Press release

A New Paradigm in Tobacco and Nicotine Addiction: NFL Biosciences demonstrates the mechanism of action of NFL-102 in a video

- **A breakthrough mechanism of action targeting neural plasticity associated with addiction, particularly through the CREB regulator, a key factor in relapse**
- **An educational video illustrating this new approach and making it easier to understand**
- **Upcoming conference presentations and a scientific publication**

Montpellier, France, April 7, 2026, at 5:45 pm CEST – NFL BIOSCIENCES (Euronext Growth Paris – FR0014003XT0 – ALNFL), a biopharmaceutical company developing innovative botanical drugs for the treatment of addiction, announced today the release of a video illustrating the mechanism of action of NFL-102, a drug candidate that could transform the treatment of tobacco and nicotine addiction. Whereas current approaches are essentially limited to managing withdrawal symptoms via nicotinic receptors, NFL-102 acts directly on the deep neural mechanisms of addiction. It modulates the CREB regulator, which is involved in brain plasticity and relapse.

This initiative builds on the company's recent work, which has identified a novel mechanism of action targeting the underlying biological processes involved in nicotine addiction. With this presentation, NFL Biosciences aims to illustrate this new paradigm in an accessible way and to reaffirm its strategy of capitalizing on this differentiating mechanism in the clinical development of its drug candidate, NFL-102.

Unlike current smoking cessation treatments, which primarily act on nicotinic receptors to reduce withdrawal symptoms, NFL-102 acts downstream of these receptors by modulating key signaling pathways involved in neuronal plasticity. It targets the CREB regulator, identified as a central player in the lasting changes to neural circuits associated with addiction, as well as astrogliosis, thereby helping to mitigate the neurobiological impact of smoking and the risk of relapse.

This approach paves the way for a paradigm shift in smoking cessation, moving beyond the management of withdrawal symptoms to focus on normalizing the brain changes caused by chronic exposure to nicotine.

In parallel with this outreach effort, NFL Biosciences plans to present these results at international scientific conferences. The French Alternative Energies and Atomic Energy Commission (CEA) also intends to submit this work for publication in a peer-reviewed international scientific journal, to contribute to its validation by the scientific community.

NFL Biosciences is thus continuing the development of NFL-102, intended for the general smoking population, with the goal of offering a therapeutic approach designed to increase the success rate of smoking cessation and sustainably reduce the risk of relapse.

About NFL Biosciences: www.nflbiosciences.com

NFL Biosciences is a biopharmaceutical company based in the Montpellier region (France) developing botanical drug candidates for the treatment of addictions. NFL Biosciences' ambition is to provide new natural therapeutic solutions that are safer and more effective for people worldwide, including in low- and middle-income countries. NFL-101 and NFL-102 are standardized tobacco leaf extracts protected by four patent families. NFL Biosciences aims to offer smokers who wish to quit a natural, safe, easy-to-administer and personalized alternative. NFL Biosciences is also developing NFL-301, a natural drug candidate intended to reduce alcohol consumption and has a drug development program targeting cannabis use disorders.

NFL Biosciences' shares are listed on Euronext Paris (FR0014003XT0 – ALNFL).

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