

CAMPTON Diagnostics

CAMPTON Biochip Reader

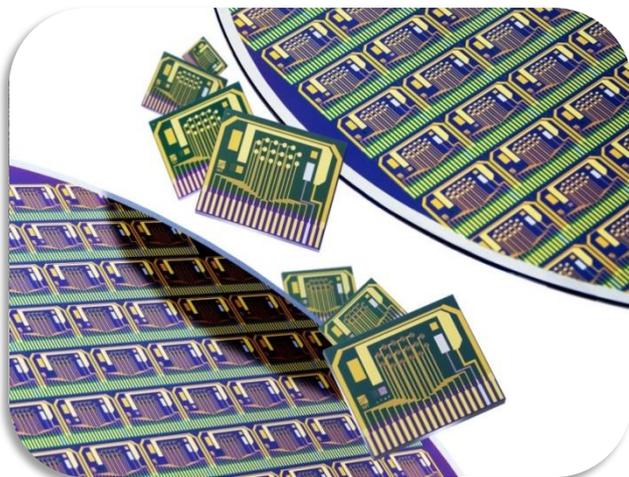
A new era of diagnostics at your fingertips



CAMPTON Biochip Reader is taking POC diagnostics to the next level in lab testing and opens a new era of diagnostics.

With just a single droplet of blood, our Biochip reader delivers reliable and fast diagnosis on a wide variety of diseases.

CAMPTON Biochip Reader helps to improve patient care and treatment.



POC Diagnostics made simple

Leading Scientists at the Fraunhofer Institute for Silicon Technology (ISIT) have developed a new Point-of-Care (POC) technology to identify cancer, infectious and autoimmune diseases in specialized medical practices or hospitals and clinics worldwide.

POC diagnostics are decentralized, near patient tests performed through the use of portable devices. Using these tests can provide faster results, helping to improve patient care and treatment.

This system solution will be certified, produced and sold on a worldwide basis by the newly founded company "CAMPTON Diagnostics™", which is located in Germany. The relevant technology is patented.

Advantages of the new CAMPTON Biochip-Reader-System

The detection of biomarkers in a patient blood sample is currently based on immunological assays (enzyme-linked immunosorbent assay [ELISA] and recombinant immunoblot assay [RIA]). These tests usually require laboratories and trained personnel and are also time-consuming (e.g. 1-3 days to get results).

Portable diagnostic devices like the CAMPTON Biochip Reader™ offer a rapid test result, which would therefore be advantageous in the field of medical care. The advantage with our system for the end customer - as well as for our direct clients doctors and hospitals - is, that it is cheaper and more time efficient. It takes a few minutes to do the test and get the results immediately.

The system is deliberately designed to use different biological substances for the identification of the corresponding diseases. Competitors often use light to detect the diseases whereas the newly developed CAMPTON technology uses electrical diversions, meaning the CAMPTON technology is more robust and is therefore suitable for the use in any climate.

Our Technology and approach

To facilitate the fast and reliable measurement of biomarkers, we intend to introduce the miniaturized automated POC system based on a cartridge with an integrated electrical biochip for ELISA-based decentralized detection of biomarkers.

This system allows the detection of multiple biomarkers in a few microlitres of serum or whole blood during a few minutes using an ELISA directly on a gold electrode array. The sensitivity of this system is comparable with standard microtiter plate ELISAs, but the duration of the novel assay is a fraction of standard ELISA's.

Next to the wide range of possible customized applications, the following established tests are currently available including all required assay reagents in ready-to-use-kits for the biochip system:

- Hepatitis C antibodies (HCV)
- C-reactive protein (CRP)
- Prostate specific antigen (PSA)



Possible applications for the Biochip system

- Allergies
- Cancer of the blood / Leukemia
- Lyme Disease / Borreliosis
- Hepatitis / Inflammation of the liver
- Cardiovascular Diseases
- Infectious Diseases (like Malaria, Ebola, HCV, HIV, Zika-Virus ...)
- Multiple Sclerosis
- Prostate Cancer
- Underactive thyroid / Hypothyroidism
- Viral diarrheal diseases

Please take note that the application of the Biochip System is not limited to the diseases mentioned above. We can integrate nearly any ELISA-based assay into the biochip as long as disease-specific proteins can be found in some type of body fluid.

The CAMPTON Biochip Reader™ is in particular suitable for the use in laboratories, but also usable for on-site applications.

The volume production of the first reader version is planned to start in the middle of 2019 and a miniaturized reader for mobile diagnostics is already under development.

Are you interested in more information?

Our Experts will gladly assist you with any queries. We look forward to hearing from you!

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