



UNIVERSITÀ
DEGLI STUDI
DI PADOVA

UniSMART
Fondazione Università di Padova



INFLAMMATION

A compound to mitigate the cytokine storm

Applicant	Università degli Studi Padova
Inventors	Patrizia Pontisso, Alessandra Biasiolo, Andrea Martini, Laura Cendron, Monica Chinellato, Santina Quarta, Mariagrazia Ruvoletto, Cristian Turato, Gianmarco Villano
Priority Date	12/7/2022
Protection	IT 102022000014593 PCT/IB2023/057138

TRL scale



What it is needed for?

The body's inflammatory response to fight infections and in tissue repair processes is crucial for normal functioning of the body. Yet, if not controlled, it can cause severe injury to the human body, as occurs during cytokine storm, a potentially fatal chain reaction that can be generated, for example, following serious forms of infection, such as SARS-CoV-2 or sepsis.

Despite the progress in developing novel strategies to manage the immune response, the drugs that could efficiently prevent a steep surge in cytokines are still lacking.

We have identified a known compound that by blocking the membrane receptor PAR-2, is able to mitigate the cytokine storm, especially in patients with severe infections such as those due to COVID-19.

Advantages

- Compound is well tolerated in the experimental model;
- Compound is stable in the experimental model;
- Compound is readily available on the market;
- Low cost.

Applications

A drug to control cytokine storm. Clinical conditions that can be characterized by cytokine storm, such as Covid-19 infection, sepsis, acute lung injury, cancer or degenerative diseases to name a few. Clinical conditions that are related to PAR-2.

What we are looking for

Technology is available for licensing and/or co-development