

## NEWS ANNOUNCEMENT - FOR IMMEDIATE RELEASE

April 20th, 2023  
Milan, Italy

# InSilicoTrials and AchilleS Vaccines Join Forces to Create Next-Generation Vaccines and Monoclonal Antibodies against Infectious Diseases

**InSilicoTrials** and **AchilleS Vaccines** have announced a strategic alliance that aims to unite visions, skills, experiences, the multidisciplinary collaboration network and interested institutions to accelerate the transition towards a complete realization of “biopharma 4.0” concept with a specific focus on vaccines and monoclonal antibodies against infectious diseases.

The collaboration will build on **InSilicoTrials**’ existing platform and its *InSilicoVACCINE Suite* to create vertical products based on modified *Outer Membrane Vesicles (mOMV)*. mOMV is a technology already used by **AchilleS Vaccines** with significant advantages for product development, including large-scale and cost-effective production. It has also demonstrated good tolerability and high immunogenicity in humans, making it an attractive candidate for personalized vaccines.

The partnership will allow **AchilleS Vaccines** to leverage the wide range of *in silico* tools provided by **InSilicoTrials**, among which the *Immunogenicity Risk Screen tool*, a computational solution that predicts the potential risk of immune responses to new protein sequences. It enables the evaluation of potential immunogenicity risks of new protein sequences *in silico*, without the need for animal testing, which can accelerate vaccine development and create safer and more effective vaccines.

“We are excited to collaborate with **AchilleS Vaccines** to develop vaccines that can make a real impact on patients’ lives,” said Luca Emili, CEO of **InSilicoTrials**. “Our *in silico* platform and tools have the potential to accelerate the development of new vaccines while reducing the need for animal testing.”

### InSilicoTrials

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### AchilleS Vaccines

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“Since the birth of our company we have dreamed of carrying out a preclinical development of a vaccine or a *monoclonal antibody* while minimizing waste, which is why the LAB 4.0 project was born. We are now excited to partner with **InSilicoTrials** to take this concept further and extend it to the point where we can simulate the entire biopharmaceutical development chain from lab, to animal testing, to clinic, while dramatically reducing related risks”, said Riccardo Baccheschi, President and CEO of **AchilleS Vaccines**.

The collaboration agreement between **InSilicoTrials** and **AchilleS Vaccines** represents a significant step forward in the development of personalized vaccines that could transform the prevention and treatment of infectious diseases.



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 InSilicoTrials

 ACHILLES  
VACCINES

## [InSilicoTrials](#)

InSilicoTrials is a company that specializes in using artificial intelligence (AI) and simulations to improve drugs and medical device development.

The company built an ecosystem of more than 70 scientific collaborations, where computational models are developed with internationally recognized universities and research centers, offering access to the highest level of data security.

InSilicoTrials' goal is to help pharmaceutical, medtech companies and researchers develop new drugs more efficiently and at a lower cost by reducing the need for traditional, time-consuming, and expensive clinical trials. With its cloud-based platform offering advanced Modeling and Simulation (M&S) tools to perform in silico trials analyses, InSilicoTrials supports companies to integrate AI and simulation technology into their drug development workflows.

InSilicoTrials is currently working on four projects funded by the European Commission: [In Silico World](#), [SimCardioTest](#), [BRAINTEASER](#) & [Disc4All](#).

## Achilles Vaccines

AchilleS Vaccines is a biotechnology company engaged in the development of new products to address some of today's most crucial health problems, including antibiotic resistance and emerging infectious diseases and with a strategic focus on health programs on the African continent.

AV' goal is to develop safe and potent vaccines and monoclonal antibodies through scalable, sustainable and cost-effective development and production processes. The company uses disruptive technology platforms, a large network of multidisciplinary, national and international partners, with the support of forward-looking European institutions.

The AchilleS Vaccines LAB 4.0 represents a new paradigm for the initial development of new biopharmaceutical products and will open new opportunities in the pharmaceutical industry. We aim to expand the "LAB 4.0 vision" and the innovative approach of "development by design" towards new methodologies by combining "development by design" with a "biopharmaceutical development by simulation" starting from the laboratory stage and ending at the clinical stage, covering the whole cycle of product development.

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