



THE RESEARCH AND INNOVATION FOUNDATION PROGRAMMES FOR RESEARCH,
TECHNOLOGICAL DEVELOPMENT AND INNOVATION
RESTART 2016-2020

Project Title

**Identification of unstable carotid plaques associated with symptoms
using ultrasonic image analysis and plaque motion analysis**

AtheroRisk

EXCELLENCE/0421/0292

Deliverable

D.2.1 Dissemination Outreach Activities Plan

No. Workpackage	2	Dissemination and Exploitation Activities
No. Task	2.1	Dissemination and Outreach Activities Plan
Workpackage Leader	HO	
Filename	AtheroRisk_D.2.1_Dissemination_Outreach_Activities_Plan	
Status	Draft	
Start Date/Duration	01/5/2022-30/3/2024	
Delivery Date	15/10/2022	



**Co-funded by
the European Union**



Republic of Cyprus



**RESEARCH
& INNOVATION
FOUNDATION**

Leading Author (Editor)				
#	Surname	Initials	Beneficiary Name	Contact email
1	Kyriakou	E.	CUT	efthyvoulos.kyriacou@cut.ac.cy
Co-Authors				
#	Surname	Initials	Beneficiary Name	Contact email
1	Liapi	G.	CUT	gd.liapi@edu.cut.ac.cy
2	Antoniades	A.	CUT	as.antoniades@edu.cut.ac.cy

Authors List

Document History			
Version	Date	Status	Author
V1	7/10/2022	Draft	Antoniades, Liapi

Deliverable type			
Nature of the deliverable	R/Soft	Document, Report/ Software/ Web	X
Dissemination level	CO/pub	Confidential/ Public domain	X

Executive Summary

In this document, the Dissemination and Outreach activities of our AtheroRisk's Project is presented and explained.

The Dissemination and Outreach Activities plan encloses all the activities that will be undertaken in order to communicate and engage relevant stakeholders, including citizens, health professionals, patient associations, policy makers and industry regarding the outcomes of the AtheroRisk project.

Acronyms

Acronym	Definition
CA	Consortium Agreement
CAS	Cyprus Atherosclerosis Society
CSA	Cyprus Stroke Association
CUT	Cyprus University of Technology
DESCA	Development of a Simplified Consortium Agreement
EC	European Commission
EAS	European Atherosclerosis Society
GA	Grant Agreement
IPR	Intellectual Property Rights
PA	Partner
SaMD	Software as a Medical Device

Table of Contents

1	Introduction	5
1.1	Dissemination Strategy Structure	5
2	External Communication	6
2.1	Target Groups.....	6
2.2	Channels.....	7
2.2.1	Website	7
2.2.2	Social Media	7
2.2.3	Newsletters	7
2.2.4	Other Outreach Activities.....	8
2.3	Dissemination Events	8
2.3.1	Seminars and Webinars	8
2.3.2	Workshops.....	8
3	Internal Communication	9
3.1	Regular Meetings.....	9
3.2	Internal Training Sessions.....	9
3.3	Mailing Lists.....	9
4	Exploitation Plan	10
4.1	Dissemination of Research Results	10
4.2	Commercialization and Intellectual Property Rights	10

List of Tables

Table 1.	Description of the content of all WP2 Tasks.....	5
Table 2.	AtheroRisk's Main Dissemination Actions.	5
Table 3.	Overall Structure of a Seminar/Webinar for the AtheroRisk Project.	8

1 Introduction

The importance of dissemination and exploitation of the AtheroRisk project is reinforced by Work Package 2 (WP2), which comprises our plan and set of actions to promote the periodic outcomes of the AtheroRisk project and encompasses five Tasks, shown below in **Table 1**.

The overall purpose of this deliverable is to demonstrate the Dissemination and Outreach Activities Plan for the project. The current document version will be subjected to two updates, spanning the time period between May 2022 and the end of the project.

Table 1. Description of the content of all WP2 Tasks.

Task	Description	Months	Leader
2.1	Dissemination and Outreach Activities Plan	M3-M24	CYENS
2.2	Communication and public engagement strategy, means, and tools	M3-M24	CUT
2.3	Design and development of dissemination and outreach	M3-M24	CYENS
2.4	Targeted dissemination event	M3-M34	CUT
2.5	Feasibility study on AtheroRisk services commercial value	M19-M24	CUT

1.1 Dissemination Strategy Structure

The dissemination activities detail the array and type of our actions in order to communicate and engage relevant stakeholders, including citizens healthcare professionals, patient associations, policy makers and industry, with respect to the outcomes of the project. **Table 2** summarizes the “AtheroRisk Dissemination Activities”.

Table 2. AtheroRisk’s Main Dissemination Actions.

No	Project Management Activity	HO	CYENS
1	Overall coordination of the dissemination activities	I	S
2	Organization of the dissemination events	I	S
3	Development of Dissemination Plan	I	S
4	Development of Exploitation Plan and implementation of exploitation activities	I	S
5	Publications of articles, news and press releases	I	S
6	Creation and maintenance of a project web site	I	S
7	Printed/electronic dissemination materials	I	-
8	Preparation of newsletters	I	S
9	Maintenance of Mailing Lists	I	-
10	Social media (Facebook & LinkedIn) administration and management	I	-

I, lead; s, support.

Our plan consists of two types of communication channels: an external and an internal communication channel. While external communication strategy covers potential target groups, internal communication standards are expected to accelerate teamwork for dissemination, both within and among the partners of the consortium.

2 External Communication

To reach all target groups and reliably spread the project's knowledge and results, we establish *external* communication channels. Regarding the external stakeholders, our plan suggests constant diffusion of information of the project's current status and achievements, as well as our next scheduled milestones.

2.1 Target Groups

During external communications the AtheroRisk project will target particular audiences. The aim is to reach highly relevant stakeholder groups. Below, we provide a reasoning for all of our proposed audiences. For each partner, there should be one person undertaking the assigned external communication tasks (7 in total). Potential direct targets, interested to know about the projects status and outcomes, and actually use the AtheroRisk Software are doctors, medical imaging professionals, medical centers, patient associations, industry experts, *policy makers* and the general public.

Doctors, Medical Imaging Professionals and Medical Centers constitute our pivotal audience, as they will most likely be the end users of the AtheroRisk Software. Apart from their broad experience in Carotid Ultrasound Imaging, they can circulate formal or informal feedback on our outcomes, which is expected to help us accommodate additional software features or support new user requirements, for the analysis of the carotid plaques. This audience is expected to be reached out multiple times, through different events or means (either online or on site) which are described in later sections of this file.

Industry experts are also considered possible early adopters of our solution, as there could be new medical ultrasound machines having the AtheroRisk Software incorporated in their system. Of course, this will entail the acquisition of a Software as a Medical Device (SaMD) Certificate of use.

Patient Associations play a crucial role in the dissemination of information and the promotion of scientific research to better manage patients with carotid atherosclerosis in Cyprus, aiming to improve their quality of life and raise awareness about the disease. For this reason, the Cyprus Stroke Association (CSA) and the Cyprus Atherosclerosis Society (CAS), will participate in the joint

organization of activities in order to stimulate further interest, aiding in the wider adoption of the proposed services, in clinical care. These activities will be communicated to and by the European Atherosclerosis Society (EAS).

Finally, the **general population** is also equally important as a target, as it represents the greater public, from where there might be new atherosclerosis use cases, in the future. Therefore, this audience should be regularly informed about advances in ultrasound-based carotid atherosclerosis detection and management.

2.2 Channels

2.2.1 Website

The ehealthlab, representing the AtheroRisk CUT team, hosted at the Department of Electrical Engineering, Computer Engineering and Informatics, at the Cyprus University of Technology, maintains a website (created under the university's Server), where a subpage for the project will be created. The AtheroRisk webpage will include general information such as AtheroRisk's general objectives and structure, Announcements and News, Public Deliverables, as well as Internal Deliverables of the project (reached upon user authentication). The webpage will be designed to be user-friendly and responsive. The first version of the webpage will be available from M3 of the project and fully functional by M5.

2.2.2 Social Media

Our Consortium acknowledges the remarkable importance that social media plays nowadays, as a vital tool to spread the impact of such a project on a timely manner and succeed in all dissemination activities.

AtheroRisk's presence to popular social media will be established. Especially, an existing Facebook Page, dedicated to the ehealthlab at CUT, will occasionally release announcements about the project. In addition, a corresponding ehealthlab CUT account will be initiated on LinkedIn. Moreover, content flow will be linked to the websites of all partner organizations and social media communication channels, to maximize the impact of the AtheroRisk project's activities.

2.2.3 Newsletters

The project's achievements, reached milestones, and reusable findings can be effectively disseminated to a large audience, through newsletters. Not only they serve to inform the Consortium of the most recent developments, but also the general public and relevant external stakeholders. Specifically, to propagate the project outcomes, an *Annual e-Newsletter* will be released. Additionally, a *one-page poster-like infographic* (highlighting motivation), as well as *short videos* (video teasers) for the general public will be created and published.

2.2.4 Other Outreach Activities

We will also submit *Articles in Newspapers* and Health-related *Cyprus Magazines*. Apart from the informative nature of these articles, we plan to create content such interviews from experts of the AtheroRisk Consortium, discussing the modern demands for an advanced Software for the analysis of atherosclerotic plaques in carotid ultrasound images and videos, in Cyprus and worldwide.

2.3 Dissemination Events

2.3.1 Seminars and Webinars

In order to actively engage external target groups, we will organize *Seminars*, accompanied by on demand *Webinar Series* (to also reach out to interested audience abroad). Annual Webinar Series will be secured, as a less restrictive solution in terms of the availability of our targets, but also as a backup plan in case of a future pandemic wave.

During these sessions, participants will have the opportunity to explore all previous carotid ultrasound-related studies, conducted by the Consortium partners, as well as to be educated about the cutting-edge technologies in medical imaging and atherosclerotic plaque analysis; especially the Deep Learning-based automated medical image analyses. The overall purpose will be to break down the AtheroRisk Software components and elucidate every existing and new integrated methodology. **Table 3** shows a general structure of our Seminars/Webinars. Webinar Series will be made available via the consortium's communication channels.

Table 3. Overall Structure of a Seminar/Webinar for the AtheroRisk Project.

Session	Description	Mode
Opening Session	Agenda/Programme Introduction	Open
Keynote Speakers	Selected Recent Studies (Consortium Experts)	Open
Presentations	Selected Presentations (Researchers in Cyprus and Greece)	Open
Q&As	Interaction with Experts (Small Groups)	Closed

Q&As, Questions & Answers.

2.3.2 Special Sessions / Workshops

In order to reach out to as many highly relevant end users of the AtheroRisk Software as possible, we plan to organize special sessions which, upon acceptance, will be held at the following events:

a. the IEEE BHI 2022, **b.** CAIP 2023, and **c.** the Biomedical and Health Informatics Conference 2023

During these special sessions we will present the AtheroRisk Software's features and underlying analyses processes to target groups..

3 Internal Communication

3.1 Regular Meetings

In our project, internal communication enables a constant and smooth flow of information. It greatly enhances the quality of the work and boosts the productivity of the project. Therefore, we establish Regular Online Meetings (using Microsoft Teams), with all the involved partners, per active WP, invited. There should be at least 2 meetings for each active WP per month.

During these sessions, a representative of the PA leading the WP will present the current advances in all Tasks and will highlight any arising issues that need to be addressed. All involved participants will decide on possible solutions, with the leader of the given Task providing a new deadline to reach newly proposed demands.

3.2 Internal Training Sessions

During the WP5 activities, and after a first version of the AtheroRisk Software is available, training the potential end users of our Integrated System (only individuals that participate in AtheroRisk will be considered at this stage), will be a pivotal step, as it will offer reciprocal benefits both for the software developers but also for the future end users of it.

Specifically, during a training session, experts from our Consortium, who have a long experience in analyzing carotid plaques in ultrasound data, will provide a primary user experience when exploring our system. Additionally, there will be multiple chances to identify any latent bug or error when utilizing any integrated module of the software. Finally, given that one of our major aims is to develop a user-friendly application, we believe that our trainees could reveal additional user interface requirements, based on their first experience with all modules.

3.3 Mailing Lists

A mailing list will be established, under the CUT's supervision, to efficiently coordinate the Consortium's operations.

This list should include all participants of the project. By doing so, we aim to keep all partners aware of all events and crucial information, in a timely manner. Internally, this will promote transparency and informed collaboration. By keeping everyone informed of all actions, each partner will be more effective at sharing the outcomes.

4 Exploitation Plan

4.1 Dissemination of Research Results

The Project will publish in open-access journals and provide open access to research data. These are aligned with EU goals for Open Access Infrastructure for Research in Europe ([OpenAIRE](#)) and the National Policy for Open Access¹. For that purpose, an OpenAIRE-compatible and European Commission (EC)-endorsed community page will be set up at [Zenodo](#).

Importantly, the AtheroRisk Software will be made available via the European Atherosclerosis Society (EAS) – Apps, Tools & Resources website (www.eas-society.org).

Our strategy to disseminate AtheroRisk's results will encompass the following: **a.** publications at prestigious interdisciplinary scientific magazines, and **b.** participation at high-impact international conferences (IEEE, BHI 2022/23, IEEE DSP 2023, CAIP 2023, and other).

Our Publications will be accessible via electronic libraries, shared in social media, and enriched with multimedia content (e.g., video summaries, slides).

4.2 Commercialization and Intellectual Property Rights

The commercialization aspects emanating from the project will be exploited based on the consortium agreement (CA) and grant agreement (GA) provisions, drafted according to DESCA 2020 and if applicable patented by the involved parties. The AtheroRisk platform maturity is expected to reach a Technology Readiness Levels (TRL) TRL 4: Technology validated in relevant (Lab) environment.

Commercialization opportunities will be considered at the 4th project quartet (during WP2). The Project Management committee and all involved parties will be responsible for identifying and protecting Intellectual Property Rights (IPR) emanating from the project, aided by EU IPR ambassadors and EU IPR Helpdesk guidelines and best practices (<https://www.iprhelpdesk.eu>).

A CA for the exploitation of IPR has been addressed at the project's launching and that specifically covered: (i) exploitation, (ii) ownership, (iii) confidentiality, and (iv) knowledge dissemination.

¹ Cyprus OA Policy on Scientific Info. Available -<http://opensciencecy.ac.cy/wp-content/uploads/2019/09/FINAL-EN-National-Policyfor-Open-Access-to-Scientific-Information.pdf>