

## **MEDESIS PHARMA: NEW PATENT FILED PROTECTING THE TECHNICAL OPTIMIZATION OF THE AONYS MICROEMULSION AND ITS EFFICACY APPLIED FOR ALL WATER-SOLUBLE PHARMACEUTICAL ACTIVE INGREDIENTS**

Montpellier, March 7, 2023 - 8:00am – MEDESIS PHARMA, a pharmaceutical biotechnology company developing drug candidates with Aonys<sup>®</sup>, its proprietary buccal nanodroplet active ingredient administration technology is pleased to announce the filing today of a new European patent application on the optimization of its microemulsion technology platform Aonys<sup>®</sup> for the increment in bioavailability and the enhancement of patient compliance.

**This new patent guarantees an industrial protection through to 2043 for all of the Aonys technology's drug applications and and strengthens the assets of Medesis Pharma which holds 72 patents spread over 11 patent families.**

The microemulsion developed since Medesis Pharma was founded comprises reverse micelles with a specific composition which, after being deposited on the buccal mucosa, enables the absorption then structuring in HDL lipoproteins, ensuring their plasma transport then the delivery of active ingredients directly inside all of the organism's cells.

The evolution of the formulation with the development of larger biological molecules highlighted a gelling issue with buccal administration in people. The inventors found that this gelling is associated with a reduced level of absorption on contact with saliva. The patented invention overcomes this challenge linked to crossing the buccal mucosa and offers an optimum solution by preventing the partial gelling on contact with saliva.

The invention also concerns improvements to the organoleptic properties through the use of aromatic ingredients, enabling a better acceptance of the drug when it is administered orally in people.

The active ingredient formulated in the pharmaceutical compositions covered by this patent may be metal ions, such as lithium for the treatment of neurodegenerative diseases, or manganese for radioprotection and the protection of healthy tissues during radiotherapy treatments for cancer, interfering RNAs to inhibit the expression of abnormal or overexpressed genes particularly for the treatment of aggressive cancers, as well as peptides, small chemical or biological molecules that are exclusively water-soluble.

### **About Medesis Pharma**

To advance the treatment of serious diseases without effective treatments, Medesis Pharma creates drug candidates based on its proprietary Aonys<sup>®</sup> technology for the oral administration of active ingredients in nanodroplet form, enabling active ingredients to be effectively delivered to all cells, with passage through the blood-brain barrier (BBB).

This innovative approach is being applied to future drugs to treat major diseases that do not have effective treatments: Alzheimer's disease, Huntington's disease, and certain resistant cancers.

Medesis Pharma is also developing treatments dedicated to populations contaminated or irradiated after a civil or military nuclear accident.

French biopharmaceutical company based near Montpellier, Medesis Pharma is the author of 15 scientific publications, holds 11 patent families and 72 patents, the result of 19 years of research.

Medesis Pharma shares are listed on Euronext Growth Paris: FR001844464 - ALMDP

For more information:

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