



## 123 Unique Biomarkers in LabSmarts

Biomarkers are listed under the analysis sections where their bar graphs appear. Sections are listed in the order they appear in the analysis report.

### RBC Analysis

1. RBC\*
2. HGB\*
3. HCT\*
4. MCV\*
5. MCH\*
6. MCHC\*
7. RDW\*
8. CRC – corrected reticulocyte count
9. RPI – reticulocyte production index

### Immune System Analysis

15. WBC\*
16. Neutrophils %\*
17. Lymphocytes %\*
18. Monocytes %\*
19. Eosinophils %\*
20. Basophils %\*
21. Neutrophils Absolute\*
22. Lymphocytes Absolute\*
23. Monocytes Absolute\*
24. Eosinophils Absolute\*
25. Basophils Absolute\*
26. NLR – Neutrophils-to-Lymphocyte Ratio\*

Bar graphs for the following are also shown in this section as they relate to the immune system, but they are counted in their main sections below.

- Globulin
- Alkaline Phosphatase

### Iron Analysis

10. Iron\*
11. TIBC
12. % Saturation
13. Ferritin
14. Transferrin

Bar graphs for these biomarkers below appear in this section but are counted in the nutrients analysis section.

- Ceruloplasmin
- Copper, RBC
- Copper, serum
- Free Copper (%)

### Coagulation Analysis

27. Platelets\*
28. MPV\*
29. D-Dimer\*
30. Fibrinogen

### Glucose Analysis

31. Glucose\*
32. HbA1c
33. Insulin
34. C-peptide

### Kidney Analysis

35. BUN\*
36. Creatinine\*
37. eGFR\*
38. BUN/Creatinine Ratio\*
39. Uric Acid

### **Nutrients Analysis**

40. Calcium (corrected for low albumin) \*
41. Ceruloplasmin\*
42. Copper, RBC
43. Copper, serum\*
44. Free Copper (%)
45. Cu/Zn Ratio
46. Phosphorus
47. Magnesium, RBC
48. Magnesium, serum
49. Vitamin B12
50. Folate, RBC
51. Folate, serum
52. Vitamin D (25-OH)
53. Vitamin D 1,25 (OH)<sub>2</sub>
54. Zinc, RBC
55. Zinc, serum\*

### **Liver / Biliary Analysis**

66. Bile Acids
67. Bilirubin, Total\*
68. Bilirubin, Direct
69. Bilirubin, Indirect
70. Alkaline Phosphatase\*
71. AST (SGOT) \*
72. ALT (SGPT) \*
73. GGT
74. Lactate Dehydrogenase (LDH, LD)\*

### **Inflammation / Oxidative Stress Analysis**

85. Homocysteine
86. hs-CRP\*
87. Sedimentation Rate (ESR)

Bar graphs for the following biomarkers are also shown in this section as they can be an indication of inflammation, but they are counted in other sections.

- Albumin
- Bilirubin, Total
- Ceruloplasmin
- Ferritin
- Fibrinogen
- GGT
- HDL
- TIBC
- Transferrin
- Uric Acid

### **Electrolytes Analysis**

56. Sodium\*
57. Potassium\*
58. Chloride\*
59. Carbon Dioxide\*
60. Anion Gap w/o K\*
61. Anion Gap w/ K\*

### **Proteins Analysis**

62. Protein, Total\*
63. Albumin\*
64. Globulin\*
65. Albumin / Globulin Ratio\*

### **Lipids Analysis**

75. Cholesterol, Total
76. HDL Cholesterol
77. Triglycerides
78. LDL Cholesterol
79. Cholesterol / HDL Ratio
80. Triglycerides / HDL Ratio
81. Apolipoprotein A-1 (Apo A-1)\*
82. Apolipoprotein B (Apo B)\*
83. Apo B / Apo A-1 Ratio
84. Lipoprotein (a)

### Thyroid Analysis

- 88. TSH\*
- 89. T4, Total
- 90. T4, Free
- 91. T3, Total
- 92. T3, Free
- 93. Reverse T3
- 94. TPO Antibodies
- 95. Tg Antibodies
- 96. TBG
- 97. T3 Uptake
- 98. FTI

### Hormones Analysis

- 99. Anti-Mullerian Hormone (AMH)\*
- 100. Cortisol, AM\*
- 101. Cortisol, PM
- 102. DHEA-S\*
- 103. DHT
- 104. Estradiol (E2)\*
- 105. Estriol (E3)
- 106. Estrogens, Total\*
- 107. Estrone (E1)\*
- 108. FSH\*
- 109. hCG
- 110. IGF-1\*
- 111. LH\*
- 112. Pregnenolone\*
- 113. Progesterone\*
- 114. 17-OHP\*
- 115. Prolactin\*
- 116. Prolactin, Lactating
- 117. SHBG\*
- 118. Bioavailable Testosterone
- 119. Bioavailable Testosterone %
- 120. Free Testosterone, Calculated\*
- 121. Free Testosterone, Direct\*
- 122. Total Testosterone\*
- 123. Total Testosterone, LC/MS\*

**\* Biomarkers with pediatric reference ranges (70 of 123).**