

## CORPORATE NEWS

### CytoTools submits patent on novel therapeutic approach for the treatment of sepsis

- **New approach considered a milestone in the treatment of sepsis ("blood poisoning")**
- **Efficacy successfully confirmed in animal model**
- **Start exploratory talks with potential development partners**

**Darmstadt, 3 June 2020 - CytoTools AG (ISIN DE000A0KFRJ1)**, a biotechnology holding company specializing in pharmaceutical and medical products, has successfully confirmed the effectiveness of a trend-setting therapeutic approach for the treatment of sepsis ("blood poisoning") in an animal model. The application for the granting of a patent on the new treatment principle was submitted by the CytoTools subsidiary CytoPharma to the German Patent and Trademark Office, Munich.

Sepsis or SIRS (Systemic Inflammatory Response Syndrome) occurs when the body's own defence system is no longer able to limit an infection locally. This leads to an exuberant defence reaction of the body, which damages its own tissue and organs. If diagnosis and treatment are carried out too late, the blood poisoning can lead to organ failure and septic circulatory shock and ends fatally. Typical symptoms are fever, heavy, rapid breathing, high heart rate and a severe feeling of illness. To date, there are no known drugs with which sepsis can be causally treated. The therapy is essentially limited to treating the symptoms.

The novel treatment principle developed by CytoPharma, which contains DPOCL as the active pharmaceutical ingredient, showed far above average success in the mouse CLP model (cecal ligation and puncture). Here, sepsis is artificially induced by injury to the appendix. Without treatment, this leads to death within one week in all of the animals previously damaged in this way. However, the novel treatment principle means that the majority of the animals (75 - 100 percent) survive the artificially induced sepsis. The use of DPOCL in the treatment of sepsis thus provides a completely new therapeutic approach that can be combined with all common symptom treatments at the same time.

"The results of the animal studies in the indication sepsis are groundbreaking and form a promising basis for entry into another highly attractive market based on our technology portfolio", explains Dr. Mark Andre Freyberg, CEO of CytoTools AG. "The preparations for the first human studies for this will start soon. In the further development of the product, we are striving for an early partnership with established pharmaceutical companies. Initial discussions in this respect immediately show great interest in our therapy approach."

Leading market research companies expect the global market for the indication sepsis and septic shock to grow to a volume of US\$ 5 to 6 billion by 2026. The company expects the approach, for which a patent application has now been filed, to be ready for the market in 5 to 7 years. The

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knowledge gained so far has been filed with the German Patent and Trademark Office under the file number DE 10 2020 113 383.9 and will be expanded internationally in compliance with the relevant deadlines. Further confirmatory studies in animal models are currently being planned in order to further expand the data basis. The first human studies are planned.

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### **About CytoTools:**

CytoTools AG is a German biotechnology holding company which translates results from basic cell biological research on cell growth and programmed cell death into new forms of therapy for the causal treatment of disease and healing. CytoTools' versatile product pipeline includes self-developed chemical compounds and biopharmaceuticals which have the potential to offer new treatment options in dermatology, cardiology, urology and oncology. CytoTools is structured as a technology holding and investment company and as such has holdings in the subsidiaries DermaTools Biotech GmbH (62 %) and CytoPharma GmbH (50 %).

### *Disclaimer*

*This release contains certain forward-looking statements. These reflect the opinion of CytoTools at the date of this communication. The results actually achieved by CytoTools may differ considerably from the statements made in the future-oriented statements. CytoTools is not obliged to update future-oriented statements.*