

## New approach for the treatment of cytokine storm associated with infections

- Peaches Biotech's Chief Scientific Director publishes positive results for his research against the cytokine storm, a pathology associated with infectious processes in the book "Purinergic System".
- The cytokine storm is a pathology associated with severe infectious processes. It is a serious global health issue but there is not available drug treatment for it. Dr. Lapuente highlights the need for an immunomodulatory, anti-inflammatory drug to combat the effects of the cytokine storm.
- The chapter published in the book Purinergic System reveals positive results for high efficacy and safety of the PRS® CK STORM as an investigational drug to prevent and treat the cytokine storm associated with infectious processes, such as of COVID-19 or other pathologies.

Madrid, September 19, 2022.- Pedro Lapuente, Chief Scientific Director at Peaches Biotech Group, a Spanish company specialized in advanced therapies, has published positive results in the development of research with PRS® CK STORM. A drug capable of preventing and fighting against the cytokine storm, an inflammatory response associated with infections such as COVID-19.

Dr. Lapuente publishes the positive results of his research in one of the chapters in the book "[Purinergic System](#)" from IntechOpen, the world's leading publisher of open access books for scientists.

The proposal of the Peaches Biotech group is presented in this publication under the title "Immunomodulatory effects of an M2 conditioned medium (PRS® CK STORM): Theory on the possible complex mechanism of action through the anti-inflammatory modulation of the TLR system and the purinergic system". It is a biological therapy based on the use of an allogeneic M2 macrophage-derived conditioned medium, the manufacturing basis of which is the co-culture of adult mesenchymal stem cells from fat and allogeneic, with M2 macrophages.

The mesenchymal stem cells, placed in co-culture with macrophages, not only respond to the macrophages and adjust their secretome accordingly, but they also induce the macrophages to respond to them, creating a feedback loop that contributes to immune regulation.

PRS® CK STORM opens the way to a new anti-inflammatory treatment that is presented as a solution to the worldwide problem of severe infectious processes.

In the words of Pedro Lapuente: *"the language with which immune cells communicate with the different tissues shows us a way to find new drugs of biological origin, of great importance as immunomodulators, anti-inflammatories and tissue regenerators"*.

## Nota de prensa

Dr. Lapuente highlights, in his book chapter, the extreme need today for an immunomodulatory, anti-inflammatory drug that can fight the effects of the cytokine storm associated with infections.

### For more information:

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### Communication Team

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### About:

#### **Peaches Biotech Group**

We are focused on the creation of drugs based on advanced therapies, especially with cytokines, stem cells or T-lymphocytes, which will allow patients to take advantage of new therapeutic options, cost-effective and disruptive with the current models. These are the company's main areas of research work:

#### **PRS, Selective Rich Plasma**

A process based on a patent developed by Peaches Biotech that generates a set of selective cytokines for various tissues, allogeneically, and that produces a regenerative and immunomodulatory effect on these tissues and their immune response. This breeding process results in a platform that has the potential to develop more than 20 different biological drugs.

#### **opT cells**

Process based on a Peaches Biotech license of the Harvard Medical School BIDMC patent for the treatment of pancreatic cancer, by education of autologous T lymphocytes, in co-culture with three-dimensional organoids generated with pancreatic tumor cells. This cell therapy technology will be tested against other solid tumors leading to other treatments.

#### **Research talent that is part of the company**

Dr. Juan Carlos de Gregorio - Founder and CEO. 2005 Innovation Award IESE-Vocento-Ernst&Young Degree in Pharmacy, specializing in pharmaceuticals. Former CEO of Puleva Biotech.

Dr. Juan Pedro Lapuente - Chief Scientific Officer of Peaches Biotech. Doctor in Medicine, Master in Molecular and Cellular Biology from the University of Zaragoza, Master in Transfusion and Advanced Cellular Medicine and Therapies from the University of Liège. Master in Sports Traumatology from the Catholic University of Murcia.

Dr. Manuel Hidalgo - Director of the Division of Hematology-Oncology at Weill Cornell Medicine, New York-Presbyterian. Currently, he is a research associate at Peaches Biotech.

Dr. Senthil Muthuswamy - Associate Professor, Department of Medicine, Harvard Medical School, Boston, Massachusetts. Director, Program in Cell Biology, Beth Israel Deaconess Medical Centre. Currently, he is a research associate at Peaches Biotech.