


PRESS RELEASE

 Oslo, Norway
 8 October 2026

SoftOx reports more than 99.99999 percent reduction of plague bacteria in laboratory testing of SIS

In vitro data highlight SoftOx Inhalation Solution (SIS) as a potential medical countermeasure against plague.

Oslo, Norway — SoftOx Solutions AS ("SoftOx"), a clinical-stage pharmaceutical company developing inhaled anti-infective therapies, today announced in vitro data highlighting its novel therapeutic as a potential medical countermeasure against plague. The data are relevant in light of recent reports of a suspected plague case in Russia. SoftOx is developing SoftOx Inhalation Solution (SIS) for both respiratory infections and biological threats.

Plague is caused by the bacterium *Yersinia pestis*. In a preclinical in vitro study, researchers found a reduction of more than 7 log10 (>99.99999 %) in viable *Yersinia pestis* bacteria within one minute of exposure to SIS. These preclinical laboratory findings demonstrate antimicrobial activity under the conditions tested, and do not establish that SIS can treat plague in humans.

Media reports have recently suggested that an employee of the Irkutsk Anti-Plague Research Institute in Siberia may have died of pneumonic plague. Russian authorities have stated that she died of pneumonia of unknown origin, and that their testing found no evidence linking her illness to the pathogens she worked with.

SoftOx participates in the EU COUNTERACT consortium, which aims to strengthen Europe's preparedness against chemical, biological, radiological and nuclear (CBRN) threats. Through this collaboration, SoftOx is developing SIS as a potential inhaled medical countermeasure against a range of biological threats, including the re-emergence of high-consequence respiratory pathogens such as *Yersinia pestis*. Treating plague today presents several challenges, including diagnosing the infection and starting antibiotic treatment before the disease becomes life-threatening. Moreover, *Yersinia pestis* strains resistant to one or more antibiotics have also been documented, which can make treatment even more difficult.

SIS' novel non-antibiotic mechanism of action is lethal to all types of bacteria, including antibiotic-resistant strains. SIS could therefore potentially be developed into a therapy for use even before a plague infection has been confirmed, including if antibiotic resistance of the specific pathogen, limits existing treatment options.

"We are sharing these data, since they are particularly relevant at this time. These preclinical findings support the further investigation of SIS as a potential plague treatment, while further clinical studies are needed to establish its safety and potential benefit. Our long-term ambition is to develop an inhaled countermeasure that could be used even when the causative pathogen has not yet been identified," said Professor Thomas Bjarnsholt, CEO of SoftOx. "The reports from Russia are an unfortunate reminder of the importance of sustained investment in medical countermeasures against biological threats. We welcome initiatives to strengthen preparedness across Europe and allied countries."

SoftOx is currently conducting SIS-02, its biodefence-focused Phase 1 study, designed to evaluate the safety, tolerability and pulmonary exposure profile of SIS following inhaled administration in healthy volunteers. The study is intended to support the further development of SIS for defence and biological countermeasure applications. This development programme is supported by the European Defence Fund and Norwegian defence partners, including the Norwegian Defence Research Establishment (FFI).

Moreover, SoftOx is also conducting a phase 2a proof-of-concept study evaluating SIS for civil clinical application as an inhaled anti-infective therapy for chronic airway infections.


>99.99999%

reduction of plague bacteria in one minute in laboratory testing of SIS (>7 log10)


Broad antibacterial activity

Non-antibiotic mechanism lethal to all types of bacteria, including antibiotic-resistant strains.


Inhaled therapy

SIS is being developed for respiratory infections and as a potential countermeasure against biological threats.

“

"We are sharing these data, since they are particularly relevant at this time. These preclinical findings support the further investigation of SIS as a potential plague treatment, while further clinical studies are needed to establish its safety and potential benefit."

Professor Thomas Bjarnsholt
 CEO, SoftOx Solutions AS

For further information, please contact:

Thomas Bjarnsholt, CEO SoftOx Solutions AS, +45 20 65 98 88
 Ulrik Spork, COB SoftOx Solutions AS, +45 31 38 83 87
 Mail: ir@soft-ox.com

About SoftOx Solutions AS:

SoftOx Solutions AS (ticker: SOFTX) is a clinical-stage pharmaceutical company developing SIS (SoftOx Inhalation Solution), a novel inhaled anti-infective therapy for the treatment of respiratory infections in the airways and lungs. The Company is listed on Euronext Growth Oslo.

Figures, conceptual models, and selected visual elements have been developed using AI-assisted visualization tools to support communication of scientific, strategic, and operational concepts.