PRESS RELEASE

STARKAGE THERAPEUTICS ESTABLISHES ITS SCIENTIFIC ADVISORY BOARD AND HOLDS THEIR FOUNDATIONAL MEETING

- **This Board advises company executives and guides the scientific team**
- **It comprises leading international independent experts**
- **Kick-off meeting held earlier this month in Paris**

Lille, France, February 13, 2022 – StarkAge Therapeutics (SATX), a pioneering discovery-stage biotechnology company focusing on cellular senescence-related diseases, announced today it has established its Scientific Advisory Board (SAB) comprised of leading international independent experts.

The main purpose of StarkAge Therapeutics SAB is to:

- Advise the company President and executive team concerning current and future R&D strategy and opportunities
- Guide the Chief Scientific Officer (CSO) and scientific team on key next steps and tools
- Review and discuss science innovation and technology trends relevant to StarkAge Therapeutics R&D operations

"The expertise of these international experts is invaluable for our young start-up," said **Dr. Pierre-Michel Bringer**, CEO of StarkAge Therapeutics. *"We are very thankful for their time and strategic advice and delighted that they have joined us".*

The Scientific Advisory Board includes the following external personalities:

✓ **David Bernard, PhD**: Dr. David Bernard is a cell and molecular biologist by training with strong expertise in cellular senescence. Currently heading up the Cellular Senescence, Cancer and Aging team at **The Cancer Research Center of Lyon (CRCL),** Dr. Bernard's team is developing several research projects focused on new mechanisms and actors of cellular senescence they have identified in regulating cancer, age-related alterations, for example, fibrosis and inflammation, and aging.

✓ **Vincent Cottin, MD**: Dr. Vincent Cottin is Professor of Respiratory Medicine and coordinator of the National Reference Centre for Rare Pulmonary Diseases at the **Louis Pradel Hospital and the Claude Bernard University in Lyon**. For many years, this

center has pioneered clinical care and research for patients with rare and orphan lung diseases. It has recently been recognized as the only center in France to be part of the European Reference Center network for interstitial lung disease (ERN-Lung, ILD). Prof. Cottin's research interests include rare 'orphan' pulmonary diseases, including lymphangioleiomyomatosis, idiopathic interstitial pneumoniae and especially idiopathic pulmonary fibrosis.
He is a member of the Scientific Advisory Board of the European Pulmonary Fibrosis Federation and Section Editor for interstitial lung disease for European Respiratory Journal.

- ✓ **Fabrizio D'Adda di Fagagna, PhD:** Dr. Fabrizio d'Adda di Fagagna is a cell and molecular biologist at **IFOM in Milan and CNR in Pavia (Italy)** who studies the involvement of the DNA damage response (DDR) pathways in physiologically relevant processes such as aging and cancer. Dr. D'Adda di Fagagna discovered the engagement of DDR factors in the maintenance of telomeres and demonstrated that cellular senescence, a form of cell aging, is the outcome of DDR activation caused by the direct recognition of critically short or damaged telomeres.

- ✓ **Ana O'Loghlen, PhD**: Dr. Ana O'Loghlen is an expert in cellular senescence in a variety of contexts such as aging, cancer, and age-related diseases. The focus of her Epigenetics & Cellular Senescence lab at the **Blizard Institute of the Queen Mary University of London** is understanding the basic mechanisms regulating cellular senescence and its influence on the microenvironment, and the understanding and identification of new components of the Senescence Associated Secretory Phenotype (SASP) and investigating their role with the microenvironment in the context of aging and cancer.

- ✓ **Pascal Pfister, MD:** Dr. Pfister is an expert in drug development, whose career spans 3 decades with **Novartis Pharmaceuticals in France, Switzerland, and the US**, in a range of therapeutic fields including the areas of inflammatory, respiratory and cardiometabolic disease where he contributed to the development of many new therapeutic solutions. His most recent contribution was leading the clinical approval of the siRNA inclisiran. Earlier in his career, Dr. Pfister was CSO of **Nicox**, a French-listed biotechnology company.

"We are privileged to have the opportunity to work with these exceptional thought leaders" added **Dr. Frédérik Oger**, CSO of StarkAge Therapeutics. *"We are testing IPF, our lead program, with our cellular senescence biomarker platform ExoCise™. If successfully completed, it could lead to helping the fight against many other age-related diseases, including in metabolic disorders."*

The full SAB gathered for the first time earlier this month in Paris in a hybrid format. During this kick-off meeting, SATX R&D Strategy was presented and discussed, benefiting from multiple inputs and suggestions for consideration, and thus refined. "*The rich discussions we had opened*

new avenues of thinking that could prove immensely useful to StarkAge Therapeutics" added **Dr. Bringer**. The SAB will meet 4 times a year.

StarkAge Therapeutics recently announced been awarded[1] 2€ million in non-dilutive funding, the maximum allowed per project in Bpifrance Deeptech program.
-- see our press release here.

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

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[2,3] (IPF) and many others[4,5,6,7]. 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 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[8] 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[9]. 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[10] is estimated between 14 and 27.9 cases per 100,000 inhabitants in the US, in Europe 1.25 to 23.4 cases per 100,000 inhabitants.

The estimated mean life expectancy[11] for IPF patients 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[2,3], neurodegenerative diseases[4], metabolic dysfunction[5,6,] or hepatic steatosis[7]. Recent scientific reviews[12,13] identified potential targets and set the foundations for testing applications in humans.

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.

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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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