#### THE TEAM

This unique consortium brings together four strategic partners with complementary expertise:

**◆ BIOINICIA S.L. – Project Coordinator** 

A dynamic, innovation-driven small enterprise specialized in the design and production of advanced face masks incorporating nanofiber filters. With a strong R&D DNA, this SME leads the project and brings industrial scalability to the forefront of health technology.

CSIC - The Spanish National Research Council

As Spain's largest public research body, CSIC offers unparalleled scientific expertise through four of its specialized research institutes, covering materials science, nanotechnology, and biomedical applications. Their involvement provides the scientific backbone of the project.

### ◆ FISABIO and IIS La Fe – Two Leading Hospital Research Foundations

These two healthcare-linked foundations provide essential clinical insight and access to real-world testing environments. Their participation bridges the gap between laboratory innovation and patient-centered application.













Project co-funded under the EU4Health Programme 2021–2027 under grant agreement no. 101203379. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Health and Digital Executive Agency (HADEA). Neither the European Union nor the granting authority can be held responsible for them.

## REUSABLE MASKS WITH ANTIMICROBIAL NANOFIBER FILTERS

The **2G\_PROVEIL** project aims to develop a **second generation of face masks** based on antimicrobial nanofibers, offering improved fit and full user safety. With a vision to maximize both durability and effectiveness, we offer a reliable, high-performance solution entirely **developed in Europe**—highlighting the continent's innovative and productive potential.



in
linkedin.com/company/2g-proveil



#### **GENERAL OBJECTIVE**

The core objective of 2G\_PROVEIL is to develop, scale up, and bring to market a second generation of reusable personal protective equipment (PPE) based on the innovative PROVEIL virucidal nanofiber technology.

The project will pursue the following specific goals:

- Improve ergonomic design to ensure a secure, comfortable fit for extended wear.
- Enhance filtration performance and breathability, with the target of achieving FFP3-level certification.
- Prioritize EU-sourced materials to minimize inhalable contaminants and guarantee product quality.
- Extend comfort, usability, and shelf-life, making the masks more practical and durable.
- Increase antimicrobial effectiveness through a nanofiber filtration system free of electret treatments.
- Incorporate a smart sensor to assist users in adjusting the mask correctly for optimal protection.

# NEXT GENERATION NANOFIBER-BASED SENSING PROVEIL PPE MASKS FOR EXTENDED PROTECTION AND SHELF-LIFE EU4HEALTH

#### **ABOUT EU4HEALTH**

EU4Health is the EU's largest health programme in monetary terms. The EU4Health programme goes beyond an ambitious response to the COVID-19 crisis to address the resilience of European healthcare systems. EU4Health provides funding to national authorities, health organisations and other bodies through grants and public procurement, contributing to a healthier Europe. Work programmes

EU4Health is implemented by annual Work Programmes supporting a broad range of actions that are clustered under four overarching "strands" with a cross-cutting focus on cancer.

- Crisis preparedness
- Health promotion & disease prevention
- Health systems & healthcare workforce
- Digital

The programme provides funding to eligible entities, health organisations and NGOs from EU countries, or non-EU countries associated to the programme.



