

## BloodAge Analysis - Information for Medical Practitioners

The BloodAge Analysis utilizes up to 54 blood biomarkers to track the aging process at the cellular level. It provides insights into a person's biological age, which can differ from their chronological age due to various medical, lifestyle and environmental factors.

This analysis leverages advanced machine learning techniques, including deep neural networks similar to those used by large language models like ChatGPT. However, the BloodAge model is specifically trained on extensive medical datasets, notably the UK Biobank.

### The UK Biobank Dataset

The UK Biobank is a pioneering biomedical database containing genetic, lifestyle, and health information, as well as biological samples from approximately 500,000 UK participants aged 40-69 years old [1]. This invaluable resource is enabling groundbreaking research into the prevention, diagnosis, and treatment of various diseases, including cancer, heart disease, and stroke.

### Biological Age Prediction

By analyzing the provided blood biomarkers, the BloodAge Analysis predicts an individual's biological age, which serves as a proxy for their overall aging status. This information is presented in a comprehensive report, highlighting potential health risks and providing data-driven insights into the person's overall well-being.

### Benefits for Patients and Practitioners

The BloodAge Analysis can benefit both patients and medical practitioners in the following ways:

- Patients can understand their current aging status and identify potential health risks early on, enabling proactive interventions.
- By tracking changes in their "blood age" over time, patients can monitor the effectiveness of lifestyle modifications or medical interventions.
- Patients can make informed decisions about their health and wellness based on data-driven insights from the analysis.
- Medical practitioners can use the BloodAge Analysis as a valuable tool for preventive care and monitoring the impact of recommended lifestyle changes or medical treatments.

### Routine Blood Work

The required biomarkers for the BloodAge Analysis are typically included in standard blood tests used in general clinical practice. Regular blood work is essential for preventive care and monitoring the impact of lifestyle changes and medical interventions [2][3][4].

It is recommended to establish a baseline through initial blood work and then track progress over time through periodic testing. This approach allows for early detection of potential issues and enables timely interventions.

## Ideal Candidates

Individuals interested in the BloodAge Analysis are typically committed to improving their health through lifestyle modifications and have a desire to monitor these changes through regular blood tests. They tend to be proactive about their health and seek to prevent future issues.

These individuals require the support and guidance from their medical practitioners to monitor the outcomes as they engage in preventative medicine by improving lifestyle choices, including nutrition, sleep, and exercise.

By incorporating the BloodAge Analysis into their practice, medical practitioners can provide personalized, data-driven recommendations and empower their patients to take an active role in their health and well-being.

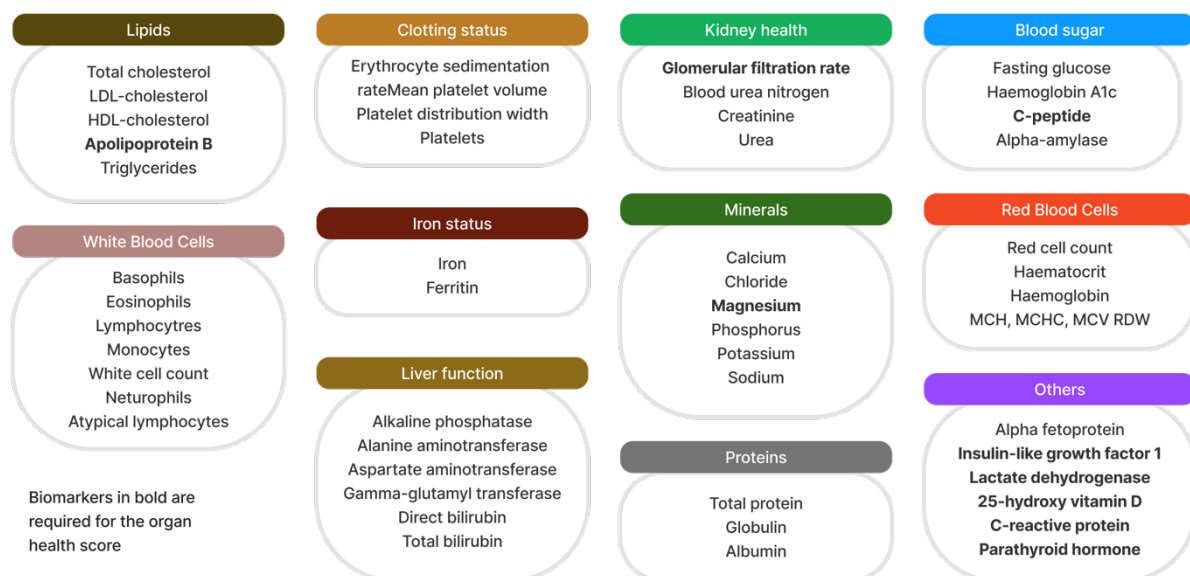


Figure 1: The BloodAge Analysis is based on up to 54 biomarkers. The minimum number of biomarkers required for a valid analysis is 30.

For further information, please visit [www.ageingclocks.com](http://www.ageingclocks.com)

## Citations

1. <https://www.ukbiobank.ac.uk/enable-your-research/about-our-data/biomarker-data>
2. <https://www.ukbiobank.ac.uk/enable-your-research/about-our-data>
3. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6175034/>
4. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8176216/>