

# **SERENYOXY - DEVELOPMENT OF PERSONALIZED ORONASAL MASKS WITH MOBILE DEVICE FEATURE FOR FACIAL SCANNING.**

## **PROJECT TOTAL DURATION**

36 MONTHS (01-01-2025 – 31-12-2027)

## **PROJECT TOTAL GRANT**

€ 1.975.475, 36

## **ESENEFC PROJECT GRANT**

€ 350.526,88

**FUNDING PROGRAMME:** COMPETE 2030



## **PRIORITY RESEARCH TOPIC**

INNOVATION IN NURSING CARE TECHNOLOGY

## **PROJECT OBJECTIVE**

THE AIM IS TO DEVELOP ORONASAL CPAP/NIV MASKS ADAPTED TO EACH PATIENT'S FACIAL ANATOMY, WITH THE INTENTION OF INCREASING THEIR COMFORT, TREATMENT EFFECTIVENESS AND USEFUL LIFE. THE PART IN CONTACT WITH THE FACE WILL BE CUSTOMIZED AND MADE FROM A FLEXIBLE MATERIAL BY ADDITIVE MANUFACTURING, WHILE THE OTHER PART WILL BE MASS-PRODUCED BY INJECTION. AN INTUITIVE APPLICATION WILL BE DEVELOPED, WHICH WILL ALLOW THE PATIENT TO SCAN THEIR FACE, IN ADDITION TO MAKING IT POSSIBLE TO PLACE ORDERS AND MONITOR PRODUCTION STAGES IN REAL TIME.

## **APPLICANT ORGANIZATION**

- NM3D IBÉRICA - SISTEMAS DE METROLOGIA INDUSTRIAL, LDA

## **PARTICIPATING ORGANIZATIONS**

- PIEP ASSOCIAÇÃO - POLO DE INOVAÇÃO EM ENGENHARIA DE POLÍMEROS



- THE HEALTH SCIENCES RESEARCH UNIT: NURSING (UICISA: E), NURSING SCHOOL OF COIMBRA (ESENFC), PORTUGAL – (RESEARCHERS: HUGO NEVES, PEDRO PARREIRA, LILIANA SOUSA, FILIPA VENTURA)
- PLASTAR INJECCÃO E PINTURA DE PLÁSTICO, LDA.
- ENSOORIGINS, LDA