Lys therapeutics

Lys Therapeutics announces that Michel Vounatsos is appointed chairman of its Board of Directors

The arrival of this world-renowned pharmaceutical industry executive specialized in the development of drugs for neurological diseases reflects the maturity and excellence of Lys Therapeutics' team and governance

Lyon & Caen, France, 22 March 2024 – Lys Therapeutics, a French biotechnology company pioneering a revolutionary approach to treating patients suffering from neurodegenerative and neurovascular diseases, today announced the appointment of Michel Vounatsos as Chairman of its Board of Directors.

From 2017 to 2022, Michel Vounatsos was Chief Executive Officer of the US pharmaceutical company Biogen, where he previously served as Vice President and Chief Commercial Officer. Prior to this, with medical training at the University of Bordeaux and an MBA from HEC Paris in hand, he spent 20 years in various positions of responsibility with the American pharmaceutical group Merck, in Europe, China and the United States.

The arrival of Michel Vounatsos marks a transformation in the governance of Lys Therapeutics with the implementation of a Board of Directors responsible for steering the company's overall strategy. Dr. Manuel Blanc, co-founder of Lys Therapeutics, retains his position as Chairman of the company and also joins the Board of Directors. This reinforcement of the governance structure marks the completion of a major cycle for the company, with the finalization of the Glunozumab maturation program. The process of humanizing and improving the affinity of the parental glunomab antibody has now been completed, leading to the selection of the drug candidate LYS241.

"We are thrilled to welcome Michel Vounatsos as the Chairman of Lys Therapeutics' Board of Directors. His appointment represents a significant milestone for our company, as we gain the invaluable insights and expertise of a distinguished leader from the pharmaceutical industry. This expression of confidence not only highlights the quality of our progress but also strengthens our determination for global success" expresses Dr. Manuel Blanc, CEO and co-founder of Lys Therapeutics, who further emphasizes: "Moreover, with the establishment of our Board of Directors, we are fortifying the governance framework essential for propelling the company through its next phases of growth and innovation."

"I am proud to head the Board of Directors of Lys Therapeutics, and to bring my experience in the major therapeutic area of neurology, where medical needs are considerable, and which has benefited from increased interest from the pharmaceutical industry in recent years. Lys Therapeutics has outstanding science and know-how in neurovascular and neurodegenerative diseases, as well as top-quality management and operational teams, which I am delighted to be able to support", says Michel Vounatsos.

The monoclonal antibody LYS241, Lys Therapeutics' lead drug candidate, counteracts pathological mechanisms linked to dysfunction of the blood-brain barrier (BBB), which are highly implicated in the pathophysiology of many neurological diseases. BBB dysfunction leads to increased passage of toxic

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and inflammatory molecules into the central nervous system, causing neuroinflammation, excitotoxicity and neuronal death.

Specifically in stroke, LYS241 counteracts the "off-target" side-effects of reference thrombolytics (alteplase and tenecteplase) on blood vessel endothelial cells, ranging from local perturbation to rupture of the BBB. This causes hemorrhage and severe inflammation leading to neuronal death, strongly impacting patients' functional recovery.

LYS241's ability to restore the integrity of the BBB is also of major interest in neurodegenerative diseases such as multiple sclerosis and other severe demyelinating diseases, as well as in Parkinson's disease, indications for which Lys Therapeutics is planning a major clinical development program.

About Lys Therapeutics

First-in-class biotherapies against neurological diseases.

Lys Therapeutics is a pioneering biotechnology company dedicated to addressing unmet medical needs in patients afflicted with neurovascular or neurodegenerative disorders through a revolutionary approach targeting blood-brain barrier (BBB) dysfunction.

In the pathophysiology of various neurological diseases such as **stroke, multiple sclerosis, and Parkinson's disease**, hyperactivation of endothelial NMDA receptors (NMDAr) by overexpressed tissue plasminogen activator (tPA) leads to the degradation of tight junctions and subsequent BBB dysfunction. This process allows inflammatory cells and toxic molecules to migrate into the brain parenchyma, triggering severe neuroinflammation and excitotoxicity, which are primary contributors to neurodegeneration.

Lys Therapeutics' lead compound, <u>LYS241</u>, is a first-in-class monoclonal antibody with a groundbreaking mechanism of action that effectively counters these pathological mechanisms. Specifically, LYS241 acts within blood vessels to prevent the binding of tPA to NMDAr, without interfering with the physiological function of NMDA receptors. By inhibiting this interaction, NMDA receptors can function normally, thereby halting downstream deleterious cellular pathways. As a result, tight junctions are reinstated, endothelial cells regain their healthy state, and BBB function is restored, shielding the brain from further neuroinflammatory and subsequent neurodegenerative cascades.

Lys Therapeutics' approach of targeting neuroinflammation to combat neurodegeneration represents a promising avenue in the quest for effective treatments for these debilitating disorders.

More information on <u>lystherapeutics.com</u>

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