

## 130 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 markers below are shown in this section because they relate to the immune system, but are counted in their main section.

- Globulin (Proteins)
- Alkaline Phosphatase (Liver)

### Iron Analysis

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

Bar graphs for the markers below are shown in this section because they relate to iron, but are counted in the nutrients analysis section.

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

### Coagulation Analysis

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

### Glucose Analysis

31. Glucose\*
32. HbA1c
33. Insulin
34. C-peptide
35. Amylase\*
- Triglycerides (shown here, counted in lipids)

### Kidney Analysis

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

### **Proteins Analysis**

41. Protein, Total\*
42. Albumin\*
43. Globulin\*
44. Albumin / Globulin Ratio\*

### **Nutrients Analysis**

45. Calcium (corrected for low albumin)\*
46. Ceruloplasmin\*
47. Copper, RBC
48. Copper, serum\*
49. Free Copper (%)
50. Cu/Zn Ratio
51. Phosphorus
52. Magnesium, RBC
53. Magnesium, serum
54. Vitamin A\*
55. Vitamin B6\*
56. Vitamin B12\*
57. Folate, RBC
58. Folate, serum
59. Vitamin D (25-OH)
60. Vitamin D 1,25 (OH)<sub>2</sub>
61. Zinc, RBC
62. Zinc, serum\*

### **Electrolytes Analysis**

63. Sodium\*
64. Potassium\*
65. Na/K Ratio\*
66. Chloride\*
67. Carbon Dioxide\*
68. Anion Gap w/o K\*
69. Anion Gap w/ K\*

### **Liver / Biliary Analysis**

70. Bile Acids
71. Bilirubin, Total\*
72. Bilirubin, Direct
73. Bilirubin, Indirect
74. Alkaline Phosphatase\*
75. AST (SGOT) \*
76. ALT (SGPT) \*
77. GGT
78. Lactate Dehydrogenase (LDH, LD)\*

### **Lipids Analysis**

79. Cholesterol, Total
80. HDL Cholesterol
81. Triglycerides
82. LDL Cholesterol
83. Cholesterol / HDL Ratio
84. Triglycerides / HDL Ratio
85. Apolipoprotein A-1 (Apo A-1)\*
86. Apolipoprotein B (Apo B)\*
87. Apo B / Apo A-1 Ratio
88. Lipoprotein (a)

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

89. Homocysteine
90. hs-CRP\*
91. Sedimentation Rate (ESR)

Bar graphs for the markers below are shown in this section because they can serve as an indication of inflammation or oxidative stress, but are counted in their main section.

- Albumin (Proteins)
- Bilirubin, Total (Liver)
- Ceruloplasmin (Nutrients)
- Ferritin (Iron)
- Fibrinogen (Coagulation)
- GGT (Liver)
- HDL (Lipids)
- TIBC (Iron)
- Transferrin (Iron)

- Uric Acid (Kidneys)

### **Thyroid Analysis**

- 92. TSH\*
- 93. T4, Total
- 94. T4, Free
- 95. T3, Total
- 96. T3, Free
- 97. Reverse T3
- 98. TPO Antibodies
- 99. Tg Antibodies
- 100. TBG
- 101. T3 Uptake
- 102. FTI

### **Hormones Analysis**

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

### **Prostate Analysis**

- 128. Prostate-Specific Antigen (PSA), Total (pediatric ranges n/a)
- 129. Prostate-Specific Antigen (PSA), Free (pediatric ranges n/a)
- 130. Prostate-Specific Antigen (PSA), % Free (pediatric ranges n/a)

**\* Biomarkers with pediatric reference ranges.**