139.9         | 116.9 - 139.8           | ≤ 116.8       | 5/9/2017<br>102.5 |
|                    | Fructosamine (μmol/L) <sup>v</sup>                          |       |           | 304               |         | > 346           | 302 - 346               | < 302         | 5/9/2017<br>333   |
|                    | Glycation Gap <sup>v</sup>                                  |       |           |                   | -1.40   | > 0.77          | 0.45 - 0.77             | < 0.45        | 5/9/2017<br>-2.26 |
| Insulin Resistance | Leptin (ng/mL) <sup>v</sup>                                 |       |           |                   | 11      | > 43            | 20 - 43                 | < 20          | 5/9/2017<br>9     |
|                    | Adiponectin (μg/mL) <sup>sv</sup>                           |       | 14        |                   |         | < 20            | 20 - 35                 | > 35          |                   |

Lab Notes:



| Electrolytes                          | Result | Flag | Reference Interval |
|---------------------------------------|--------|------|--------------------|
| Na+ (mmol/L) <sup>v</sup>             | 142    |      | 133 - 145          |
| K+ (mmol/L) <sup>v</sup>              | 5.5    | H    | 3.5 - 5.3          |
| Cl- (mmol/L) <sup>v</sup>             | 106    |      | 98 - 110           |
| CO <sub>2</sub> (mmol/L) <sup>v</sup> | 30     |      | 19 - 31            |
| Anion Gap (calculated) <sup>v</sup>   | 6      |      | 6 - 18             |
| Calcium (mg/dL) <sup>v</sup>          | 10.0   |      | 8.8 - 10.5         |
| Magnesium (mg/dL) <sup>v</sup>        | 2.2    |      | 1.6 - 2.4          |

| Liver                                | Result | Flag | Reference Interval   |
|--------------------------------------|--------|------|--|
| ALT / GPT (U/L) <sup>v</sup>         | 16     |      | < 34   |
| AST / GOT (U/L) <sup>v</sup>         | 19     |      | < 33   |
| ALP (U/L) <sup>v</sup>               | 29     | L    | < 16 years: 62 - 356<br>16 - 20 years: 37 - 119<br>21 - 90 years: 35 - 125<br>> 90 years: 37 - 129 |
| Total Bilirubin (mg/dL) <sup>v</sup> | 0.7    |      | Up to 1.2  |

| Others   | Result | Flag | Reference Interval |
|--|--------|------|--------------------|
| Albumin (g/dL) <sup>v</sup>                      | 4.7    |      | 3.7 - 5.1          |
| % Albumin (calculated) <sup>v</sup>              | 70     |      | 54 - 71            |
| Globulin (g/dL) (calculated) <sup>v</sup>        | 2.0    |      | 1.9 - 3.5          |
| Albumin:Globulin Ratio (calculated) <sup>v</sup> | 2.36   |      | 1.15 - 2.50        |
| Total Protein (g/dL) <sup>v</sup>                | 6.7    |      | 6.1 - 8.0          |

| Thyroid   | Result | Flag | Reference Interval   |
|---|--------|------|----------------------|
| TSH (μIU/mL) <sup>v</sup>                             | 1.52   |      | 0.27 - 4.20          |
| T4, free (ng/dL) <sup>v</sup>                         | 1.16   |      | 0.93 - 1.70          |
| T3, free (pg/mL) <sup>v</sup>                         | 3.1    |      | > 19 yrs - 2.0 - 4.4 |
| Reverse T3 (ng/dL) <sup>sv</sup>                      | 13     |      | 8 - 24               |
| Anti-Thyroglobulin Antibody (IU/mL) <sup>tv</sup>     | 11     |      | < 115                |
| Anti-Thyroid Peroxidase Antibody (IU/mL) <sup>v</sup> | 15     |      | < 34                 |

| Male and Female Hormones                            | Result | Flag | Reference Interval  |
|---|--------|------|---|
| Dehydroepiandrosterone sulfate (μg/dL) <sup>v</sup> | 149    |      | 15 - 19 yrs: 65 - 368<br>20 - 24 yrs: 148 - 407<br>25 - 34 yrs: 99 - 340<br>35 - 44 yrs: 61 - 337<br>45 - 54 yrs: 35 - 256<br>55 - 64 yrs: 19 - 246<br>65 - 74 yrs: 9 - 205<br>> 74 yrs: 12 - 154   |
| Estradiol (pg/mL) <sup>v</sup>                      | 464.0  |      | Follicular phase: 12.4 - 233.0<br>Ovulation phase: 41.0 - 398.0<br>Luteal phase: 22.3 - 341.0<br>Postmenopause: < 138.0<br>1 <sup>st</sup> trimester pregnancy: 154.0 - 3243.0<br>2 <sup>nd</sup> trimester pregnancy: 1561.0 - 21280.0<br>3 <sup>rd</sup> trimester pregnancy: 8525.0 - >30000.0 |
| Estrone (pg/mL) <sup>sv</sup>                       | 126    |      | Post-menopausal: 10 - 55<br>Pre-menopausal: 13 - 135  |

Lab Notes:

| Male and Female Hormones                                 | Result | Flag | Reference Interval   |
|--|--------|------|--|
| Progesterone (ng/mL) <sup>v</sup>                        | 0.66   |      | Follicular phase: 0.06 - 0.89<br>Ovulation phase: 0.12 - 12.00<br>Luteal phase: 1.83 - 23.90<br>Postmenopause: < 0.70<br>1 <sup>st</sup> trimester: 11.00 - 44.30<br>2 <sup>nd</sup> trimester: 25.40 - 83.30<br>3 <sup>rd</sup> trimester: 58.70 - 214.00 |
| Human sex hormone-binding globulin (nmol/L) <sup>v</sup> | 110    |      | 20 - 130   |
| Testosterone (ng/dL) <sup>v</sup>                        | 16     |      | 12 - 82  |
| Free Testosterone (ng/dL) (calculated) <sup>v</sup>      | 0.12   |      | 0.06 - 0.92  |
| Pregnenolone (ng/dL) <sup>sv</sup>                       | 76     |      | Adult: < 151<br>Prepubertal: 20 - 140  |

Lab Notes:



| Renal   | Result                           | Flag    | Reference Interval  |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
|---|----------------------------------|---------|---|--------------|-------------|----------------|---------|----------------|--------|----------------|------------------|-------------|---------|--------------------------------|---------|-----|----------------------------------|---------|----|--------------------|---------|----|----------------|------|
| Creatinine, serum (mg/dL) <sup>v</sup>  | 0.8                              |         | 0.5 - 0.9   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| Estimated Glomerular Filtration Rate (eGFR) (based on Creatinine if African American) (mL/min/1.73m <sup>2</sup> ) <sup>v</sup>     | 100                              |         | <table border="1"> <thead> <tr> <th>GFR Category</th> <th>Description</th> <th>Range</th> </tr> </thead> <tbody> <tr> <td>G1</td> <td>Normal or high</td> <td>≥ 90</td> </tr> <tr> <td>G2</td> <td>Mildly decreased</td> <td>60 - 89</td> </tr> <tr> <td>G3a</td> <td>Mildly to moderately decreased</td> <td>45 - 59</td> </tr> <tr> <td>G3b</td> <td>Moderately to severely decreased</td> <td>30 - 44</td> </tr> <tr> <td>G4</td> <td>Severely decreased</td> <td>15 - 29</td> </tr> <tr> <td>G5</td> <td>Kidney Failure</td> <td>&lt; 15</td> </tr> </tbody> </table> | GFR Category | Description | Range          | G1      | Normal or high | ≥ 90   | G2             | Mildly decreased | 60 - 89     | G3a     | Mildly to moderately decreased | 45 - 59 | G3b | Moderately to severely decreased | 30 - 44 | G4 | Severely decreased | 15 - 29 | G5 | Kidney Failure | < 15 |
| GFR Category  | Description                      | Range   |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| G1  | Normal or high                   | ≥ 90    |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| G2  | Mildly decreased                 | 60 - 89 |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| G3a   | Mildly to moderately decreased   | 45 - 59 |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| G3b   | Moderately to severely decreased | 30 - 44 |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| G4  | Severely decreased               | 15 - 29 |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| G5  | Kidney Failure                   | < 15    |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| Estimated Glomerular Filtration Rate (eGFR) (based on Creatinine if non-African American) (mL/min/1.73m <sup>2</sup> ) <sup>v</sup> | 86                               |         | <table border="1"> <thead> <tr> <th>GFR Category</th> <th>Description</th> <th>Range</th> </tr> </thead> <tbody> <tr> <td>G1</td> <td>Normal or high</td> <td>≥ 90</td> </tr> <tr> <td>G2</td> <td>Mildly decreased</td> <td>60 - 89</td> </tr> <tr> <td>G3a</td> <td>Mildly to moderately decreased</td> <td>45 - 59</td> </tr> <tr> <td>G3b</td> <td>Moderately to severely decreased</td> <td>30 - 44</td> </tr> <tr> <td>G4</td> <td>Severely decreased</td> <td>15 - 29</td> </tr> <tr> <td>G5</td> <td>Kidney Failure</td> <td>&lt; 15</td> </tr> </tbody> </table> | GFR Category | Description | Range          | G1      | Normal or high | ≥ 90   | G2             | Mildly decreased | 60 - 89     | G3a     | Mildly to moderately decreased | 45 - 59 | G3b | Moderately to severely decreased | 30 - 44 | G4 | Severely decreased | 15 - 29 | G5 | Kidney Failure | < 15 |
| GFR Category  | Description                      | Range   |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| G1  | Normal or high                   | ≥ 90    |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| G2  | Mildly decreased                 | 60 - 89 |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| G3a   | Mildly to moderately decreased   | 45 - 59 |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| G3b   | Moderately to severely decreased | 30 - 44 |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| G4  | Severely decreased               | 15 - 29 |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| G5  | Kidney Failure                   | < 15    |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| BUN (mg/dL) <sup>v</sup>  | 14                               |         | 6 - 20  |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| BUN:Creatinine Ratio (calculated) <sup>v</sup>  | 18                               |         | <table border="1"> <tbody> <tr> <td>&lt; 11 years:</td> <td>14 - 34</td> </tr> <tr> <td>11 - 15 years:</td> <td>10 - 30</td> </tr> <tr> <td>16 - 20 years:</td> <td>9 - 25</td> </tr> <tr> <td>21 - 70 years:</td> <td>10 - 27</td> </tr> <tr> <td>&gt; 70 years:</td> <td>10 - 29</td> </tr> </tbody> </table>   | < 11 years:  | 14 - 34     | 11 - 15 years: | 10 - 30 | 16 - 20 years: | 9 - 25 | 21 - 70 years: | 10 - 27          | > 70 years: | 10 - 29 |                                |         |     |                                  |         |    |                    |         |    |                |      |
| < 11 years:   | 14 - 34                          |         |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| 11 - 15 years:  | 10 - 30                          |         |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| 16 - 20 years:  | 9 - 25                           |         |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| 21 - 70 years:  | 10 - 27                          |         |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |
| > 70 years:   | 10 - 29                          |         |   |              |             |                |         |                |        |                |                  |             |         |                                |         |     |                                  |         |    |                    |         |    |                |      |

Lab Notes:



| CBC with Automated Differential / Platelet | Result | Flag | Reference Interval |
|--|--------|------|--------------------|
|--|--------|------|--------------------|

|   |      |  |             |
|---|------|--|-------------|
| WBC (x10 <sup>3</sup> /μL) <sup>v</sup>       | 6.9  |  | 4.0 - 10.5  |
| RBC (x10 <sup>6</sup> /μL) <sup>v</sup>       | 4.6  |  | 3.8 - 5.1   |
| Hemoglobin (g/dL) <sup>v</sup>                | 12.9 |  | 11.5 - 15.0 |
| Hematocrit (%) <sup>v</sup>                   | 39   |  | 34 - 44     |
| MCV (fL) <sup>v</sup>                         | 84   |  | 80 - 98     |
| MCH (pg) <sup>v</sup>                         | 28   |  | 27 - 34     |
| MCHC (g/dL) <sup>v</sup>                      | 33   |  | 32 - 36     |
| RDW (%) <sup>v</sup>                          | 14.5 |  | 11.7 - 15   |
| Platelets (x10 <sup>3</sup> /μL) <sup>v</sup> | 304  |  | 140 - 415   |
| Neutrophils (%) <sup>v</sup>                  | 56   |  | 40 - 74     |
| Lymphocytes (%) <sup>v</sup>                  | 35   |  | 14 - 46     |
| Monocytes (%) <sup>v</sup>                    | 8    |  | 4 - 13      |
| Eosinophils (%) <sup>v</sup>                  | 1    |  | 0 - 7       |
| Basophils (%) <sup>v</sup>                    | 1    |  | 0 - 3       |

| CBC with Automated Differential / Platelet | Result | Flag | Reference Interval |
|--|--------|------|--------------------|
|--|--------|------|--------------------|

|  |     |  |           |
|--|-----|--|-----------|
| Neutrophils (absolute) (x10 <sup>3</sup> /μL) <sup>v</sup>           | 3.8 |  | 1.8 - 7.8 |
| Lymphocytes (absolute) (x10 <sup>3</sup> /μL) <sup>v</sup>           | 2.4 |  | 0.7 - 4.5 |
| Monocytes (absolute) (x10 <sup>3</sup> /μL) <sup>v</sup>             | 0.5 |  | 0.1 - 1.0 |
| Eosinophils (absolute) (x10 <sup>3</sup> /μL) <sup>v</sup>           | 0.1 |  | 0.0 - 0.4 |
| Basophils (absolute) (x10 <sup>3</sup> /μL) <sup>v</sup>             | 0.0 |  | 0.0 - 0.2 |
| Immature Granulocytes (absolute) (x10 <sup>3</sup> /μL) <sup>v</sup> | 0.0 |  | 0.0 - 0.1 |

Reference ranges for CBC are applicable to patients greater than 18 years of age.

Lab Notes:



For autoimmune testing, hs-CRP assay is utilized to measure CRP. Standard reference intervals for both hs-CRP and CRP are reported.

| Autoimmune                 | Result | Flag | Reference Interval |
|----------------------------|--------|------|--------------------|
| hs-CRP (mg/L) <sup>y</sup> | 0.4    |      | < 5.0              |

Lab Notes:





| Lipids                                      |          |            |          |  |  | Trend Line | High Risk Range                      | Intermediate Risk Range                     | Optimal Range                       |
|---|----------|------------|----------|--|--|------------|--------------------------------------|---|-------------------------------------|
|   | 5/1/2015 | 12/11/2015 | 5/9/2017 |  |  |            |                                      |   |                                     |
| Total Cholesterol (mg/dL) <sup>v</sup>      | 218      | 248        | 237      |  |  |            | ≥ 240                                | 200 - 239                                   | < 200                               |
| LDL-C Direct (mg/dL) <sup>v</sup>           | 130      | 144        | 143      |  |  |            | ≥ 130<br>CHD & CHD<br>risk eq. > 100 | 100 - 129<br>CHD & CHD<br>risk eq. 70 - 100 | < 100<br>CHD & CHD<br>risk eq. < 70 |
| HDL-C (mg/dL) <sup>v</sup>                  | 84       | 99         | 85       |  |  |            | < 50                                 |   | ≥ 50                                |
| Triglycerides (mg/dL) <sup>v</sup>          | 59       | 51         | 45       |  |  |            | > 199                                | 150 - 199                                   | < 150                               |
| Non-HDL-C (mg/dL) (calculated) <sup>v</sup> | 134      | 149        | 152      |  |  |            | ≥ 160                                | 130 - 159                                   | < 130                               |

| Lipoprotein Particles and Apolipoproteins     |          |            |          |  |  | Trend Line | High Risk Range | Intermediate Risk Range | Optimal Range |
|---|----------|------------|----------|--|--|------------|-----------------|-------------------------|---------------|
|   | 5/1/2015 | 12/11/2015 | 5/9/2017 |  |  |            |                 |                         |               |
| Apo B (mg/dL) <sup>v</sup>                    | 93       | 97         | 110      |  |  |            | ≥ 100           | 81 - 99                 | ≤ 80          |
| LDL-P (nmol/L) <sup>sv</sup> , by NMR         | 1517     | 1689       | 1797     |  |  |            | ≥ 1360          | 1020 - 1359             | < 1020        |
| Small LDL-P (nmol/L) <sup>sv</sup> , by NMR   | 328      | 307        | 334      |  |  |            | > 1000          | 501 - 1000              | < 501         |
| sdLDL-C (mg/dL) <sup>sv</sup>                 | 24       | 28         | 29       |  |  |            | > 30            | 21 - 30                 | < 21          |
| Apo A-I (mg/dL) <sup>v</sup>                  | 170      | 190        | 165      |  |  |            | < 130           | 130 - 150               | > 150         |
| HDL-P (μmol/L) <sup>sv</sup> , by NMR         | 39.7     | 41.9       | 44.3     |  |  |            | ≤ 34.0          | 34.1 - 38.0             | > 38.0        |
| HDL2-C (mg/dL) <sup>sv</sup>                  | 36       | 51         | 37       |  |  |            | ≤ 12            | 13 - 16                 | ≥ 17          |
| Apo B:Apo A-I Ratio (calculated) <sup>v</sup> | 0.55     | 0.51       | 0.67     |  |  |            | ≥ 0.81          | 0.61 - 0.80             | ≤ 0.60        |
| Lp(a)-P (nmol/L) <sup>sv</sup>                | < 50     | < 50       | < 50     |  |  |            | > 125           | 75 - 125                | < 75          |

| Inflammation/Oxidation   |          |            |           |          |           | Trend Line | High Risk Range | Intermediate Risk Range | Optimal Range |
|--|----------|------------|-----------|----------|-----------|------------|-----------------|-------------------------|---------------|
|  | 5/1/2015 | 12/11/2015 | 1/23/2017 | 5/9/2017 | 8/21/2018 |            |                 |                         |               |
| Fibrinogen (mg/dL) <sup>v</sup>  | 423      | 357        | 486       | 373      | 373       |            | < 126 or > 517  | 438 - 517               | 126 - 437     |
| hs-CRP (mg/L) <sup>v</sup>   | 0.6      | < 0.3      | 0.7       | < 0.3    | 0.4       |            | > 2.9           | 1.0 - 2.9               | < 1.0         |
| Lp-PLA <sub>2</sub> (ng/mL) <sup>sv</sup>                                |          |            |           | 277      | 295       |            | > 383           | 291 - 383               | < 291         |
| Myeloperoxidase (pmol/L) <sup>sv</sup>                                   |          |            | 170       | 156      | 141       |            | ≥ 332           | 256 - 331               | ≤ 255         |
| F <sub>2</sub> -Isoprostanes (urine) (ng/mg of creatinine) <sup>sv</sup> |          |            |           | 0.15     | 0.12      |            | ≥ 0.33          | 0.22 - 0.32             | ≤ 0.21        |
| Oxidized LDL (U/L) <sup>sv</sup>   |          |            | < 0       | 69       | 65        |            | > 70            | 60 - 70                 | < 60          |




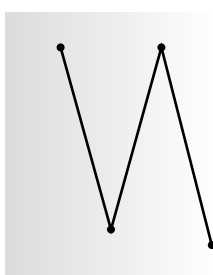


| Myocardial Structure/Stress/Function |          |            |           |          |           | Trend Line | High Risk Range | Intermediate Risk Range | Optimal Range |
|--------------------------------------|----------|------------|-----------|----------|-----------|------------|-----------------|-------------------------|---------------|
|                                      | 5/1/2015 | 12/11/2015 | 1/23/2017 | 5/9/2017 | 8/21/2018 |            |                 |                         |               |
| Galectin-3 (ng/mL) <sup>v</sup>      |          |            |           | 16.7     | 11.8      |            | > 25.9          | 17.9 - 25.9             | < 17.9        |
| Galectin-3 (ng/mL) <sup>v</sup>      |          |            |           | 13.4     | 11.9      |            | > 25.9          | 17.9 - 25.9             | < 17.9        |
| NT-proBNP (pg/mL) <sup>v</sup>       |          |            | 16        | 41       | 25        |            | > 449           | 125 - 449               | < 125         |

| Metabolic   |          |            |           |          |           | Trend Line | High Risk Range  | Intermediate Risk Range | Optimal Range |
|---|----------|------------|-----------|----------|-----------|------------|------------------|-------------------------|---------------|
|   | 5/1/2015 | 12/11/2015 | 1/23/2017 | 5/9/2017 | 8/21/2018 |            |                  |                         |               |
| Insulin (μU/mL) <sup>v</sup>                                |          |            |           | 4        | 6         |            | ≥ 12             | 10 - 11                 | 3 - 9         |
| Glucose (mg/dL) <sup>v</sup>                                | 85       | 91         | 87        | 95       | 97        |            | > 125            | 100-125                 | 70 - 99       |
| HbA1c (%) <sup>v</sup>                                      | 5.2      | 5.5        | 5.8       | 5.2      | 5.5       |            | ≥ 6.5            | 5.7 - 6.4               | ≤ 5.6         |
| Estimated Average Glucose (mg/dL) (calculated) <sup>v</sup> | 102.5    | 111.2      | 119.8     | 102.5    | 111.2     |            | ≥ 139.9          | 116.9 - 139.8           | ≤ 116.8       |
| 25-hydroxy-Vitamin D (ng/mL) <sup>v</sup>                   |          |            |           | 32       | 52        |            | ≤ 14             | 15 - 29                 | 30 - 100      |
| 25-hydroxy-Vitamin D (ng/mL) <sup>v</sup>                   |          |            | 45        | 57       | 70        |            | < 20             | 20 - 29                 | 30 - 100      |
| Uric Acid (mg/dL) <sup>v</sup>                              |          |            |           |          | 4.0       |            | ≥ 8.0            | 7.0 - 7.9               | 2.0 - 6.9     |
| TSH (μIU/mL) <sup>v</sup>                                   | 1.53     | 1.74       | 2.10      | 1.38     | 1.52      |            | < 0.27 or > 4.20 |                         | 0.27 - 4.20   |
| Homocysteine (μmol/L) <sup>v</sup>                          |          | 10         | 7         | 8        | 6         |            | > 13             | 11 - 13                 | < 11          |
| Vitamin B <sub>12</sub> (pg/mL) <sup>v</sup>                |          | 785        | > 2000    | > 2000   | 1996      |            | < 211            | 211 - 400               | > 400         |
| Leptin (ng/mL) <sup>v</sup>                                 | 6        | 9          | 12        | 9        | 11        |            | > 43             | 20 - 43                 | < 20          |
| Adiponectin (μg/mL) <sup>v</sup>                            |          | 9          | 11        | 12       | 11        |            | < 10             | 10 - 14                 | > 14          |
| Fructosamine (μmol/L) <sup>v</sup>                          |          |            |           | 333      | 304       |            | > 346            | 302 - 346               | < 302         |

| Renal  |          |            |           |          |           | Trend Line | High Risk Range | Intermediate Risk Range | Optimal Range |
|--|----------|------------|-----------|----------|-----------|------------|-----------------|-------------------------|---------------|
|  | 5/1/2015 | 12/11/2015 | 1/23/2017 | 5/9/2017 | 8/21/2018 |            |                 |                         |               |
| Cystatin C (mg/L) <sup>v</sup>   |          |            |           | 0.73     | 0.63      |            | ≥ 1.04          | 0.96 - 1.03             | ≤ 0.95        |
| Estimated Glomerular Filtration Rate (eGFR, mL/min/1.73m <sup>2</sup> ) <sup>v</sup> |          |            |           | 142      | > 150     |            | < 60            | 60 - 89                 | > 89          |
| Creatinine, serum (mg/dL) <sup>v</sup>   | 0.8      | 0.9        | 0.8       | 0.8      | 0.8       |            | > 0.9           |                         | 0.5 - 0.9     |

| Omega Acids |  |          |            |           |          | Trend Line | High Risk Range | Intermediate Risk Range | Optimal Range |
|-------------|--|----------|------------|-----------|----------|------------|-----------------|-------------------------|---------------|
|             | HS-Omega-3 Index <sup>®v</sup><br>(RBC EPA+DHA) <sup>a</sup> | 5/1/2015 | 12/11/2015 | 1/23/2017 | 5/9/2017 |            | < 4.0%          | 4.0% - 8.0%             | > 8.0%        |
|             | Omega-3 Total <sup>v</sup>                                   | 5/1/2015 | 12/11/2015 | 1/23/2017 | 5/9/2017 |            | 0.1% - 14.1%    |                         |               |
|             | Omega-6 Total <sup>v</sup>                                   | 5/1/2015 | 12/11/2015 | 1/23/2017 | 5/9/2017 |            | 28.6% - 44.5%   |                         |               |
|             | Trans Total <sup>v</sup>                                     | 5/1/2015 | 12/11/2015 | 1/23/2017 | 5/9/2017 |            | <0.1% - 1.8%    |                         |               |

| Male and Female Hormones |  |          |            |            |           | Trend Line | High Risk Range | Intermediate Risk Range   | Optimal Range |  |
|--------------------------|--|----------|------------|------------|-----------|------------|-----------------|---|---------------|--|
|                          | Dehydroepiandrosterone sulfate (µg/dL) <sup>v</sup>      | 5/1/2015 | 12/11/2015 | 1/23/2017  | 5/9/2017  | 8/21/2018  |                 | 15 - 19 yrs: 65 - 368<br>20 - 24 yrs: 148 - 407<br>25 - 34 yrs: 99 - 340<br>35 - 44 yrs: 61 - 337<br>45 - 54 yrs: 35 - 256<br>55 - 64 yrs: 19 - 246<br>65 - 74 yrs: 9 - 205<br>> 74 yrs: 12 - 154   |               |  |
|                          | Estradiol (pg/mL) <sup>v</sup>                           |          |            |            |           | 5/1/2015   |                 | Women:<br>Follicular phase: 12.5 - 166.0<br>Ovulation phase: 85.8 - 498.0<br>Luteal phase: 43.8 - 211.0<br>Postmenopause: < 54.7<br>1st Tri. Pregnancy: 215.0 - 4300.0<br><br>Girls (1-10 years):<br>6.0 - 27.0   |               |  |
|                          | Estradiol (pg/mL) <sup>v</sup>                           |          | 12/11/2015 | 1/23/2017  | 5/9/2017  | 8/21/2018  |                 | Follicular phase: 12.4 - 233.0<br>Ovulation phase: 41.0 - 398.0<br>Luteal phase: 22.3 - 341.0<br>Postmenopause: < 138.0<br>1 <sup>st</sup> trimester pregnancy: 154.0 - 3243.0<br>2 <sup>nd</sup> trimester pregnancy: 1561.0 - 21280.0<br>3 <sup>rd</sup> trimester pregnancy: 8525.0 - >30000.0 |               |  |
|                          | FSH (mIU/mL) <sup>v</sup>                                |          |            | 12/11/2015 | 1/23/2017 | 5/9/2017   |                 | Follicular phase: 3.5 - 12.5<br>Ovulation phase: 4.7 - 21.5<br>Luteal phase: 1.7 - 7.7<br>Postmenopause: 25.8 - 134.8   |               |  |
|                          | LH (mIU/mL) <sup>v</sup>                                 |          |            | 12/11/2015 | 1/23/2017 | 5/9/2017   |                 | Follicular phase: 2.4 - 12.6<br>Ovulation phase: 14.0 - 95.6<br>Luteal phase: 1.0 - 11.4<br>Postmenopause: 7.7 - 58.5   |               |  |
|                          | Progesterone (ng/mL) <sup>v</sup>                        |          |            |            | 5/1/2015  | 12/11/2015 |                 | Follicular phase: 0.2 - 1.5<br>Ovulation phase: 0.8 - 3.0<br>Luteal phase: 1.7 - 27<br>Postmenopause: 0.1 - 0.8   |               |  |
|                          | Progesterone (ng/mL) <sup>v</sup>                        |          |            | 1/23/2017  | 5/9/2017  | 8/21/2018  |                 | Follicular phase: 0.06 - 0.89<br>Ovulation phase: 0.12 - 12.00<br>Luteal phase: 1.83 - 23.90<br>Postmenopause: < 0.70<br>1 <sup>st</sup> trimester: 11.00 - 44.30<br>2 <sup>nd</sup> trimester: 25.40 - 83.30<br>3 <sup>rd</sup> trimester: 58.70 - 214.00  |               |  |
|                          | Human sex hormone-binding globulin (nmol/L) <sup>v</sup> | 5/1/2015 | 12/11/2015 | 1/23/2017  | 5/9/2017  | 8/21/2018  |                 |   | 20 - 130      |  |
|                          | Testosterone (ng/dL) <sup>v</sup>                        | 5/1/2015 | 12/11/2015 | 1/23/2017  | 5/9/2017  | 8/21/2018  |                 |   | 12 - 82       |  |

| Male and Female Hormones |   |            |            |           |           | Trend Line   | High Risk Range   | Intermediate Risk Range | Optimal Range |
|--------------------------|---|------------|------------|-----------|-----------|--|---|-------------------------|---------------|
|                          | Free Testosterone (ng/dL) (calculated) <sup>v</sup> |            |            | 5/9/2017  | 8/21/2018 |  |   |                         | 0.06 - 0.92   |
|                          | Insulin-like Growth Factor 1 (ng/mL) <sup>v</sup>   | 5/1/2015   | 12/11/2015 | 1/23/2017 | 5/9/2017  |  | 14 - 15 Years 107 - 487<br>16 - 17 Years 108 - 463<br>18 - 19 Years 108 - 440<br>20 - 25 Years 106 - 398<br>26 - 30 Years 101 - 353<br>31 - 35 Years 94 - 315<br>36 - 40 Years 86 - 283<br>41 - 45 Years 78 - 256<br>46 - 50 Years 68 - 235<br>51 - 55 Years 60 - 217<br>56 - 60 Years 54 - 203<br>61 - 65 Years 48 - 193<br>66 - 70 Years 43 - 186<br>71 - 75 Years 40 - 183<br>76 - 80 Years 39 - 184<br>81 - 85 Years 37 - 189<br>86 - 90 Years 37 - 197 |                         |               |
|                          | Pregnenolone (ng/dL) <sup>sv</sup>                  | 12/11/2015 | 1/23/2017  | 5/9/2017  | 8/21/2018 |  | Adult: < 151<br>Prepubertal: 20 - 140   |                         |               |
|                          | Prolactin (ng/mL) <sup>v</sup>                      |            | 12/11/2015 | 1/23/2017 | 5/9/2017  |  |   |                         | 4.79 - 23.30  |



