

## MEDESIS PHARMA announces a joint European patent with TRANSGENE

Montpellier, September 1 2021 at 5:45 p.m. - Medesis Pharma (ISIN: FR0010844464, MNEMO: ALMDP), a pharmaceutical biotechnology company developing drug candidates with its proprietary technology for the oral administration of active ingredients in micelles, today announces the joint filing with TRANSGENE (Euronext Paris: TNG), a biotechnology company that designs and develops cancer immunotherapies based on viral vectors, of a European patent protecting an original therapeutic approach to inhibit the expression of the interferon gene.

The present invention relates to a new application of Aonys reverse micelle system developed by MEDESIS PHARMA for the delivery of small interfering RNAs (siRNAs). This technology allows, after oral administration, a plasma transport protected in HDL lipoproteins, the passage of biological barriers and the intracellular delivery of siRNAs by cellular lipoprotein receptors. It should also enable targeting of tumors which overexpress HDL receptors.

The siRNA thus formulated target genes linked to the interferon pathway, with an exemplification for the IFNAR1 gene, representing a potential therapeutic option in pathologies involving this pathway.

For Transgene, the approach is interesting because it would make it possible to transiently block the antiviral defense mechanism that could be involved in the treatment of cancer with oncolytic viruses. The patent effectively shows enhanced activity for the combination of the nano formulated anti-IFNAR1 siRNA and its oncolytic vector Vaccinia in a preclinical solid tumor model.

Other pathologies are linked to an overexpression of one or more genes linked to the interferon pathway and could benefit from the innovation patented: bacterial, viral or parasitic infections and autoimmune and / or inflammatory diseases, including systemic lupus erythematosus (SLE), multiple sclerosis (MS), myositis such as dermatomyositis, Sjogren's disease, scleroderma, rheumatoid arthritis or sarcoidosis, neuropsychiatric pathology and certain cancers, in particular cancers overexpressing the IFNAR1 gene.

The CNRS is also a stakeholder in the patent with the contribution of the design of the siRNA sequence carried out by Hervé SEITZ (IGH - UMR 9002).

### About Medesis Pharma

To advance the treatment of serious diseases without effective treatments, Medesis Pharma creates drug candidates based on its proprietary Aonys® 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 for future drugs to treat major diseases that do not have effective treatments: Alzheimer's Disease, Huntington's Disease, certain resistant cancers and severe respiratory inflammations such as those linked to COVID-19. Medesis Pharma is also developing dedicated treatments for people irradiated following a civil or military nuclear accident.

Medesis Pharma, a French biopharmaceutical company based near Montpellier, has a track record of 15 scientific publications, holds ten patents, reflecting 17 years of research, and is focused specifically on four projects that are moving into Clinical Phase II for neurodegenerative diseases and the treatment of Covid-19. Building on its world-renowned positions, Medesis Pharma is also working on new applications for its technology in partnership with public research laboratories (CNRS, CEA, IRBA), major teaching hospital centers in France, Canada and the United States, as well as private structures such as Transgene.

Medesis Pharma's shares are listed on Euronext Growth Paris (FR0010844464 – ALMDP).

Pour plus d'information :  
[www.medesispharma.com](http://www.medesispharma.com)

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