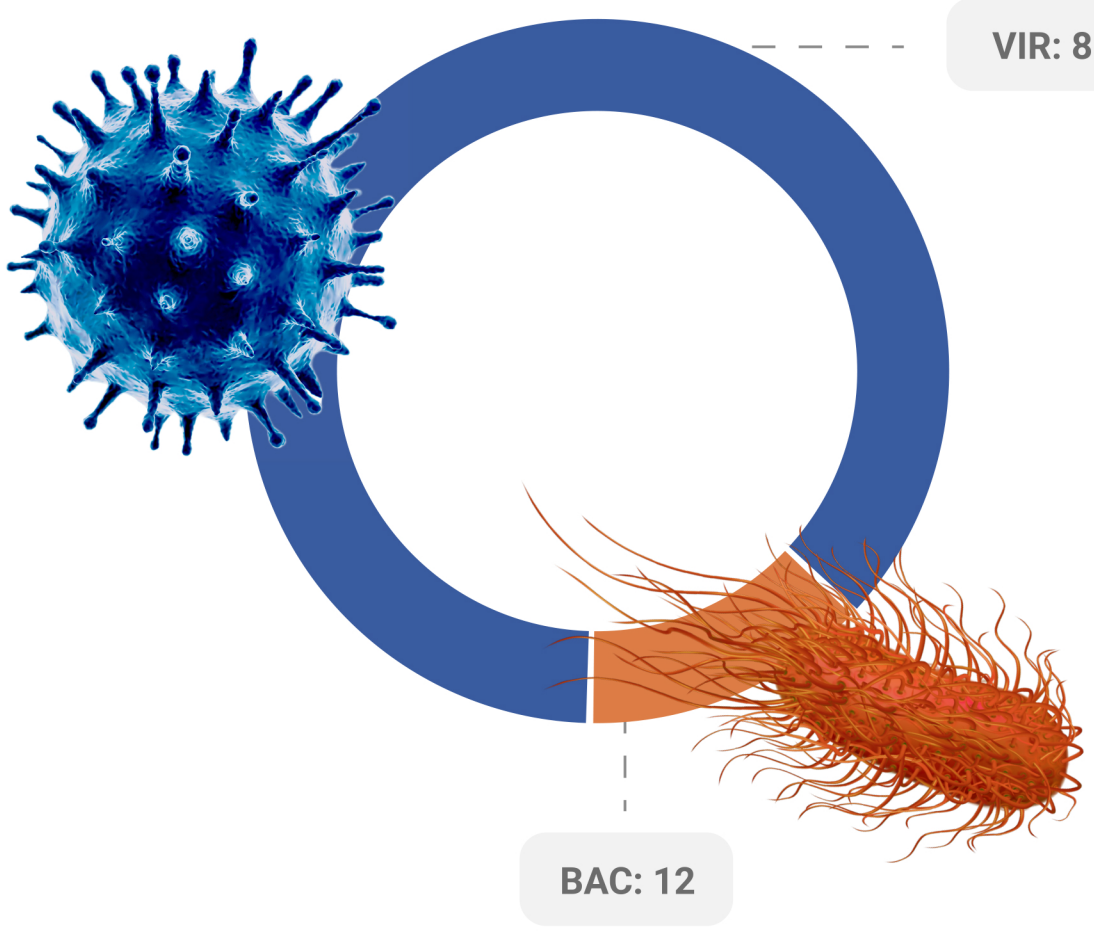
Smart Blood Analytics

VIRUS vs. BACTERIA

Clinical decision support system differentiating between viral and bacterial infections based on 17 routine blood test results, biological sex, and age.



CE MD

How it works?

The VIRUS vs. BACTERIA artificial intelligence model uses **complex decision-making approaches**, which simultaneously consider available blood parameters and their ratios to suggest either a viral or bacterial infection. It can detect even subtly correlated deviations in blood parameters that are significant for a good prediction.

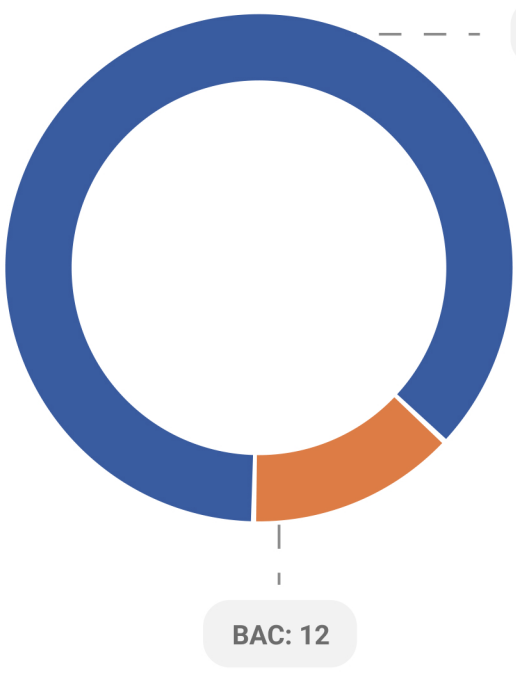
The device is intended to be used by physicians for adult patients with symptoms of a viral or bacterial infection.

Benefits

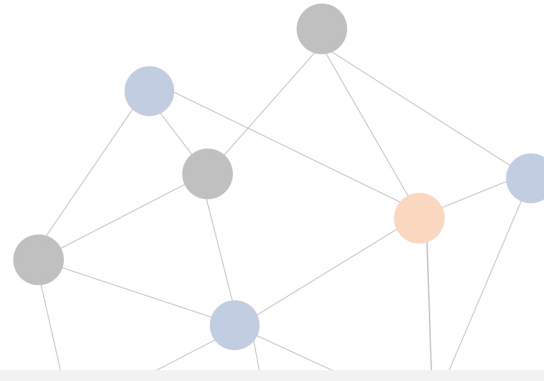
- Helps in rational use of antibiotics
- Works on 17 common blood test parameters measured by the most basic blood test analyzers
- Better results than CRP alone
- Empowers physician’s routine diagnostic workflow

The result

Results are presented in the form of a pie chart and scored between 0 and 100 %. Results with a higher likelihood of either viral or bacterial infection indicate that the pattern of 17 blood parameters measured in a patient's blood is qualitatively similar to some existing patterns of patients with known viral or bacterial infections.



Code	Description
VIR	Viral infection
BAC	Bacterial infection



88 out of 100 people with similar blood test results are diagnosed with viral infection.

12 out of 100 people with similar blood test results are diagnosed with bacterial infection.

Blood Parameters

To use VIRUS vs. BACTERIA, the following Complete Blood Count (CBC) with differential and CRP need to be measured, and their values need to be provided:

- Leukocyte count
- Erythrocyte count
- Hemoglobin
- Hematocrit
- Mean Corpuscular Volume
- Mean Corpuscular Hemoglobin
- Mean Corpuscular Hemoglobin Concentration
- Erythrocyte Distribution Width
- Trombocytes count
- Mean Paletlet Volume
- Lymphocyte count
- Monocyte count
- Neutrophilis count
- Lymphocyte %
- Monocyte %
- Neutrophilis %
- C-Reactive Protein

Contact

Smart Blood Analytics Swiss SA
Höschgasse 25, CH-8008 ZÜRICH
www.smartbloodanalytics.com
info@sba-swiss.com