



NANEMIAR

Nanomedicine Approach to Normalize Erythrocyte Maturation in Congenital Anemia by Messenger RNA

D5.3 DISSEMINATION AND EXPLOITATION REPORT 1

SHORT DESCRIPTION

This document contains a review of NANEMIAR dissemination-based initiatives and communications actions, as well as exploitation undertaken during its first year of execution (October 1, 2023 - September 30, 2024).

DISSEMINATION STATUS

PUBLIC

DATE

September 27, 2024

DELIVERABLE INFORMATION

Project number:	101080156
Project acronym:	NANEMIAR
Project name:	<i>Nanomedicine Approach to Normalize Erythrocyte Maturation in Congenital Anemia by Messenger RNA</i>
Deliverable number:	D5.3
Deliverable title:	<i>DISSEMINATION AND EXPLOITATION REPORT 1</i>
Deliverable version:	v1
Work Package number:	WP5
Work Package title:	<i>Dissemination and Exploitation</i>
Due Date of delivery:	<i>September 30, 2024</i>
Actual date of delivery:	<i>September 27, 2024</i>
Dissemination level:	<i>Public</i>
Editor(s):	<i>Dr. Ana Belén Pérez Oliva (FFIS-IMIB) Dr. Jenny van Asbeck-van der Wijst (MERCURNA BV) Dr. Christophe Lachaud (CNRS)</i>
Contributor(s):	<i>Hana Hukelová (FFIS-IMIB)</i>
Reviewer(s):	<i>Dr. Ana Belén Pérez Oliva (FFIS-IMIB)</i>

ALL RIGHT RESERVED

The document is proprietary of the NANEMIAR consortium members. No copying or distributing, in any form or by any means, is allowed without the prior written agreement of the owner of the property rights.

DISCLAIMER

“NANEMIAR project is funded by the European Union. Views and opinions expressed in this document are, however, those of the authors 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.”



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

HISTORY CHART

<i>Version</i>	<i>Date</i>	<i>Changes made</i>	<i>Page(s)</i>	<i>Modified by</i>
0.1	19/07/2024	1st draft of the D5.3	All	Hana Hukelová (FFIS-IMIB)
0.1	22/07-06/08/2024	Contribution from WP leaders	All	Dr. Ana Belén Pérez Oliva (FFIS-IMIB) Dr. Jenny van Asbeck-van der Wijst (MERCURNA BV) Dr. Christophe Lachaud (CNRS)
0.2	10/09/2024	2nd draft of the D5.3	All	Hana Hukelová (FFIS-IMIB)
0.2	11-20/09/2024	Contribution from WP leaders	All	Dr. Ana Belén Pérez Oliva (FFIS-IMIB) Dr. Jenny van Asbeck-van der Wijst (MERCURNA BV) Dr. Christophe Lachaud (CNRS)
0.2	23/09/2024	Quality control of the 2 nd draft	All	Hana Hukelová (FFIS-IMIB)
0.2	23-25/09/2024	Quality control of the 2 nd draft	All	Dr. Ana Belén Pérez Oliva (FFIS-IMIB)
1.0	27/09/2024	Final version completed	All	Dr. Ana Belén Pérez Oliva (FFIS-IMIB)



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

LIST OF ABBREVIATIONS

Abbreviation *Description*

C&D	Communication and dissemination
DEP	Dissemination and Exploitation plan
IBiPO	International BioHealth Project Office
FA	Fanconi Anemia
FTO	Freedom to Operate
GDPR	General Data Protection Regulation
IPR	Intellectual property rights
KPIs	Key performance indicators
MarMaRa	The Marseille Rare Diseases Institute
NDA	Non-disclosure agreement
R&D	Research and development
TBD	To be determined
WP	Work Package



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

Executive summary

The main purpose of the communication and dissemination actions is to universally support the project according to three principal objectives: spread the NANEMIAR message and outcomes, reach and motivate a broad spectrum of stakeholders, and track the results and impacts generated by the project implementation. A fourth objective is related to project exploitation to promote the use of project results for development of novel medicines.

The focus during the 1st year of project implementation was on creating the visual identity of the project, as well as materials, tools and channels to support NANEMIAR's communication and dissemination strategy. Moreover, the Dissemination and Exploitation Plan (DEP), including Communication activities was established to identify target audiences and key messages. NANEMIAR social media accounts have been opened to increase project awareness, engage stakeholders, and generate new leads for exploitation. The project partners started actively using these tools and channels at different scientific and non-scientific events, such as those focused on the public. A detailed record of all dissemination and communication activities has been created to continuously monitor, assess and improve DEP effectiveness.

Chapter 1 of this deliverable explains the progress of the work carried out within WP5 (Dissemination and Exploitation) during the 1st year of project implementation. The chapter 2 presents NANEMIAR communication, dissemination and exploitation strategy – objectives and target groups – as stated in the project DEP. The chapter 3 describes all the action put in place toward the communication activities progress, where the Section 3.1 offers communication tools and channels overview, the Section 3.2 focuses on compliance with the KPIs set out in the DEP and finally, the Section 3.3 offers more detailed information about NANEMIAR communication activities carried out during the first year of the project overview. Chapter 4 offers an overview of NANEMIAR dissemination, Section 4.1 focuses on compliance with the KPIs set out in the DEP and Section 4.2 offers, in a similar way as in communication, more details about the dissemination carried out. The document closes with Chapter 5 dedicated to exploitation, which, as explained, will be carried out in the following period of project implementation.



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

TABLE OF CONTENT

Executive summary	5
1. Dissemination and exploitation (WP5)	8
1.1 Explanation of the work carried out in WP5.	8
1.1.1 Objectives	8
1.1.2 Overview of the progress of WP5	8
1.1.3 Deviations from Annex 1 and Annex 2 (if applicable)	9
1.1.4 Continuous reporting – Funding and Tenders Portal	9
2. Communication, dissemination and exploitation strategy	11
2.1 Objectives	11
2.2 Key targets groups (as stated in NANEMIAR DEP)	12
3. Communication strategy progress	13
3.1 Communications tools and channels overview	13
3.1.1 NANEMIAR visual identity	13
3.1.2 NANEMIAR website	13
3.1.3 Promotional material and communication toolkit	15
3.1.4 Social media	17
3.2 NANEMIAR communication results compared to KPI	17
3.2.1 NANEMIAR communication at a glance. Facts and figures.	18
3.3 NANEMIAR communication activities overview.	19
4. Dissemination overview	30
4.1 NANEMIAR dissemination results compared to KPI	30
4.2 NANEMIAR dissemination activities overview.	30
5. Exploitation overview	37



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

LIST OF FIGURES

<i>Figure 1. NANEMIAR logo</i>	13
<i>Figure 2. Screenshot homepage NANEMIAR</i>	13
<i>Figure 3. NANEMIAR website content map (navigation)</i>	14
<i>Figure 4. Infographic on facts and figures of NANEMIAR</i>	19

LIST OF TABLES

<i>Table 1. Overview of the progress of WP</i>	8
<i>Table 2. List of deliverables within WP5</i>	9
<i>Table 3. List of milestones within WP5</i>	10
<i>Table 4. NANEMIAR DEP key target groups</i>	12
<i>Table 5. Website structure and content</i>	14
<i>Table 6. Overview of communication tools and channels</i>	17
<i>Table 7. Overview of the communication activities and achieved key performance indicators (KPIs)</i>	17
<i>Table 8. Overview of dissemination activities and achieved key performance indicators (KPIs)</i>	30



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

1. Dissemination and exploitation (WP5)

1.1 Explanation of the work carried out in WP5.

1.1.1 Objectives

The main purpose of the tasks carried out under this WP, as transversal as it is, is to support the actions aimed at achieving the globality of the specific objectives of the project. During the first 12 months of project implementation, the specific focus was on creating the visual identity of the project, as well as materials, tools and channels to support NANEMIAR's communication and dissemination strategy.

1.1.2 Overview of the progress of WP5

Table 1. Overview of the progress of WP

Main activity	As planned	Notes
Task 5.1: Creation and update of the Dissemination and Exploitation Plan, including Communication activities (M1-36)		
Creation DEP	Yes	Created and submitted (D5.2, M6)
Periodic update DEP	Yes	Revision realized (Milestone 7, M11); no updates required at this stage
Task 5.2: Open dissemination and collaboration (M1-36)		
Active dissemination through partner channels and networks	Yes	In progress
Participation in events	Yes	In progress
Task 5.3: Creation and promotion of the NANEMIAR project (M1-36)		
Project identity package	Yes	Created and available on project website
Periodic communication	Yes	In progress

Looking at the tasks in more detail, the Dissemination and Exploitation Plan (DEP), including Communication activities was established under Task 5.1 and submitted (D5.2, M6). A detailed record of all dissemination and communication activities has been created and kept. It is available to the consortium in the dedicated shared folder in Teams to continuously monitor, assess and improve DEP effectiveness.

The project visual identity, website (www.nanemiar.eu) and the promotional materials produced under Task 5.3 (Creation and promotion of the NANEMIAR project) have been designed and developed. NANEMIAR social media accounts have been opened and are actively managed to increase project awareness, engage stakeholders, and generate new leads for exploitation.

The project partners have also actively participated in different scientific events, and meetings focused on the general public (e.g., radio interview), as part of Task 5.2 (Open dissemination and collaboration). These activities are adjusted to those planned in the NANEMIAR DEP.



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

On 1 July 2024, the NANEMIAR project monitoring meeting was held, with the presence of the project coordinator and partners, who are also the work package (WP) leaders. This meeting focused on the critical review of the status of project execution to date (M1 – M9), as well as planning for the next 3 months (M9-M12). Specifically, it was divided into two parts:

1. critical review of scientific progress (WP1-WP2), as well as management (WP4)
2. critical review of the implementation of the Dissemination and Exploitation Plan (WP5)

Critical review of the implementation of the Dissemination and Exploitation Plan (WP5) focused on:

- Revision of the status of continuous updating of NANEMIAR web page
- Review of the status of followers of NANEMIAR's social networks
- Communications activities overview and communication results compared to KPI
- Dissemination overview and dissemination results compared to KPI
- Exploitation overview
- Revision of the status of continuous reporting focused on communication, dissemination and exploitation through the Funding and Tenders Portal

Based on the conclusions of this meeting and the previous monitoring meeting held on January 30, a report M9 of the critical review of the implementation of the DEP (WP5), including communication activities was prepared for internal use (August 28, 2024). This report is available for all consortium members on project's Teams space. At the conclusion of this review, it was decided that no update to the DEP is required at this stage. The M9 report served as the basis for preparing this deliverable document.

1.1.3 Deviations from Annex 1 and Annex 2 (if applicable)

No deviations from activities planned within WP5 implementation are identified.

1.1.4 Continuous reporting – Funding and Tenders Portal

To date, all WP5 deliverables have been delivered in a timely manner. All information related to the communication and dissemination activities of the 1st year is also being reported on the Funding and Tenders Portal as part of continuous reporting. All partners keep track of this information via a dedicated excel table for communication and dissemination tracking available in the shared NANEMIAR folder in Microsoft Teams, previously mentioned. The status of deliverables and milestones is further outlined below.

Table 2. List of deliverables within WP5

WP N°	Deliv. Related N°	Deliv.N°	Deliverable Name	Lead Beneficiary	Type	Dissem. Level	Due Date	Delivery Date	Status
WP5	D5.1	D11	NANEMIAR Website	FFIS	DEC	PU	31-dec-23	27-dec-23	Submitted
WP5	D5.2	D12	Dissemination and Exploitation Plan	MERCURNA BV	R	PU	31-mar-24	26-mar-24	Submitted
WP5	D5.3	D13	Dissemination and Exploitation report 1	FFIS	R	PU	30-sep-24	27-sep-24	Submitted
WP5	D5.4	D14	Dissemination and Exploitation report 2	FFIS	R	PU	30-sep-25		Pending



Funded by the European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

WP5	D5.5	D16	Dissemination and Exploitation report 3	FFIS	R	PU	30-sep-26		Pending
-----	------	-----	---	------	---	----	-----------	--	---------

Next planned deliverable for September 30, 2025.

Table 3. List of milestones within WP5

Milestone N°	Milestone Name	WP N°	Lead Beneficiary	Means of Verification	Delivery Date	Delivery Date (actual)	Achieved
9	Critical review and updates of the Dissemination and Exploitation plans - 1	WP5	FFIS	Report discussed in quarterly project management meeting	31-aug-24	28-aug-24	Achieved
10	Critical review and updates of the Dissemination and Exploitation plans - 2	WP5	FFIS	Report discussed in quarterly project management meeting	31-aug-25		Pending

Next planned milestone (M10) for August 31, 2025.

Project summary for publication was prepared and is available on Portal. The project information sheet is uploaded to promote the project.

Further information on the project will be included alongside the continuation of the project, including description of the next sub-sections:

- Context and overall objectives
- Work performed and main achievements
- Results beyond the state of the art
- Policy relevance of NANEMIAR project



Funded by the European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

2. Communication, dissemination and exploitation strategy

2.1 Objectives

As stated in NANEMIAR Dissemination and Exploitation Plan (DEP) (dedicated deliverable D5.2, M6), there is significant unmet need for effective, safe, and affordable alternatives that reduce the blood transfusion burden in β -thalassemia and other non-iron anemia patients. Current therapeutics involve *ex vivo* gene therapy or agents that target ineffective erythropoiesis. Yet, these therapies come either at significant cost or have serious side effects due to systemic application.

Added value of NANEMIAR

The project is designed to deliver PoC for an innovative targeted mRNA-based therapy treatment that has the potential to effectively treat β -thalassemia in a safer and more cost-effective manner than current treatments available.

The NANEMIAR communication and dissemination (C&D) strategy aims to efficiently and effectively use mainstream communication tools to increase public and stakeholders' awareness about the added value of the project, to stimulate acceptance and, through project exploitation strategy, to foster uptake of NANEMIAR findings throughout the European Union.

An integrated impact-driven approach will be adopted through a multi-stakeholder and multi-channel strategy, with the following specific objectives:

Overall goals

- To communicate and disseminate the main message of NANEMIAR and its outcomes at European, national and regional level.
- To reach and motivate all target groups and foster their interest in the project.
- To measure the results and impacts generated by the implementation of C&D activities.
- To exploit the results obtained in the project for development of novel medicines.

Specific goals

- To create a brand identity of NANEMIAR to make it easily recognizable.
- To select the most efficient communication tools and make optimal use of resources.
- To build credibility and reliability within pharmaceutical and clinical communities.
- To increase public awareness on the activities and the achievements of the project based on a multichannel approach, also exploiting NANEMIAR partners' own communication channels.
- To generate stories that will secure wider media coverage at local/national or European level.
- To engage with the main stakeholders by implementing dedicated workshops and activities in collaboration with organizers of public open days and/or patient organizations to promote NANEMIAR generated knowledge at European level.
- To manage intellectual property and seek patent protection where possible.
- To keep a close interaction among partners, stakeholders, public authorities, and other EU projects.



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

2.2 Key targets groups (as stated in NANEMIAR DEP)

Table 4. NANEMIAR DEP key target groups

	Main group	Specific key target group	What can they bring to the project?	How can the project be of interest?
Internal audience	Project partners	Researchers	Developing and executing the project activities. Contributing to the advancement of knowledge and maximizing the impact of the action.	Gain experience and knowledge in the respective field, interact with peers
		Administrative members	Supporting project activities and increasing visibility of outcomes and results	Participate in networking events
	European Commission	Horizon Europe project representatives	Supporting project activities and networking opportunities, and future funding options	Gain insights into projects results and suggest interactions to foster synergies and wider interest
External audience	Academia / scientific community	Researchers and groups	Establish connections for future collaboration, and interaction on scientific outcomes, methods etc.	Novel methodologies can be relevant to their work
		Members of scientific advisory boards, committees, national and international networks, related EU projects, etc.		New interactions and insights into the topic, and potential new members
	Pharma/Biotech companies	Researchers and R&D teams	Establish connections for future collaboration, and interaction on scientific outcomes, methods etc.	Novel methodologies can be relevant to their work and future options for implementation of new technologies
		Business developers and management	Potential collaboration agreement for future exploitation of project results and possible financing options	
		Investors and venture capital	Financing options for exploitation and further project development	
	Clinicians	Hematologists	Information about the patient perspective, the mechanism of disease, and clinical development strategy	Novel scientific insight and the advent of new therapies for their patients
	Patients /end user	Congenital anemia patients and their families	Information and interaction about the patient perspective and awareness support	The advent of novel therapies that may improve their quality of life
		Patient organizations and representatives		Novel scientific insight on new therapy options for patients
	General public	University students, civil society	Support towards public perception, engagement, and awareness	Insights into scientific career, drug development and outreach information about congenital anemia and new treatment options
		EU, national and local media	Public engagement, project promotion and awareness	Press releases, news articles and social media posts on the project



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

3. Communication strategy progress

3.1 Communications tools and channels overview

Communication activities were focused on the promotion of NANEMIAR to a non-specialist audience, covering a wide range of groups, at different geographical levels with the objective of increasing awareness and understanding.

The short version of NANEMIAR's key message is:

"NANEMIAR aims to develop novel treatment options for patients with congenital anemia and generate novel data and methodologies that contribute to the emerging field of mRNA-based therapeutics. We are a research project funded by the European Commission from 2023 to 2026."

Communication was pursued through the project's public communication channels and tools designed during the first months of project implementation. These involved:

- NANEMIAR visual identity design (M1-M2)
- Website design (M1-M3) and management (M4-M12)
- Development of promotional material (M1-M6) and updating a website communication toolkit (M1-M12)
- Development of social media strategy (M1-M2) and management of social media accounts (M3-M12)

3.1.1 NANEMIAR visual identity



Figure 1. NANEMIAR logo

3.1.2 NANEMIAR website

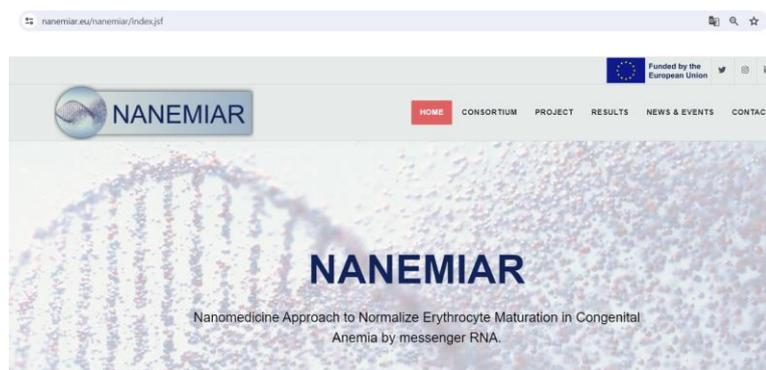


Figure 2. Screenshot homepage NANEMIAR



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

The website serves as the main information gate of the project. Here, general and specialized information is stored, updated and permanently accessible to any interested party. It contains information about the project, its progress, results, and impacts as they are obtained.

Domain: www.nanemiar.eu

Languages: English (some materials and content available in French or Spanish - as example the flyer for patients and their families).

The following initial Content Map (Navigation) was prepared:

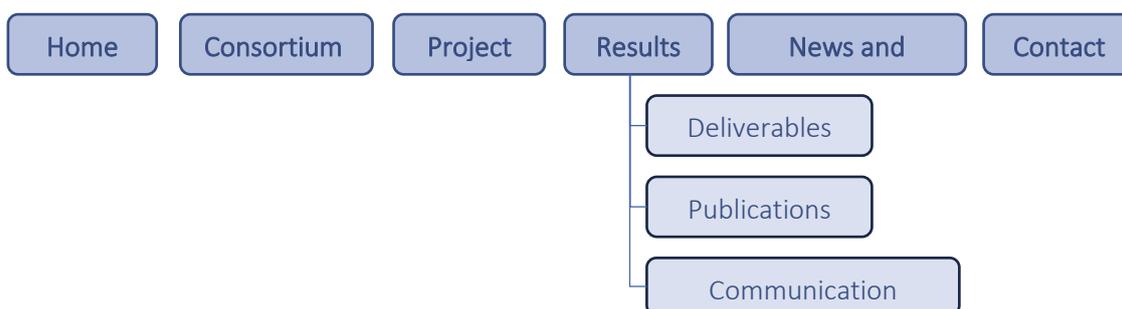


Figure 3. NANEMIAI website content map (navigation)

The website structure, content creation and monitoring, specification, as well as evaluation is described in the dedicated deliverable D5.1 NANEMIAI website (M3). In short, the table below provides an overview.

Table 5. Website structure and content

Top Navigation	Dropdown / Subentry	Section and subsection (planned) content	Status M1-M12
Homepage	Home Consortium Project Results News and events Contact	Top navigation (listed subentries) NANEMIAI Logo and social media buttons The most recent and notable news of the project (dynamic banner) NANEMIAI contribution to EU priorities, added value and expected impact Research team Footer: funding, partners logos, social media buttons and cookies policy	Available
Consortium	List of partners	Description of partners with URLs to partner homepages	Available
Project	Key contents of the project	Short presentation of the key contents of the project, its objectives, ambition, workplan	Available
Results	NANEMIAI results	Public Deliverables Publications Communication toolkit	To be updated ones approved by EC 1 related publication available Communication toolkit available
News and events	List of relevant news and upcoming events	News, press releases NANEMIAI events and other related events of relevance (internal and external ones)	10 news published + 1 upcoming event announced
Contact	List of contacts	Contact details for NANEMIAI project	Available



Funded by the European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

3.1.3 Promotional material and communication toolkit

During the first year of project implementation the next promotion material was designed:

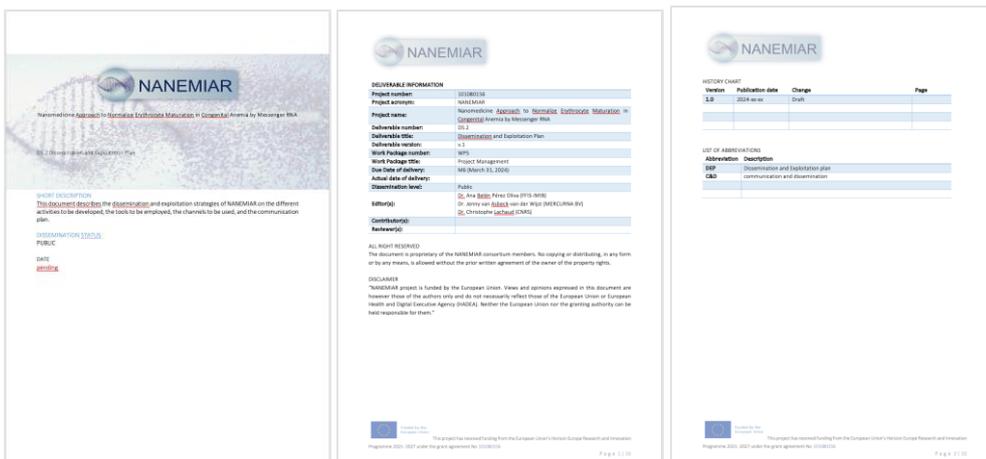
- Presentation templates for meetings and events
- Deliverables templates (public ones will be published on project website)
- Project roll-up
- Project information sheet in **3 languages (EN, ES, FR)**
- Template slide presentation with general information about the project objectives, approach, partners, and expected impact.

The material is prepared with the aim of reinforcing the community identity of the project. All resources are available for interested audiences in PDF format for downloading on the project website: [NANEMIAR - Communication tool-kit](#). This section will be updated with new material as it becomes available during the life of the project (e.g. posters).

Presentation templates



Word documents and deliverable templates



Funded by the European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

NANEMIAR roll-up



Slide presentation

NANEMIAR

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

HORIZON-HLTH-2022-DISEASE-06-04 two-stage. Development of new effective therapies for rare diseases

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

Project facts

Grant ID: 101080156

2.682.897,50€

Funded by the European Union

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

Project information sheet

NANEMIAR

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
- Mercuria BV (Mercuria BV) - The Netherlands
- Centre National de la Recherche Scientifique (CNRS) - France

Max. grant amount: 2.682.897,50€

Keywords: Biochemistry and molecular biology, mRNA, lipid nanoparticles, targeted delivery, erythropoiesis, congenital 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	Specific objectives
Development of an mRNA-based drug candidate for treatment of congenital anemia	<ul style="list-style-type: none"> 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	Expected impact
A nanomedicine base-system for next-generation gene therapies	"Health burden" diseases in the EU and worldwide is reduced through effective disease management

Proof-of-concept for a safe treatment option for β -thalassaemia

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

NANEMIAR

nanemiאר.eu
[linkedin.com/showcase/nanemiאר/](https://www.linkedin.com/showcase/nanemiאר/)
 @nanemiאר
 @nanemiאר

Funded by the European Union

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:

FFIS, IMIB, Mercuria, CNRS



Funded by the European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

3.1.4 Social media

NANEMIAR has open accounts at **X, Instagram, and LinkedIn:**

X Profile: @NANEMIAR <https://x.com/nanemiאר>

Instagram Profile: @NANEMIAR <https://www.instagram.com/nanemiאר>

LinkedIn Profile: <https://www.linkedin.com/showcase/nanemiאר>

#innovation #research #EUproject #HorizonEurope #EUfunded #congenitalanemia #mRNA

3.2 NANEMIAR communication results compared to KPI

The following table shows the achieved results related to the communication tools and channels that were incorporated in the first year of project implementation, in relation to the overall KPIs defined in the NANEMIAR DEP.

Table 6. Overview of communication tools and channels

Communication tools /channels		Objectives	Period	Expected KPIs	Status M1-M12
A	NANEMIAR visual identity	Design, manage and update the project's website and visibility	M1-3	NANEMIAR website: Number of visitors (per project year): 500 Pages visited: 1000 Average time spent on the website (min): 2 min	Total number of visits: 62902 (*) Unique pages visited: 18616 (*) Average time spent: 6.33 minutes (*)
	NANEMIAR website		M3-6		
	Links to consortium partner information		M3-36		
	Links to news items and special events		M3-36		
	Access to project promotional material and public project results	Engage audience	M3-36		
B	Posters, presentations, banner/roll-up	Inform target groups on project objectives and expected impacts	M2-36	Presentation in 15 events	Poster / oral presentation in 4 events
	Project information sheet		M5-36	500 distributions	In progress
	NANEMIAR social media (LinkedIn, X, Instagram)	Increase project awareness, engage stakeholders, and generate new leads for exploitation	M1-36	>100 followers per social media channel	Instagram: 74 (*) LinkedIn: 147 (*) X: 44 (*)
	Press releases and news items		M1-36	12 items	3 press articles 10 news items

(*) status on September 23,2024

The communication activities carried out during the first year of the project and achieved KPIs are detailed below. The name of the communication activity is labelled in the same way as it appears in the NANEMIAR DEP.

Table 7. Overview of the communication activities and achieved key performance indicators (KPIs)

Comm. activity name	Objective / description	Comm. channel	Target audience	Period	Expected KPIs	Status M1-M12
	Inform about the official launch of	NANEMIAR website	General public	M2	1 item	1 item (100%)



Funded by the European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

NANEMIAR Kick-off meeting	the project, increasing project awareness and stakeholder engagement	Press release / news items	General public		2 items	2 items (100%)
		Social media posts	General public		>50 views	>50 views (100%) X: 158 views LinkedIn: 157 impressions Instagram: 15 likes
		Partners' website / newsletter	Academic and clinicians, general public		1 item	1 notice and 1 newsletter (100%)
NANEMIAR presentation	Communication of the main project message, increasing project awareness and stakeholder engagement	Project information sheet	Clinicians	M7-M36	10 sheets	Exceeded
			Patients and general public	M7-M36	25 sheets	Exceeded
		Radio interview	General public	M7-M9	1 item	1 item (100%)
		NANEMIAR website (*)	General public	M4-M36		1 item
		Event /meeting (*)	General public / Academic and industry researchers, clinicians	M4-M36		2 items
		Social media posts	General public	M4-M36		2 items
		Partners' website / newsletter (*)	General public	M4-M36		2 items newsletter
NANEMIAR achievements	Communication of project achievements	NANEMIAR website - news items	All target groups	M3-M36	20 items	2 items
		Press release / news items in local press	All target groups	M3-M36	12 items	1 item
		Social media posts	All target groups	M3-M36	15 items	1 item
		Partners' website / newsletter	Academic and clinicians	M1-M36	12 news items included in partners' website / newsletter	2 items newsletter
Project research teams interviews / NANEMIAR stories	Short interviews with team members to show their perspective / insights related NANEMIAR project	NANEMIAR website			6 interviews	2 items
		Social media posts	All target groups	M7-M36	>50 views per interview	1 st interview (FFIS-IMIB) X: 79 views LinkedIn: 10 impressions Instagram: 10 likes
Participation in public events	Stakeholder involvement and stimulation to actively participate in the events	Presentations Project information sheet	General public	M7-M36	Presentation of project material in at least 6 events	Pending Next planned: October 18, 2024
Patient's event	Round table video with scientist clinicians and patients to show their vision of NANEMIAR (*)	Project information sheet	Patients and their families	M8-M15 (TBD)	1 item Dissemination of video in more than 10 forums plus YouTube	1 item (100%); published on YouTube channel of IMIB Social media posts: Instagram: 16 likes

(*) additional channels used

3.2.1 NANEMIAR communication at a glance. Facts and figures.



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

The following is a visual synthesis of main figures achieved during the first project life.

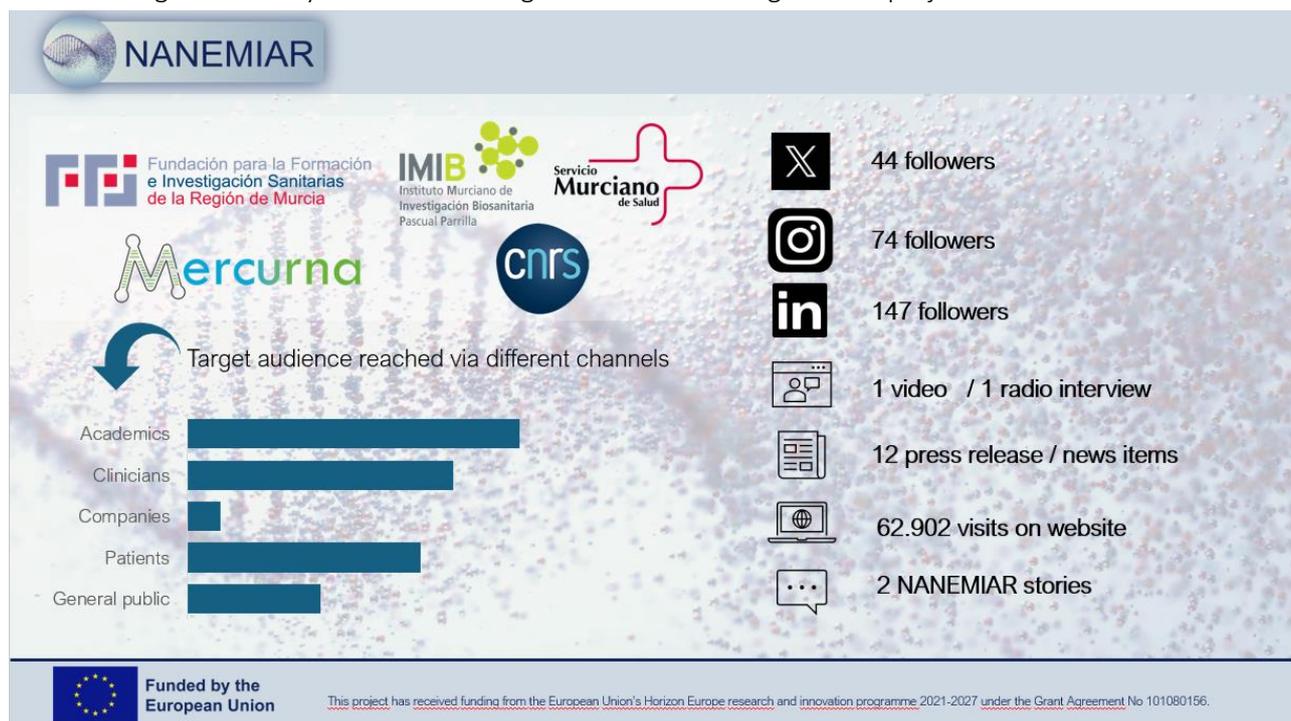


Figure 4. Infographic on facts and figures of NANEMIAR

3.3 NANEMIAR communication activities overview.

The communication activities carried out during the first year of the project are detailed below. The name of the communication activity is labelled in the same way as it appears in the NANEMIAR DEP.

3.3.1 Kick-off meeting

Objective: Inform about the official launch of the project, increasing project awareness and stakeholder engagement.

Description: The NANEMIAR kick-off meeting was held in hybrid format on 20 November 2023, in Murcia city, Spain. All institutions within the NANEMIAR consortium participated in this inaugural meeting, during which each member introduced himself/herself and mentioned the tasks he/she is involved in. The progress of each WP was reviewed and subsequent steps for this innovative project were discussed and outlined.

How? Communication channels: This meeting was communicated through different channels (Table 7 with KPIs reached). Below are examples of these communication activities.

Who? Target audience: general public, academic, clinicians



Funded by the European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

EU Funded Project NANEMIAR Launched

04/12/2023

The NANEMIAR kick-off meeting was held today, on the 20th of November, in Murcia city, Spain. All institutions within the NANEMIAR consortium participated in this inaugural meeting, during which each member presented the progress made and outlined the subsequent steps for this innovative project.

The meeting was graced with the presence of Helene Le Borgne and Christina Kyriakopoulou from European Commission (EC Policy Officers from DG Research and Innovation).

The NANEMIAR project aims to develop a new therapy for patients suffering from congenital anemia, with the goal of improving their quality of life. Congenital anemias encompass a myriad of birth defects, which are highly complex disorders whose causes are largely unknown, and current treatments are often inadequate.



Shared via:

NANEMIAR website. Notice available in the next [link](#).

Press releases, including their launching dates and source of information:

26/11/2023 - [Comienza a andar el proyecto NANEMIAR en Murcia](#) (La Opinión de Murcia)

26/11/2023 - [El proyecto Nanemiar celebra su primer encuentro en Murcia](#) (La Verdad)

Social media posts, including their launching dates, channel, links and views results:

21/11/2023 – [LinkedIn](#) (157 unique impressions)

22/11/2023 – [X](#) (158 views)

22/11/2023 – [Instagram](#) (25 likes)

Partner website / newsletter: published on the web page of the International Biohealth Project Office (IBiPO) of the FFIS/IMIB (Murcia, Spain) and IMIB web page.

Notice published: 28/11/2023 - [El proyecto europeo NANEMIAR celebró en Murcia su reunión de lanzamiento](#)

Notice in Newsletter IBiPO: 30/11/2023 - *The European NANEMIAR project held its Kick-off meeting in Murcia.*

Available in the next [link](#). (eBoletín IBiPO_nº12_Diciembre 2023)



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

3.3.2 NANEMIAR presentation

Objective: Communication of the main project message, increasing project awareness and stakeholder engagement

Description: The target audience was informed about the launch of a new European NANEMIAR project, the composition of the consortium, its objective, its duration, as well as that it is funded through the Horizon Europe 2021-2027 research and innovation program (Grant Agreement No. 101080156).

How? Communication channels: Project information sheet / radio interview / NANEMIAR website / partner newsletter / social media posts / meetings. (Table 7 with KPIs reached). New channels were used apart from those initially planned in the DEP.

Who? Target audience: Clinicians, patients; research community and general public

Status on M12: KPIs achieved; communication done through different channels. Target audience was reached.

More details on the communication are presented below:

The European project Nanomedicine Approach to Normalize Erythrocyte Maturation in Congenital Anemia by messenger RNA (NANEMIAR) is now underway

Target audience reached: research community and general public.

Shared via:

Partner newsletter. Published on the web page of the IBiPO of the FFIS/IMIB and IMIB web page.

Notice in IBiPO Newsletter: 27/10/2023 - *The European project Nanomedicine Approach to Normalize Erythrocyte Maturation in Congenital Anemia by messenger RNA (NANEMIAR) is now underway!* Available in the next [link](#). (eBoletín IBiPO_nº11_Noviembre 2023)



Project information sheet

The project flyer was translated into local languages and information is being distributed to patients during their recruitment. It was also distributed by e-mails through FFI-IMIB and CNRS PI's networks and communication channels to professionals/clinicians.

Target audience reached: Clinicians and patients / researchers



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

The NANEMIAR project information sheet was prepared (M4-M5) as a primary communication tool with patients. This flyer is used when recruiting patients, to whom project information is provided. Considering that **it is available in pdf format for download on the NANEMIAR website in 3 languages (EN, ES and FR)**, its distribution is also carried out online. This sheet contains information about:

- Project facts (duration, programme, type of action, GA nº, project partners, max. grant amount, keywords)
- Project summary (ambition, specific objectives, outcomes and expected impact)
- Projects social media channels and web page direction, partner's and EU logos.

Available on NANEMIAR project website: [NANEMIAR - Communication tool-kit](#)

Shared also via:

Partner newsletter. Published on the web page of the IBIPO of the FFIS/IMIB and IMIB web page. Notice in Newsletter IBIPO: 29/08/2024 - *The NANEMIAR project flyer is now available in different languages.* Available in the next [link](#). (eBoletín IBIPO_nº9_September 2024) – the Spanish version of the flyer included as a supplement to the edition.

Radio interview

On 2 May 2024, the NANEMIAR project was presented by the Murcia team in the EUROPEAN CONNECTION program of the Onda Regional (radio interview), the program to establish contact with the European Union, but especially with European projects to increase the visibility of projects, which are performed in the region of Murcia thanks to the cohesion work carried out by the different institutions with European funding.

Target audience reached: general public

Related outcome: Communication of the main project message (ambition and objectives) done, project awareness increased (European funding, consortium behind the project, duration) and general public engage (explained the needs of the patients, which are the basis for the proposal and implementation of NANEMIAR, day-to-day life at the clinic, the situation of the patients and what the casuistry they face, etc.).



Shared via:

Website of Onda Regional offers a complete interview (Spanish):

<https://www.orm.es/programas/plaza-publica/conexion-europa-proyecto-nanemiary/>



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

Social media: X - [Europe Connection We spoke with Ana B Perez Oliva, Eduardo Salido Fierrez, Hana Hukelova about Nanemiar - a magnificent Horizon EU project on the treatment of congenital anemias led by FFIS/IMIB and in which CNRS and Mercurna participate](#) (553 views)

Notice available on **NANEMIAR website:** [The Murcia team of NANEMIAR presents the project in the EUROPEAN CONNECTION program of the Onda Regional](#)

High School visit OCAI lab

On 25 April 2024, as part of our commitment to fostering scientific curiosity and education, OCAI Lab (IMIB) hosted a group of enthusiastic high school students from IES Mar Serena, Pulpí (Spain). NANEMIAR project was presented during their visit.

Target audience reached: Citizens / general public. 27 participants

Related outcome: Communication of the main project message, project awareness increased, and general public engaged.



Shared via:

Social media: 26/04/2024 – [Instagram available here](#) (15 likes); [Twitter available here](#) (5 likes, 405 views); [LinkedIn available here](#) (404 unique impressions)

Notice available on **NANEMIAR website:** [High School visit OCAI lab](#)

3.3.3 NANEMIAR achievements

Objective: Communication of project achievements.

Description: The target audience was informed about the NANEMIAR project, its objective, implementation progress and achievements, as well as the funding program.

How? Communication channels: NANEMIAR website / Press release / news items in local press / partners' website and newsletter

Who? Target audience: all target groups

Status on M12 – communication in progress. Target audience reached: general public, academic and clinicians

More details on the communication are presented below:

The European NANEMIAR project launches web page



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

Target audience reached: research community and general public

Shared via:

Partner newsletter. Published on the web page of the IBiPO of the FFIS/IMIB and IMIB web page. Notice in IBiPO Newsletter published: 02/02/2024 - *El proyecto europeo NANEMIAR lanza su página Web.* Available in the next [link](#). (eBoletín IBiPO_nº2_February 2024)



Participation on the European Hematology Association (EHA) 2024

During June 13-16, 2024, the European Hematology Association (EHA) 2024 held its Congress in Hybrid format 2024 (EHA2024) in Madrid. This Congress brought together clinicians, researchers, and industry professionals, as it was a unique opportunity to catch up on the latest advances in the field of hematology and connect with colleagues from around the world. The consortium was represented by 3 clinicians from SMS (Dr. Salido, Blanquer and Cabañas).

Target audience reached: Clinicians, researchers, and industry professionals from the field of hematology. >250 participants

Related outcome: Communication of the main project message (ambition and objectives) done, project awareness increased, and specific target group engaged. No results were presented. The NANEMIAR project has been included in the abstract book with a title: [DEVELOPMENT OF A TARGETED MRNA-BASED THERAPEUTIC AS A POTENTIAL NEW TREATMENT FOR BETA-THALASSEMIA](#) (Abstract: PB3238; Abstract Type: Publication Only; Topic: Thalassemias) Author(s): christophe Lachaud, Jenny vanasbeck-vanderwijst, Miriam Pinilla, Elena Martinez Balsalobre, Miguel Blanquer Blanquer, Eduardo Salido-Fiérrez, Ana Belen Perez Oliva (Abstract release date: 05/14/24) EHA Library. Perez Oliva A. 06/13/2024; 422004; PB3238



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**



Shared via:

Notice on **NANEMIAR website**: [NANEMIAR researchers participate in the 2024 European Hematology Association \(EHA\) Congress in Madrid.](#)

Partner newsletter. Published on the web page of the IBiPO of the FFIS/IMIB and IMIB web page. Notice in Newsletter IBiPO: 27/06/2024 - *NANEMIAR researchers participate in the Congress of the European Hematology Association (EHA) 2024 in Madrid.* Available in the next [link](#). (eBoletín IBiPO_nº7_Julio 2024)

Social media: 19/06/2024 – [LinkedIn available here](#) (109 unique impressions); Instagram available here (12 likes).

The NANEMIAR project promoted in the article on European research and innovation funding in the Region of Murcia (press release)

In the article “[La ciencia y la innovación avanzan en la Región a lomos de los fondos europeos](#)” published on 29 May 2024 in the newspaper La Verdad (Murcia, Spain), several research and innovation projects that allow these scientific advances precisely thanks to European funding are highlighted, the NANEMIAR project being one of these.

Target audience reached: general public

Related outcome: Communication of the main project message (ambition and objectives) done, project awareness increased, and general public engaged.



Funded by the
European Union

This project has received funding from the European Union’s Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**



The NANEMIAR research staff of the IMIB in their laboratory on the Health Campus

Shared via:

Notice on **NANEMIAR website**: [The NANEMIAR project promoted in the article on European research and innovation funding in the Region of Murcia](#)

3.3.4 Project research team interviews / NANEMIAR Stories

Objective: Promote the project through the opinions and personal perspective of consortium partners

Description: Short interviews with team members to show their perspective / insights related NANEMIAR project

How? Communication channels: NANEMIAR website / social media channels

Who? Target audience: research community and general public

Status on M12 – communication in progress. Target audience reached: general public, academic and clinicians

Related outcome: Communication of the main project message (ambition and objectives) done, project awareness increased, the role of project partners (FFIS/IMIB and Mercurna at the moment) and their expertise in NANEMIAR explain, the impact of NANEMIAR contribution on the Patients highlighted, research community and general public engaged.

Below are examples of these communication activities:

[Welcome to NANEMIAR Stories! A chat with Dr. Ana Belén Pérez Oliva, Principal Investigator at IMIB \(Murcia, Spain\) and coordinator of NANEMIAR Project.](#)



Funded by the
European Union

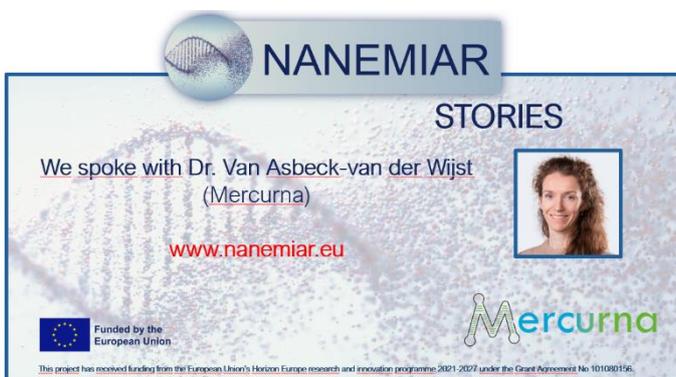
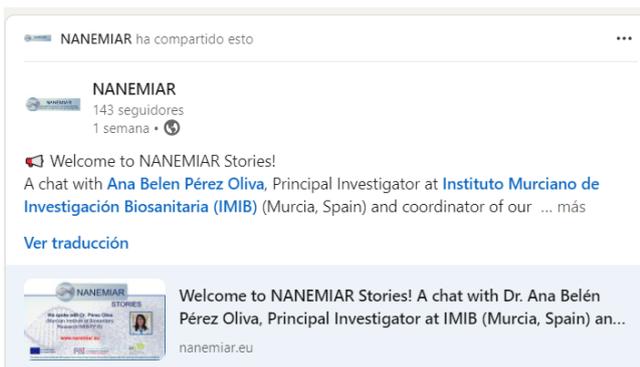
This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**



Shared via:

08/07/2024 – notice available on **NANEMIAR website**: [Welcome to NANEMIAR Stories! A chat with Dr. Ana Belén Pérez Oliva, Principal Investigator at IMIB \(Murcia, Spain\) and coordinator of NANEMIAR Project.](#)

Social media: 08/07/2024 - Welcome to NANEMIAR Stories! A chat with Dr. Ana Belén Pérez Oliva, Principal Investigator at IMIB (Murcia, Spain) and coordinator of NANEMIAR Project. X – 79 views; Instagram: 10 likes; LinkedIn: 10 unique impressions



Funded by the European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

Shared via:

26/09/2024 – notice available on **NANEMIAR website**: [We are back with a new NANEMIAR story, talking to Dr. Van Asbeck-van der Wijst \(Mercurna, Netherlands\)](#)

Newsletter IBIPO: 27/09/2024 - *Learn about the role of Mercurna, a start-up partner in the European NANEMIAR project.* Available in the next [link](#). (eBoletín IBIPO_nº10_Octubre 2024)

Social media: pending in next days

3.3.5 Participation in public events

Objective: Stakeholder involvement and stimulation to actively participate in the events

How? Communication channels: NANEMIAR presentation on site in public events

Who? Target audience: all target groups

In planning for next period:

Participation of FFIS/IMIB on the 2nd edition "Get closer to Europe in the Region of Murcia" (planned for October 18, 2024 Murcia, Spain)

The Fair is an initiative of the Europe Direct Region of Murcia. The objective is to make visible the public institutions (public universities and research centers, city hall, associations, etc.) grouped under the informal network "Connect with the EU in the Region of Murcia" and their activities / participation on European projects, work with European programs or that have a clearly European vocation to the general public.

3.3.6 Patient's event

Objective: Round table video with scientist clinicians and patients to show their vision of NANEMIAR

Description: The recording of the interview with patients was completed (June 5, 2024). It was attended by basic and clinical researchers from FFIS/IMIB and SMS, as well as family members and patients of Congenital Anemia. Video of this round table was prepared; the interview was transcribed and translated into English. Video was published and shared with English transcript / subtitles on IMIB YouTube channel.

How? Communication channels: social media / Video on YouTube channel

Who? Target audience: Patients and their families / general public/ all target groups

Related outcome: Communication of the main project message (ambition and objectives) done, project awareness increased, patients and their families engaged.

Below are examples of this communication activity:



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**



Shared via:

Social media: 10/06/2024 – Instagram (16 likes)



18/07/2024 - IMIB YouTube channel: [Research cycle for life: Congenital anemias](#) (Available in Spanish with English subtitles / transcript)

In planning in next period: to share this video via different channels / forums



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

4. Dissemination overview

4.1 NANEMIAR dissemination results compared to KPI

The following table shows the achieved dissemination results during the first year of project implementation in comparison with the overall KPIs defined in the NANEMIAR DEP.

Table 8. Overview of dissemination activities and achieved key performance indicators (KPIs)

Dissemination activity name	Objective / description	Type of dissemination activity	Target audience	Period	Expected KPIs	Status M1-M12
Oral and/or poster presentations	Dissemination at (inter)national conferences (Error! No se encuentra el origen de la referencia.)	Conferences	Academic and industry researchers, clinicians	M2-M36	At least 6 items	4 items
Publications in peer-reviewed journals	Publications in peer-reviewed journals (e.g., Nature Communications, ACS Nano, Science Advances, Blood, etc.).	Other scientific collaboration	Academic and industry researchers, clinicians	M9-M36	1-2 of published articles in scientific journals	Pending
Round table discussions	Meeting with stakeholders in the field of congenital anemia, rare diseases, and/or mRNA therapeutics	Education and training event, Meetings, Clustering activities, Collaboration with EU-funded projects	Academic and industry researchers, clinicians	M7-M36	Participation in at least 6 meetings / discussions	5 items
Membership of Networks, Associations and Platforms	Dissemination at specific meetings / events of networks, platforms and associations where several partners are members (including Eritropatologist National group, RAIN, ERN-EuroBloodNet, REDCap, COST Action HELIOS)	Other scientific collaboration	Academic and clinical communities	M7-M36	Participation in at least 3 collaboration meetings	Pending
Visibility in industry networks	Increasing project awareness and stakeholder engagement. Presentation of project results and pathways for exploitation	Meetings Other	Industrial community (business developers, venture capital, investors)	M23-M36	> 15 slidedecks shared with project results for exploitation	Pending

4.2 NANEMIAR dissemination activities overview.

The dissemination carried out during the first year of the project is detailed below. The name of the activity is labelled in the same way as it appears in the NANEMIAR DEP.



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

4.2.1 Oral and/or poster presentations

Objective: Dissemination of project objectives and present preliminary result to the target audience related hematology field

Description: NANEMIAR partners participated in different scientific events / congresses focused on hematology field were NANEMIAR project and preliminary results were presented.

What? Type of dissemination activity: Conferences

Who? Target audience: Research communities

Status on M12: in progress; dissemination done in different scientific events / congresses. Target audience was reached

Below are examples of these dissemination activities:

LXV National Congress of the Spanish Society of Hematology and Hemotherapy (SEHH) and XXXIX Congress of the Spanish Society of Thrombosis and Hemostasis (SETH), held jointly with the III Ibero-American Congress of Hematology (October 26-28, 2023, Sevilla, Spain)

Oral communication title: mRNA NANOPARTICLES AS A POTENTIAL TREATMENT FOR BETA-THALASEMIA AND OTHER CONGENITAL ANEMIAS. PROOF OF CONCEPT */selected as THE BEST ORAL COMMUNICATION, NERITHROPATHOLOGY.

Target audience reached: Research communities; 50 participants

Why? Description of the objectives(s) with the reference to the specific project output:

NANEMIAR Project participated in the SYMPOSIUM GENE THERAPIES IN CONGENITAL ANEMIAS as the best oral communication.

The specific objectives of this symposium were: 1. Recognize the indications for gene therapy in different congenital anemias, as well as its limitations and possible side effects; 2. Identify alternative curative therapeutic options to allogeneic transplant of hematopoietic progenitors in congenital anemias and 3. Know the different gene therapy strategies (lentivirus, CRISPR, etc.) in the treatment of hereditary hemopathies.

Link: <https://www.hemato2023.com/>



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**



Sábado, 28 de octubre | Programa científico

11:00-12:30 | SALA BRUSELAS

SIMPOSIO
TERAPIAS GÉNICAS EN ANEMIAS CONGÉNITAS

Coordinador:
Dr. Rafael del Oro Barreto
Hospital Universitario Cruces, Barakaldo, Vizcaya.

Anemia de Fanconi
Dra. Jossane Zubizaray Salguero
Hospital Infantil Universitario del Niño Jesús, Madrid.

Deficit de piruvato quinasa
Dr. José Carlos Segura Sainza
Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (CIEMAT), Madrid.

Dr. José Luis López Lorenzo
Hospital Universitario Fundación Jiménez Díaz, Madrid.

Terapia génica en Blackfan-Diamond
Dra. Cristina Beléndez Bieler
Hospital General Universitario Gregorio Marañón, Madrid.

Objetivos docentes:

- Reconocer las indicaciones de terapia génica en las diferentes anemias congénitas, así como sus limitaciones y posibles efectos secundarios.
- Identificar las opciones terapéuticas actuales: alternativas al trasplante aléptico de progenitores hematopoyéticos en anemias congénitas.
- Conocer las diferentes estrategias de terapia génica (lentivirus, CRISPR, etc.) en el tratamiento de las hemopatías hereditarias.

CON LA COLABORACIÓN DE
VERTEX

110

Sábado, 28 de octubre | Programa científico

CS-18 NANOPARTICULAS DE ARNM COMO POTENCIAL TRATAMIENTO PARA LA BETA-TALASEMIA Y OTRAS ANEMIAS CONGÉNITAS. PRUEBA DE CONCEPTO

A.B. PÉREZ-OLIVA⁽¹⁾; C. LACHAUD⁽²⁾; J. VAN ASBECK-VAN DER WIJST⁽³⁾; J.M. MORALEDA⁽⁴⁾; M. BLANQUER-BLANQUER⁽⁴⁾; M. SÁNCHEZ VILLALOBOS⁽⁴⁾; V. NAVARRO RAMÍREZ⁽¹⁾; E. SALIDO FÉRREZ⁽⁴⁾

⁽¹⁾Instituto Murciano de Investigación Biosanitaria; ⁽²⁾Cancer Research Center of Marseille, Aix-Marseille Univ, Inserm, CNRS, Institut Paoli-Calmettes, CRCM, Marseille (France); ⁽³⁾Mercuria BV, Oss (The Netherlands); ⁽⁴⁾Servicio de Hematología y Hemoterapia. Hospital Clínico Universitario Virgen de la Arrixaca, Murcia.

Shared via:

Social media: 28/10/2023 – [LinkedIn](#) (378 unique impressions)

Partner newsletter. Published on the web page of the IBIPO of the FFIS/IMIB and IMIB web page. Notice in Newsletter IBIPO: 27/10/2023 - *The European project Nanomedicine Approach to Normalize Erythrocyte Maturation in Congenital Anemia by messenger RNA (NANEMIAR) is now underway!* Available in the next [link](#). (eBoletín IBIPO_nº11_Noviembre 2023)

Rare disorder Annual symposium MarMaRa (April 18-19, 2024 Marseille, France)

Oral presentation title: Nanomedicine Approach to Normalize Erythrocyte Maturation in Congenital Anemia by messenger RNA

Organized by: The Marseille Rare Diseases Institute (MarMaRa)

Target audience reached: Research communities, local and regional authorities; Nº of participants: 200

Why? Description of the objectives(s) with the reference to the specific project output:

CNRS partner attended the MARMARA meeting, where present NANEMIAR project and its initial results. This meeting was open to everyone with registration, fostering an inclusive environment for discussion and collaboration. During this presentation, NANEMIAR progress was shared and received valuable feedback from



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

a diverse audience. The event was an excellent opportunity to connect with other researchers and stakeholders, furthering the impact of NANEMIAR work (identification of impact in other rare disorders).

Link: <https://www.univ-amu.fr/fr/public/actualites/institut-marmara-colloque>

15th 3R meeting 2024 (May 21-24, Leucate France)

Oral presentation title: Nanomedicine Approach to Normalize Erythrocyte Maturation in Congenital Anemia by messenger RNA

Organized by: 3R Comity

Target audience reached: Research communities; N° of participants: 250-300

Why? Description of the objectives(s) with the reference to the specific project output:

Replication – Repair – Recombination. From Molecular Mechanisms to Clinical Applications (15th 3R meeting 2024) gathers all the teams working on genetic diseases and genome stability. For the past 25 years, the French 3R meeting has enabled the community of French researchers interested in this subject to meet regularly, providing a unique opportunity for young scientists to present their work and exchange ideas with other researchers. This seminar was an excellent platform for sharing knowledge and discussing the latest advancements in the field. CNRS partner had the privilege of presenting NANEMIAR research and engaging with leading scientists and researchers dedicated to understanding and treating genetic disorders. The event was highly enriching and fostered valuable collaborations aimed at improving genomic stability research, as well as identification of alternative protocols for the detection of hematopoiesis.

Link: <https://premc.org/3r-meeting-2024/>

MARMARA Day for Entrepreneurship and Valorization (July 4, 2024, Marseille, France)

Oral presentation title: Nanomedicine Approach to Normalize Erythrocyte Maturation in Congenital Anemia by messenger RNA

Organized by: MarMaRa

Target audience reached: Research communities, national authorities and others; N° of participants: 50

Why? Description of the objectives(s) with the reference to the specific project output:

NANEMIAR partner from CNRS attended the MARMARA Day for Entrepreneurship and Valorization, where Dr. Christophe Lachaud was invited to present the NANEMIAR project. As this project is based on a collaboration with industry and aims to bridge the gap between research and practical applications, the event provided an excellent platform to showcase our innovative approach and discuss its potential impact. Engaging with entrepreneurs, industry leaders, and researchers, valuable insights were received and fostered new partnerships to further NANEMIAR project's goals.

Link: <https://www.univ-amu.fr/fr/public/actualites/3e-colloque-annuel-institut-marmara-8-9-juin-2023>



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**



Shared via:

21/08/2024 – notice available on **NANEMIAR website**: [NANEMIAR Project presented on the MARMARA Day for Entrepreneurship and Valorization](#)

In planning for next period:

Poster presentation on LXVI National Congress of the Spanish Association of Hematology and Hemotherapy (SEHH) and the XL Congress of the Spanish Society of Thrombosis and Hemostasis (SETH), which are held jointly in Palma de Mallorca, Spain. (October 24-26, 2024)

Link: www.hemato2024.com

3.2.2 Round table discussions

Objective: Meeting with stakeholders in the field of congenital anemia, rare diseases, and/or mRNA therapeutics

Description: NANEMIAR partners participated in different scientific meetings / round table discussion where they had the opportunity to present the project and engage stakeholders in the field of congenital anemia, rare diseases, and/or mRNA therapeutics

What? Type of dissemination activity: round tables, clustering activities

Who? Target audience: Academic and industry researchers, clinicians

Status on M12: in progress; dissemination done in different scientific / clustering meetings. Target audience was reached

Below are examples of these dissemination activities:

Rencontre Maladies rares "la place des femmes dans la prise en charge des maladies rares" (February 28, 2024 Paris, France)

Organized by: M&M Conseil (www.mmconseil.com)

Target audience reached: Research communities. N° of participants: 50

Why? Description of the objectives(s) with the reference to the specific project output:



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

The Rare Diseases Meeting, organized in conjunction with the International Rare Disease Day focused on to discuss the role of women in the management of rare diseases. During the roundtable, CNRS partner had the opportunity to highlight NANEMIAR project, which is coordinated by a woman. The discussion was engaging, with valuable exchanges between researchers, doctors, and patients. It was a great platform to showcase our efforts and to emphasize the critical contributions of women in this field, as well as for identification of alternative protocols for the detection of hematopoiesis

Link: <https://www.mmconseil.com/evenement/table-ronde-maladies-rares/>

RD Cluster kick-off meeting of Horizon Europe projects on Rare Diseases Therapies (March 14, 2024, Brussels, Belgium)

Organized by: European Commission

Target audience reached: European Commission, invited 9 projects call HORIZON-HLTH-2022-DISEASE-06-04-two-stage: Development of new effective therapies for rare diseases and 2 projects call HORIZON-HLTH-2023-IND-06-04: Modelling & Simulation projects on regulatory needs for orphan and pediatrics. N^o of participants: 20-25.

Why? Description of the objectives(s) with the reference to the specific project output:

The project partners were invited to assist at this cluster meeting organized by EC to create synergies within the Horizon Europe projects on Rare Diseases Therapies. The coordinator, Ana Belén Pérez-Oliva (FFIS-IMIB) presented the project to the audience. NANEMIAR awareness increased and possible synergies with other EU-funded projects on rare diseases were identified.



Shared via:

Social media: 14/03/2024 – [LinkedIn available here](#) (835 unique impressions)

Notice available on **NANEMIAR website:** [On the 14th of March our team had the privilege of attending the Kick-off meeting of the 'RD cluster' in Brussel, a great initiative by the European Commission](#)

Partner newsletter. Published on the web page of the IBiPO of the FFIS/IMIB and IMIB web page. Notice in Newsletter IBiPO: 04/04/2024 - *NANEMIAR participates in the Kickoff meeting of the RD cluster in Brussels /clustering activities* [Available in the next link.](#) (eBoletín IBiPO_nº4_April 2024)



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

First Fanconi Anemia (FA) Europe Scientific Meeting (May 23-24, 2024, Paris, France)

Organized by: FA Europe (www.faeurope.org)

Target audience reached: research communities, international organization (UN body, OECD, etc.); N° of participants: 90

Why? Description of the objectives(s) with the reference to the specific project output:

On May 24th the FA Europe Network held the first ever pan-European scientific meeting to promote collaboration on Fanconi Anemia between European countries. This was the culmination of efforts initiated by Fanconi Hope and the Dutch FA Support Group (the Workgroup of the VKN) with the help of an international grant and strong support from the Fanconi Cancer Foundation, which resulted in the establishment of the FA Europe Network in 2019. This meeting brings together doctors, patient associations, and researchers from across Europe. During this gathering, CNRS partner had the opportunity to engage with leading experts and stakeholders in the field. The meeting facilitated a rich exchange of ideas and fostered collaborations aimed at advancing research and treatment for various medical conditions, as well as identification of potential collaborators for the follow up project. It was an honor to be part of such a diverse and dedicated group, working together to make significant strides in healthcare.

Link: <https://faeurope.org/event-reports/>

OPALE roundtable (June 30 – July 2, 2024 Ile-de-France, France)

Organized by: Institute Carnot OPALE (www.opale.org)

Target audience reached: research communities; N° of participants: 30

Why? Description of the objectives(s) with the reference to the specific project output:

CNRS partner participated in a roundtable organized by the Carnot Institute OPALE, which focuses on blood diseases. During the event, Dr. Christophe Lachaud had the opportunity to present the outlines of the NANEMIAR project. OPALE offers significant support through access to advanced research platforms, clinical expertise, and strong industrial partnerships. Additionally, its network of clinicians and access to patient cohorts can accelerate the translation of research findings into clinical applications, making OPALE an ideal partner for advancing the NANEMIAR project's goals.

Link: <https://www.opale.org/fr/>

11th edition Annual seminar Canceropôle (July 4-5, 2024, St Raphael France)

Organized by: Canceropôle Provence-Alpes-Côte d'Azur - The regional driving force behind anticancer research and innovation (www.canceropole-paca.com)

Target audience reached: research communities; N° of participants: 250-300

Why? Description of the objectives(s) with the reference to the specific project output:

The Canceropôle PACA, a leading network dedicated to cancer research and innovation in the Provence-Alpes-Côte d'Azur region, held its annual seminar aimed at fostering collaboration between researchers, clinicians, and industry partners to advance cancer therapies. During the event, Dr. Christophe Lachaud participated in a roundtable on nanotechnologies to improve the diagnosis and treatment of cancer-related rare anemias. The goal was to connect with other groups working on mRNA LNP targeting blood cells to identify potential collaborators for the follow-up project.

Link: <https://canceropole-paca.com/agenda/11e-seminaire-annuel-du-canceropole/>



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**

5. Exploitation overview

Considering that we are in the starting phase of project execution, there is no exploitation of NANEMIAR results during this implementation period (M1-12).



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**



NANEMIAR

Nanomedicine Approach to Normalize Erythrocyte Maturation in Congenital Anemia by Messenger RNA

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



Funded by the
European Union



Fundación para la Formación
e Investigación Sanitarias
de la Región de Murcia



IMIB
Instituto Murciano de
Investigación Biosanitaria
Pascual Parrilla



Servicio
Murciano
de Salud



Funded by the
European Union

This project has received funding from the European Union's Horizon Europe Research and Innovation Programme 2021- 2027 under the grant agreement No **101080156**