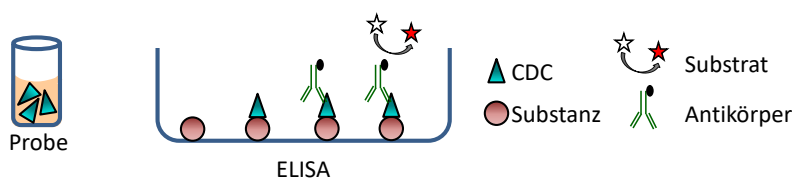


# Supply of a specific, direct and fast detection method for Cholesterol dependent Cytolysin (CDC)

Diagnostic of CDC producing pathogens, Food safety

## DESCRIPTION OF TECHNOLOGY

Cholesterol dependent Cytolysin (CDC) is secreted by gram-positive bacteria. The CDCs are able to cause serious and life-threatening endogenous and exogenous human and animal infections. *Streptococcus pneumoniae*, *Streptococcus suis* and *Listeria monocytogenes* are important CDC producing pathogens. Due to the high lethality rate and the significance for humans and animals, it is important to specify and diagnose those pathogens in order to therapy the patients, to identify and eliminate the source of infection and ensure the food safety. The released CDCs are bound to a specific substance and can be detected with conventional methods like ELISA and Western Blot.



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## APPLICATION FIELDS

Application fields are in microbiological and clinical diagnostics, in food- and environmental analysis. Solid and liquid samples can be used.

## AT A GLANCE ...

### Application Fields

- Clinical diagnostics (Human and animal samples)
- Food samples
- Environmental samples
- Immunotherapy

### Business

- Microbiological laboratories
- Clinical laboratories
- Food analytics

### USP

- Reliable and rapid method for the detection of CDCs
- No necessity for elaborated and expensive technologies and laboratories
- Fast and cost-efficiently method

### Development Status

- Detection of bounded CDC in human and animal body fluids and in food and environmental samples
- Development and test in the routine laboratory of the university hospital Giessen
- Further steps: Development of a lateral flow test

### Patent Status

Priority application filed on Dec. 22, 2017 in EP.

## ADVANTAGES OVER THE PRIOR ART

The test is carried out by using established methods (ELISA, Western Blot) and is **highly specific** for CDCs.

There is only a **small amount of sample material** needed. The toxins can be verified in a **short period of time** and directly out of the patient's sample.

## STATE OF THE PRODUCT DEVELOPMENT

A reliable, safe and fast detection method for Cholesterol dependent Cytolysin can be provided.

## MARKET POTENTIAL

The product idea is in the market segment of medical analytics and food diagnostics. In case of a market ready lateral flow test and for ELISA tests the technology is also interesting for the smaller segment of consumables in immunochemical reagents. The largest market share in the area of IVD is in the US (47%), followed by the European market with 31% share. Until 2021 an increase of the market size up to 20,575 billion US-\$ is predicted. This corresponds to an annual growth rate of 5,1%.

## COOPERATION OPPORTUNITIES

On behalf of its shareholder Justus-Liebig-Universität Giessen TransMIT GmbH is looking for cooperation partners or licensees for distribution / further development in Germany, Europe, USA and Asia.

## A TECHNOLOGY OF



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