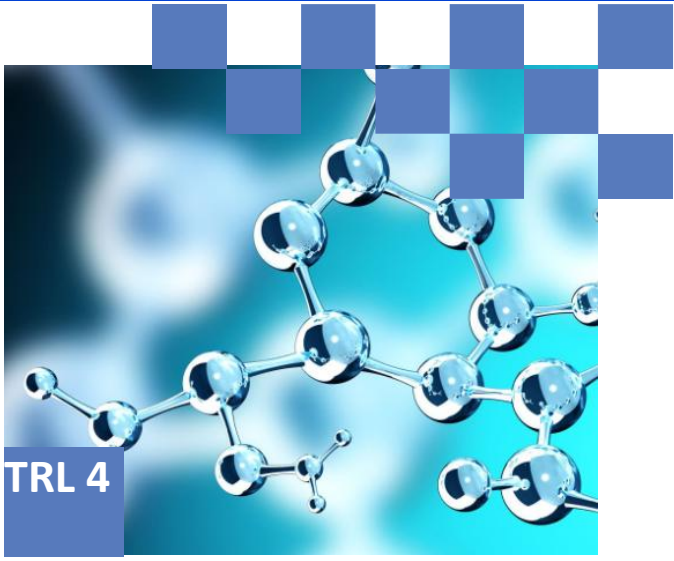
University of Gdańsk
Technology Transfer Office

chemistry

Peptides for the prevention and treatment of inflammation



About technology

The human body is continually exposed to pathogenic micro-organisms, which, over the course of evolution, has developed a number of effective mechanisms to prevent the development of infections and to fight infections. Very often, however, the body is unable to fight infection and the associated inflammation (especially systemic), which can lead to septic shock or other severe complications. Effective prevention and treatment methods are now in demand on the market, as sepsis (otherwise known as septicaemia) is a huge clinical problem - especially in hospitals, in intensive care units (750,000 new cases of severe sepsis are detected annually in the USA), where it is the second most common cause of death. The vast majority of infections are caused by bacteria.

At the Faculty of Chemistry of the University of Gdansk UG, research has been conducted for many years on the **design and synthesis** of **biologically active peptides**. The subject of the invention are peptides for use in the **prevention** and **treatment of inflammation** - caused by bacterial infections, as well as systemic inflammation - such as sepsis, accompanied by an increase in cytokines and reactive nitrogen species. This application applies to both humans and animals.

The efficacy of the compounds' anti-inflammatory properties, especially against inflammation caused by **Gram-negative bacteria**, has been confirmed by studies in vitro and in a mouse model organism.

Research Team

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IP Protection

The invention is the subject of patent protection:

- Poland: **Pat.239303**

Implementation progress

TRL 4 –Technology validated in laboratory conditions

Cooperation opportunities

- Licensing agreement
- Transfer of ownership
- Partnership for further research

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