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Attana Virus Analytics

The next generation of virus intelligence

COVID-19 exposing the vulnerabilities of society

The ongoing pandemic has exposed both our bodies' vulnerability towards viruses and the human civilization's susceptibility to disinformation, misinformation and lack of information.

One of the greatest threats to global health

SARS-CoV-2 is only 1 of 10^{31} unique viruses estimated to exist on Earth. In 2019, WHO even declared a global influenza pandemic as one of the greatest threats to global health.

Attana's Quartz Crystal Microbalance (QCM) biosensors provide unique patient insights. Below is a comparison of the current viral testing process, providing binary results, and Attana's superior testing process, allowing for in-depth patient classification and extensive insights.

Current viral testing process

Testing

- Blood sample
- Nasopharyngeal sample (tops test)

Analysis

- Antibody presence
- Virus presence

Patient classification

- Un-infected
- Infected
- Post-infected

The current binary results limits the insights to a basic patient classification and lacks the capability of identifying Attana's sub-classification

Attana's viral testing process

Testing

- Blood sample
- Nasopharyngeal sample (tops test)
- Biopsy

Analysis

- **Antibody** Concentration (titer), population & quality
- **Virus** Concentration (titer) & infectiousness

Patient classification

Un-infected	Infected		Post-infected
Not yet infected & effective immune system	Pre-peak of infection	Post-peak of infection	Recovered, non-infectious & effective immunity
Not yet infected & ineffective immune system			Recovered, non-infectious & ineffective immunity

Collecting a wider range of inputs

In the AVA testing process, blood, nasopharyngeal and biopsy samples are analyzed using Attana's cutting-edge QCM biosensors, providing the necessary foundation for observing important virus and antibody characteristics.

Deeper analysis of viral metrics

With AVA's capability of going further than examining antibody and virus presence, other crucial metrics are analyzed to provide more in-depth insights than what is currently found on the market.

Improved patient classification

Attana's sub-classifications can be defined based on observed antibody and virus metrics; these provide more extensive insights on important aspects of individual's immune system status, state of infection and grade of immunity.

Attana Virus Profile

Enabling cost-savings & commercialization

AVA can not only save costs by delivering new and accurate info from large-scale testing, it can also be used to construct several commercial applications for individuals, corporations and institutions.

Attana Virus Profile (AVP)

AVP is a research application; a collective platform for all patient results and insights. AVP generates valuable insights and features, offering services like treatment plans, contact tracing and vaccination guidelines.

Every individual could potentially receive a personalized AVP based on their results, including historical data on previously taken tests.