



Press release

NFL Biosciences announces the publication of the results of its Phase II clinical trial CESTO II evaluating NFL-101 in smoking cessation in *Nicotine & Tobacco Research*, the official journal of the Society for Research on Nicotine and Tobacco (SRNT)

- The SRNT, the world's leading scientific society dedicated to nicotine and tobacco research, publishes the results of the CESTO II study in its reference journal, thereby ensuring their optimal dissemination within the specialized scientific community
- Two administrations of NFL-101 at the 100 µg dose demonstrated a significant increase in continuous abstinence and a durable reduction in craving, the irresistible urge to smoke
- NFL-101 shows an excellent safety profile, comparable to placebo

Montpellier, France, September 1st, 2025, 6:00 pm CEST – NFL BIOSCIENCES (Euronext Growth Paris – FR0014003XT0 – ALNFL), a biopharmaceutical company developing innovative botanical drugs for the treatment of addictions, today announces the publication of the full results of its Phase 2 clinical trial CESTO II, conducted in 318 smokers. The scientific article, entitled "[*Efficacy and Safety of NFL-101 as a Smoking Cessation Therapy: A Randomized Phase 2 Clinical Trial CESTO2*](#)", has been published in *Nicotine & Tobacco Research* — an international peer-reviewed reference journal, the official journal of the Society for Research on Nicotine and Tobacco (SRNT), and published by Oxford University Press. This publication reflects the recognition of the CESTO II results by the international scientific community and further enhances their global visibility.

A global public health challenge

Tobacco use remains the leading preventable cause of mortality worldwide, responsible for more than 8 million deaths every year according to the WHO. Despite strong quit intentions among most smokers, permanent success rates remain low. Current treatments require prolonged daily use and suffer from poor adherence, often due to the side effects associated with their administration. **NFL-101** stands out with an optimized dosing regimen that promotes adherence with only **two administrations, an innovative mechanism of action, improved tolerability, and enhanced efficacy on craving** (the urge to smoke), the main factor driving relapse.

Promising clinical results

The Phase 2 CESTO II trial was a multicenter, randomized, double-blind, placebo-controlled study with one-year follow-up, designed to evaluate the efficacy, safety and immune response (immunogenicity) of NFL-101 in smoking cessation. A total of 318 smokers were randomized to receive subcutaneous injections of NFL-101 at 100 µg, NFL-101 at 200 µg, or placebo on Day 1 and Day 8. The primary endpoint was 28-day continuous abstinence, assessed six weeks after quitting (CA, Day 15 to Day 43).

Administration of NFL-101 at the 100 µg dose **increased 28-day continuous abstinence** at six weeks post-quit, confirmed by urinary cotinine concentrations (24.1% in the 100 µg group versus 12.9% in the placebo group ($p=0.0378$; $RR=1.87$)). This dose also led to a **significant and durable reduction in craving** ($p<0.05$) compared with placebo. The most pronounced effects were observed on emotionality (smoking to regulate mood) and compulsivity (difficulty resisting the urge to smoke), two key psychological determinants of relapse. These results suggest that NFL-101 may help reduce relapse risk by attenuating craving over the long term. Abstinent participants showed a **significant increase in anti-NFL-101 IgG** concentrations compared with those who continued smoking ($p<0.009$).

The results of this study support the development of a new therapeutic class based on neuro-immune modulation. Additional strengths include the subcutaneous route of administration, consisting of two injections one week apart (thereby promoting adherence to treatment), as well as a **well-established safety profile with minimal adverse effects**.

The article has been published in open access on the [Nicotine & Tobacco Research](#) website in its accepted manuscript version, pending final typesetting. It is also indexed on PubMed, where only the abstract is currently available; the full version will be accessible after editorial finalization.

Bruno Lafont, Chief Executive Officer and co-founder of NFL Biosciences, states: *“The publication of the full results of the CESTO II study in Nicotine & Tobacco Research, the official journal of the Society for Research on Nicotine and Tobacco (SRNT), the world’s leading scientific society in the field, represents an important milestone within NFL Biosciences’ strategy to strengthen its scientific recognition and visibility. This dynamic is also supported by ongoing research collaborations with leading institutions such as the French Alternative Energies and Atomic Energy Commission (CEA), the Hôpital Européen Georges-Pompidou (HEGP), and McLean Hospital.”*

Next steps

NFL Biosciences is continuing its interactions with regulatory agencies as part of scientific advice requests, with the latest meetings scheduled for the end of September. These discussions will help refine the development plan for NFL-101 with a view to confirming its efficacy and safety in a multicenter, international Phase 3 clinical trial.

About NFL Biosciences: www.nflbiosciences.com

NFL Biosciences is a biopharmaceutical company based in the Montpellier region of France, developing plant-based drug candidates for the treatment of addictions. NFL Biosciences' ambition is to bring new, safer and more effective natural therapeutic solutions to the entire world population, including low- and middle-income countries. Its most advanced product, NFL-101, is a standardized tobacco leaf extract protected by three patent families. NFL Biosciences intends to offer smokers wishing to quit a natural, safe, easy-to-administer and personalized alternative. NFL Biosciences is also developing NFL-301, a natural drug candidate for the reduction of alcohol consumption and has a drug development project for the treatment of cannabis use disorders.

NFL Biosciences shares are listed on Euronext Growth Paris (FR0014003XT0 - ALNFL). The company is qualified as an “Innovative Company” eligible for FCPI investment. More information on www.nflbiosciences.com

Contacts :

NewCap

Investor Relations / Media Relations

Mathilde Bohin / Arthur Rouillé

Tel.: 01 44 71 94 94

E-mail : nfl@newcap.eu

NFL Biosciences

Bruno Lafont

Tél.: 04 11 93 76 67

E-mail : info@nflbiosciences.com