

# Nanomedicine Approach to Normalize Erythrocyte Maturation in Congenital Anemia by messenger RNA

PROJECT INFORMATION SHEET

#### **PROJECT FACTS**

#### **Duration**

01/10/2023 to 30/09/2026 (36 months)

#### **Programme**

HORIZON Europe - The European Union's Horizon Europe Research and Innovation Programme 2021-2027

# **Type of Action**

**HORIZON** Research and Innovation Action (RIA)

# **Grant Agreement**

#### 101080156

# **Project partners**

- Fundación para la Formación e Investigación Sanitarias de la Región de Murcia (FFIS) - Spain (Coordinator)
  - Servicio Murciano de Salud (Affiliated Entity to FFIS) Spain
- 2. Mercurna BV (Mercurna BV) The Netherlands
- 3. Centre National de la Recherhce Scientifique (CNRS) France

#### Max. grant amount

2.682.897,50€

#### **Keywords**

Biochemistry and molecular biology, mRNA, lipid nanoparticles, targeted delivery, erythroiesis, congential anemia

# PROJECT SUMMARY

Messenger RNA (mRNA) is a versatile tool known for its rapid development, high effectiveness, and low risk. In the NANEMIAR project, we will harness the advantages of mRNA to develop a treatment for congenital anemia.

#### **Ambition**



Development of an mRNA-based drug candidate for treatment of congenital anemias

#### **Specific objectives**



Development of targeted mRNA therapeutic

Pharmaceutical application of mRNA therapeutic





Pre-clinical potential of novel therapeutic

Combining expertise from academic, clinical and industry partners in Spain, France and The Netherlands, we aim to generate an innovative treatment option for congenital anemia, and advance knowledge in targeted therapeutics.

#### Outcomes of the call



A nanomedicine base-system for next-generation gene therapies

Proof-of-concept for a safe treatment option for b-thalassemia



# **Expected impact**



"Health burden of diseases in the EU and worldwide is reduced through effective disease management"

Aligning with The Horizon Europe Strategic Plan for improved therapies and rare diseases.



# NANEMIAR



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This project has received funding from the European Union's Horizon Europe research and innovation programme 2021- 2027 under the Grant Agreement No 101080156

#### **PARTNERS:**









