



## PRESS RELEASE

### STARKAGE THERAPEUTICS AWARDED €2M FROM BPIFRANCE TO DEVELOP INNOVATIVE IMMUNOTHERAPY APPROACH TARGETING SENESCENT CELLS IN AGE-RELATED DISEASES

- StarkAge Tx awarded €2 Million through Bpifrance's "Deeptech Program"
- Bpifrance's Deeptech program aims to finance disruptive R&D programs
- Early development of biomarker platform ExoCise™ now secured
- Pierre-Michel Bringer appointed Chief Executive Officer

Lille, France, January 18, 2022 – StarkAge Therapeutics, a pioneering discovery-stage biotechnology company focusing on cellular senescence related diseases, announced today it received Bpifrance Deeptech label designation for its lead program in Idiopathic Pulmonary Fibrosis (IPF).

*"This exceptional achievement, under the scientific leadership of Dr. Müge Ogrunc, underscores the potential of the technology we are developing."* said **Dr. Thierry Mathieu** founder and President of StarkAge Therapeutics. *"We are grateful for the strong and continuous support from Bpifrance since the creation of StarkAge Therapeutics".*

With this label, StarkAge Tx was awarded 2€ million in non-dilutive funding, the maximum allowed per project in this program<sup>1</sup>, across 4 years. This is a major steppingstone to advance and drive their program to success.

A further increase in capital will likely be required to fully fund their pre-clinical IPF program prior to engaging with US and European regulatory agencies.

*"This will help us move our research forward significantly"* added **Dr. Mathieu**. *"IPF is the first program we are testing with ExoCise™, our cellular senescence biomarker platform. If successfully completed, it could lead to helping with many other age-related diseases."*

StarkAge Therapeutics also announced that Dr. Pierre-Michel Bringer, has been appointed Chief Executive Officer. Dr. Bringer has over 35 years of Pharmaceutical Industry experience in multiple countries including the US, spanning M&A / licensing, communication, strategic planning, marketing & sales. Most recently he served 13 years as Investor Relations Officer with Novartis. Pierre-Michel holds a Doctorate of Pharmacy from Paris University

*“Pierre-Michel broad industry knowledge, including expertise with investors, and his passion for science make him the strong leader we needed”* said **Dr. Mathieu** *“We are thrilled to have Pierre-Michel with us as CEO, and I am happy to hand-over the helm of StarkAge Therapeutics”*.

*“I feel honored and humbled to lead the next steps of StarkAge Therapeutics whose science focuses on harnessing immunotherapy against cellular senescence.”* said **Dr. Bringer**.

### About senescence

Cellular senescence is a stress-induced, durable cell-cycle arrest of previously replication-competent cells. Senescent cells can be beneficial as well as detrimental regarding host physiology and disease. Indeed, while cellular senescence can facilitate physiological processes such as tissue repair and wound healing, the actions of their secreted pro-inflammatory cytokines can promote tissue dysfunctions, especially during aging. In this context, the rate at which senescent cells accumulate within tissues increases with aging leading to age-related disorders causing diseases such as idiopathic pulmonary fibrosis<sup>2,3</sup> (IPF) and many others<sup>4,5,6,7</sup>. Consequently, these detrimental senescent cells are considered a potential therapeutic target in age-related disorders. Nevertheless, the challenge remains to specifically target detrimental senescent cells while avoiding altering the functions of beneficial ones.

### About Bpifrance Deeptech program

Bpifrance’s Deeptech program<sup>1</sup> aims to help finance well-characterized and disruptive R&D programs.

The DeepTech label is granted to projects based on innovative technology, in particular:

- from a research laboratory (public/private) and/or relying on a team/governance in connection with the scientific world
- which constitute a strongly differentiating advantage compared to the competition
- characterized by a long/complex go-to-market (development, industrialization, marketing) and therefore probably capital-intensive.

### About ExoCise™

ExoCise is StarkAge Therapeutics’ proprietary platform designed to analyze extracellular vesicles (EVs), particularly exosomes and microvesicles, identifying robust and specific biomarkers for senescent cells in disease-setting by their specific multi-OMICS<sup>8</sup> characterization.

EVs are secreted by virtually all cell types in the body and released in body fluids, particularly blood. EVs contain various molecules such as RNA, proteins, enzymes, cytokines etc. Some of these molecules are specific to the tissue they originate from, and even specific to certain cells within that tissue (biomarkers). EVs secreted from diseased or senescent cells to the blood could be used to detect and diagnose such conditions with a simple blood draw.

By applying ExoCise to patients with age-related diseases involving senescent cell accumulation, StarkAge Therapeutics expects to design safe and targeted immunotherapy solutions, setting StarkAge Therapeutics apart from competitors' approaches with senolytic drugs which lacked safety and selectivity.

### **About Idiopathic Pulmonary Fibrosis (IPF)**

IPF is a severe and debilitating disease with limited-or-no therapeutic options, in which the lungs become fibrotic and scarred<sup>9</sup>. It is a progressive illness where breathing becomes increasingly difficult over time until patients die from IPF. There is currently no treatment that can stop the evolution of the disease, or even reverse the scarring of the lungs.

IPF prevalence<sup>10</sup> is estimated between 14 and 27.9 cases per 100,000 habitants in the US, in Europe 1.25 to 23.4 cases per 100,000 habitants in Europe.

With regard to IPF life expectancy<sup>11</sup>, the estimated mean survival is 2-5 years from the time of diagnosis. Estimated mortality rates are 64.3 deaths per million in men and 58.4 deaths per million in women.

### **About StarkAge Therapeutics**

StarkAge Therapeutics (SATX) is a pioneering privately held discovery-stage biotechnology company based in Lille, France. It was founded in 2018 by Dr. Thierry Mathieu, with scientific support from Dr. Müge Ogrunc, based on the idea that eliminating disease-specific senescent cells using immunotherapy could deliver significant therapeutic benefits to patients.

Its ambition is to delay or halt disease progression and improve the quality of life of patients with age-related diseases.

Increasing evidence in literature confirms senescent cell accumulation as a hallmark in various aged-related diseases such as idiopathic pulmonary fibrosis<sup>2,3</sup>, neurodegenerative diseases<sup>4</sup>, metabolic dysfunction<sup>5,6</sup> or hepatic steatosis<sup>7</sup>. Recent scientific reviews<sup>12,13</sup> identified potential targets and set the foundations for testing applications in human.

StarkAge Therapeutics' unique expertise originates from its proprietary biomarker discovery platform, ExoCise™, which enables the characterization of senescent cell biomarkers from patient derived extracellular vesicles and their specific validation for each disease.

StarkAge Therapeutics has selected Idiopathic Pulmonary Fibrosis (IPF) as its lead program. Other fibrotic diseases or metabolic diseases are under evaluation.

## Contacts

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## Forward-Looking Statement

This press release may contain forward-looking statements. Such statements are based on StarkAge Therapeutics' beliefs and expectations regarding future events. They are subject to risks and uncertainties beyond the company's control which could cause actual results, performance, or achievements to be materially different from the expectations implied by such forward-looking statements.

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