UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16 UNDER THE SECURITIES EXCHANGE ACT OF 1934

For the Month of September 2023

Commission File Number: 001-38281

PHAXIAM Therapeutics S.A.

(Translation of registrant's name into English)

60 Avenue Rockefeller 69008 Lyon France

(Address of principal executive office)

 $Indicate\ by\ check\ mark\ whether\ the\ registrant\ files\ or\ will\ file\ annual\ reports\ under\ cover\ of\ Form\ 20-F\ or\ Form\ 40-F:$

Form 20-F S Form 40-F £

INFORMATION CONTAINED IN THIS REPORT ON FORM 6-K

Press Release dated September 19, 2023

On September 19, 2023, PHAXIAM Therapeutics S.A. issued a press release to announce the launch of a new preclinical development targeting a strong antimicrobial-resistant bacteria, *Klebsiella pneumonia*.

The full text of the press release is attached as Exhibit 99.1 to this Report on Form 6-K and incorporated herein by reference.

EXHIBIT INDEX

Exhibit	Description
99.1	Press Release dated September 19, 2023.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

PHAXIAM Therapeutics S.A.

September 21, 2023 By: /s/ Eric Soyer

Date:

Name Eric Soyer

Title: Deputy Chief Executive Officer, Chief Financial Officer and Chief

Operating Officer



PHAXIAM Therapeutics extends its phage portfolio to *Klebsiella pneumoniae*, a new resistant and aggressive bacterial target

- Klebsiella pneumoniae is responsible for severe infections and stands out for its high resistance to antibiotics
- PHAXIAM's anti-Klebsiella pneumoniae phages to enter pre-clinical development to assess their efficacy in lung, blood and urinary tract infections, in addition to the three major targets already developed (S. aureus, P. aeruginosa, E. coli)

Lyon (France) and Cambridge (MA, US), September 19, 2023 – 07:00 a.m. CEST – PHAXIAM Therapeutics (Nasdaq & Euronext: FR0011471135), today announces the launch of a new preclinical development targeting a strong antimicrobial-resistant bacteria, *Klebsiella pneumonia*.

Klebsiella pneumoniae (K.pneumoniae) causes a wide range of infections, including pneumonia, urinary tract infections, bacteremia and liver abscesses, and mainly infects immunocompromised people. However, the emergence and spread of hypervirulent and multi-resistant strains of this bacterium have recently extended its potential targets to people with no health problems.

In Western countries, we estimate that between 3% and 5% of pneumonias are linked to an infection caused by *K. pneumoniae*. Worldwide, *K. pneumoniae* is responsible for 11.8% of hospital-acquired pneumonia. In high-risk patients (alcoholics and septicemics), the mortality rate associated with this kind of infection is between 50 and 100%¹. The incidence of *K. pneumoniae* resistances is evaluated between 90-100,000 patients in the US and EU5², mainly in Urinary Tract infections and Respiratory Tract infections.

Recent studies in Europe and the United States^{3,4} also revealed the existence of *K. pneumoniae* strains with an exceptionally high level of antimicrobial resistance, making them even more difficult to treat. The results of these studies demonstrated a worrying trend among the samples collected, which may even be resistant to enzyme-inhibiting antibiotics that have recently been developed but have not yet been marketed. This level of antimicrobial resistance in *K. pneumoniae* strains had never been observed before.

Selected phages will be evaluated on a wide range of infections in which PHAXIAM already benefits from considerable expertise, such as lung, blood and urinary tract infections. This will enable the Company to capitalize on preclinical models validated with its three historical phage families, mutualize certain developments within the same indication and accelerate the progression to clinical phases.

Thibaut du Fayet, Chief Executive Officer of PHAXIAM Therapeutics, stated: "With the launch of this new program, PHAXIAM Therapeutics deploys its strategy in line with the plan presented during the merger, and reaffirms its position at the forefront of the fight against antimicrobial resistance. K.pneumoniae bacteria represents a new target with a high medical need, affecting a large population worldwide, and for which antibiotics offer only a limited therapeutic solution. Our anti-Klebsiella phages will thus complement an already extended phage portfolio for the clinical indications we are targeting, and reinforce our ability to efficiently address a broad spectrum of resistant bacterial infections."

¹ John V. Ashurst; Adam Dawson ET AL., 2022.

² Five main European countries: France, Germany, UK, Spain & Italy

³ Highly multidrug-resistant Gram-negative bacterial infections in war victims in Ukraine, 2022; The Lancet Infectious Diseases

⁴ NIH investigates multidrug-resistant bacterium emerging in community settings; National Institutes of Health (NIH)



About PHAXIAM Therapeutics

PHAXIAM is a biopharmaceutical company developing innovative treatments for resistant bacterial infections, which are responsible for many serious infections. The company is building on an innovative approach based on the use of phages, natural bacterial-killing viruses. PHAXIAM is developing a portfolio of phages targeting 3 of the most resistant and dangerous bacteria, which together account for more than two-thirds of resistant hospital-acquired infections: Staphylococcus aureus, Escherichia coli and Pseudomonas aeruginosa.

PHAXIAM is listed on the Nasdaq Global Select Market in the United States (ticker: PHXM – to be modified to a new symbol) and on the Euronext regulated market in Paris (ISIN code: FR0011471135, ticker: PHXM). PHAXIAM is part of the CAC Healthcare, CAC Pharma & Bio, CAC Mid & Small, CAC All Tradable, EnterNext PEA-PME 150 and Next Biotech indexes.

For more information, please visit www.phaxiam.com

Contacts

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